

# Environmental Impact Statement for Combined Licenses (COLs) for Turkey Point Nuclear Plant Units 6 and 7

**Final Report** 

Appendix E

U.S. Nuclear Regulatory Commission Office of New Reactors Washington, DC 20555-0001

U.S. Army Corps of Engineers Jacksonville District Jacksonville, Florida 32232-0019



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**Final Report** 

Appendix E

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Division of New Reactor Licensing Office of New Reactors U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

Regulatory Division Jacksonville District U.S. Army Corps of Engineers Jacksonville, Florida 32232-0019



US Army Corps of Engineers®

#### Final Environmental Impact Statement for the Combined License (COL) FOR THE TURKEY POINT NUCLEAR PLANT

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# ABSTRACT

This environmental impact statement (EIS) has been prepared in response to an application submitted to the U.S. Nuclear Regulatory Commission (NRC) by Florida Power & Light Company (FPL) for two combined construction permits and operating licenses (combined licenses or COLs). The proposed actions related to the FPL application are (1) NRC issuance of COLs for two new power reactor units (Units 6 and 7) at the Turkey Point Nuclear Power Plant site in Miami-Dade County, Florida, and (2) U.S. Army Corps of Engineers (USACE) decision to issue, deny, or issue with modifications a Department of the Army (DA) permit to perform certain dredge and fill activities in waters of the United States and to construct structures in navigable waters of the United States related to the project. The NRC, its contractors, and USACE make up the review team. The National Park Service (NPS) is also a cooperating agency on this EIS but does not now have a request to take any specific regulatory action before it. Due to this unique set of circumstances, impact determinations made in this EIS should only be attributed to the review team. This EIS documents the review team's analysis, which considers and weighs the environmental impacts of constructing and operating two new nuclear units at the Turkey Point site and at alternative sites, including measures potentially available for reducing or avoiding adverse impacts.

The EIS includes an evaluation of the impacts of construction and operation of Turkey Point Units 6 and 7 on waters of the United States pursuant to Section 404 of the Clean Water Act and on navigable waters of the United States pursuant to Section 10 of the Rivers and Harbors Act of 1899. The USACE will base its evaluation of FPL's DA permit application, on the requirements of USACE regulations, the Clean Water Act Section 404(b)(1) Guidelines, and the USACE public interest review process.

After considering the environmental aspects of the proposed action before the NRC, the NRC staff's recommendation to the Commission is that the COLs be issued as proposed. This recommendation is based on (1) the application, including the Environmental Report (ER), submitted by FPL; (2) consultation with Federal, State, Tribal, and local agencies; (3) the review

#### Abstract

team's independent review; (4) the consideration of public comments received on the environmental review; and (5) the assessments summarized in this EIS, including the potential mitigation measures identified in the ER and this EIS.

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# EXECUTIVE SUMMARY

This environmental impact statement (EIS) presents the results of a U.S. Nuclear Regulatory Commission (NRC) environmental review of an application for a combined construction permit and operating license (combined license or COL) for two new nuclear reactor units at a proposed Turkey Point site in Miami-Dade County, Florida. The U.S. Army Corps of Engineers (USACE) participated in the preparation of the EIS as a cooperating agency and as a member of the review team, which consisted of the NRC staff, its contractor staff, and the USACE staff. The National Park Service (NPS) participated in the environmental review as a cooperating agency by providing special expertise for the areas in and around the adjacent national parks (Biscayne and Everglades National Parks). The NPS does not have a request to take any specific regulatory actions related to the proposed COLs before it. Due to this unique set of circumstances, all impact determinations made in this EIS should not be attributed to NPS, but only to the NRC and USACE (also referred to as the review team). The NPS's participation in connection with this EIS does not imply NPS concurrence.

### Background

On June 30, 2009, the Florida Power & Light Company (FPL) submitted an application to the NRC for a combined construction permit and operating license (combined license or COL) for Turkey Point Units 6 and 7.

Upon acceptance of FPL's application, the NRC review team began the environmental review process by publishing a Notice of Intent to prepare an EIS and conduct scoping in the *Federal Register* on June 15, 2010. As part of this environmental review, the review team did the following:

- conducted public scoping meetings on July 15, 2010 in Homestead, Florida
- conducted a site visit of the proposed Units 6 and 7 plant area on the Turkey Point site in June 2010
- conducted visits to alternative sites in July 2010
- reviewed FPL's Environmental Report (ER)
- consulted with Tribal Nations and other agencies such as the U.S. Fish and Wildlife Service (FWS), Advisory Council on Historic Preservation, Florida Fish and Wildlife Conservation Commission, National Marine Fisheries Service, Miami-Dade Office of Historic and Archaeological Resources, and Florida Division of Historical Resources
- conducted the review following guidance set forth in NUREG-1555:
  - "Standard Review Plans for Environmental Reviews for Nuclear Power Plants
  - Supplement 1: Operating License Renewal"
- considered public comments received during the 60-day scoping process from June 15, 2010 to August 16, 2010

- conducted public meetings on the draft EIS on April 22, 2015, in Miami, Florida, and on April 23, 2015, in Homestead, Florida
- considered public comments received during the comment periods for the draft EIS, which extended from March 5 to May 22 and from May 28 to July 17, 2016.

## **Proposed Action**

FPL initiated the proposed Federal action by submitting an application for Turkey Point Units 6 and 7 to the NRC. The NRC's Federal action is issuance of COLs for two Westinghouse AP1000 reactors at the Turkey Point site near Homestead, Florida.

The USACE is a cooperating agency in preparation of this EIS. The USACE's Federal action is its decision of whether to issue, deny, or issue with modifications a Department of Army (DA) permit pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 to authorize certain construction activities potentially affecting waters of the United States.<sup>(1)</sup>

## Purpose and Need for Action

The purpose of the proposed NRC action, issuance of the COL, is to provide for additional baseload electric generating capacity for use in the FPL service territory.

The USACE determines both a basic and an overall project purpose pursuant to the Clean Water Act Section 404(b)(1) Guidelines, 33 CFR § 230.10. The basic purpose is to meet the public's need for electric energy. The overall purpose is to meet the public's need for reliable increased electrical baseload generating capacity in FPL's service territory.

## Affected Environment

The Turkey Point site is located in southeast Miami-Dade County, Florida, near Homestead (Figure ES-1). Turkey Point Units 6 and 7 would be located on the same site as the existing Turkey Point site, which has five other power plants, including two nuclear power reactors. Turkey Point would be located 25 mi south of Miami and 4.5 and 8 mi east of Homestead and Florida City, respectively. The primary source of cooling water would be reclaimed wastewater and the alternative source would be saltwater supplied from radial collector wells beneath Biscayne Bay. The ultimate heat sink for Turkey Point Units 6 and 7 would be the atmosphere, using three mechanical draft cooling towers per reactor.

<sup>(1)</sup> Waters of the United States" is used to include both "waters of the United States" as defined by 33 CFR Part 328 (TN1683) defining the extent of USACE geographic jurisdiction pursuant to Section 404 of the Clean Water Act and "navigable waters of the United States" as defined by 33 CFR Part 329 (TN4770) defining the extent of USACE geographic jurisdiction pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403) (TN4768).

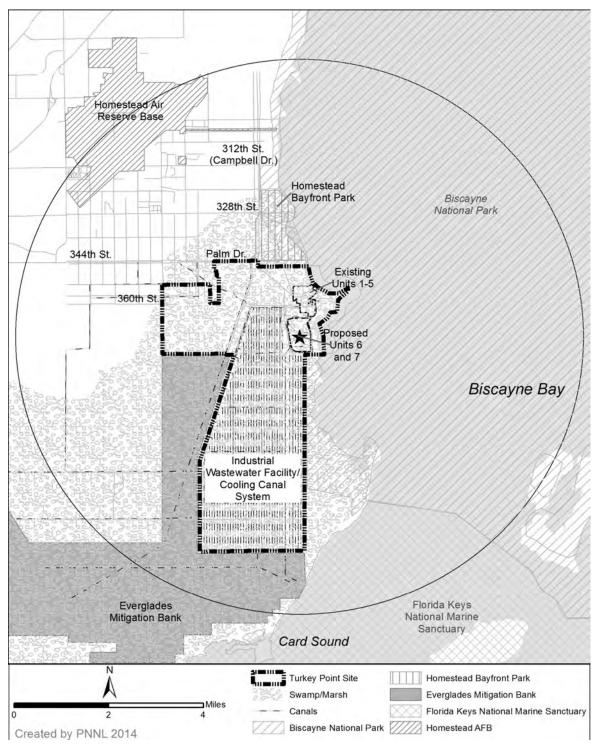


Figure ES-1. The Turkey Point Site and Affected Environment

## **Evaluation of Environmental Impacts**

This EIS evaluates the potential environmental impacts of the construction and operation of the two new nuclear plants proposed for the Turkey Point site related to the following resource areas:

- land use
- air quality
- aquatic ecology
- terrestrial ecology
- surface and groundwater
- waste (radiological and nonradiological)
- human health (radiological and nonradiological)
- socioeconomics
- environmental justice
- cultural resources
- fuel cycle, decommissioning, and transportation

The impacts are designated as SMALL, MODERATE, or LARGE. The incremental impacts related to the construction and operations activities requiring NRC authorization are described and characterized, as are the cumulative impacts resulting from the proposed action when the effects are added to, or interact with, other past, present, and reasonably foreseeable future effects on the same resources. A summary of the construction and operation impacts are outlined in Table ES-1. Table ES-2 summarizes the review team's assessment of cumulative impacts. The review team's detailed analysis which supports the impact assessment of the proposed new units can be found in Chapters 4, 5, and 7, respectively.

**SMALL:** Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.

**MODERATE**: Environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.

**LARGE**: Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

Resource Category	Preconstruction and Construction	Operation
Land Use	MODERATE (NRC authorized construction impact level is SMALL)	MODERATE
Water-Related	,	
Water Use – Surface Water	SMALL	SMALL
Water Use – Groundwater Use	SMALL	SMALL
Water Quality – Surface Water	SMALL	SMALL
Water Quality – Groundwater	SMALL	SMALL
Ecology		
Terrestrial Ecosystems	MODERATE (NRC authorized construction impact level is SMALL)	MODERATE
Aquatic Ecosystems	SMALL to MODERATE	SMALL
Socioeconomic		
Physical Impacts	SMALL (adverse) to MODERATE (beneficial)	SMALL (adverse) to MODERATE (beneficial)
Demography	SMALL	SMALL
Economic Impacts on the Community	SMALL	SMALL and beneficial
Infrastructure and Community Services	SMALL to MODERATE	SMALL to MODERATE
Environmental Justice	NONE <sup>(a)</sup>	NONE <sup>(a)</sup>
Historic and Cultural Resources	MODERATE (NRC authorized construction impact level is SMALL)	SMALL
Air Quality	SMALL	SMALL
Nonradiological Health	SMALL	SMALL
Nonradiological Waste	SMALL	SMALL
Radiological Health	SMALL	SMALL
Postulated Accidents	n/a	SMALL
Fuel Cycle, Transportation, and Decommissioning	n/a	SMALL

#### Table ES-1. Environmental Impact Levels of the Proposed Turkey Point Units 6 and 7

(a) A determination of "NONE" for Environmental Justice analyses does not mean there are no adverse impacts to minority or low-income populations from the proposed project. Instead, an indication of "NONE" means that while there are adverse impacts, those impacts do not affect minority or low-income populations in any disproportionate manner, relative to the general population.

Resource Category	Impact Level
Land Use	MODERATE
Water-Related	
Water Use – Surface Water	SMALL
Water Use – Groundwater Use	SMALL
Water Quality – Surface Water	MODERATE
Water Quality – Groundwater	SMALL
Ecology	
Terrestrial Ecosystems	MODERATE to LARGE
Aquatic Ecosystems	MODERATE
Socioeconomic	
Physical Impacts	SMALL adverse to MODERATE beneficial
Demography	SMALL
Economic Impacts on the Community	SMALL and beneficial
Infrastructure and Community Services	SMALL to MODERATE
Environmental Justice	NONE <sup>(a)</sup>
Historic and Cultural Resources	MODERATE
Air Quality	SMALL to MODERATE for criteria pollutants and MODERATE for GHGs
Nonradiological Health	SMALL
Nonradiological Waste	SMALL
Radiological Health	SMALL
Postulated Accidents	SMALL
Fuel Cycle, Transportation, and Decommissioning	SMALL

## Table ES-2.Cumulative Impacts on Environmental Resources, Including the Impacts of<br/>Proposed Turkey Point Units 6 and 7

(a) A determination of "NONE" for Environmental Justice analyses does not mean there are no adverse impacts to minority or low-income populations from the proposed project. Instead, an indication of "NONE" means that while there are adverse impacts, those impacts do not affect minority or low-income populations in any disproportionate manner, relative to the general population.

## Alternatives

The review team considered the environmental impacts associated with alternatives to issuing a COL for the two new nuclear units proposed by FPL for the Turkey Point site. These alternatives included a no-action alternative (i.e., not issuing the COL) and alternative energy sources, siting locations, and system designs.

The no-action alternative would result in the COL not being granted or the USACE not issuing its permit. Upon such a denial, construction and operation of new units at the Turkey Point site would not occur and the predicted environmental impacts would not take place. If no other facility would be built or strategy implemented to take its place, the benefits of the additional electrical capacity and electricity generation to be provided would also not occur and the need for baseload power would not be met.

Based on the NRC staff's review of energy alternatives, the NRC staff concluded that, from an environmental perspective, none of the viable alternatives is environmentally preferable to building a new baseload nuclear power generation plant at the Turkey Point site. The NRC staff eliminated several energy sources (e.g., wind, solar, geothermal, and biomass) from full

consideration because they are not currently capable of meeting the need of this project. None of the viable baseload alternatives (natural gas, coal, or a combination of alternatives) was environmentally preferable to the proposed Turkey Point units.

After comparing the cumulative effects of a new nuclear power plant at the proposed site against those at the alternative sites, the NRC staff concluded that none of the alternative sites would be environmentally preferable to the proposed site for building and operating a new nuclear power plant (Table ES-3). The four alternatives sites selected were as follows (Figure ES-2):

- Glades
- Martin
- Okeechobee 2
- St. Lucie.

#### Table ES-3. Comparison of Cumulative Impacts at the Turkey Point and Alternative Sites

	Turkey Point	<b></b>		Okeechobee	•···
Resource Category	Site <sup>(a)</sup>	Glades <sup>(b)</sup>	Martin <sup>(b)</sup>	<b>2</b> <sup>(b)</sup>	St. Lucie <sup>(b)</sup>
Land Use	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE
Water-Related					
Surface-water use	SMALL	MODERATE	MODERATE	MODERATE	SMALL
Groundwater use	SMALL	SMALL	SMALL	SMALL	SMALL
Surface-water quality	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE
Groundwater quality	SMALL	SMALL	SMALL	SMALL	SMALL
Ecology					
Terrestrial and wetland ecosystems	MODERATE to LARGE	MODERATE	MODERATE	MODERATE	MODERATE
Aquatic ecosystems	MODERATE	MODERATE	MODERATE	MODERATE	SMALL to MODERATE
Socioeconomics					
Physical impacts	SMALL adverse except for MODERATE beneficial impacts on road quality	MODERATE adverse to SMALL beneficial impacts on road quality	MODERATE adverse to MODERATE beneficial impacts on road quality	MODERATE adverse to SMALL beneficial impacts on road quality	LARGE adverse to MODERATE beneficial impacts on road quality
Demography	SMALL	SMALL	SMALL	SMALL	SMALL, except for LARGE residential displacement impacts
Economic impacts on the community	SMALL and beneficial	SMALL and beneficial, except for LARGE and beneficial property tax revenues for Glades County and School District	SMALL and beneficial, except for MODERATE and beneficial property tax revenues for Martin County and School District	SMALL and beneficial, except for LARGE and beneficial property tax revenues for Okeechobee County and School District	SMALL and beneficial

	Turkey Point			Okeechobee	
Resource Category	Site <sup>(a)</sup>	Glades <sup>(b)</sup>	Martin <sup>(b)</sup>	<b>2</b> <sup>(b)</sup>	St. Lucie <sup>(b)</sup>
Infrastructure and	SMALL except	SMALL except	SMALL except	SMALL except	SMALL except
community services	for	for	for	for	for
	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE
	adverse	adverse	adverse	adverse	adverse
	impacts on	impacts on	impacts on	impacts on	impacts on
	traffic	traffic	traffic	traffic	traffic
Environmental Justice	None <sup>(c)</sup>	None <sup>(c)</sup>	None <sup>(c)</sup>	None <sup>(c)</sup>	None <sup>(c)</sup>
Historic and Cultural	MODERATE	MODERATE	SMALL	MODERATE	SMALL
Resources					
Air Quality					
Criteria pollutants	SMALL to MODERATE	SMALL	SMALL to MODERATE	SMALL to MODERATE	SMALL to MODERATE
Greenhouse gas emissions	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE
Nonradiological Health	SMALL	SMALL	SMALL	SMALL	SMALL
Radiological Health	SMALL	SMALL	SMALL	SMALL	SMALL
Postulated Accidents	SMALL	SMALL	SMALL	SMALL	SMALL

#### Table ES-3. (contd)

(a) Cumulative impact determinations taken from EIS Table 7-3.

(b) Cumulative impact determinations taken from EIS Table 9-28.

(c) A determination of "NONE" for Environmental Justice analyses does not mean there are no adverse impacts on minority or low-income populations from the proposed project. Instead, an indication of "NONE" means that while there are adverse impacts, those impacts do not affect minority or low-income populations in any disproportionate manner, relative to the general population.

Table ES-3 provides a summary of the cumulative impacts for the proposed and alternative sites. The NRC staff concluded that all of the sites were generally comparable, and it would be difficult to state that one site is preferable to another from an environmental perspective. In such a case, the proposed site prevails because none of the alternatives is environmentally preferable to the proposed site.

Table ES-4 provides a summary of the EIS-derived impacts for a new nuclear power plant in comparison with the energy alternatives. The NRC staff concluded that none of the viable energy alternatives is preferable to construction of a new baseload nuclear power-generating plant located within FPL's region of interest.

The NRC staff considered various alternative systems designs, including seven alternative heatdissipation systems and multiple alternative intake, discharge, and water-supply systems. The review team identified no alternatives that were environmentally preferable to the proposed Turkey Point Units 6 and 7 systems design.



Figure ES-2. Location of Sites Considered as Alternatives to the Turkey Point Site

Impact Category	Nuclear	Coal <sup>(b)</sup>	Natural Gas <sup>(b)</sup>	Combination of Alternatives <sup>(b)</sup>
Land Use	MODERATE	MODERATE	MODERATE	MODERATE
Air Quality	SMALL	MODERATE	SMALL to MODERATE	SMALL to MODERATE
Water Use and Quality	SMALL	SMALL	SMALL	SMALL
Ecology	MODERATE	MODERATE	MODERATE	MODERATE
Waste Management	SMALL	MODERATE	SMALL	SMALL
Socioeconomics	MODERATE Beneficial to MODERATE Adverse	MODERATE Beneficial to MODERATE Adverse	MODERATE Beneficial to SMALL Adverse	MODERATE Beneficial to MODERATE Adverse
Human Health	SMALL	SMALL	SMALL	SMALL
Historic and Cultural Resources	MODERATE	MODERATE	MODERATE	MODERATE
Environmental Justice	NONE <sup>(b)</sup>	NONE <sup>(b)</sup>	NONE <sup>(b)</sup>	NONE <sup>(b)</sup>

# Table ES-4.Summary of Environmental Impacts<sup>(a)</sup> of Construction and Operation of New<br/>Nuclear, Coal-Fired, and Natural-Gas–Fired Generating Units and a<br/>Combination of Alternatives

(a) Impact levels for all alternatives are for construction and operation but do not reflect cumulative impacts. Thus, the nuclear impacts identified here may differ from those used to compare the proposed site to the alternative sites, which reflect cumulative impacts.

(b) Impacts taken from EIS Table 9-4. These conclusions for energy alternatives should be compared to NRCauthorized activities reflected in Chapters 4, 5, and Sections 6.1, and 6.2.

(c) A determination of "NONE" for Environmental Justice analyses does not mean there are no adverse impacts to minority or low-income populations from the proposed project. Instead, an indication of "NONE" means that while there are adverse impacts, those impacts do not affect minority or low-income populations in any disproportionate manner, relative to the general population.

## **Benefits and Costs**

The NRC staff compiled and compared the pertinent analytical conclusions reached in the EIS. It gathered all of the expected impacts from building and operating proposed Turkey Point Units 6 and 7 and aggregated them into two final categories: (1) expected environmental costs and (2) expected benefits to be derived from approval of the proposed action. Although the analysis in Section 10.6 is conceptually similar to a purely economic benefit-cost analysis, which determines the net present dollar value of a given project, the purpose of the section is to identify potential societal benefits of the proposed activities and compare them to the potential internal (i.e., private) and external (i.e., societal) costs of the proposed activities. In general, the purpose is to inform the COL process by gathering and reviewing information that demonstrates the likelihood that the benefits of the proposed activities outweigh the aggregate costs.

On the basis of the assessments in this EIS, the building and operation of proposed Turkey Point Units 6 and 7, with mitigation measures identified by the review team, would accrue benefits that most likely would outweigh the economic, environmental, and social costs. For the NRC-proposed action (i.e., NRC-authorized construction and operation), the accrued benefits would also outweigh the costs of preconstruction, construction, and operation of proposed Turkey Point Units 6 and 7.

#### **Public Involvement**

A 60-day scoping period was held from June 15, 2010, to August 16, 2010. On July 15, 2010, the NRC held two public scoping meetings in Homestead, Florida. The review team received many oral comments during the public meetings and 32 e-mails and 10 letters throughout the rest of the scoping period on numerous topics including energy alternatives, terrestrial ecology, ground and surface water, and socioeconomics. The review team's response to the in-scope public comments can be found in Appendix D. The Scoping Summary Report (Agencywide Documents Access and Management System (ADAMS) Accession No. ML103130609) contains all of the comments, even those considered out-of-scope (e.g., security, safety issues).

During the initial 75-day comment period on the draft EIS, which began on March 6, 2015, the review team held public meetings in Miami, Florida, on April 22, 2015, and in Homestead, Florida, on April 23, 2015. During the course of the comment period, the NRC received requests from members of the public, a Tribal government, and Federal agencies to extend the comment period. In response to these requests, the NRC received the comment period on the draft EIS on May 28, 2015, until July 17, 2015, allowing additional time for public comments. In total, approximately 68 people provided oral comments at the public meetings held in April, and the NRC received approximately 11,300 pieces of correspondence during the original and reopened comment period.

#### Recommendation

The NRC's recommendation to the Commission related to the environmental aspects of the proposed action is that the COL should be issued.

This recommendation is based on the following:

- the application, including the ER, submitted by FPL
- consultation with Federal, State, Tribes, and local agencies
- site audits and alternative sites audits
- consideration of public comments received during the environmental review
- the review team's independent review and assessment summarized in this EIS.

The NRC's determination is independent of the USACE's determination of whether to issue, deny, or issue with modifications the DA permit application for the Turkey Point Units 6 and 7. The USACE will conclude its Clean Water Act Section 404(b)(1) Guidelines and public interest analyses in its Record of Decision.

## ABBREVIATIONS/ACRONYMS

AADT	annual average daily traffic
ac	acre(s)
ACC	averted cleanup and decontamination costs
ac-ft	acre (foot) feet
ACHP	Advisory Council on Historic Preservation
ACS	American Community Survey
AD	Anno Domini
ADAMS	Agencywide Documents Access and Management System
AERMOD	American Meteorological Society/U.S. Environmental Protection Agency (AMS/EPA) Regulatory Model
AICUZ	Air Installation Compatible Use Zone
ALARA	as low as reasonably achievable
a.m.	ante meridian
AO	Administrative Order
AP-42	EPA's Compilation of Air Pollutant Emission Factors document
APE	Area of Potential Effect
APPZ	Avon Park Permeable (or Producing) Zone
AQCR	Air Quality Control Region
ARNI	Aquatic Resources of National Importance
ARRA	American Recovery and Reinvestment Act of 2009
ASE	advanced safety evaluation
ASR	aquifer storage and recovery (system)
ATC	Atlantic Coastal Ridge
BA	Biological Assessment
BACT	Best Available Control Technologies
BBCW	Biscayne Bay Coastal Wetlands
BC	Before Christ
BEBR	University of Florida's Bureau of Economic and Business Research
BEA	U.S. Bureau of Economic Analysis
BEIR VII	Biological Effects of Ionizing Radiation VII
bgs	below ground surface
BISC	Biscayne Bay
BLS	U.S. Bureau of Labor Statistics
BMP	Best Management Practice
Btu	British thermal unit
°C	degree(s) Celsius
μCi	microcurie(s)

μCi/mL	microcuries per milliliter
CA	Consent Agreement
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CCD	Colony Collapse Disorder
CCR	coal combustion residuals
CCS	cooling-canal system (also known as IWF)
CDF	core damage frequency
CDMP	Comprehensive Development Master Plan
CDNFRM	cost for decontamination of non-farmland
CEC	chemical/contaminant of emerging concern
CEQ	Council on Environmental Quality
CERP	Comprehensive Everglades Restoration Program (also Project, Plan)
CFR	Code of Federal Regulations
cfs	cubic foot/feet per second
cm	centimeter(s)
cm <sup>2</sup>	square centimeter(s)
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
COL	combined construction permit and operating license
CPI	Consumer Price Index
CPUE	catch per unit effort
CSAPR	Cross-State Air Pollution Rule
CTEMISS	cooling-tower emissions processor
CWA	Clean Water Act (aka Federal Water Pollution Control Act)
CWS	circulating-water system
CZMP	Coastal Zone Management Plan
	<b>U</b>
d	day(s)
D	Directional Distribution Factor
DA	Department of the Army
dB	decibel(s)
dBA	decibel(s) on the A-weighted scale
DBA	design basis accident
DCD	Design Control Document
DEET	<i>N,N</i> -Diethyl- <i>meta</i> -toluamide
DEIS	draft environmental impact statement
DERM	Miami-Dade County Department of Environmental Resources Management
DHS	Department of Homeland Security

DNL	day-night average sound level
DOE	U.S. Department of Energy
DOI	U.S. Department of Interior
DOT	U.S. Department of Transportation
DPS	distinct population segment
DSM	demand-side management
DZMW	dual-zone monitoring well
EAB EAI EC10 EC50 ECOTOX EDR EDR EEEA EFH EIA EIS EJ ELF ELF-EMF EMB EMF EMB EMF ENP EPA EPOC EPRI ER ESA ESOC ESRP	exclusion area boundary Ecological Associates, Inc. effective concentration required to induce a 10% effect effective concentration required to induce a 50% effect EPA Ecotoxicology Florida Legislature's Office of Economic and Demographic Research East Everglades Expansion Area Environmentally Endangered Lands (Program) essential fish habitat Energy Information Administration environmental impact statement environmental justice extremely low frequency extremely low frequency-electromagnetic field Everglades Mitigation Bank electromagnetic field Everglades National Park U.S. Environmental Protection Agency emerging pollutant of concern Electric Power Research Institute Environmental Report Endangered Species Act of 1973, as amended emerging substance of concern Environmental Standard Review Plan (NUREG-1555, Supplement 1, Operating License Renewal)
EW	exploratory well
°F	degree(s) Fahrenheit
FAA	Federal Aviation Administration
FAC	Florida Administrative Code or Fla. Admin. Code
FDEP	Florida Department of Environmental Protection
FDHR	Florida Division of Historic Resources
FDOH	Florida Department of Health

FECFlorida East Coast (Railway)FEFPFlorida Education Finance ProgramFEMAFederal Emergency Management AgencyFERCFederal Emergency Management AgencyFERCFederal Energy Regulatory CommissionFFWCCFlorida Fish and Wildlife Conservation CommissionFIRMFlood Insurance Rate MapFKNMSFlorida Keys National Marine SanctuaryFLUCFCSFlorida Land Use, Cover, and Forms Classification SystemFLUMFuture Land Use MapFMNHFlorida Master Site File (form)FNAIFlorida Natural Areas InventoryFONSIFindings of No Significant ImpactFPLFlorida Power & Light Companyfpsfoot (feet) per secondFPSCFlorida Power & Light CommissionFR <i>Federal Register</i> FRCCFlorida Reliability Coordinating CouncilFSRRFinal Safety Analysis ReportFSERFinal Safety Analysis ReportFSERFinal Safety Per yearft1dfoot (feet) per dayft3dcubic foot (feet) per dayft3dcubic foot (feet) per dayft3dcubic foot (feet) per dayft3dcubic foot (feet) per yearFTEfull-time equivalentFWPCAFederal Water Pollution Control Act (also known as the Clean Water Act of 1977)FWSU.S. Fish and Wildlife ServiceFYfiscal yearµgmicrogram(s) microgram(s) per literµGymicrogram(s) microgram(s) galgallon(s)gallon(s)	FDOT	Florida Department of Transportation
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ggram(s) or gravity of Earth (g-force)galgallon(s)	µg/L	microgram(s) per liter
gal gallon(s)	μGy	microgray(s)
	g	gram(s) or gravity of Earth (g-force)
	gal	gallon(s)
gai/yr gallon(s) per year	gal/yr	gallon(s) per year

GC	gas centrifuge
g/cm <sup>3</sup>	gram(s) per cubic centimeter
GCRP	U.S. Global Change Research Program
GEIS	Generic Environmental Impact Statement (for License Renewal of Nuclear Plants, NUREG-1437)
GHG	greenhouse gas
GIS	geographic information system
gpd	gallon per day
gpm	gallon per minute
gpm/ft	gallon(s) per minute per foot
g/s	gram(s) per second
GU	Interim District (zone)
GW	gigawatt(s)
GWh	gigawatt hour(s)
ha	hectare(s)
HAP	hazardous air pollutant
HAPC	habitat area of particular concern
HBB	health-based benchmark
HDR	HDR Engineering, Inc.
HEC-RAS	Hydrologic Engineering Centers River Analysis System
hr	hour
HUD	U.S. Department of Housing and Urban Development
Hz	hertz
I	Interstate
IAEA	International Atomic Energy Agency
ICRP	International Commission on Radiological Protection
ID	identification
IGCC	integrated gasification combined-cycle
in.	inch(es)
IRWST	in-containment refueling water storage tank
ISFSI	independent spent fuel storage installation
IUCN	World Conservation Union
IWF	industrial wastewater facility (also known as CCS)
К	Standard Peak Hour Factor
kg	kilogram(s)
kg/d	kilogram(s) per day
kg/L	kilogram(s) per liter
kg/yr	kilogram(s) per year

kg/ha/mo kHz km km <sup>2</sup> km/hr kt kV kV/m	kilogram(s)/hectare/month kilohertz kilometer(s) square kilometer(s) kilometer(s) per hour knot(s) kilovolt(s) kilovolt(s) per meter
kW kWh	kilowatt(s) kilowatt-hour(s)
L	liter(s)
lb lb/ur	pound(s)
lb/yr L <sub>dn</sub>	pound(s) per year day-night average sound level
	least environmentally damaging practicable alternative
L <sub>eq</sub>	noise level equivalent
LFA	Lower Floridan Aquifer
LLC	Limited Liability Company
LLW	low-level waste
LOEC	lowest-observed effect concentration
LOS	level of service
LPZ	low-population zone
LST	local standard time
LWA	Limited Work Authorization
LWR	light water reactor
µmhos/cm	micromhos per centimeter
m	meter(s)
m/s	meter(s) per second
m <sup>2</sup>	square meter(s)
m <sup>3</sup>	cubic meter(s)
m³/d m³/s	cubic meters per day
mə/s mA	cubic meter(s) per second
MACCS	milliampere(s) MELCOR Accident Consequence Code System
MCU	Middle Confining Unit
MDC	Miami-Dade County
M-DCPS	Miami-Dade County Public School District
MDWASD	Miami-Dade Water and Sewer Department
MEI	maximally exposed individual

mg	milligram(s)
mG	milliGauss
Mgd	million gallon(s) per day
Mgd/yr	million gallon(s) per day per year
Mgm	million gallons per month
Mg/L	milligram(s) per liter
Mg/m <sup>3</sup>	milligram(s) per cubic meter
mg N/L	milligrams of nitrate per liter
mg P/L	milligrams of phosphate per liter
mGy	milligray(s)
mGy/d	milligray(s) per day
MFCMA	Magnuson–Stevens Fishery Conservation and Management Act (or Magnuson–Stevens Act)
MHz	megahertz
mi	mile(s)
mi <sup>2</sup>	square mile(s)
min	minute(s)
MIT	Massachusetts Institute of Technology
mL	milliliter(s)
MMBtu	one million British thermal units
MMBtu/hr	one million British thermal units per hour
MMBtu/yr	one million British thermal units per year
mo	month(s)
MOU	Memorandum of Understanding
mph	mile(s) per hour
mrad	millirad
mrem	millirem
msl or MSL	mean sea level
mSv	millisievert(s)
MSW	municipal solid waste
MT	metric ton(nes)
MTU	metric ton uranium
MW	megawatt(s)
MWd/MTU	megawatt-days per metric ton of uranium
MW(e)	megawatt(s) electric
MW(t)	megawatt(s) thermal
MWh	megawatt hour(s)
MWh/yr	megawatt hour(s) per year
Ν	north or nitrogen
NA	not applicable

NAAQS	National Ambient Air Quality Standard
NAD83	North American Datum of 1983
NARUC	
NASCAR	National Association of Regulatory Utility Commissioners
_	National Association for Stock Car Auto Racing
NAVD88	North American Vertical Datum of 1988
NCI	National Cancer Institute
NCRP	National Council on Radiation Protection and Measurements
NEPA	National Environmental Policy Act of 1969, as amended
NERC	North American Electric Reliability Corporation
NESC	National Electrical Safety Code
NFC	Natural Forest Community
NGCC	natural-gas combined-cycle
NGVD	National Geodetic Vertical Datum
NHPA	National Historic Preservation Act
NIEHS	National Institute of Environmental Health Sciences
NMFS	National Marine Fisheries Service
NNC	Numerical Nutrient Criteria
NO <sub>2</sub>	nitrogen dioxide
NO <sub>3</sub> +NO <sub>2</sub>	nitrate+nitrite
NO <sub>x</sub>	nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
NOEC	no-observed effect concentration
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRC	U.S. Nuclear Regulatory Commission
NRHP	National Register of Historic Places
NSR	new source review
NUREG	U.S. Nuclear Regulatory Commission technical document
NW	northwest
NWS	National Weather Service
O <sub>2</sub>	oxygen
O <sub>3</sub>	ozone
ODCM	Offsite Dose Calculation Manual
OFW	Outstanding Florida Water
OIG	Office of the Inspector General
ORV	off-road vehicle
OSHA	Occupational Safety and Health Administration
Р	phosphorus
PAH	polycyclic aromatic hydrocarbon

PC	personal computer
PCB	polychlorinated biphenyl
pCi/L	picocurie(s) per Liter
рН	measure of acidity or basicity in solution
PHU	panther habitat units
PHU	panther habitat unit
PFA	Panther Focus Area
P/L	phosphorus per liter
PIR	Public Interest Review or Project Implementation Report
PIRF	Public Interest Review Factor
PK-12	preschool through 12th grade
p.m.	post meridian
PM	particulate matter
PM <sub>10</sub>	particulate matter with an aerodynamic diameter of 10 microns or less
PM <sub>2.5</sub>	particulate matter with an aerodynamic diameter of 2.5 microns or less
PPSA	Power Plant Siting Act
ppm	part(s) per million
ppt	parts per thousand
PRA	probabilistic risk assessment
PSA	probabilistic safety assessment
PSD	Prevention of Significant Deterioration (Permit)
psu	practical salinity unit
PWR	pressurized water reactor
rad	radiation absorbed dose
RAI	Request for Additional Information
RCRA	Resource Conservation and Recovery Act of 1976, as amended
RCW	radial collector well
rem	roentgen equivalent man
REMP	radiological environmental monitoring program
RfC	reference concentration
RFI	Request for Information
RHA	Rivers and Harbors Act of 1899
RIMS II	Regional Input-Output Modeling System
RMS	root mean square
Rn-222	radon-222
ROD	Record of Decision
ROI	region of interest
RPHP	Radiation Public Health Project
RRY	reference reactor year
RSICC	(Oak Ridge) Radiation Safety Information Computational Center

RV	recreational vehicle
RWTF	reclaimed water-treatment facility
Ryr	reactor year
s or sec	second(s)
SAFMC	South Atlantic Fisheries Management Council
SAMA	severe accident mitigation alternative
SAMDA	severe accident mitigation design alternative
SAV	submerged aquatic vegetation
SBO	Station Blackout
SCA	Site Certification Application
scf	standard cubic feet
SCR	selective catalytic reduction
SDWWTP	South District Wastewater Treatment Plant
sec	second(s)
SECA	State Energy Conversion Alliance
SER	Safety Evaluation Report
SFRPC	South Florida Regional Planning Council
SFWMD	South Florida Water Management District
SGWEA	Southern Glades Wildlife Environmental Area
SHA	seismic hazard analysis
SHPO	State Historic Preservation Office (or Officer)
s/m <sup>3</sup>	seconds per cubic meter
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	oxides of sulfur
SOR	Save Our Rivers (Program)
SPCC	Spill Prevention, Control, and Countermeasure (Plan)
SR	State Route
SRP	Standard Review Plan
SSC	Species of Concern
SU	Standard Unit(s)
Sv	sievert(s)
SW	southwest
SWPPP	stormwater pollution prevention plan
SWS	service-water system
Т	ton(s) or tonne(s)
T/B	Tug/Barge
TBq	terrabequerel
TCP	traditional cultural property
T&E	threatened and endangered

TDS	total dissolved solids
TEDE	total effective dose equivalent
THPO	Tribal Historic Preservation Officer
TIMDEC	decontamination time
TKN	total Kjeldahl nitrogen
TLD	thermoluminescent dosimeter
TLF	Treasured Lands Foundation
TN	total nitrogen
TOC	total organic carbon
TP	total phosphorus
TRC	total reportable cases
TVA	Tennessee Valley Authority
UDB	urban development boundary
UF <sub>6</sub>	uranium hexafluoride
UIC	underground injection control
UMAM	Uniform Mitigation Assessment Method
UMTRI	University of Michigan Transportation Research Institute
UNESCO	United National Educational, Scientific and Cultural Organization
UO <sub>2</sub>	uranium dioxide
US	U.S. (State Highway)
U.S.	United States
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USCB	U.S. Census Bureau
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USDW	underground source of drinking water
USGS	U.S. Geological Survey
VOC	volatile organic compound
W	west
W.A.T.E.R.	Wetland Assessment Technique for Environmental Review
WCA	water conservation area
Westinghouse	Westinghouse Electric Company, LLC
WHO	World Health Organization
wk	week(s)
WOTUS	waters of the United States
WRDA	Water Resources Development Act
WTP	water treatment plant
WWTP	wastewater treatment plant
	1

χ/Q atmospheric dispersion factor(s); annual average normalized air concentration value(s)

yd³	cubic yards
yr	year(s)

## APPENDIX E

## DRAFT ENVIRONMENTAL IMPACT STATEMENT COMMENTS AND RESPONSES

## APPENDIX E

## DRAFT ENVIRONMENTAL IMPACT STATEMENT COMMENTS AND RESPONSES

As part of the U.S. Nuclear Regulatory Commission (NRC) review of the Florida Power & Light Company (FPL) application for combined construction permits and operating licenses (COLs) for proposed Units 6 and 7 at the Turkey Point site, located in Miami-Dade County, Florida, the NRC and the U.S. Army Corps of Engineers (USACE) (together referred to as the "review team") solicited comments from the public on the draft environmental impact statement (EIS). The draft EIS was issued on March 5, 2015. A 75-day comment period began on March 6, 2015, when the U.S. Environmental Protection Agency (EPA) issued a *Federal Register* Notice of Availability (80 FR 12172) of the draft EIS to allow members of the public to comment on the results of the environmental review. The public comment period closed on May 22, 2015. On May 28, 2015, the NRC reopened the public comment period to allow more time for members of the public to develop and submit their comments (80 FR 30501-TN4614). The reopened comment period closed on July 17, 2015.

As part of the process to solicit public comments on the draft EIS, the review team

- placed a copy of the draft EIS at the Homestead Branch Library in Homestead, Florida and the South Dade Regional Library in Miami, Florida;
- made the draft EIS available in the NRC's Public Document Room in Rockville, Maryland;
- placed a copy of the draft EIS on the NRC website at http://www.nrc.gov/reading-rm/doccollections/nuregs/staff/sr2176/.
- provided a copy of the draft EIS to the Turkey Point Nuclear Plant environmental review mailing list and any member of the public who requested one;
- sent copies of the draft EIS to certain Federal, State, Tribal, and local agencies;
- published a request for comment on the draft EIS in the *Federal Register* on March 5, 2015 (80 FR 12043);
- filed the draft EIS with the U.S. Environmental Protection Agency; and
- held three public meetings, one on Wednesday, April 22, 2015 in Miami, Florida, and two on Thursday, April 23, 2015 in Homestead, Florida.

Approximately 182 people attended the public meetings in Miami, approximately 196 people attended the two meetings in Homestead, and numerous participants provided oral comments at each. A certified court reporter recorded these oral comments and prepared written transcripts of the meeting. The transcripts (NRC 2015-TN4553; NRC 2015-TN4554; NRC 2015-TN4555) of the public meetings were published on August 25, 2015, as part of the public meeting summary. In addition to the comments received at the public meeting, the NRC received letters, e-mail messages, and posts to the regulations.gov site with comments concerning the proposed new units at the Turkey Point site.

The comment letters, regulations.gov posts, e-mail messages, and transcripts of the public meetings are available in the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible at http://www.nrc.gov/reading-rm.html. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC's Public Document Room reference staff at 1-800-397-4209 or 301-415-4737. The ADAMS accession numbers for the letters, regulations.gov posts, e-mail messages, and transcripts are provided in Table E-1.

- Section E.1 Disposition of Comments provides a list of commenter names and a unique identifier that is used throughout this appendix.
- Section E.2 Comments and Responses provides individual comments and the corresponding response by subject category.
- Section E.3 Form Letter Authors provides tables for each form letter received and includes commenter names and the ADAMS identifier.
- Section E.4 References provides the list of references used in this appendix.

#### E.1 Disposition of Comments

Each set of comments from a given commenter was given a unique correspondence identifier, allowing each set of comments from a commenter to be traced back to the transcript, letter, or e-mail in which the comments were submitted. After the comment period concluded, the review team considered and dispositioned all comments received. To identify each individual comment, the review team reviewed the transcripts of the public meetings and each piece of correspondence received related to the draft EIS. As part of the review, the review team identified statements that it believed were related to the proposed action and recorded the statements as comments. Each comment was assigned to a specific subject area, and similar comments were grouped together. Finally, responses were prepared for each comment or group of comments.

Some comments addressed topics and issues that are not part of the environmental review for this proposed action. These comments included questions about NRC's safety review, general statements of support or opposition to nuclear power, and comments on the NRC regulatory process in general. These comments are included, but detailed responses to such comments are not provided because they addressed issues that do not directly relate to the environmental effects of this proposed action and are, thus, outside the scope of the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.) (TN661) review of this proposed action. Many comments, however, specifically addressed the scope of the environmental review, analyses, and issues contained in the draft EIS.

Table E-1 provides a list of commenters identified by name, affiliation (if given), comment number, and the source of the comment.

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Abalos, Jessica		reg.gov (ML15201A051)	0659
Ackerman, Frank		Email (ML15153A511)	0565
Agler, Mindy		Email (ML15141A397)	0152
Aha, Chas		reg.gov (ML15225A087)	0708
Albers, Harold		Email (ML15156A095)	0688
Allen, Keith		Email (ML15156A488)	0162
Allen, Maureen		Email (ML15141A653)	0154
Allison, Noreen		reg.gov (ML15211A039)	0549
Almer, Anessa		reg.gov (ML15225A093)	0712
Almirola, Alejandro		Email (ML15159A881)	0178
Almirola, Alejandro		Email (ML15159A948)	0178
Almirola, Alejandro		Meeting Transcript (ML15219A360)	0721-31
Alvarez, Chad		reg.gov (ML15201A057)	0664
Alvarez, Susana		reg.gov (ML15104A339)	0025
Andersen, Paul		Email (ML15148B181)	0388
Anderson, Glen		Email (ML15156B027)	0321
Anderson, Vaughn		Email (ML15141A262)	0380
Anderson, Vaughn		Email (ML15162A942)	0608
Anderson, Vaughn		Email (ML15195A631)	0560
Anonymous, Anonymous		Email (ML15146A106)	0239
Anonymous, Anonymous		reg.gov (ML15096A471)	0327
Anonymous, Anonymous		reg.gov (ML15110A282)	0331
Anonymous, Anonymous		reg.gov (ML15110A284)	0333
Anonymous, Anonymous		reg.gov (ML15110A288)	0336
Anonymous, Anonymous		reg.gov (ML15128A081)	0346
Anonymous, Anonymous		reg.gov (ML15128A087)	0351
Anonymous, Anonymous		reg.gov (ML15128A091)	0354
Anonymous, Anonymous		reg.gov (ML15198A123)	0644
Anonymous, Anonymous		reg.gov (ML15198A124)	0645
Anonymous, Anonymous		reg.gov (ML15198A130)	0628
Anonymous, Anonymous		reg.gov (ML15211A041)	
Anonymous, Anonymous		reg.gov (ML15211A057)	
Anonymous, Anonymous		reg.gov (ML15225A084)	
Anonymous, Anonymous		reg.gov (ML15225A085)	0706
Anonymous, Anonymous		reg.gov (ML15225A092)	0711
Anonymous, Anonymous		reg.gov (ML15225A204)	0715
Anonymous, Anonymous		reg.gov (ML15225A208)	0719
Anonymous, Charity		reg.gov (ML15198A143)	0638
Anonymous, Elena		reg.gov (ML15201A055)	0662
Anonymous, Judi		reg.gov (ML15211A030)	0537
Anonymous, Lynn		Email (ML15146A153)	0161
Aronson, Murray		Email (ML15153B137)	0391
Atler, Neal		Email (ML15139A871)	0215
הנסו, ווכמו			0210

 Table E-1. Individuals Providing Comments During the Comment Period

0		Comment Source and	Correspondence
Commenter	Affiliation (if stated)	ADAMS Accession #	ID
Austin, Stan	National Park Service	Email (ML15222A171)	0622
Austin, Stan	National Park Service	Email (ML15272A460)	0623
Avers, Pamela Dee		Email (ML15139A692)	0090
Bach, Lili		Email (ML15139A722)	0128
Bagwell, Wilson Knox		Email (ML15156A862)	0306
Bailey, Evelyn		Email (ML15148B220)	0525
Ball, Cheri		Email (ML15190A270)	0472
Balog, Nancy		Email (ML15159B075)	0185
Barczak, Sara	Southern Alliance for Clean Energy	Email (ML15146A145)	0112
Barlow, Jeffrey		Email (ML15139A974)	0218
Barnes, Janice		Email (ML15195A188)	0558
Barnidge, Virginia		reg.gov (ML15201A041)	0672
Bastidas, Mauricio		reg.gov (ML15225A115)	0720
Batista, Carlos		Letter (ML15128A183)	0685
Baumwall, Douglas		reg.gov (ML15104A332)	0329
Bazzi, Noell		Email (ML15139A609)	0047
Bazzone, Barbara		Email (ML15146A112)	0159
Beattie, Jane		Email (ML15154B523)	0417
Beckman, Yvonne and Douglas		Email (ML15139A633)	0060
Beiriger, Mary		Email (ML15162A919)	0287
Bejarano, Antonio		reg.gov (ML15104A328)	0019
Bender, Kae		Email (ML15154C263)	0441
Bennett, Robbie		Email (ML15148A890)	0265
Benson, Mary		Email (ML15139A685)	0081
Benton-Janetta, Lori		Email (ML15156B499)	0449
Bereczki, Patricia		Email (ML15153B232)	0393
Berendsohn, Catherine		Meeting Transcript (ML15219A410)	0723-11
Bernabei, Catharina		Meeting Transcript (ML15219A360)	0721-18
Bernatis, Jenn		Email (ML15142A340)	0520
Berndgen, Michelle		reg.gov (ML15128A451)	0361
Bertelson, Bob	Florida Power and Light	Meeting Transcript (ML15219A410)	0723-15
Berzowski, Bill		Meeting Transcript (ML15219A386)	0722-18
Bethune, David		Meeting Transcript (ML15219A360)	0721-23
Bethune, David		reg.gov (ML15128A454)	0615
Betts, Cynthia		Email (ML15155B927)	0280
Birsh, Arthur and Joan		Email (ML15139A684)	0083
Black, Mary Beth		Email (ML15141A499)	0107
Blair, Dan		Email (ML15154A284)	0485
Blanck, Heidi		Email (ML15155C231)	0397
		(	

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Bodiford, Loretta	•	Email (ML15156B342)	0444
Bofill, Beatriz		Email (ML15142A382)	0235
Bofill, Beatriz		Email (ML15211A034)	0235
Boling, Steve	Florida Power and Light	Meeting Transcript (ML15219A410)	0723-7
Bonilla-Jones, Carmen Elisa		Email (ML15142A324)	0231
Boone, James		Email (ML15155A604)	0533
Boone, Jim		Email (ML15154C045)	0436
Borie, Edith		Email (ML15156A016)	0629
Boyce, Sheila		Email (ML15139A693)	0091
Brandariz, Anita		Email (ML15148B306)	0529
Bratcher, Suzanne		Email (ML15155A332)	0498
Bremen, Gary		Email (ML15159B232)	0181
Breslin, Tom		Meeting Transcript (ML15219A360)	0721-17
Brexel, Sr., Charles		Email (ML15197A051)	0592
Brinn, Ira		Email (ML15141A268)	0148
Brito, Rosa	South Dade Chamber of Commerce	Meeting Transcript (ML15219A410)	0723-10
Bromage, Joan		Email (ML15148B122)	0386
Brown, Bradford		reg.gov (ML15201A061)	0667
Brown, Judith O.		Email (ML15139A725)	0131
Brown, Robert		Email (ML15148B082)	0383
Brstow, Mary		Email (ML15156A021)	0497
Brumleve, Charles		Email (ML15155A420)	0502
Bryan, David		Email (ML15195A572)	0507
Bubb, Ken		Email (ML15148B039)	0462
Buechler, Jerry		reg.gov (ML15225A207)	0718
Bump, Deborah		Email (ML15148B317)	0535
Bunker, Diane		Email (ML15154B857)	0426
Burge, Laura		Email (ML15156A161)	0540
Burns, Terry		Email (ML15155B716)	0647
Buyea, Thomas		Email (ML15155A458)	0505
Cafarelli, Cenie		Email (ML15142A309)	0298
Campbell, Cara	Ecology Party of Florida	Email (ML15146A151)	0253
Campbell, Grant		Email (ML15155A310)	0482
Cardona, Alfredo		reg.gov (ML15128A078)	0343
Carlson, John		Email (ML15142A378)	0158
Carpenter, Rory		Email (ML15155B705)	0694
Casey, Sr., Robert J.		Letter (ML15131A379)	0368
Casper, Laurel		Email (ML15159B553)	0202
Castro, Alyssa Tomasi		reg.gov (ML15201A059)	0665
Caswell, Gail		Email (ML15148A721)	0465
Caswell, Susan		Email (ML15154A305)	0487
Cathey, Turner		Email (ML15139A679)	0079

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Causey, Charlie	Florida Keys Environmental Fund	Email (ML15146A151)	0253
Cava, Daniella Levine	Miami-Dade County Commissioner	reg.gov (ML15155A563)	0172
Cava, Daniella Levine	Miami-Dade County Commissioner	reg.gov (ML15198A121)	0172
Cavros, George	Southern Alliance for Clean Energy	Email (ML15146A151)	0253
Cavros, George	Southern Alliance for Clean Energy	Meeting Transcript (ML15219A360)	0721-8
Chatterton, Andrew	North American Young Generation Nuclear	Meeting Transcript (ML15219A386)	0722-3
Chenoweth, Mike	Izaak Walton League of America	Email (ML15146A151)	0253
Chirillo, James		Email (ML15155B963)	0261
Chiszar, Benjamin J.		Letter (ML15191A341)	0677
Chrissos, H. L. Chris		Email (ML15159A039)	0164
Christie, Grazie		reg.gov (ML15104A321)	0013
Clapp, Linda		Email (ML15159B286)	0028
Clay, Cynthia		Email (ML15139A986)	0219
Cleland, Noel		Letter (ML15160A314)	0207
Cleland, Noel	Sierra Club Miami Group	Email (ML15175A152)	0288
Cobb, Tanya	·	Email (ML15153B269)	0413
Coffey, Rotraud		Email (ML15142A340)	0516
Cohen, Howard		Email (ML15155A936)	0567
Colby, Helen		Email (ML15139A717)	0124
Colby, Helen		Email (ML15146A126)	0242
Colby, Helen		Email (ML15156A120)	0733
Colls, Ana		Email (ML15139A719)	0125
Colson, Clay G.		Email (ML15162A913)	0602
Commenters, Multiple		Email (ML15139A604)	0044
Commenters, Multiple		Email (ML15139A651)	0067
Commenters, Multiple		Email (ML15139A668)	0073
Commenters, Multiple		Email (ML15139A729)	0103
Commenters, Multiple		Email (ML15140A000)	0102
Commenters, Multiple		Email (ML15140A141)	0102
Commenters, Multiple		Email (ML15141A259)	0379
Commenters, Multiple		Email (ML15146A110)	0240
Compel, Jr., Joseph		Email (ML15140A110) Email (ML15160A987)	0240
Cook, Cherie		Email (ML15166A492)	0283
Cook, J.		. , , , , , , , , , , , , , , , , , , ,	
		reg.gov (ML15211A051) Letter (ML15160A311)	0577 0204
Cooper, Fran Cooper, Joe		Email (ML15159A077)	0204 0165
•		· · · · · · · · · · · · · · · · · · ·	
Corda, Charles		Meeting Transcript (ML15219A360)	0721-25
Corey, Sheffield		Email (ML15154B767)	0424
-			0424 0633
Cornely, Tina		reg.gov (ML15198A136)	0033

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Corral, Oscar	Anniation (il Stated)	Email (ML15139A727)	0133
Council, Barbara		Email (ML15155A348)	0731
Courliss, William		Email (ML15153A991)	0604
Critser, Jackie		Email (ML15159A251)	0168
Crystal, Chris		reg.gov (ML15110A285)	0334
Cullen, Sarah		Email (ML15198A538)	0597
Cummings, Frank		reg.gov (ML15225A089)	0709
Cunningham, Sue		Email (ML15146A374)	0114
Cusidor, Teresa		Email (ML15139A721)	0127
Dahlgren, Shelley		Email (ML15154B983)	0434
Daly, Meg	Friends of the Underline	Email (ML15139A674)	0076
Daly, Meg	Friends of the Underline	Email (ML15146A151)	0253
Daniels, Bonnie	Thends of the Ordenine	reg.gov (ML15128A076)	0341
Darden, Colgate		Email (ML15195A151)	0571
Datz, Amy		reg.gov (ML15211A046)	0621
•		•• • • •	0614
Dauerty, Barbara		Email (ML15155C003) Email (ML15154A414)	0493
Davidson, Penny		, ,	
Davis, S. K.		Email (ML15153B256)	0412
de Armas, Maria Cristina		Email (ML15139A676)	0077
de Azevedo, Ricardo		Email (ML15139A711)	0119
Defoggi, Virginia		Email (ML15148B204)	0266
Degges, Frank		Email (ML15156B481)	0447
Delateur, Marc		Email (ML15142A281)	0230
Demaria, Karen		Email (ML15155C181)	0262
Demello, Christine		Email (ML15155C024)	0180
DeMent, David L.		Email (ML15139A588)	0036
Denninger, Frank		reg.gov (ML15211A045)	0554
Dent, William		Email (ML15162A094)	0319
Detrick, Mary		Email (ML15161A649)	0317
Deutsch, Steven		reg.gov (ML15211A042)	0552
Dickinson, Robert		Email (ML15148B038)	0461
Dietrich, Chris OMeara		Email (ML15142A224)	0295
Dimondstein, Carla		Email (ML15153A491)	0564
Dolben, Hollis		reg.gov (ML15198A128)	0627
Dorn, Kathryn		Email (ML15155B897)	0693
Dougherty, Kate		Email (ML15154B076)	0394
Douglas, Carolyn		Email (ML15154A285)	0486
Draper, Lonnie M.		Email (ML15196A152)	0511
Drevicky, John		Email (ML15156A438)	0691
Drew, Virginia		Email (ML15154B284)	0399
Dronsky, Rick		Email (ML15141A234)	0142
Dudley, Dwight	Florida House of Representatives	Email (ML15146A155)	0254
Dulicai, Linda		Email (ML15156A029)	0697
Dunn, Elmo		Email (ML15154B341)	0402
DuPriest, William Robert		Email (ML15139A695)	0093
		,	

Table E-1. (contd)

		/	
Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Duquette, Bill	Homestead Hospital	Meeting Transcript (ML15219A386)	0722-13
Duran-Pinzon, Jaime		Email (ML15146A131)	0243
Durieux, P.		Email (ML15158A046)	0451
Dutton, Julene		reg.gov (ML15198A145)	0640
Dwyer, John P.		Email (ML15147A217)	0264
Dwyer, John P.		reg.gov (ML15201A045)	0673
Dwyer, Karen		reg.gov (ML15141A398)	0674
Dwyer, Karen		reg.gov (ML15201A048)	0674
Earnshaw, Shinann		Email (ML15155C194)	0326
Eastman, John		Meeting Transcript (ML15219A360)	0721-24
Eckert, Brenda		Email (ML15154B325)	0400
Edmond, Gabriel	South Miami	Meeting Transcript (ML15219A360)	0721-7
Edwards, Suzi		reg.gov (ML15211A056)	0600
Egan, June		Email (ML15156A312)	0690
Ehrenfried, Jennifer		reg.gov (ML15211A033)	0544
Ehrmann, Nancy		Email (ML15158A154)	0454
Elton, Wallace		Email (ML15160A802)	0229
Enfield, David		Email (ML15142A383)	0236
Engelberg, Jodi		reg.gov (ML15082A283)	0004
England, Margaret	Hendry-Glades Audubon	Email (ML15146A151)	0253
England, Peter		Meeting Transcript (ML15219A386)	0722-10
Ercole, Steven		Email (ML15159A445)	0170
Ericson, Del		Email (ML15142A256)	0320
Erven, Marlene		Email (ML15161A618)	0314
F****SH, Peter		reg.gov (ML15211A037)	0547
Faber, Davenie		reg.gov (ML15082A285)	0006
Fairchild, David		Email (ML15139A696)	0094
Family, Manzi		Email (ML15198A509)	0593
Farnsworth, Stu		Email (ML15148A586)	0464
Fass, Amy Fay, Virginia M.	NOAA-Habitat Conservation	Email (ML15160A803) Email (ML15272A530)	0278 0724
Footoou Lypp	Division	Email (NII 151614617)	0313
Fecteau, Lynn Felinski, Julee		Email (ML15161A617)	0625
Fernandez, Maria		reg.gov (ML15198A126) Email (ML15139A647)	0064
Cristina			
Ferro, Colleen		Email (ML15146A231)	0260
Ferry, Lisa		reg.gov (ML15198A129)	0704
Field, Fran		Email (ML15146A228)	0258
Fielding, Ed	Martin County Board of Commissioners	Email (ML15142A379)	0232
Finver, Jody		Email (ML15085A500)	0008
Fischer, Antoinette		reg.gov (ML15128A513)	0365

Table E-1. (contd)

		Comment Source and	Correspondence
Commenter	Affiliation (if stated)	ADAMS Accession #	ID
Fishman, Zelma		Email (ML15154B087)	0395
Fitzpatrick, Deirdre		Email (ML15139A940)	0217
Fitzpatrick, Deirdre		Email (ML15148B206)	0389
Forbes, J.		Email (ML15159B307)	0189
Foster, Beverly		Email (ML15154B337)	0401
Fox, Kristi		Email (ML15195A187)	0506
Franzmann, Paul		Email (ML15156A298)	0384
Fray, Antje		Email (ML15155B775)	0648
Frederickson, Kelly		Email (ML15155B676)	0188
Freel, Susan		Email (ML15159A079)	0166
Fuentes, Mariana		Email (ML15195A156)	0574
Fulks, Anna Louise		Email (ML15146A141)	0250
Fuller, Manley	Florida Wildlife Federation	Email (ML15146A151)	0253
G., Ambriel		reg.gov (ML15211A050)	0561
Galbreath, Jerry		Email (ML15146A368)	0489
Galles, Camilla		reg.gov (ML15198A125)	0624
Garcia, Alda S.		Email (ML15146A128)	0524
Garcia, Javier	Pipefitters, Local 725	Meeting Transcript (ML15219A360)	0721-20
Garcia, Ruslan		Email (ML15139A705)	0116
Garey, Jenne		Email (ML15142A273)	0668
Garmon, Toni		Email (ML15154A221)	0477
Gavel, Deborah		Email (ML15139A700)	0098
Geary, Craig W.		Email (ML15139A699)	0097
Geiger, Marcia		Email (ML15156A978)	0312
Ghosh, Susan		Email (ML15198A526)	0595
Gibson, David		Email (ML15162A490)	0324
Glass, Rachel		Email (ML15159B572)	0222
Glasshof, Wendy		Email (ML15155B196)	0587
Glynn, Simon		Email (ML15146A143)	0111
Goldberg, Laura		Email (ML15155B050)	0568
Goldman, Emanuel		Email (ML15141A401)	0153
Goldmeier, Barry		reg.gov (ML15104A324)	0015
Goldstein, Louis		Email (ML15154B561)	0418
Gomez, Albert		Meeting Transcript (ML15219A360)	0721-34
Gomez, Christian		Email (ML15154A757)	0269
Gomez, Gustavo		Email (ML15139A703)	0101
Gomez, Lissett		Email (ML15139A549)	0030
Gomez, Toni Thoman		Email (ML15155A442)	0504
Gonzalez, Carlos		reg.gov (ML15225A096)	0714
Gonzalez, Javier		Meeting Transcript (ML15219A386)	0722-8
Govindasamy, Rani		Èmail (ML15146A137)	0247
Graffagnino, Mary Ann and Frank		Email (ML15154B434)	0403

Table E-1. (contd)

		Comment Source and	Correspondence
Commenter	Affiliation (if stated)	ADAMS Accession #	ĪD
Grant, Randy		Email (ML15141A258)	0146
Greenwald, Ken		Email (ML15155C084)	0385
Greer, Tom		Email (ML15153B174)	0392
Gregory, Gregory B.		Email (ML15154A125)	0728
Griffith, Ed and Harriet	New Progressive Alliance	reg.gov (ML15128A514)	0366
Grill, Brock		Email (ML15142A340)	0512
Grill, Helen		Email (ML15139A596)	0043
Griswold, Dave		reg.gov (ML15198A134)	0631
Gross, Cheryl A.		Email (ML15148A486)	0463
Gross, Gary		reg.gov (ML15104A326)	0017
Guy, Sharon		reg.gov (ML15201A043)	0654
H., Pat		reg.gov (ML15211A040)	0550
Haber, Matthew S.	City of Miami	Email (ML15201A460)	0611
Haber, Rochelle		Email (ML15146A132)	0244
Haffmans, Edmund		reg.gov (ML15138A086)	0371
Hall, Linnea M. Fronce Thomas		Email (ML15160A853)	0279
Halligan, Melody		Email (ML15154A377)	0491
Hamilton, Brent		reg.gov (ML15082A281)	0002
Hamilton, McHenry		Letter (ML15160A312)	0205
Hanna, Jane		Email (ML15155B346)	0588
Hansen, Yvonne		Email (ML15154C148)	0439
Harden, Ronald		Email (ML15159B465)	0195
Hardie, Daniel		Émail (ML15153A409)	0562
Hardin, Lillian		Email (ML15158A172)	0455
Harper, Diane		Email (ML15153A722)	0583
Harris, Walter	South Miami	Meeting Transcript (ML15219A360)	0721-6
Harrison, J. M. M.		Email (ML15195A715)	0508
Harrison, Norma J. F.		Email (ML15155B823)	0649
Hart, Barbara		Email (ML15162B091)	0196
Hart, Barbara		Email (ML15162B154)	0196
Hartmann, Donald		reg.gov (ML15201A049)	0657
Haselhurst, Richard		reg.gov (ML15198A144)	0639
Hawkes, Holly Forrester		Email (ML15139A552)	0031
Hayes, Linda		Email (ML15156A712)	0275
Hazard, Evan		Email (ML15153B288)	0415
Headley, Linda		reg.gov (ML15138A091)	0376
Hefty, Lee N.	Miami-Dade County Division of Environmental Resources Management	Email (ML15146A118)	0110
Heiney, Jamie	-	reg.gov (ML15225A095)	0713
Henry, Jim		Meeting Transcript (ML15219A410)	0723-12
Herrera, Luis	Vizcaya Road Association	Meeting Transcript (ML15219A360)	0721-33
Hickey, Alan		reg.gov (ML15201A042)	0653

Table E-1. (contd)

		Comment Source and	Correspondence
Commenter	Affiliation (if stated)	ADAMS Accession #	Correspondence ID
Hicklin, Mary		Email (ML15154B949)	0431
Hilderbrandt, Todd		Email (ML15155B158)	0585
Hill, Michael		Email (ML15156B468)	0446
Hodie, Jake		Email (ML15159B366)	0191
Hoegler, Jean		Email (ML15154C117)	0438
Hoffmeyer, Lisa		reg.gov (ML15211A036)	0546
Hogle, Dick		Email (ML15142A185)	0293
Holland, Karen		reg.gov (ML15211A044)	0059
Hollister, David		Email (ML15162A494)	0325
Horiwitz, Laura		Email (ML15155A379)	0732
Houghton, Francis		Émail (ML15159B565)	0735
Howell, Carol		Email (ML15142A216)	0294
Hoyle, Lester and Judy		Émail (ML15154C229)	0440
Hubbard, Stanley S.		Email (ML15139A707)	0680
Hubler, Gina Marie		Email (ML15139A691)	0089
Hubler, Gina Marie		Email (ML15139A697)	0095
Hudak, Jill		Email (ML15139A591)	0038
Hudak, Jill		Meeting Transcript	0722-19
Fiddak, off		(ML15219A386)	0722-10
Hudson, Harold J.		Email (ML15139A701)	0099
Hughes, David		reg.gov (ML15138A092)	
Hull, Meagan		reg.gov (ML15128A079)	0344
Hunt, Jim		Email (ML15160A978)	0311
Hurley, Paula		reg.gov (ML15128A452)	0362
Hyams, Charles		Email (ML15139A710)	0213
Hyden, Brent A.	Department of the Air Force	Letter (ML15198A132)	0670
Icaza, Alejo	Department of the Air Force	Email (ML15134A013)	0613
Imbesi, Nan		Email (ML15139A631)	0058
Infante, Jose Renee	Redland Market Village	Meeting Transcript	0722-12
		(ML15219A386)	
Inguanzo, Maria		Email (ML15154A756)	0268
Jackalone, Frank	National Sierra Club	Email (ML15175A152)	0288
Jackson, Donald L.		Email (ML15162A859)	0286
Jacobs, Lee		Letter (ML15191A341)	0677
Jacobs, Lee		Letter (ML15191A341)	0679
Jacobs, Leslye		reg.gov (ML15198A137)	0634
Jennings, Cara		Email (ML15162A489)	0323
Jens-Rochow, Steve		reg.gov (ML15201A060)	0666
Jezierski, Elisabeth		Email (ML15156A651)	0302
Jimenz, Lawrence		Email (ML15156A646)	0301
Joannou, Jr., Benjamin		Email (ML15139A949)	0643
Joannou, Jr., Benjamin		reg.gov (ML15104A334)	0023
Johannsen, Christian		Email (ML15139A605)	0045
Johnson, Diane		Email (ML15196A475)	0590
Johnson, Kay		Email (ML15161A638)	0315
Johnson, Nadine		Email (ML15084A178)	0007

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID	
Johnson, Rheta		Email (ML15148B048)	0696	
Johnson, Robert		Email (ML15159B352)	0190	
Johnston, Judy		Email (ML15156A529)	0734	
Jones, Diane		Email (ML15139A724)	0130	
Jones, Gary		Email (ML15156B302)	0443	
Jones, George L.	Ocean Research and Conservation Association, Inc.	Email (ML15146A151)	0253	
Jones, Joan and Robert		Email (ML15141A267)	0147	
Jones, Michael E.		Email (ML15139A682)	0082	
Juras, Randy		Email (ML15154B691)	0419	
Jurczewski, Carol		Email (ML15147A727)	0490	
Jurin, Richard		Email (ML15141A538)	0108	
K., Jeff		reg.gov (ML15110A286)	0335	
Kadis, Patricia		Email (ML15146A138)	0248	
Karlow, Edwin		Email (ML15160A657)	0226	
Karsten, Annetta		Email (ML15158A072)	0452	
Kasenow, Lisa		Email (ML15139A621)	0054	
Kasenow, Lisa		Email (ML15159B532)	0200	
Kassel, Kerul		reg.gov (ML15128A093)	0676	
Kaul, Devika	University of Miami	Meeting Transcript (ML15219A386)	0722-14	
Kavanaugh, Daniel		Letter (ML15124A025)	0338	
Kaye, Jackie		Email (ML15162A588)	0407	
Keating, Tim		reg.gov (ML15211A035)	0545	
Keaton, Rebecca		Email (ML15155A438)	0503	
Keim, Mary		Email (ML15142A340)	0517	
Keller, Alan	Audoban of the Western Everglades	Email (ML15146A151)	0253	
Kern, Madeleine Fisher		Email (ML15153B247)	0411	
Khajeh-Noori, Jeri		Email (ML15162A951)	0609	
Khajeh-Noori, Jeri		Email (ML15196A128)	0381	
Kimball, Larry		Email (ML15148B248)	0526	
Kipnis, Dan		Email (ML15139A655)	0702	
Kipnis, Dan		Email (ML15139A656)	0703	
Kipnis, Dan		Email (ML15272A488)	0725	
Kipnis, Dan		Email (ML15272A504)	0702	
Kipnis, Dan		Meeting Transcript (ML15219A386)	0722-2	
Kirschbaum, Saran		Email (ML15148A753)	0466	
Klopfer, Carol		Letter (ML15191A341)	0677	
Klopfer, Carol		Letter (ML15191A341)	0678	
Knowles, Yvonne	Homestead Main Street Program	Meeting Transcript (ML15219A386)	0722-11	
Koenigsberg, Linda	9. ~	Meeting Transcript (ML15219A360)	0721-26	
Konczal, Eddie		Email (ML15159A373)	0169	
Kowalski, Kathleen S.		Email (ML15139A612)	0049	

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Kristy, Joseph	· · ·	Email (ML15155B886)	0650
Kuraza, Devon	Florida Power and Light	Meeting Transcript (ML15219A360)	0721-15
Lague, Victoria		Èmail (ML15139A644)	0061
Lamb, Deborah S.		Email (ML15139A661)	0070
Lane, N. Jo		Email (ML15155B103)	0569
Lange, Alexandra		Email (ML15139A689)	0087
Lange, Alexandra		Email (ML15139A690)	0088
Lange, Barbara		Email (ML15197A046)	0591
Langlieb Greer, Evelyn		Email (ML15196A148)	0510
Larrabee, Laura		Email (ML15139A587)	0035
Larsen, Paul		reg.gov (ML15082A284)	0005
Larsen, Shannon		Email (ML15146A148)	0160
Larsen, Shannon		Email (ML15146A156)	0255
Larsen, Shannon		Email (ML15146A156)	0610
Larsen, Shannon		Email (ML15146A159)	0255
Lawrence, Diane		Email (ML15139A688)	0086
Lawrence, Theresa		reg.gov (ML15211A054)	0580
Lawson, Ken		Email (ML15160A577)	0225
Le Cronier, Micki		reg.gov (ML15201A039)	0652
Lebatard, David		Email (ML15159B388)	0192
Ledbetter, Carolyn		Email (ML15156B255)	0406
Lee, Nancy		reg.gov (ML15138A088)	0373
Leibowitz, Arthuir		Email (ML15154B449)	0404
Lenz, Andrew		Email (ML15154A104)	0470
Leo, Carlos		Email (ML15154B902)	0428
Lerner, Cindy	Village of Pinecrest	Email (ML15141A257)	0145
Lerner, Cindy	Village of Pinecrest	Email (ML15160A320)	0145
Lerner, Cindy	Village of Pinecrest Mayor	Email (ML15146A155)	0254
Lerner, Cindy	Village of Pinecrest Mayor	Meeting Transcript (ML15219A360)	0721-3
Lettieri, Tammy		Email (ML15146A230)	0259
Lettieri, Tammy		Email (ML15195A570)	0559
Levy, Morgan I.		Email (ML15139A738)	0136
Liesche, Ken		Email (ML15154A338)	0488
Lindsey, Jerrie		Email (ML15146A133)	0245
Lish, Christopher		reg.gov (ML15211A047)	0555
Livingston, C. J.		Email (ML15154C069)	0437
Livingston, Catherine		reg.gov (ML15138A089)	0374
LoBiondo, Roana and Michael		reg.gov (ML15128A203)	0359
Logan, Brian		Email (ML15139A666)	0072
Lopez, Jaclyn	Center for Biological Diversity	Email (ML15146A150)	0113
Lopez, Josie		Email (ML15162A389)	0284
Lucas, Carmen		Email (ML15141A232)	0141
Lucero, Olga		Email (ML15139A728)	0134

Table E-1. (contd)

		,	
Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Lucero, Olga		Email (ML15161A393)	0134
Lucero, Olga		Email (ML15162A855)	0134
Lundholm, Mark		Email (ML15156A896)	0309
Macher, Nathan		reg.gov (ML15139A021)	0378
Macraith, Bonnie		Email (ML15142A031)	0186
Macy, Michelle		Email (ML15156B180)	0405
Maher, William	Florida Power and Light	Email (ML15202A054)	0619
Mahoney, Robert S.		reg.gov (ML15128A512)	0364
Mahoney, Stephen	Sierra Club Miami Group	Email (ML15175A152)	0288
Maida, Cecilia		Email (ML15156B400)	0445
Malefatto, Alfred	Lewis, Longman and Walker	Letter (ML15160A318)	0211
Malone, Peggy	-	Email (ML15156A131)	0539
Malpass, Betsy		Email (ML15154B739)	0421
Malyon, Hilary		Email (ML15155B974)	0669
Manter, Larry		Email (ML15155A026)	0471
Manuel, Becky Randel		Email (ML15139A739)	0137
Martin, Allan	University of Florida	Meeting Transcript (ML15219A386)	0722-6
Martin, Drew		reg.gov (ML15198A119)	0641
Martin, Drew	Loxahatchee Group of the Sierra Club	Meeting Transcript (ML15219A360)	0721-13
Martin, Drew	Sierra Club, Loxahatchee Group	Email (ML15146A151)	0253
Martin, Patrick	Nuclear Matters	Meeting Transcript (ML15219A360)	0721-21
Martinez, Orlando A.		Email (ML15195A148)	0570
Massa, Arturo		reg.gov (ML15104A327)	0018
Massey, Linda		Email (ML15142A340)	0514
Matheny, Kent		Email (ML15158A087)	0453
Matthews, Debbie	Sierra Club Florida	Email (ML15175A152)	0288
Mauri, Tom		Email (ML15139A726)	0132
Mayer, Doug		Email (ML15139A723)	0129
Mayer, Karen		Email (ML15155A110)	0475
Mayotte, Monica		Email (ML15159B458)	0194
Mazzarella, Rebecca		Email (ML15142A007)	0495
Mazzuca, Rich		Email (ML15153A798)	0584
McCall, Eric		Email (ML15139A624)	0056
McCarthy, Dawn		reg.gov (ML15104A338)	0330
McColgan, Robert		Meeting Transcript (ML15219A386)	0722-15
Mccroskey, Carol		Email (ML15154A835)	0530
McDaniel, Diana		Email (ML15159B554)	0203
McDuffie, Stephen		Meeting Transcript (ML15219A410)	0723-8
Mcintyre, Frances		Email (ML15195A152ML)	0572
Mckee, Sarah		Email (ML15154A386)	0492
McLaughlin, Caroline	National Parks Conservation	Email (ML15146A151)	0253

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Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
	Assocation		
McLaughlin, Caroline	National Parks Conservation Assocation	Meeting Transcript (ML15219A360)	0721-9
McLaughlin, Caroline	National Parks Conservation Assocation	Meeting Transcript (ML15219A410)	0723-4
McLaughlin, Caroline	National Parks Conservation Association	Email (ML15146A150)	0113
McVicker, Micah		Email (ML15159A875)	0177
Melby, George M.		Email (ML15154B109)	0396
Mendelsohn, Alex		Email (ML15158A082)	0277
Mendez, Victoria	Miami's Attorney's Office	Meeting Transcript (ML15219A360)	0721-5
Merino, Miriam		Email (ML15139A694)	0092
Merleaux, Derek		reg.gov (ML15128A077)	0342
Metje, Melodie		Email (ML15153B020)	0606
Meyer, Paul		Email (ML15139A715)	0122
Meyer-Steele, Shawn		Email (ML15166A031)	0187
Miami, City	City of Miami	Email (ML15146A122)	0456
Mikan, Edward	-	Email (ML15148B348)	0536
Mikowski, George		Email (ML15142A377)	0382
Miller, Howard R.		Email (ML15139A740)	0138
Miller, Melissa		Email (ML15162A670)	0285
Miller, Nena		Email (ML15156A282)	0689
Miller, Nyana		reg.gov (ML15198A127)	0626
Mitzkewich, Yuri		reg.gov (ML15211A029)	0523
Moll, Wolfgang		reg.gov (ML15198A135)	0632
Monfort, Brooke		Email (ML15154A183)	0476
Montalvo, Stephanie		reg.gov (ML15198A133)	0630
Moo, Patrick	University of Florida American Nuclear Society Student Section	Meeting Transcript (ML15219A386)	0722-4
Moore, Linda		Email (ML15159B529)	0199
Morgan, Carol		Email (ML15155C150)	0387
Morgan, Karen		Email (ML15141A687)	0155
Morrisse, Christine		Email (ML15148A138)	0483
Morton, Sean	Florida Keys National Marine Sanctuary	Email (ML15245A496)	0618
Mosca-Clark, Vivianne		Email (ML15154C278)	0442
Mosher, Paul		Email (ML15146A139)	0249
Mueller, Bradley M.	Seminole Tribe of Florida Tribal Historic Preservation Office, Ah- Tah-Thi-Ki Museum	Email (ML15289A368)	0727
Mueller, Heinz J.	U.S. Environmental Protection Agency	Email (ML15216A357)	0617
Mulet, Tomas		Email (ML15139A716)	0123
Mundhenk, Norm		Email (ML15153B015)	0605
Murphy, Mike		Meeting Transcript (ML15219A410)	0723-6

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		Comment Source and	Correspondence
Commenter	Affiliation (if stated)	ADAMS Accession #	ID
Myers, B. J.		Email (ML15156B026)	0256
Nagel, Karen		Email (ML15148B250)	0527
Nappe, Judith		Email (ML15155B785)	0695
Neal, Kevin		Email (ML15139A536)	0027
Neff, Victoria		Email (ML15155C228)	0682
Nelson, Joyce E.		Email (ML15141A269)	0149
Nelson, Wendy		Email (ML15154A040)	0468
Neway, Roberta		Email (ML15139A628)	0057
Newman, Donna		Émail (ML15141A737)	0156
Nickerson, Nancy		Email (ML15155B708)	0692
Nieto, Victor		reg.gov (ML15225A206)	0717
Norman, Ronald		Letter (ML15128A197)	0358
Nye, Janet		Email (ML15160A887)	0281
O'Brien, Lance		Email (ML15139A548)	0029
O'Donahoo, Gayle		Email (ML15156A031)	0698
O'Donahoo, Roger		Email (ML15156A031)	0698
O'Meara, Patrick		Email (ML15195A644)	0700
Odierna, Cynthia		reg.gov (ML15211A031)	0542
Oliva, Vivian		reg.gov (ML15128A085)	0349
Olson, Diane		Email (ML15154B971)	0432
Oria, Jordan		Email (ML15159A531)	0171
Oria, Jordan		Email (ML15159A532)	0171
Ortiz, Natalia		reg.gov (ML15082A282)	0003
Ortiz, Natalia		reg.gov (ML15138A087)	0372
Orzechowicz, Holly		Email (ML15147A207)	0263
Osborne, Martin		Email (ML15139A939)	0216
Otis, Martha		Email (ML15141A274)	0150
Otto, Peter		Email (ML15196A089)	0509
Padilla, Dora		Email (ML15146A104)	0238
Padron-Delgado, Blanca		Email (ML15146A225)	0257
Palmer, Majorie		reg.gov (ML15128A450)	0360
Pareto, Rolando and		Email (ML15139A593)	0040
Marlene Parker, Richard		Email (ML15161A645)	0316
Parsons, Timothy A.	Florida Department of State	Email (ML15139A741)	0139
Passmore, Judith		Email (ML15153B129)	0390
Pattison, Janet		Email (ML15155B629)	0646
Pearce, J. B.		Email (ML15155A219)	0479
Perez, Danica		Email (ML15159B073)	0184
Peterman, Andy		Email (ML15156A013)	0274
Peters, Emily		reg.gov (ML15128A453)	0363
Petersen, John		reg.gov (ML15128A083)	0347
Peterson, Ted		Email (ML15154B759)	0423
Pew, Don		Email (ML15154A680)	0500
Pheil, Edward		reg.gov (ML15225A086)	0707
Philips, Sally B.		reg.gov (ML15110A296)	
		109.900 (ME10110A290)	0001

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Phillips, Monica D.		Email (ML15139A686)	0084
Pikus, Barbara		Email (ML15156A935)	0303
Pinto, Theresa		Email (ML15195A041)	0499
Piper, Cynthia		Email (ML15159B028)	0183
Platt, David		Email (ML15141A604)	0109
Platt, George Seth		reg.gov (ML15225A091)	0710
Poese, David		Email (ML15156A861)	0305
Polifroni, Josephine		Email (ML15159A957)	0182
Polk, J. D.		reg.gov (ML15133A099)	0369
Polk, James		Email (ML15148B008)	0458
Pontier, Christine Hughes		Email (ML15139A720)	0126
Poole, Diane		Email (ML15148A951)	0457
Poolos, Hazel		Email (ML15153A938)	0726
Portela, Ana C.		Email (ML15188A202)	0409
Porter, Jeff	City of Homestead	Meeting Transcript (ML15219A386)	0722-1
Portuondo, Pilar		Èmail (ML15146A114)	0241
Post, Patrick		reg.gov (ML15198A146)	0671
Provost, Allan		reg.gov (ML15128A074)	0339
Provost, Allan		reg.gov (ML15198A118)	0339
Prugue, Jorge and Paloma		Email (ML15139A657)	0068
Puchades, Mary		Email (ML15181A349)	0616
Punnett, Daniela		reg.gov (ML15211A043)	0553
Purcell, Douglas		Email (ML15154B901)	0427
Purdy, Shyam and Mohini		Email (ML15142A380)	0233
Quarles, Greyson		Email (ML15139A687)	0085
Quillen, Carter		Email (ML15201A466)	0601
Quinn, George		Email (ML15148A881)	0410
Raab, Frances		Email (ML15154A991)	0532
Rader, D.L.		Email (ML15154B205)	0729
Raits, Eric		Email (ML15139A645)	0062
Ramankutty, Vishnu		reg.gov (ML15211A052)	0578
Ramsey, Betty		Email (ML15153A419)	0563
Rapuano, Shannon		Email (ML15198A522)	0594
Rawlins, Steve		reg.gov (ML15198A120)	0642
Read, Alice Gray		reg.gov (ML15104A333)	0022
Reed, Jennifer		Email (ML15154A658)	0496
Regalado, Tomas	City of Miami Mayor	Email (ML15146A155)	0254
Regalado, Tomas	City of Miami Mayor	Meeting Transcript (ML15219A360)	0721-4
Regalado, Tomas	Mayor of the City of Miami	Email (ML15146A122)	0515
Regalado, Tomas	Mayor of the City of Miami	Email (ML15201A460)	0515
Reid, Sarah	-	Email (ML15159B539)	0201
Reiter, Ben		Email (ML15139A680)	0080

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Rennie, Edwyna		Email (ML15160A054)	0224
Revord, Michael		Email (ML15154B712)	0420
Reyneri, Juan		Email (ML15139A713)	0121
Reynolds, Laura	Tropical Audubon Society	Email (ML15146A150)	0113
Reynolds, Laura	Tropical Audubon Society	Email (ML15146A151)	0253
Reynolds, Laura	Tropical Audubon Society	Meeting Transcript (ML15219A360)	0721-10
Rhodes, Karen		Email (ML15140A049)	0140
Riccio, Jim	Greenpeace	reg.gov (ML15225A205)	0716
Richards, Margie		Email (ML15156A134)	0450
Richardson, Don		Email (ML15142A227)	0296
Rifkind, David		Meeting Transcript (ML15219A360)	0721-16
Riley, Bill	International Brotherhood of Electrical Workers, Local Union 349	Meeting Transcript (ML15219A360)	0721-19
Riley, Bill	International Brotherhood of Electrical Workers, Local Union 349	Meeting Transcript (ML15219A386)	0722-9
Riley, Bill	International Brotherhood of Electrical Workers, Local Union 349	Meeting Transcript (ML15219A410)	0723-14
Ritz, David	Ocean Reef Community Association	Email (ML15160A315)	0208
Robbin, Valerie		Email (ML15160A050)	0223
Roberts, Kenneth		Email (ML15195A161)	0575
Roberts, Linda		Email (ML15139A698)	0096
Robertson, Alyce		Email (ML15139A706)	0117
Robinson, Angel		Email (ML15155A118)	0474
Rock, Andrew		Email (ML15198A542)	0599
Rodriguez, Barbara		Email (ML15139A560)	0034
Rodriguez, Jose Javier	State of Florida	Meeting Transcript (ML15219A360)	0721-1
Rodriguez, Jose Javier	State of Florida	reg.gov (ML15201A063)	0675
Rodriguez, Manuel J.	RoadTech Engineering	Meeting Transcript (ML15219A360)	0721-27
Roedel, Kitty		Email (ML15139A622)	0055
Roehl, Richard Ralph		Email (ML15142A340)	0513
Roff, Rhonda	Sierra Club Calusa Group	Email (ML15175A152)	0288
Roff, Rhonda	Sierra Club Calusa Group	Meeting Transcript (ML15219A360)	0721-11
Roos, Monica		Email (ML15139A617)	0052
Roque, Julio		reg.gov (ML15096A472)	0328
Roque, Julio		reg.gov (ML15104A336)	0024
Rose, Aaron		Email (ML15156A887)	0307
Rose, Simon		Email (ML15085A501)	0009
Roseberry, Bill		Email (ML15159A882)	0179
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Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Rosenberry, Casara	, , , , , , , , , , , , , , , , , , ,	reg.gov (ML15128A515)	0367
Rosenfeld, Alice		Email (ML15155A909)	0566
Ross, Robert and Teresa		Email (ML15139A709)	0212
Ross, Sherwood		reg.gov (ML15110A283)	0332
Rossin, A. David		reg.gov (ML15128A080)	0345
Rothstein, Debbie		Email (ML15142A158)	0292
Routh, Jeffrey		Email (ML15142A340)	0522
Rowe, James		reg.gov (ML15104A318)	0011
Royce, M.		reg.gov (ML15128A090)	0353
Rush, Charlene		Email (ML15156B496)	0448
Ryan, Jim		reg.gov (ML15211A032)	0543
Sachs, Jean		Email (ML15155B254)	0686
Salatino, Freda		Email (ML15148B144)	0299
Samole, Sharon		Email (ML15142A381)	0234
San Pedro, Patricia		Email (ML15139A531)	0026
Sanchez, Sergio and Irma		reg.gov (ML15201A052)	0660
Sanfilippo, Val		reg.gov (ML15198A140)	0636
Saporito, Thomas	Saprodani Associates	reg.gov (ML15096A473)	0010
Sasiadek, Alfred		Email (ML15139A620)	0053
Scherr, Matthew		Email (ML15128A183)	0684
Schilling, Judy		Email (ML15154B916)	0429
Schlackman, Mara		Meeting Transcript (ML15219A360)	0721-32
Schoene, William		Email (ML15159B279)	0037
Schwab, Roy		reg.gov (ML15211A053)	0579
Schwaller, Greg		Email (ML15159A156)	0167
Schwartz, Matthew	South Florida Wetlands Association	Email (ML15146A150)	0113
Schwartz, Matthew	South Florida Wetlands Association	Meeting Transcript (ML15219A360)	0721-22
Schwartz, Matthew	South Florida Wetlands Association	Meeting Transcript (ML15219A410)	0723-9
Scott, John	Sierra Club Calusa Group	Email (ML15175A152)	0288
Scott, Ruth		reg.gov (ML15211A038)	
Segal-Wright, Nicholas		reg.gov (ML15201A054)	
Segor, Joseph C.		Meeting Transcript (ML15219A386)	0722-16
Seiman, Rhonda		reg.gov (ML15198A138)	0635
September, P. J.		Email (ML15155B871)	0267
Shahsavar, Mehran		reg.gov (ML15104A319)	
Shapiro, Eugene		reg.gov (ML15128A095)	0357
Shark, Jason		Email (ML15139A712)	0120
Sharp, Andrea Heuson		Letter (ML15160A317)	0210
Shasky, Mike		reg.gov (ML15128A086)	0350
Shelley, Cynthia		reg.gov (ML15211A049)	
Shepard, J.		Email (ML15141A253)	0143

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Shepherd, James		Email (ML15155A092)	0473
Sheridan, Michelle		Email (ML15159A863)	0176
Shifflett, Jr., James E.		Email (ML15156A090)	0687
Shipe, Kathleen		Email (ML15159B428)	0193
Shlackman, Jed		reg.gov (ML15128A094)	0356
Shlackman, Mara		Email (ML15146A134)	0246
Sifko, Basilio		Email (ML15188A199)	0408
Silva, Nicolas	University of Florida	Meeting Transcript (ML15219A386)	0722-5
Silver, William		reg.gov (ML15104A330)	0021
Silverstein, Rachel	Miami Water Keeper	Email (ML15146A150)	0113
Silverstein, Rachel	Miami Water Keeper	Meeting Transcript (ML15219A386)	0722-7
Silverstein, Rachel	Miami Waterkeeper	Email (ML15146A151)	0253
Simmerman, Scott		Email (ML15158A216)	0480
Simon, Gary P.		Email (ML15139A613)	0050
Simpson, Chris	International Brotherhood of Electrical Workers	Meeting Transcript (ML15219A410)	0723-13
Skove, Ellen H.		Email (ML15139A681)	0081
Slaton, Marina		Email (ML15154A967)	0531
Slonim, Roberta		reg.gov (ML15104A325)	0016
Smay, Betty		Email (ML15139A646)	0063
Smith, David W.		Email (ML15139A616)	0051
Smith, Leigh Emerson		Email (ML15162A432)	0322
Smith, Leigh Emerson		reg.gov (ML15104A329)	0020
Smith, Pamela		Email (ML15155A184)	0730
Smoller, Merry Sue		reg.gov (ML15141A254)	0637
Smoller, Merry Sue		reg.gov (ML15198A142)	0637
Smyke, Pete		Email (ML15148B026)	0459
Smythe, Ana		Email (ML15155A878)	0557
Socie, Robert		Email (ML15142A340)	0521
Sockloff, Judith		Email (ML15162A906)	0175
Sommers, Andrea		Email (ML15154A758)	0270
Sophia, Tristan		Email (ML15142A063)	0221
Sorenson, Katy		Email (ML15198A528)	0596
Southern, Tom		reg.gov (ML15110A287)	0620
Speno, Charlie		Email (ML15148A180)	0484
Spigel, Sue		Email (ML15139B000)	0220
Stamps, Gail		Email (ML15155B183)	0586
Standley, Ron		Email (ML15153B272)	0414
Stanko, Janet L.	Sierra Club, Northeast Florida	Email (ML15141A319)	0151
Stanley, Gael		Email (ML15139A664)	0071
Stanley, Joyce	U.S. Department of the Interior	Email (ML15294A379)	0227
Star, Priscilla		Meeting Transcript (ML15219A410)	0723-3
Stevens, Lisa		Email (ML15156A898)	0310

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Stewart, Berkeley		Email (ML15155A990)	0273
Stocker, Nancy		Email (ML15162B105)	0699
Stoddard, Philip K.	City of South Miami	Email (ML15141A255)	0106
Stoddard, Philip K.	City of South Miami Mayor	Email (ML15146A155)	0254
Stoddard, Philip K.	City of South Miami Mayor	Meeting Transcript (ML15219A360)	0721-2
Streit, Christopher V.		Email (ML15139A672)	0075
Streit, Didi		Email (ML15139A669)	0074
Strouble, Jackie		Email (ML15156B019)	0297
Suda, Maryska		Email (ML15155A659)	0534
Svensson, Bo		Email (ML15154A242)	0478
Swensen, Harry		Email (ML15159A731)	0174
Swenson, Cyndee		Meeting Transcript (ML15219A386)	0722-17
Szabo, Liz		Email (ML15155A298)	0481
Szabo, Liz		Email (ML15155B617)	0481
Tacher, Ian		Email (ML15082A132)	0001
Tamargo, Jorge J.		Email (ML15154A542)	0494
Tamburr, C.		reg.gov (ML15201A046)	0655
Tambussi-Brechon, Linda		Email (ML15139A595)	0042
Taylor, Kirk		Email (ML15155B906)	0276
Teas, James		reg.gov (ML15138A085)	0612
Teas, Jim	Sierra Club Miami Group	Email (ML15175A152)	0288
Teas, Jim	Sierra Club Miami Group	Meeting Transcript (ML15219A410)	0723-5
Teasley, Regi		Email (ML15162A061)	0318
Thiel, Markus		Email (ML15139A737)	0135
Thomas, Bill		reg.gov (ML15128A092)	0355
Thomas, Gina		Email (ML15154A993)	0271
Thompson, Muhammad		Email (ML15156A270)	0683
Timberlake, Ralph		Email (ML15160A889)	0282
Tingle, Peggy		reg.gov (ML15128A089)	0352
Togati, Joanne		Email (ML15142A340)	0519
Tokunaga, Barb		Email (ML15156A445)	0198
Tompkins, Constance		Email (ML15139A683)	0081
Tosney, Kathryn		Email (ML15153A911)	0173
Trauner, Keith		Email (ML15195A153)	0573
Trencher, Ruth		Email (ML15139A704)	0115
Trowbridge, Mark	Coral Gables Chamber of Commerce	Meeting Transcript (ML15219A410)	0723-2
Tucker, Lauren		Email (ML15141A224)	0105
Tulenko, James		reg.gov (ML15138A090)	0375
Turner, William P.		reg.gov (ML15201A056)	0663
Tweedy, Mary		Email (ML15211A055)	0581
Tweeton, Tanya		reg.gov (ML15128A075)	0340
Ullman, John	Miami Group of the Sierra Club	Meeting Transcript	0721-30
Unitian, JUIII		meeting transcript	0121-30

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
		(ML15219A360)	
Ullman, Jonathan	National Sierra Club	Email (ML15175A152)	0288
Umpierre, Diana		Email (ML15160A316)	0209
Umpierre, Diana		Email (ML15162A271)	0209
Underwood, John		Email (ML15154B521)	0416
Van Leer, Sam	Urban Paradise Guild	Email (ML15146A147)	0252
Van Pelt, Jason		Email (ML15153A518)	0300
Van Thienen, Mateo		Email (ML15139A557)	0033
Vance, Richard		Email (ML15142A131)	0289
Vayu, Satya		reg.gov (ML15138A084)	0370
Veijalainen, Pertti		Email (ML15148A825)	0467
Veit, Eberhard		Email (ML15153B029)	0607
Vermeulen, Mary		Email (ML15154B979)	0433
Vinciguerra, Anthony		Email (ML15139A556)	0032
Violich, Francesca		Email (ML15139A592)	0039
Vorachek, Mary		Email (ML15142A152)	0291
Wade, Pat		Email (ML15153A704)	0582
Wade, Thomas M.		Email (ML15139A607)	0046
Wallace, Otis	Florida City	Meeting Transcript (ML15219A410)	0723-1
Wallington, Victoria		Email (ML15156A892)	0308
Ward, Richard		reg.gov (ML15128A084)	0348
Warzalla, Jim		Email (ML15155B847)	0144
Wasilewski, Joe	Natural Selections	Meeting Transcript (ML15219A360)	0721-14
Watson, Fran		Èmail (ML15148B273)	0528
Weber, Gae		Email (ML15142A006)	0157
Weber, Zorina		Email (ML15154A103)	0469
Wegner, Geri		Email (ML15139A611)	0048
Weiss, Arwen		Email (ML15142A340)	0518
Welber, Michael		Email (ML15142A385)	0237
West, Eric		Email (ML15154C041)	0435
Westaway, Katharine		reg.gov (ML15104A323)	0014
White, Barry	Citizens Allied for Safe Energy, Inc.	Email (ML15139A702)	0100
White, Barry J.	CASE	Email (ML15198A539)	0598
White, Barry J.	CASE	Meeting Transcript (ML15219A360)	0721-12
White, Holly		Letter (ML15160A313)	0206
White, Paton	Audubon Society of the Everglades	Email (ML15146A151)	0253
Whitehorn, C.	-	Email (ML15154A318)	0681
Whitfield, Isabelle		Email (ML15146A146)	0251
Whitlock, Catherine		Email (ML15218A210)	0701
Wicht, Dan		Email (ML15156A578)	0197
Wilansky, Laura Sue		Email (ML15139A678)	0078

Table E-1. (contd)

Commenter	Affiliation (if stated)	Comment Source and ADAMS Accession #	Correspondence ID
Wilansky, Laura Sue		Meeting Transcript (ML15219A360)	0721-28
Willett, Bett		reg.gov (ML15201A050)	0658
Willett, Greg		Email (ML15148B363)	0538
Williams, Elinor	Loxahatchee National Wildlife Refuge	Email (ML15146A151)	0253
Williams, Paul		Email (ML15139A594)	0041
Williams, Paul		Email (ML15139A659)	0069
Williams, Penelope		Email (ML15196A067)	0576
Wilson, J. D. Bruce		Email (ML15139A648)	0065
Wingerd, Mala		Email (ML15154B820)	0425
Winters, Gracie		Email (ML15154B133)	0398
Wong, Christina		Email (ML15139A649)	0066
Wry, Ellen		Email (ML15142A132)	0290
Yarter, E. C.		Email (ML15148B034)	0460
Yeager, Jerry		Email (ML15160A733)	0228
Yost, Gaylord		Email (ML15154B918)	0430
Young, Kim		Email (ML15155B916)	0651
Yount, Madeline		Email (ML15154B744)	0422
Yovel, Ephrat		Meeting Transcript (ML15219A360)	0721-29
Zakon, Allan		Email (ML15139A708)	0118
Zarsky, Terry		Email (ML15153B098)	0541
Zerulla, Tanja		Email (ML15139A714)	0214
Zhivelev, Leon		reg.gov (ML15201A047)	0656
Zimmermann, John		Email (ML15154A715)	0501
Zimmermann, John		Email (ML15156A789)	0304
Zook, Caryl		Email (ML15196A256)	0589
Zuniga, Family		Email (ML15154B094)	0272

Table E-1. (contd)

Table E-2 provides an alphabetical index to the comment categories and lists the commentersand the specific comment identification number(s) that were included in each category

	Commenter (Comment ID)
Accidents-Severe	Allison, Noreen (0549-2)
	Almer, Anessa (0712-1)
	Almirola, Alejandro (0178-2)
	<ul> <li>Anonymous, Anonymous (0331-2) (0333-4) (0551-3) (0603-7) (0644-2)</li> </ul>
	Anonymous, Charity (0638-1)
	• Bach, Lili (0128-2)
	Baumwall, Douglas (0329-3)
	<ul> <li>Bazzone, Barbara (0159-4)</li> </ul>
	<ul> <li>Bender, Kae (0441-1)</li> </ul>
	<ul> <li>Benson, Mary (0081-2)</li> </ul>
	<ul> <li>Bethune, David (0615-2-17) (0615-2-26) (0615-3-8) (0721-23-5) (0721-23-7) (0721-23-8)</li> </ul>
	Betts, Cynthia (0280-1)
	<ul> <li>Burge, Laura (0540-1)</li> </ul>
	<ul> <li>Burns, Terry (0647-1)</li> </ul>
	Carpenter, Rory (0694-5)
	Caswell, Susan (0487-1)
	Chrissos, H. L. Chris (0164-1)
	• Commenters, Multiple (0044-2) (0067-2) (0067-3) (0240-8)
	• Corda, Charles (0721-25-1)
	• Corral, Oscar (0133-4)
	• Council, Barbara (0731-1)
	<ul> <li>Denninger, Frank (0554-1)</li> </ul>
	<ul> <li>Draper, Lonnie M. (0511-4)</li> </ul>
	<ul> <li>DuPriest, William Robert (0093-2)</li> </ul>
	• Dwyer, John P. (0673-3)
	Enfield, David (0236-2)
	• Felinski, Julee (0625-3)
	• Finver, Jody (0008-6) (0008-10)
	<ul> <li>Fulks, Anna Louise (0250-1) (0250-4)</li> </ul>
	• Geary, Craig W. (0097-3)
	Glass, Rachel (0222-1)
	• Guy, Sharon (0654-4)
	<ul> <li>Haber, Matthew S. (0611-14)</li> </ul>
	Haffmans, Edmund (0371-2)
	Hall, Linnea M. Fronce Thomas (0279-1)
	Hardin, Lillian (0455-1)
	• Haselhurst, Richard (0639-2)
	• Hoyle, Lester and Judy (0440-2)
	<ul> <li>Hull, Meagan (0344-2)</li> </ul>
	• Hyams, Charles (0213-2)
	<ul> <li>Joannou, Jr., Benjamin (0643-1)</li> </ul>
	<ul> <li>Jones, Diane (0130-3)</li> </ul>
	<ul> <li>Jurin, Richard (0108-1)</li> </ul>
	<ul> <li>Kavanaugh, Daniel (0338-1)</li> <li>Kaanigaharg Linda (0721-26-2)</li> </ul>
	Koenigsberg, Linda (0721-26-2)
	<ul> <li>Lague, Victoria (0061-2)</li> </ul>

Table E-2. Comment Categories

Comment Category	Commenter (Comment ID)
Accidents-Severe	Lange, Alexandra (0087-3)
(contd)	<ul> <li>Lee, Nancy (0373-6) (0373-9)</li> </ul>
	Lettieri, Tammy (0259-1)
	<ul> <li>LoBiondo, Roana and Michael (0359-2)</li> </ul>
	Lucero, Olga (0134-1)
	<ul> <li>Maher, William (0619-1-4)</li> </ul>
	• Mauri, Tom (0132-1)
	• Mayer, Doug (0129-1)
	Mazzarella, Rebecca (0495-3)
	McColgan, Robert (0722-15-2)
	• Mckee, Sarah (0492-3)
	• Mendez, Victoria (0721-5-1)
	Merleaux, Derek (0342-2)
	<ul> <li>Meyer, Paul (0122-3)</li> </ul>
	<ul> <li>Miami, City (0456-18) (0456-19)</li> </ul>
	<ul> <li>Mikowski, George (0382-2)</li> </ul>
	<ul> <li>Nappe, Judith (0695-3)</li> </ul>
	<ul> <li>Nelson, Joyce E. (0149-8)</li> </ul>
	<ul> <li>Neway, Roberta (0057-3) (0057-4)</li> </ul>
	Norman, Ronald (0358-3)
	Orzechowicz, Holly (0263-1)
	Palmer, Majorie (0360-4)
	• Platt, David (0109-2)
	• Polk, James (0458-1)
	Provost, Allan (0339-1)
	• Rader, D.L. (0729-1)
	Read, Alice Gray (0022-2)
	Reid, Sarah (0201-1)
	<ul> <li>Riccio, Jim (0716-9) (0716-10)</li> </ul>
	<ul> <li>Rifkind, David (0721-16-1)</li> </ul>
	<ul> <li>Roehl, Richard Ralph (0513-1)</li> </ul>
	<ul> <li>Roff, Rhonda (0721-11-9)</li> </ul>
	Roque, Julio (0024-1)
	<ul> <li>Ross, Sherwood (0332-1)</li> </ul>
	Schwartz, Matthew (0721-22-10)
	• Scott, Ruth (0548-2)
	Shlackman, Mara (0246-2)
	• Skove, Ellen H. (0081-2)
	• Smyke, Pete (0459-2)
	• Stanko, Janet L. (0151-1)
	• Stocker, Nancy (0699-1)
	• Swensen, Harry (0174-1)
	<ul> <li>Taylor, Kirk (0276-1)</li> </ul>
	<ul> <li>Tompkins, Constance (0081-2)</li> </ul>
	<ul> <li>Trauner, Keith (0573-2)</li> </ul>
	<ul> <li>Trencher, Ruth (0115-7)</li> </ul>
	<ul> <li>Trencher, Ruth (0115-7)</li> <li>Tweeton, Tanya (0340-8) (0340-9)</li> </ul>
	<ul> <li>Van Leer, Sam (0252-2) (0252-10) (0252-11)</li> </ul>

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	• Violich, Francesca (0039-2)
	White, Holly (0206-2)
	<ul> <li>Wilansky, Laura Sue (0078-1) (0078-10) (0721-28-2) (0721-28-10)</li> </ul>
	• Yarter, E. C. (0460-1)
	<ul> <li>Young, Kim (0651-4)</li> </ul>
	<ul> <li>Zarsky, Terry (0541-2)</li> </ul>
Alternatives-Energy	Agler, Mindy (0152-1)
	Almer, Anessa (0712-2)
	• Almirola, Alejandro (0178-5) (0721-31-5) (0721-31-10) (0721-31-12)
	(0721-31-14)
	<ul> <li>Anderson, Vaughn (0608-1)</li> </ul>
	<ul> <li>Anonymous, Anonymous (0706-1) (0715-3)</li> </ul>
	<ul> <li>Anonymous, Charity (0638-2)</li> </ul>
	<ul> <li>Anonymous, Elena (0662-2)</li> </ul>
	<ul> <li>Anonymous, Judi (0537-6)</li> </ul>
	• Atler, Neal (0215-1)
	• Bach, Lili (0128-3)
	Bailey, Evelyn (0525-1)
	• Ball, Cheri (0472-2)
	• Balog, Nancy (0185-2)
	Barlow, Jeffrey (0218-1)
	Barnes, Janice (0558-2)
	Bastidas, Mauricio (0720-2)
	Batista, Carlos (0685-1)     Baumuell, Dauglas (0220.4)
	Baumwall, Douglas (0329-4)
	Bazzone, Barbara (0159-6)     Bandar Kap (0141-2)
	<ul><li>Bender, Kae (0441-2)</li><li>Bennett, Robbie (0265-2)</li></ul>
	<ul> <li>Bernabei, Catharina (0721-18-3) (0721-18-4)</li> </ul>
	<ul> <li>Bethune, David (0615-1-3) (0615-1-14)</li> </ul>
	<ul> <li>Bonilla-Jones, Carmen Elisa (0231-2) (0231-4)</li> </ul>
	<ul> <li>Brexel, Sr., Charles (0592-2) (0592-3) (0592-5) (0592-6) (0592-7)</li> </ul>
	<ul> <li>Brown, Judith O. (0131-2)</li> </ul>
	<ul> <li>Buechler, Jerry (0718-2)</li> </ul>
	<ul> <li>Cavros, George (0721-8-3) (0721-8-5) (0721-8-7) (0721-8-9)</li> </ul>
	<ul> <li>Chiszar, Benjamin J. (0677-5)</li> </ul>
	<ul> <li>Clay, Cynthia (0219-1)</li> </ul>
	<ul> <li>Cleland, Noel (0207-3) (0288-10) (0288-13) (0288-16)</li> </ul>
	• Colby, Helen (0124-2) (0242-1)
	• Colls, Ana (0125-2)
	• Colson, Clay G. (0602-2)
	• Commenters, Multiple (0044-8) (0073-2) (0104-3) (0240-13) (0379-5)
	• Compel, Jr., Joseph (0283-3) (0283-5) (0283-6)
	• Cornely, Tina (0633-3)
	Crystal, Chris (0334-5)
	Cunningham, Sue (0114-3)
	• Daly, Meg (0076-6)
	<ul><li>Datz, Amy (0621-3)</li><li>de Armas, Maria Cristina (0077-2)</li></ul>

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	• de Azevedo, Ricardo (0119-2)
	• DeMent, David L. (0036-1)
	Detrick, Mary (0317-1)
	Deutsch, Steven (0552-2)
	Dimondstein, Carla (0564-3)
	Dolben, Hollis (0627-1)
	• Duran-Pinzon, Jaime (0243-3) (0243-5)
	<ul> <li>Dwyer, John P. (0264-6) (0673-6)</li> </ul>
	• Dwyer, Karen (0674-7)
	Eckert, Brenda (0400-2)
	Edmond, Gabriel (0721-7-7)
	Edwards, Suzi (0600-2)
	• Ehrenfried, Jennifer (0544-2)
	• Engelberg, Jodi (0004-2)
	• Ercole, Steven (0170-2)
	• Fairchild, David (0094-2) (0094-6)
	• Family, Manzi (0593-1)
	• Fecteau, Lynn (0313-1)
	• Felinski, Julee (0625-4)
	• Ferro, Colleen (0260-1)
	• Ferry, Lisa (0704-2)
	• Finver, Jody (0008-13)
	• Fischer, Antoinette (0365-9)
	• Fulks, Anna Louise (0250-5) (0250-7)
	• Galles, Camilla (0624-4)
	• Garcia, Ruslan (0116-2)
	• Geary, Craig W. (0097-2)
	• Goldman, Emanuel (0153-4)
	Goldmeier, Barry (0015-15)
	• Gomez, Albert (0721-34-2) (0721-34-5)
	<ul> <li>Gomez, Christian (0269-2)</li> </ul>
	<ul> <li>Gomez, Gustavo (0101-2)</li> </ul>
	<ul> <li>Grant, Randy (0146-5) (0146-6)</li> </ul>
	<ul> <li>Grill, Helen (0043-2)</li> </ul>
	<ul> <li>Gross, Cheryl A. (0463-8)</li> </ul>
	<ul> <li>Haber, Matthew S. (0611-16)</li> </ul>
	<ul> <li>Haffmans, Edmund (0371-5)</li> </ul>
	<ul> <li>Hardin, Lillian (0455-3)</li> </ul>
	<ul> <li>Hartmann, Donald (0657-1)</li> </ul>
	<ul> <li>Haselhurst, Richard (0639-4)</li> </ul>
	<ul> <li>Heiney, Jamie (0713-3)</li> </ul>
	<ul> <li>Henry, Jim (0723-12-5) (0723-12-6) (0723-12-7)</li> <li>Herrera, Luis (0721-33-4)</li> </ul>
	<ul> <li>Herrera, Luis (0721-33-4)</li> <li>Hickey, Alan (0653-2)</li> </ul>
	Hill, Michael (0446-1)     Hollister, David (0325-1)
	Hollister, David (0325-1)
	Howell, Carol (0294-1)
	Hubler, Gina Marie (0089-2)
	Hull, Meagan (0344-1)

**Comment Category** Commenter (Comment ID) Hunt, Jim (0311-1) • • Hurley, Paula (0362-5) Hyams, Charles (0213-4) • Icaza, Alejo (0613-2) • Imbesi, Nan (0058-2) • Inguanzo, Maria (0268-1) • Jackalone, Frank (0288-10) (0288-13) (0288-16) • Jacobs, Lee (0677-5) • Jennings, Cara (0323-4) • Jens-Rochow, Steve (0666-3) • Jezierski, Elisabeth (0302-1) • Joannou, Jr., Benjamin (0023-2) • Johnson, Diane (0590-1) • Johnson, Kay (0315-1) • Johnson, Robert (0190-1) • Kadis, Patricia (0248-1) • Keim, Mary (0517-1) • Khajeh-Noori, Jeri (0381-1) (0609-2) • Klopfer, Carol (0677-5) • Kristy, Joseph (0650-1) • Kuraza, Devon (0721-15-2) (0721-15-4) (0721-15-7) • Lamb, Deborah S. (0070-2) (0070-4) • Lange, Alexandra (0087-5) (0088-1) (0088-3) (0088-6) • Lange, Barbara (0591-1) • Lebatard, David (0192-3) • Lee, Nancy (0373-7) • Lettieri, Tammy (0259-5) • Levy, Morgan I. (0136-3) (0136-4) • LoBiondo, Roana and Michael (0359-4) • Lucas, Carmen (0141-2) • Macher, Nathan (0378-2) (0378-7) • Maher, William (0619-1-7) Mahoney, Stephen (0288-10) (0288-13) (0288-16) • Maida, Cecilia (0445-1) • Martin, Drew (0641-9) • Massey, Linda (0514-1) • Matthews, Debbie (0288-10) (0288-13) (0288-16) • Mayer, Doug (0129-4) • Mayotte, Monica (0194-2) • Mazzarella, Rebecca (0495-2) • Merino, Miriam (0092-3) • Merleaux, Derek (0342-3) • Miami, City (0456-23) • • Mitzkewich, Yuri (0523-2) Moll, Wolfgang (0632-1) • Montalvo, Stephanie (0630-1) • Mosca-Clark, Vivianne (0442-2)

Table E-2. (contd)

- Mosher, Paul (0249-3)
- Mueller, Heinz J. (0617-4-12)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	• Myers, B. J. (0256-2)
	• Neal, Kevin (0027-1)
	Nelson, Joyce E. (0149-6)
	Neway, Roberta (0057-6)
	O'Meara, Patrick (0700-1)
	<ul> <li>Ortiz, Natalia (0003-2) (0372-3)</li> </ul>
	Orzechowicz, Holly (0263-5)
	<ul> <li>Otis, Martha (0150-2) (0150-3)</li> </ul>
	Padilla, Dora (0238-2)
	<ul> <li>Passmore, Judith (0390-1)</li> </ul>
	Peters, Emily (0363-2)
	<ul> <li>Philips, Sally B. (0337-6)</li> </ul>
	<ul> <li>Phillips, Monica D. (0084-2)</li> </ul>
	Piper, Cynthia (0183-2)
	<ul> <li>Platt, George Seth (0710-4)</li> </ul>
	<ul> <li>Polk, J. D. (0369-2)</li> </ul>
	<ul> <li>Portuondo, Pilar (0241-2)</li> </ul>
	<ul> <li>Post, Patrick (0671-1-3) (0671-2-1) (0671-2-3)</li> </ul>
	<ul> <li>Puchades, Mary (0616-2)</li> </ul>
	Quillen, Carter (0601-1)
	Raab, Frances (0532-1)
	<ul> <li>Ramsey, Betty (0563-1)</li> </ul>
	Rapuano, Shannon (0594-5)
	Rawlins, Steve (0642-3)
	<ul> <li>Read, Alice Gray (0022-1) (0022-6)</li> </ul>
	<ul> <li>Regalado, Tomas (0515-4)</li> </ul>
	• Reiter, Ben (0080-3)
	• Reyneri, Juan (0121-2)
	<ul> <li>Reynolds, Laura (0721-10-3)</li> </ul>
	Richards, Margie (0450-1)
	<ul> <li>Rifkind, David (0721-16-2) (0721-16-3) (0721-16-4) (0721-16-6)</li> </ul>
	Roberts, Linda (0096-3)
	• Rodriguez, Barbara (0034-2) (0034-4)
	<ul> <li>Rodriguez, Jose Javier (0675-3) (0721-1-10)</li> </ul>
	Roedel, Kitty (0055-4)
	• Roff, Rhonda (0288-10) (0288-13) (0288-16) (0721-11-4) (0721-11-8)
	<ul> <li>Roos, Monica (0052-2)</li> </ul>
	• Rose, Simon (0009-4)
	<ul> <li>Ross, Robert and Teresa (0212-4)</li> </ul>
	<ul> <li>Ross, Sherwood (0332-2)</li> </ul>
	• Ryan, Jim (0543-2)
	San Pedro, Patricia (0026-1)
	Sanchez, Sergio and Irma (0660-2)
	<ul> <li>Saporito, Thomas (0010-5) (0010-6)</li> </ul>
	<ul> <li>Sasiadek, Alfred (0053-3) (0053-5)</li> </ul>
	• Schlackman, Mara (0721-32-1)
	• Schoene, William (0037-2)
	• Schwab, Roy (0579-2) (0579-5)
	<ul> <li>Schwartz Matthew (0721-22-18) (0723-9-2) (0723-9-3) (0723-9-5) (0723-</li> </ul>

• Schwartz, Matthew (0721-22-18) (0723-9-2) (0723-9-3) (0723-9-5) (0723-

<b>Comment Category</b>	Commenter (Comment ID)
	9-20)
	<ul> <li>Scott, John (0288-10) (0288-13) (0288-16)</li> </ul>
	<ul> <li>Scott, Ruth (0548-3)</li> </ul>
	<ul> <li>Segal-Wright, Nicholas (0661-2)</li> </ul>
	<ul> <li>Seiman, Rhonda (0635-5)</li> </ul>
	<ul> <li>Shahsavar, Mehran (0012-2)</li> </ul>
	<ul> <li>Shapiro, Eugene (0357-2)</li> </ul>
	<ul> <li>Shepherd, James (0473-1)</li> </ul>
	<ul> <li>Shlackman, Jed (0356-4) (0356-16)</li> </ul>
	• Silver, William (0021-2)
	• Smay, Betty (0063-2)
	• Smith, David W. (0051-3)
	• Smith, Leigh Emerson (0020-2) (0322-1)
	• Sorenson, Katy (0596-2) (0596-4)
	• Speno, Charlie (0484-2)
	• Star, Priscilla (0723-3-3) (0723-3-5)
	• Szabo, Liz (0481-3)
	<ul> <li>Teas, Jim (0288-10) (0288-13) (0288-16) (0723-5-4)</li> <li>This! Markus (0125-2)</li> </ul>
	• Thiel, Markus (0135-2)
	• Thomas, Bill (0355-2)
	Trauner, Keith (0573-4)     Transher, Buth (0115 5)
	Trencher, Ruth (0115-5)     Tweaten Tanya (0240.7)
	<ul> <li>Tweeton, Tanya (0340-7)</li> <li>Ullman, John (0721-30-10)</li> </ul>
	<ul> <li>Ullman, Jonathan (0288-10) (0288-13) (0288-16)</li> <li>Van Leer, Sam (0252-12) (0252-14) (0252-15) (0252-16) (0252-18)</li> </ul>
	<ul> <li>Van Thienen, Mateo (0033-2)</li> </ul>
	<ul> <li>Vinciguerra, Anthony (0032-2)</li> </ul>
	<ul> <li>Violich, Francesca (0039-4)</li> </ul>
	<ul> <li>Ward, Richard (0348-2)</li> </ul>
	<ul> <li>Wegner, Geri (0048-3)</li> </ul>
	<ul> <li>Welber, Michael (0237-1)</li> </ul>
	• Westaway, Katharine (0014-2)
	• Wilansky, Laura Sue (0078-11) (0078-13) (0721-28-11) (0721-28-12)
	<ul> <li>Wingerd, Mala (0425-1)</li> </ul>
	• Zakon, Allan (0118-2)
	<ul> <li>Zerulla, Tanja (0214-7)</li> </ul>
	• Zhivelev, Leon (0656-2)
	• Zimmermann, John (0501-1)
	• Zuniga, Family (0272-3)
Alternatives-No-	• Barczak, Sara (0112-3)
Action	<ul> <li>Brexel, Sr., Charles (0592-1) (0592-11)</li> </ul>
	<ul> <li>Brinn, Ira (0148-2)</li> </ul>
	<ul> <li>Cavros, George (0721-8-2)</li> </ul>
	<ul> <li>Commenters, Multiple (0104-2) (0379-2) (0379-7)</li> </ul>
	• Harrison, J. M. M. (0508-2)
	Khajeh-Noori, Jeri (0609-3)
	• Lebatard, David (0192-2)
	<ul> <li>Maher, William (0619-2-17)</li> </ul>

Table E-2. (contd)

Table E-2	. (contd)
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Comment Category	Commenter (Comment ID)
Alternatives-Sites	Allison, Noreen (0549-1)
	<ul> <li>Almer, Anessa (0712-4)</li> </ul>
	Anonymous, Anonymous (0711-1)
	<ul> <li>Anonymous, Judi (0537-2) (0537-7)</li> </ul>
	• Balog, Nancy (0185-1)
	Bazzone, Barbara (0159-2)
	Bethune, David (0615-2-24)
	• Birsh, Arthur and Joan (0083-2)
	• Blair, Dan (0485-1)
	Bloom, Justin (0253-2)
	Bofill, Beatriz (0235-2)
	• Borie, Edith (0629-1)
	• Bremen, Gary (0181-2)
	Brexel, Sr., Charles (0592-12)
	• Burge, Laura (0540-3)
	Campbell, Cara (0253-2)
	• Causey, Charlie (0253-2)
	Cava, Daniella Levine (0172-1)
	Cavros, George (0253-2)
	Chenoweth, Mike (0253-2)
	Chirillo, James (0261-1)
	<ul> <li>Cobb, Tanya (0413-3)</li> </ul>
	• Commenters, Multiple (0044-3) (0044-5) (0102-4) (0103-4) (0240-2)
	(0379-3)
	• Daly, Meg (0253-2)
	• Datz, Amy (0621-2)
	Dietrich, Chris OMeara (0295-2)
	• Dorn, Kathryn (0693-4)
	<ul> <li>Douglas, Carolyn (0486-1)</li> </ul>
	<ul> <li>Dudley, Dwight (0254-2)</li> </ul>
	<ul> <li>Edmond, Gabriel (0721-7-1) (0721-7-5)</li> </ul>
	<ul> <li>England, Margaret (0253-2)</li> </ul>
	• Fass, Amy (0278-1)
	• Ferry, Lisa (0704-1)
	• Field, Fran (0258-5)
	• Finver, Jody (0008-9)
	<ul> <li>Fulks, Anna Louise (0250-2)</li> </ul>
	<ul> <li>Fuller, Manley (0253-2)</li> </ul>
	<ul> <li>Garey, Jenne (0668-1)</li> </ul>
	<ul> <li>Glasshof, Wendy (0587-1)</li> </ul>
	<ul> <li>Goldstein, Louis (0418-1)</li> </ul>
	<ul> <li>Govindasamy, Rani (0247-1)</li> </ul>
	<ul> <li>Greer, Tom (0392-2)</li> <li>Griffith Ed and Harriet (0366-2) (0366-6)</li> </ul>
	• Griffith, Ed and Harriet (0366-2) (0366-6)
	• Grill, Brock (0512-1)
	• Guy, Sharon (0654-2)
	<ul> <li>Hanna, Jane (0588-2) (0588-3) (0588-4)</li> </ul>
	<ul> <li>Headley, Linda (0376-1)</li> </ul>

Headley, Linda (0376-1)Jones, George L. (0253-2)

Comment Category	Commenter (Comment ID)
	Karsten, Annetta (0452-1)
	<ul> <li>Kassel, Kerul (0676-4) (0676-9)</li> </ul>
	• Keller, Alan (0253-2)
	Kimball, Larry (0526-1)
	Lague, Victoria (0061-3)
	Lebatard, David (0192-5)
	<ul> <li>Lerner, Cindy (0145-13) (0254-2) (0721-3-4)</li> </ul>
	Lish, Christopher (0555-2)
	<ul> <li>Livingston, C. J. (0437-1)</li> </ul>
	LoBiondo, Roana and Michael (0359-1)
	• Lopez, Jaclyn (0113-1-3)
	Macy, Michelle (0405-1)
	• Maher, William (0619-3-2) (0619-5-14) (0619-5-15) (0619-5-16) (0619-5-
	18)
	<ul> <li>Malpass, Betsy (0421-1)</li> </ul>
	Manter, Larry (0471-1)
	<ul> <li>Martin, Drew (0253-2) (0641-11) (0721-13-3)</li> </ul>
	Mckee, Sarah (0492-2)
	• McLaughlin, Caroline (0113-1-3) (0253-2) (0721-9-2) (0721-9-3) (0723-4
	4)
	Melby, George M. (0396-1)
	Mendelsohn, Alex (0277-1)
	Mendez, Victoria (0721-5-5)
	• Miami, City (0456-3) (0456-4) (0456-5) (0456-7) (0456-9)
	• Mueller, Heinz J. (0617-4-14)
	Mundhenk, Norm (0605-1)
	Neff, Victoria (0682-1)
	• Oliva, Vivian (0349-2) (0349-3)
	• Ortiz, Natalia (0372-4)
	Orzechowicz, Holly (0263-3)
	Palmer, Majorie (0360-1)
	Pareto, Rolando and Marlene (0040-2)
	• Petersen, John (0347-1)
	• Poese, David (0305-1)
	Rapuano, Shannon (0594-1)
	Regalado, Tomas (0254-2)
	Revord, Michael (0420-1)
	<ul> <li>Reynolds, Laura (0113-1-3) (0253-2)</li> </ul>
	<ul> <li>Riccio, Jim (0716-8)</li> </ul>
	<ul> <li>Ritz, David (0208-2) (0208-5)</li> </ul>
	<ul> <li>Ross, Robert and Teresa (0212-3)</li> </ul>
	<ul> <li>Routh, Jeffrey (0522-1)</li> </ul>
	<ul> <li>Royce, M. (0353-2) (0353-6)</li> </ul>
	<ul> <li>Sachs, Jean (0686-1)</li> </ul>
	<ul> <li>Schlackman, Mara (0721-32-5)</li> </ul>
	<ul> <li>Schwartz, Matthew (0113-1-3) (0721-22-17)</li> </ul>
	<ul> <li>Schwarz, Matthew (01131-3) (0721-22-17)</li> <li>Sharp, Andrea Heuson (0210-2)</li> </ul>
	• Sharp, Andrea Heuson (0210-2)

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	• Silverstein, Rachel (0113-1-3) (0253-2)
	Smoller, Merry Sue (0637-1)
	Speno, Charlie (0484-1)
	• Spigel, Sue (0220-1)
	<ul> <li>Stoddard, Philip K. (0254-2)</li> </ul>
	Tingle, Peggy (0352-1)
	Togati, Joanne (0519-1)
	Tokunaga, Barb (0198-1)
	• Ullman, John (0721-30-7)
	• Van Leer, Sam (0252-7)
	• Van Pelt, Jason (0300-1) (0300-3)
	• Vayu, Satya (0370-6) (0370-12)
	• Violich, Francesca (0039-3)
	• White, Paton (0253-2)
	• Whitehorn, C. (0681-1)
	• Wilansky, Laura Sue (0078-8) (0721-28-8)
	• Willett, Greg (0538-1)
	Williams, Elinor (0253-2)
	• Yeager, Jerry (0228-4)
Alternatives-System	• White, Barry J. (0721-12-12)
Design	• Write, Daily 3. $(0721 - 12 - 12)$
Benefit-Cost Balance	Anonymous Anonymous (0222 E) (0226 2) (071E 2)
Denemi-Cost Dalance	<ul> <li>Anonymous, Anonymous (0333-5) (0336-2) (0715-2)</li> </ul>
	Anonymous, Charity (0638-3)
	• Bastidas, Mauricio (0720-1)
	• Batista, Carlos (0685-6) (0685-11)
	Bennett, Robbie (0265-1)
	• Bethune, David (0615-1-15)
	• Burns, Terry (0647-2)
	• Cavros, George (0721-8-6) (0721-8-11)
	Chrissos, H. L. Chris (0164-4)
	• Cleland, Noel (0207-7)
	Compel, Jr., Joseph (0283-2)
	<ul> <li>Dickinson, Robert (0461-1)</li> </ul>
	<ul> <li>Dimondstein, Carla (0564-2)</li> </ul>
	• Eastman, John (0721-24-2)
	<ul> <li>Gross, Cheryl A. (0463-2)</li> </ul>
	<ul> <li>Harrison, Norma J. F. (0649-1)</li> </ul>
	Heiney, Jamie (0713-2)
	<ul> <li>Henry, Jim (0723-12-3)</li> </ul>
	<ul> <li>Keating, Tim (0545-7)</li> </ul>
	• Lane, N. Jo (0569-1)
	<ul> <li>Lange, Alexandra (0088-5)</li> </ul>
	• Mayer, Doug (0129-2)
	Miller, Nyana (0626-3)
	Mosher, Paul (0249-2)
	• Nelson, Joyce E. (0149-10) (0149-13)
	Platt, George Seth (0710-5)
	• Post, Patrick (0671-1-2) (0671-2-4)
	Read, Alice Gray (0022-3)

Comment Category	Commenter (Comment ID)
	<ul> <li>Regalado, Tomas (0515-6)</li> <li>Rock, Andrew (0599-1)</li> <li>Rodriguez, Jose Javier (0721-1-1) (0721-1-2) (0721-1-4)</li> <li>Roedel, Kitty (0055-5)</li> <li>Roff, Rhonda (0721-11-3)</li> <li>Stanley, Gael (0071-1)</li> <li>Tamargo, Jorge J. (0494-1)</li> <li>Vorachek, Mary (0291-2)</li> <li>Wilansky, Laura Sue (0078-3) (0721-28-4)</li> <li>Zerulla, Tanja (0214-2)</li> </ul>
Climate Change	<ul> <li>Berendsohn, Catherine (0723-11-4) (0723-11-5) (0723-11-7)</li> <li>Edmond, Gabriel (0721-7-2) (0721-7-4)</li> <li>Haber, Matthew S. (0611-15)</li> <li>Harris, Walter (0721-6-3)</li> <li>Henry, Jim (0723-12-13)</li> <li>Hubbard, Stanley S. (0680-2)</li> <li>Lawrence, Diane (0086-3)</li> <li>Martin, Drew (0721-13-4)</li> <li>McLaughlin, Caroline (0721-9-7) (0723-4-2) (0723-4-8) (0723-4-9)</li> <li>Mueller, Heinz J. (0617-4-16)</li> <li>Roff, Rhonda (0721-11-2)</li> <li>Rose, Simon (0009-2)</li> </ul>
Cumulative Impacts	<ul> <li>Austin, Stan (0622-2-5)</li> <li>Cava, Daniella Levine (0172-6) (0172-8)</li> <li>Lerner, Cindy (0145-6)</li> <li>Lopez, Jaclyn (0113-2-2)</li> <li>McLaughlin, Caroline (0113-2-2)</li> <li>Reynolds, Laura (0113-2-2)</li> <li>Schwartz, Matthew (0113-2-2)</li> <li>Silverstein, Rachel (0113-2-2)</li> </ul>
Decommissioning	<ul> <li>Franzmann, Paul (0384-2)</li> <li>Hyams, Charles (0213-5)</li> <li>Jones, Diane (0130-4)</li> </ul>
Ecology-Aquatic	<ul> <li>Anonymous, Judi (0537-5)</li> <li>Austin, Stan (0622-1-7) (0622-1-9) (0622-1-26) (0622-2-3) (0622-2-11)</li> <li>Benson, Mary (0081-3)</li> <li>Bertelson, Bob (0723-15-2)</li> <li>Brexel, Sr., Charles (0592-9)</li> <li>Carpenter, Rory (0694-6)</li> <li>Casey, Sr., Robert J. (0368-2)</li> <li>Cleland, Noel (0288-2)</li> <li>Cobb, Tanya (0413-2)</li> <li>Commenters, Multiple (0102-3) (0103-3)</li> <li>Courliss, William (0604-1)</li> <li>Dietrich, Chris OMeara (0295-4)</li> <li>Fay, Virginia M. (0724-1) (0724-2) (0724-3) (0724-5) (0724-8) (0724-9) (0724-10) (0724-11) (0724-12) (0724-13) (0724-14)</li> <li>Field, Fran (0258-3)</li> </ul>

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
Somment Sategory	Finver, Jody (0008-5)
	<ul> <li>Goldmeier, Barry (0015-13)</li> </ul>
	<ul> <li>Gregory, Gregory B. (0728-2)</li> </ul>
	<ul> <li>Griffith, Ed and Harriet (0366-5) (0366-7)</li> </ul>
	<ul> <li>Hazard, Evan (0415-1)</li> </ul>
	<ul> <li>Hefty, Lee N. (0110-1-6)</li> </ul>
	<ul> <li>Hodie, Jake (0191-1)</li> </ul>
	<ul> <li>Hurley, Paula (0362-3)</li> </ul>
	<ul> <li>Icaza, Alejo (0613-1)</li> </ul>
	<ul> <li>Jackalone, Frank (0288-2)</li> </ul>
	<ul> <li>Jones, Diane (0130-2)</li> </ul>
	<ul> <li>Kassel, Kerul (0676-2) (0676-7)</li> </ul>
	• Kaul, Devika (0722-14-4)
	<ul> <li>Lish, Christopher (0555-1)</li> </ul>
	• Lopez, Jaclyn (0113-1-13) (0113-1-16) (0113-1-18) (0113-1-19)
	<ul> <li>Lopez, Josie (0284-3) (0284-5)</li> </ul>
	• Maher, William (0619-1-12) (0619-1-16) (0619-2-29) (0619-3-12) (0619-3
	13) (0619-4-9) (0619-4-10) (0619-4-11) (0619-4-16) (0619-6-8) (0619-6-
	12) (0619-6-14) (0619-7-3) (0619-7-4) (0619-7-6) (0619-7-7) (0619-7-8)
	(0619-7-9) (0619-7-10) (0619-7-11)
	<ul> <li>Mahoney, Stephen (0288-2)</li> </ul>
	<ul> <li>Martin, Drew (0641-7) (0721-13-7)</li> </ul>
	Matthews, Debbie (0288-2)
	<ul> <li>McLaughlin, Caroline (0113-1-13) (0113-1-16) (0113-1-18) (0113-1-19) (0723-4-3)</li> </ul>
	<ul> <li>Mendez, Victoria (0721-5-7)</li> </ul>
	<ul> <li>Morton, Sean (0618-2) (0618-3)</li> </ul>
	<ul> <li>Mueller, Heinz J. (0617-1-11) (0617-1-12) (0617-1-24) (0617-1-27) (0617 1-31) (0617-1-32) (0617-1-33) (0617-4-7) (0617-4-8)</li> </ul>
	<ul> <li>Pheil, Edward (0707-2) (0707-4)</li> </ul>
	<ul> <li>Phillips, Monica D. (0084-1)</li> </ul>
	<ul> <li>Post, Patrick (0671-1-1)</li> </ul>
	Raab, Frances (0532-2)
	<ul> <li>Regalado, Tomas (0515-3)</li> </ul>
	<ul> <li>Reynolds, Laura (0113-1-13) (0113-1-16) (0113-1-18) (0113-1-19)</li> </ul>
	• Ritz, David (0208-3)
	<ul> <li>Rodriguez, Jose Javier (0721-1-8)</li> </ul>
	<ul> <li>Roff, Rhonda (0288-2)</li> </ul>
	• Royce, M. (0353-5)
	• Salatino, Freda (0299-2)
	<ul> <li>Schwartz, Matthew (0113-1-13) (0113-1-16) (0113-1-18) (0113-1-19) (0721-22-13) (0721-22-15) (0721-22-16)</li> </ul>
	• Scott, John (0288-2)
	Sharp, Andrea Heuson (0210-4)
	Shipe, Kathleen (0193-2)
	• Shlackman, Jed (0356-2) (0356-11)
	• Silverstein, Rachel (0113-1-13) (0113-1-16) (0113-1-18) (0113-1-19)
	<ul> <li>Skove, Ellen H. (0081-3)</li> </ul>
	$a = \text{Stapley} = \log(0.227.4) (0.227.5) (0.227.11)$

- Stanley, Joyce (0227-4) (0227-5) (0227-11)
  Stoddard, Philip K. (0106-5) (0106-12)

Comment Category	Commenter (Comment ID)
	• Swenson, Cyndee (0722-17-4)
	• Teas, Jim (0288-2)
	Tompkins, Constance (0081-3)
	Tweeton, Tanya (0340-2)
	Ullman, Jonathan (0288-2)
	• Van Leer, Sam (0252-4)
	• Vayu, Satya (0370-3) (0370-7) (0370-10)
	• Wegner, Geri (0048-1)
	• White, Barry J. (0721-12-4) (0721-12-10)
	• Wilansky, Laura Sue (0078-7)
	• Yeager, Jerry (0228-3)
	• Zerulla, Tanja (0214-5)
Ecology-Terrestrial	
Ecology-Terrestrial	(0622-1-20) (0622-1-21) (0622-1-22) (0622-1-23) (0622-1-24) (0622-1-25)
	(0622-2-1) (0622-2-2) (0622-2-4) (0622-2-7) (0622-2-10) (0622-2-12)
	(0622-2-13) (0622-2-15) (0623-9)
	• Bazzone, Barbara (0159-3)
	Benton-Janetta, Lori (0449-2)
	Berendsohn, Catherine (0723-11-3)
	• Bertelson, Bob (0723-15-3)
	Casper, Laurel (0202-1)
	Cleland, Noel (0288-7)
	Commenters, Multiple (0240-9)
	Cusidor, Teresa (0127-3)
	• Dwyer, Karen (0674-6)
	• Eastman, John (0721-24-4)
	<ul> <li>Fay, Virginia M. (0724-4) (0724-15) (0724-16)</li> </ul>
	• Finver, Jody (0008-7)
	<ul> <li>Jackalone, Frank (0288-7)</li> </ul>
	<ul> <li>Lee, Nancy (0373-2)</li> </ul>
	Lindsey, Jerrie (0245-3)
	<ul> <li>Lopez, Jaclyn (0113-1-6) (0113-1-9) (0113-1-10) (0113-2-8) (0113-2-9) (0113-2-14) (0113-2-16) (0113-2-17)</li> </ul>
	• Maher, William (0619-1-2) (0619-1-9) (0619-1-19) (0619-1-20) (0619-2-2)
	(0619-2-5) (0619-2-6) (0619-2-7) (0619-2-31) (0619-2-35) (0619-2-37)
	(0619-2-38) (0619-2-39) (0619-3-7) (0619-3-8) (0619-3-9) (0619-3-10)
	(0619-3-11) (0619-4-3) (0619-4-4) (0619-4-5) (0619-4-6) (0619-4-7)
	(0619-4-8) (0619-4-17) (0619-4-18) (0619-5-9) (0619-6-1) (0619-6-2)
	(0619-6-3) (0619-6-4) (0619-6-5) (0619-6-6) (0619-6-7) (0619-6-9) (0619-
	6-10) (0619-6-11) (0619-6-13) (0619-6-15) (0619-6-16) (0619-6-17) (0619
	6-18) (0619-6-19) (0619-7-1) (0619-7-2) (0619-7-5)
	Mahoney, Stephen (0288-7)
	Matthews, Debbie (0288-7)
	McDuffie, Stephen (0723-8-4)
	• McLaughlin, Caroline (0113-1-6) (0113-1-9) (0113-1-10) (0113-2-8) (0113-
	2-9) (0113-2-14) (0113-2-16) (0113-2-17)
	• Miller, Melissa (0285-2)
	<ul> <li>Miller, Nena (0689-1)</li> </ul>
	• Mueller, Heinz J. (0617-1-6) (0617-1-9) (0617-1-10) (0617-1-13) (0617-1-
	28) (0617-1-29) (0617-1-30)

Table E-2. (contd)

Table E-2.	(contd)
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Comment Category	Commenter (Comment ID)	
	• Peters, Emily (0363-4)	
	<ul> <li>Reynolds, Laura (0113-1-6) (0113-1-9) (0113-1-10) (0113-2-8) (0113-2-9) (0113-2-14) (0113-2-16) (0113-2-17)</li> </ul>	
	<ul> <li>Roff, Rhonda (0288-7)</li> </ul>	
	• Rose, Aaron (0307-1)	
	• Schlackman, Mara (0721-32-9)	
	<ul> <li>Schwartz, Matthew (0113-1-6) (0113-1-9) (0113-1-10) (0113-2-8) (0113-2-9) (0113-2-14) (0113-2-16) (0113-2-17) (0721-22-4) (0721-22-7) (0723-9-10) (0723-9-12) (0723-9-13)</li> </ul>	
	<ul> <li>Scott, John (0288-7)</li> </ul>	
	• Shlackman, Mara (0246-5)	
	<ul> <li>Silverstein, Rachel (0113-1-6) (0113-1-9) (0113-1-10) (0113-2-8) (0113-2-9) (0113-2-14) (0113-2-16) (0113-2-17)</li> </ul>	
	<ul> <li>Stanley, Joyce (0227-1) (0227-2) (0227-3) (0227-6) (0227-7) (0227-8) (0227-10) (0227-12) (0227-13) (0227-14)</li> </ul>	
	• Swenson, Cyndee (0722-17-1)	
	• Teas, Jim (0288-7)	
	• Ullman, Jonathan (0288-7)	
	Wallington, Victoria (0308-1)	
	• White, Barry J. (0598-2)	
	• Wong, Christina (0066-3)	
	• Zerulla, Tanja (0214-4) (0214-6)	
Editorial Comments	<ul> <li>Maher, William (0619-1-5) (0619-1-13) (0619-1-18) (0619-2-15) (0619-2-16) (0619-2-28) (0619-5-7) (0619-5-11)</li> </ul>	
Environmental	Edmond, Gabriel (0721-7-6)	
Justice	• Mueller, Heinz J. (0617-3-2) (0617-3-3)	
	<ul> <li>Stoddard, Philip K. (0721-2-15)</li> </ul>	
Geology	• Mueller, Heinz J. (0617-1-23)	
	• White, Barry J. (0721-12-7)	
Health-	Almirola, Alejandro (0721-31-8)	
Nonradiological	Batista, Carlos (0685-2)	
	Bethune, David (0615-2-19)	
	<ul> <li>Commenters, Multiple (0073-5) (0240-4)</li> </ul>	
	<ul> <li>de Armas, Maria Cristina (0077-4)</li> </ul>	
	• Dwyer, Karen (0674-2)	
	Goldman, Emanuel (0153-2)	
	• Griffith, Ed and Harriet (0366-4)	
	Haselhurst, Richard (0639-3)	
	Hurley, Paula (0362-2)	
	<ul> <li>Kassel, Kerul (0676-6)</li> <li>Kaspigeborg, Linde (0721.26.1)</li> </ul>	
	Koenigsberg, Linda (0721-26-1)	
	<ul> <li>Lange, Alexandra (0088-7)</li> <li>Mahar, William (0610-2-26) (0610-2-22) (0610-2-22) (0610-4-12) (0610-4</li> </ul>	
	<ul> <li>Maher, William (0619-2-26) (0619-2-32) (0619-2-33) (0619-4-12) (0619-4-13) (0619-4-14)</li> </ul>	
	<ul> <li>Mueller, Heinz J. (0617-1-35) (0617-1-36)</li> </ul>	
	<ul> <li>Mullier, Heinz J. (0017-1-33) (0017-1-30)</li> <li>Philips, Sally B. (0337-3)</li> </ul>	
	<ul> <li>Poolos, Hazel (0726-1)</li> </ul>	
	<ul> <li>Roff, Rhonda (0721-11-6)</li> </ul>	
	• Royce, M. (0353-4)	

Comment Category	Commenter (Comment ID)
	<ul> <li>Schwartz, Matthew (0721-22-12)</li> <li>Shlackman, Jed (0356-10)</li> <li>Stoddard, Philip K. (0721-2-12)</li> <li>Vayu, Satya (0370-9)</li> <li>White, Barry J. (0721-12-3)</li> </ul>
Health-Radiological	<ul> <li>Wilansky, Laura Sue (0078-6) (0721-28-6)</li> <li>Anonymous, Anonymous (0603-2) (0603-3) (0603-4) (0603-5) (0628-2)</li> </ul>
nealth-Radiological	<ul> <li>(0644-3)</li> <li>Bethune, David (0615-1-8) (0615-1-9) (0615-1-11) (0615-2-22)</li> <li>Draper, Lonnie M. (0511-3)</li> <li>DuPriest, William Robert (0093-4)</li> <li>Dwyer, John P. (0264-4)</li> <li>Galles, Camilla (0624-2) (0624-3)</li> <li>Garcia, Alda S. (0524-1)</li> <li>Maher, William (0619-1-3) (0619-2-27) (0619-2-30) (0619-2-36) (0619-4-15) (0619-4-19) (0619-4-20) (0619-7-12) (0619-7-13) (0619-7-14) (0619-7-15) (0619-7-16)</li> <li>Schlackman, Mara (0721-32-3)</li> <li>Wilansky, Laura Sue (0078-9) (0721-28-9)</li> </ul>
Historic and Cultural Resources	<ul> <li>Wilson, J. D. Bruce (0065-1)</li> <li>Maher, William (0619-1-10) (0619-2-10) (0619-2-13) (0619-3-14) (0619-3-15) (0619-3-16)</li> <li>Mueller, Bradley M. (0727-1) (0727-2) (0727-3) (0727-4) (0727-5)</li> <li>Mueller, Heinz J. (0617-3-4) (0617-3-5)</li> <li>Parsons, Timothy A. (0139-1) (0139-2) (0139-3)</li> </ul>
Hydrology- Groundwater	<ul> <li>Almirola, Alejandro (0721-31-3)</li> <li>Austin, Stan (0622-1-2) (0623-2) (0623-6) (0623-8)</li> <li>Barczak, Sara (0112-7)</li> <li>Batista, Carlos (0685-14)</li> <li>Berendsohn, Catherine (0723-11-2)</li> <li>Bethune, David (0615-1-5) (0615-3-1) (0615-3-4)</li> <li>Bloom, Justin (0253-3)</li> <li>Breslin, Tom (0721-17-2)</li> <li>Campbell, Cara (0253-3)</li> <li>Causey, Charlie (0253-3)</li> <li>Cavros, George (0253-3)</li> <li>Chenoweth, Mike (0253-3)</li> <li>Cleland, Noel (0288-8)</li> <li>Cobb, Tanya (0413-5)</li> <li>Commenters, Multiple (0102-6) (0103-6) (0240-12)</li> <li>Daly, Meg (0253-3)</li> <li>Daniels, Bonnie (0341-3)</li> <li>de Armas, Maria Cristina (0077-1)</li> <li>Dorn, Kathryn (0693-3)</li> <li>Eastman, John (0721-24-3)</li> <li>England, Margaret (0253-3)</li> <li>Fay, Virginia M. (0724-6) (0724-7)</li> <li>Finver, Jody (0008-8)</li> <li>Fischer, Antoinette (0365-2) (0365-4)</li> </ul>

Table E-2. (contd)

Table E-2.	(contd)
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Comment Category	Commenter (Comment ID)
	Fulks, Anna Louise (0250-8)
	Fuller, Manley (0253-3)
	Gomez, Christian (0269-1)
	Gross, Cheryl A. (0463-1)
	<ul> <li>Haber, Matthew S. (0611-4) (0611-5) (0611-7) (0611-8) (0611-9) (0611- 10)</li> </ul>
	• Hefty, Lee N. (0110-1-8) (0110-1-9) (0110-1-10) (0110-1-12)
	• Henry, Jim (0723-12-9) (0723-12-12) (0723-12-14)
	Horiwitz, Laura (0732-1)
	• Hoyle, Lester and Judy (0440-6)
	• Jackalone, Frank (0288-8)
	• Jennings, Cara (0323-1)
	• Jones, George L. (0253-3)
	• Kaul, Devika (0722-14-2)
	Keaton, Rebecca (0503-1)
	• Keller, Alan (0253-3)
	• Kuraza, Devon (0721-15-10)
	• Lange, Barbara (0591-2)
	• Lerner, Cindy (0145-2) (0145-3) (0145-5) (0145-8) (0145-10) (0721-3-2)
	• Lindsey, Jerrie (0245-5)
	• Livingston, C. J. (0437-2)
	<ul> <li>Lopez, Jaclyn (0113-1-4) (0113-1-15) (0113-1-17) (0113-2-1) (0113-2-3) (0113-2-4) (0113-2-5) (0113-2-7) (0113-2-10)</li> </ul>
	<ul> <li>Maher, William (0619-2-20) (0619-4-2) (0619-5-8) (0619-7-17) (0619-7-18 (0619-7-19) (0619-7-20) (0619-7-21) (0619-7-22)</li> </ul>
	<ul> <li>Mahoney, Stephen (0288-8)</li> </ul>
	<ul> <li>Malefatto, Alfred (0211-1)</li> </ul>
	• Martin, Drew (0253-3)
	• Matthews, Debbie (0288-8)
	<ul> <li>McDuffie, Stephen (0723-8-8)</li> </ul>
	<ul> <li>McLaughlin, Caroline (0113-1-4) (0113-1-15) (0113-1-17) (0113-2-1) (0113-2-3) (0113-2-4) (0113-2-5) (0113-2-7) (0113-2-10) (0253-3) (0721-9-6) (0723-4-6) (0723-4-7)</li> </ul>
	<ul> <li>Meyer-Steele, Shawn (0187-3)</li> </ul>
	<ul> <li>Miami, City (0456-10) (0456-12) (0456-21)</li> </ul>
	<ul> <li>Mueller, Heinz J. (0617-1-7) (0617-1-15) (0617-1-17) (0617-1-22) (0617-1-25) (0617-1-26) (0617-2-1)</li> </ul>
	<ul> <li>Palmer, Majorie (0360-3)</li> </ul>
	<ul> <li>Reynolds, Laura (0113-1-4) (0113-1-15) (0113-1-17) (0113-2-1) (0113-2-</li> </ul>
	3) (0113-2-4) (0113-2-5) (0113-2-7) (0113-2-10) (0253-3)
	• Ritz, David (0208-1) (0208-7)
	• Roff, Rhonda (0288-8)
	<ul> <li>Schwartz, Matthew (0113-1-4) (0113-1-15) (0113-1-17) (0113-2-1) (0113-2-3) (0113-2-4) (0113-2-5) (0113-2-7) (0113-2-10) (0721-22-8) (0721-22-4) (0721</li></ul>
	14) (0723-9-16) (0723-9-18)
	• Scott, John (0288-8)
	<ul> <li>Silverstein, Rachel (0113-1-4) (0113-1-15) (0113-1-17) (0113-2-1) (0113-2-3) (0113-2-4) (0113-2-5) (0113-2-7) (0113-2-10) (0253-3) (0722-7-5)</li> <li>Stoddard, Philip K. (0106-4) (0721-2-2) (0721-2-3) (0721-2-4)</li> </ul>

- Stoddard, Philip K. (0106-4) (0721-2-2) (0721-2-3) (0721-2-4) Streit, Didi (0074-2) ٠
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Comment Category	Commenter (Comment ID)
	• Teas, James (0612-1) (0612-2) (0612-3) (0612-4) (0612-5) (0612-6)
	<ul> <li>Teas, Jim (0288-8) (0723-5-6)</li> </ul>
	<ul> <li>Tweeton, Tanya (0340-1)</li> </ul>
	• Ullman, Jonathan (0288-8)
	• Van Leer, Sam (0252-5)
	• Vayu, Satya (0370-11)
	• White, Barry J. (0721-12-6)
	• White, Paton (0253-3)
	• Wilansky, Laura Sue (0078-9) (0721-28-7)
	• Williams, Elinor (0253-3)
	• Yeager, Jerry (0228-6)
Hydrology-Surface	Albers, Harold (0688-1)
Water	Almer, Anessa (0712-3)
	<ul> <li>Anonymous, Anonymous (0327-1) (0551-1)</li> </ul>
	<ul> <li>Anonymous, Judi (0537-3)</li> </ul>
	• Austin, Stan (0622-1-3) (0622-1-4) (0622-1-5) (0622-1-10) (0622-1-14)
	(0622-1-28) (0622-1-29) (0622-2-14) (0623-3) (0623-4) (0623-5) (0623-7)
	• Barczak, Sara (0112-2) (0112-5) (0112-6)
	• Beattie, Jane (0417-2)
	Beckman, Yvonne and Douglas (0060-3) (0060-4)
	• Berndgen, Michelle (0361-2)
	• Bethune, David (0615-2-27) (0615-3-2) (0615-3-3) (0615-3-5) (0615-3-6)
	Bloom, Justin (0253-4)
	Boyce, Sheila (0091-2)
	Bremen, Gary (0181-1)
	Brexel, Sr., Charles (0592-8)
	<ul> <li>Brstow, Mary (0497-1)</li> <li>Buschlar, Jarry (0718-1) (0718-5)</li> </ul>
	<ul> <li>Buechler, Jerry (0718-1) (0718-5)</li> <li>Ceferelli Conia (0208-1)</li> </ul>
	<ul> <li>Cafarelli, Cenie (0298-1)</li> <li>Campbell, Cara (0253-4)</li> </ul>
	<ul> <li>Campbell, Cara (0253-4)</li> <li>Carpenter, Rory (0694-3)</li> </ul>
	<ul> <li>Casey, Sr., Robert J. (0368-1)</li> </ul>
	<ul> <li>Cathey, Turner (0079-1)</li> </ul>
	<ul> <li>Causey, Charlie (0253-4)</li> </ul>
	<ul> <li>Cava, Daniella Levine (0172-2) (0172-3) (0172-4) (0172-5)</li> </ul>
	<ul> <li>Cavros, George (0253-4)</li> </ul>
	<ul> <li>Chenoweth, Mike (0253-4)</li> </ul>
	<ul> <li>Chiszar, Benjamin J. (0677-3)</li> </ul>
	<ul> <li>Cleland, Noel (0288-3) (0288-4) (0288-5) (0288-9) (0288-12) (0288-14)</li> </ul>
	<ul> <li>Cobb, Tanya (0413-4)</li> </ul>
	Coffey, Rotraud (0516-1)
	<ul> <li>Commenters, Multiple (0073-1) (0102-2) (0102-5) (0103-2) (0103-5)</li> </ul>
	(0103-7) (0104-4) (0240-3) (0240-6) (0379-6)
	<ul> <li>Compel, Jr., Joseph (0283-4)</li> </ul>
	<ul> <li>Cook, Cherie (0163-2)</li> </ul>
	Cornely, Tina (0633-2)
	• Corral, Oscar (0133-2)
	• Crystal, Chris (0334-3) (0334-4)
	• Cunningham, Sue (0114-2) (0114-4)

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	• Cusidor, Teresa (0127-2) (0127-4)
	<ul> <li>Daly, Meg (0253-4)</li> </ul>
	Darden, Colgate (0571-2)
	Davidson, Penny (0493-1)
	Demello, Christine (0180-1)
	Dietrich, Chris OMeara (0295-3)
	Dorn, Kathryn (0693-1)
	Drevicky, John (0691-1)
	• Dudley, Dwight (0254-3) (0254-4)
	• Duquette, Bill (0722-13-7)
	<ul> <li>Dwyer, John P. (0264-3) (0673-4) (0673-8)</li> </ul>
	• Dwyer, Karen (0674-4)
	• Eckert, Brenda (0400-1)
	• Enfield, David (0236-1)
	• England, Margaret (0253-4)
	• Ericson, Del (0320-1)
	• Fairchild, David (0094-1) (0094-3) (0094-5)
	• Field, Fran (0258-2) (0258-4)
	• Finver, Jody (0008-14) (0008-15)
	• Fischer, Antoinette (0365-3) (0365-5) (0365-6) (0365-7)
	• Foster, Beverly (0401-1)
	• Fuentes, Mariana (0574-2)
	Fulks, Anna Louise (0250-6)
	• Fuller, Manley (0253-4)
	• Goldman, Emanuel (0153-1)
	<ul> <li>Gonzalez, Javier (0722-8-1) (0722-8-2) (0722-8-3)</li> </ul>
	<ul> <li>Grant, Randy (0146-4)</li> </ul>
	Gregory, Gregory B. (0728-1)
	• Griffith, Ed and Harriet (0366-9)
	<ul> <li>Gross, Cheryl A. (0463-3)</li> </ul>
	<ul> <li>Guy, Sharon (0654-3)</li> </ul>
	<ul> <li>H., Pat (0550-1) (0550-4)</li> </ul>
	<ul> <li>Haber, Matthew S. (0611-1) (0611-2) (0611-3) (0611-6) (0611-11) (0611-</li> </ul>
	12) (0611-13) (0611-18) (0611-19)
	• Haber, Rochelle (0244-2)
	• Hanna, Jane (0588-6)
	<ul> <li>Hefty, Lee N. (0110-1-7)</li> </ul>
	• Hoyle, Lester and Judy (0440-3) (0440-4)
	<ul> <li>Hudak, Jill (0722-19-1)</li> </ul>
	<ul> <li>Jackalone, Frank (0288-3) (0288-4) (0288-5) (0288-9) (0288-12) (0288-14</li> </ul>
	<ul> <li>Jacobs, Lee (0677-3)</li> </ul>
	<ul> <li>Johnson, Diane (0590-2)</li> </ul>
	<ul> <li>Jones, Gary (0443-1)</li> </ul>
	<ul> <li>Jones, George L. (0253-4)</li> </ul>
	<ul> <li>Jones, Joan and Robert (0147-2)</li> </ul>
	<ul> <li>Kasenow, Lisa (0054-1) (0200-1)</li> </ul>
	<ul> <li>Kassel, Kerul (0676-5) (0676-8)</li> </ul>
	<ul> <li>Kaul, Devika (0722-14-3)</li> </ul>
	<ul> <li>Keating, Tim (0545-2) (0545-3)</li> </ul>

Comment Category	Commenter (Comment ID)
	• Keller, Alan (0253-4)
	• Kipnis, Dan (0702-1) (0703-1) (0722-2-1) (0722-2-2) (0722-2-3) (0725-1)
	Klopfer, Carol (0677-3)
	<ul> <li>Kowalski, Kathleen S. (0049-2)</li> </ul>
	• Lange, Alexandra (0088-4)
	• Larsen, Paul (0005-1)
	Lawrence, Diane (0086-2)
	• Lebatard, David (0192-4)
	• Lee, Nancy (0373-3) (0373-4) (0373-8) (0373-11) (0373-12)
	• Lenz, Andrew (0470-1)
	<ul> <li>Lerner, Cindy (0145-4) (0145-7) (0145-9) (0145-11) (0145-12) (0254-3)</li> <li>(0254-4) (0724-2-4) (0724-2-2)</li> </ul>
	(0254-4) $(0721-3-1)$ $(0721-3-3)$
	<ul> <li>Levy, Morgan I. (0136-1) (0136-2)</li> <li>Liesche, Ken (0488-1)</li> </ul>
	<ul> <li>Liesche, Ken (0488-1)</li> <li>Lindsey, Jerrie (0245-2)</li> </ul>
	<ul> <li>Lopez, Jaclyn (0113-1-5) (0113-1-7) (0113-1-8) (0113-1-11) (0113-2-6)</li> </ul>
	(0113-2-11) (0113-2-12) (0113-2-18)
	Lopez, Josie (0284-2)
	<ul> <li>Maher, William (0619-1-8) (0619-1-15) (0619-2-9) (0619-2-12) (0619-2-14) (0619-2-19) (0619-5-17)</li> </ul>
	Mahoney, Robert S. (0364-2)
	• Mahoney, Stephen (0288-3) (0288-4) (0288-5) (0288-9) (0288-12) (0288-
	14)
	• Malefatto, Alfred (0211-2)
	<ul> <li>Martin, Drew (0253-4) (0641-2) (0641-3) (0641-4) (0641-12) (0721-13-2) (0721-13-6) (0721-13-8)</li> </ul>
	• Martinez, Orlando A. (0570-3) (0570-4)
	<ul> <li>Matthews, Debbie (0288-3) (0288-4) (0288-5) (0288-9) (0288-12) (0288-14)</li> </ul>
	Mayotte, Monica (0194-1)
	Mazzarella, Rebecca (0495-4)
	Mazzuca, Rich (0584-1)
	<ul> <li>McLaughlin, Caroline (0113-1-5) (0113-1-7) (0113-1-8) (0113-1-11) (0113-2-6) (0113-2-11) (0113-2-12) (0113-2-18) (0253-4) (0721-9-5)</li> </ul>
	<ul> <li>Mendez, Victoria (0721-5-4) (0721-5-8)</li> </ul>
	<ul> <li>Merleaux, Derek (0342-1)</li> </ul>
	<ul> <li>Meyer, Paul (0122-2)</li> </ul>
	<ul> <li>Meyer-Steele, Shawn (0187-4)</li> </ul>
	• Miami, City (0456-6) (0456-8) (0456-11) (0456-13) (0456-14) (0456-15)
	(0456-16) (0456-17) (0456-20) (0456-27) (0456-28)
	Monfort, Brooke (0476-1)     Montolva, Stanbania (0620-2)
	<ul> <li>Montalvo, Stephanie (0630-2)</li> <li>Morrisse, Christine (0483-1)</li> </ul>
	<ul> <li>Morrisse, Christine (0483-1)</li> <li>Morton, Sean (0618-1)</li> </ul>
	<ul> <li>Monton, Sean (0616-1)</li> <li>Mueller, Heinz J. (0617-1-2) (0617-1-3) (0617-1-4) (0617-1-8) (0617-1-14)</li> </ul>
	(0617-1-16) (0617-1-18) (0617-1-19) (0617-1-20) (0617-1-21) (0617-4-1) (0617-4-2) (0617-4-3) (0617-4-4) (0617-4-5) (0617-4-6) (0617-4-10)
	(0617-4-13) • Murphy, Mike (0723-6-3)
	<ul> <li>Murphy, Mike (0723-6-3)</li> <li>Nappe, Judith (0695-2)</li> </ul>
	- Nappe, Juditi (0035-2)

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	• Otto, Peter (0509-2)
	Pareto, Rolando and Marlene (0040-4)
	• Peters, Emily (0363-3)
	• Philips, Sally B. (0337-4)
	Platt, George Seth (0710-2)
	Pontier, Christine Hughes (0126-3)
	Rapuano, Shannon (0594-2)
	• Rawlins, Steve (0642-2) (0642-5)
	Read, Alice Gray (0022-4)
	<ul> <li>Regalado, Tomas (0254-3) (0254-4) (0515-2) (0515-5) (0721-4-2) (0721-4-3)</li> </ul>
	• Reynolds, Laura (0113-1-5) (0113-1-7) (0113-1-8) (0113-1-11) (0113-2-6)
	(0113-2-11) (0113-2-12) (0113-2-18) (0253-4) (0721-10-2) (0721-10-4)
	<ul> <li>Rhodes, Karen (0140-3)</li> <li>Riccio, Jim (0716-7)</li> </ul>
	<ul> <li>Riley, Bill (0722-9-9)</li> </ul>
	<ul> <li>Ritz, David (0208-6) (0208-8) (0208-9)</li> </ul>
	<ul> <li>Robinson, Angel (0474-1)</li> </ul>
	<ul> <li>Rock, Andrew (0599-2)</li> </ul>
	<ul> <li>Rodriguez, Jose Javier (0675-2) (0675-6) (0721-1-5) (0721-1-6)</li> </ul>
	<ul> <li>Roedel, Kitty (0055-3)</li> </ul>
	<ul> <li>Roff, Rhonda (0288-3) (0288-4) (0288-5) (0288-9) (0288-12) (0288-14) (0721-11-5)</li> </ul>
	<ul> <li>Rose, Simon (0009-3)</li> </ul>
	<ul> <li>Ross, Robert and Teresa (0212-2)</li> </ul>
	<ul> <li>Royce, M. (0353-3)</li> </ul>
	<ul> <li>Salatino, Freda (0299-1) (0299-3) (0299-4)</li> </ul>
	<ul> <li>Sasiadek, Alfred (0053-2) (0053-4)</li> </ul>
	<ul> <li>Schlackman, Mara (0721-32-4) (0721-32-6)</li> </ul>
	<ul> <li>Schwartz, Matthew (0113-1-5) (0113-1-7) (0113-1-8) (0113-1-11) (0113-2</li> </ul>
	6) (0113-2-11) (0113-2-12) (0113-2-18) (0723-9-14) (0723-9-15)
	<ul> <li>Scott, John (0288-3) (0288-4) (0288-5) (0288-9) (0288-12) (0288-14)</li> </ul>
	<ul> <li>Segal-Wright, Nicholas (0661-3)</li> </ul>
	• Segor, Joseph C. (0722-16-1)
	• Seiman, Rhonda (0635-3)
	• Sharp, Andrea Heuson (0210-3) (0210-5)
	• Shipe, Kathleen (0193-1)
	• Shlackman, Jed (0356-1) (0356-9) (0356-12)
	Shlackman, Mara (0246-3)
	• Silverstein, Rachel (0113-1-5) (0113-1-7) (0113-1-8) (0113-1-11) (0113-2-
	6) (0113-2-11) (0113-2-12) (0113-2-18) (0253-4) (0722-7-3) (0722-7-4)
	(0722-7-6) (0722-7-8)
	• Smyke, Pete (0459-1)
	• Standley, Ron (0414-1)
	• Stanley, Joyce (0227-9)
	<ul> <li>Stoddard, Philip K. (0106-2) (0106-6) (0106-7) (0106-8) (0106-9) (0106-10) (0106-11) (0254-3) (0254-4) (0721-2-5) (0721-2-6) (0721-2-7) (0721-2</li> <li>N (0721-2-0) (0721-2-10)</li> </ul>
	8) (0721-2-9) (0721-2-10) • Strouble, Jackie (0297-2)

- Strouble, Jackie (0297-2)Swenson, Cyndee (0722-17-3)

Comment Category	Commenter (Comment ID)
	<ul> <li>Teas, James (0612-7)</li> <li>Teas, Jim (0288-3) (0288-4) (0288-5) (0288-9) (0288-12) (0288-14) (0723-5-5)</li> <li>Teasley, Regi (0318-1)</li> <li>Thiel, Markus (0135-1)</li> <li>Thomas, Bill (0355-1)</li> <li>Tingle, Peggy (0352-2)</li> <li>Trauner, Keith (0573-3)</li> <li>Trencher, Ruth (0115-6)</li> <li>Trowbridge, Mark (0723-2-6)</li> <li>Ullman, John (0721-30-3) (0721-30-6) (0721-30-8) (0721-30-9)</li> <li>Ullman, Jonathan (0288-3) (0288-4) (0288-5) (0288-9) (0288-12) (0288-14)</li> <li>Van Leer, Sam (0252-3) (0252-6) (0252-9)</li> <li>Vayu, Satya (0370-2) (0370-8)</li> <li>Wallace, Otis (0723-1-6)</li> <li>West, Eric (0435-1)</li> <li>White, Barry J. (0598-3) (0721-12-2) (0721-12-9)</li> <li>White, Paton (0253-4)</li> <li>Wiansky, Laura Sue (0078-5)</li> <li>Williams, Elinor (0253-4)</li> <li>Yeager, Jerry (0228-2) (0228-5) (0228-7)</li> <li>Yovel, Ephrat (0721-29-2)</li> </ul>
Land Use-Site and Vicinity	<ul> <li>Austin, Stan (0622-2-8)</li> <li>Gross, Cheryl A. (0463-5)</li> <li>Hefty, Lee N. (0110-1-4) (0110-1-11)</li> <li>Lindsey, Jerrie (0245-6)</li> <li>Maher, William (0619-1-17) (0619-2-3) (0619-2-4) (0619-2-8) (0619-2-11) (0619-2-18) (0619-3-3) (0619-3-4) (0619-3-5) (0619-3-6)</li> <li>Tweeton, Tanya (0340-4)</li> </ul>
Land Use- Transmission Lines	<ul> <li>Almirola, Alejandro (0721-31-6) (0721-31-7)</li> <li>Austin, Stan (0622-1-12) (0622-1-15) (0622-1-16) (0622-1-27) (0622-2-9) (0623-12)</li> <li>Batista, Carlos (0685-3)</li> <li>Berendsohn, Catherine (0723-11-6)</li> <li>Berndgen, Michelle (0361-3)</li> <li>Brown, Judith O. (0131-1)</li> <li>Commenters, Multiple (0044-7) (0073-3) (0073-4) (0073-6) (0240-10) (0240-11)</li> <li>Corral, Oscar (0133-3)</li> <li>Crystal, Chris (0334-2)</li> <li>Daly, Meg (0076-1) (0076-3)</li> <li>de Armas, Maria Cristina (0077-3)</li> <li>Fairchild, David (0094-4)</li> <li>Finver, Jody (0008-2)</li> <li>Fulks, Anna Louise (0250-3)</li> <li>Griffith, Ed and Harriet (0366-3) (0366-8)</li> <li>H., Pat (0550-2)</li> </ul>

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	Haber, Matthew S. (0611-17)
	Hamilton, McHenry (0205-1)
	<ul> <li>Hefty, Lee N. (0110-1-1) (0110-1-2) (0110-1-3) (0110-1-5)</li> </ul>
	<ul> <li>Hughes, David (0377-1) (0377-2)</li> </ul>
	<ul> <li>Hyden, Brent A. (0670-1) (0670-2)</li> </ul>
	<ul> <li>Johnson, Nadine (0007-2)</li> </ul>
	<ul> <li>Kassel, Kerul (0676-3)</li> </ul>
	<ul> <li>Koenigsberg, Linda (0721-26-3)</li> </ul>
	Lange, Alexandra (0088-2)
	<ul> <li>Langlieb Greer, Evelyn (0510-1)</li> </ul>
	<ul> <li>Maher, William (0619-2-1) (0619-2-34) (0619-4-1)</li> </ul>
	• Martin, Drew (0641-10)
	Martinez, Orlando A. (0570-2)
	• McCall, Eric (0056-2)
	<ul> <li>McLaughlin, Caroline (0721-9-4) (0723-4-5)</li> </ul>
	Merino, Miriam (0092-2)
	Meyer-Steele, Shawn (0187-5)
	• Miami, City (0456-24)
	• Mueller, Heinz J. (0617-4-11)
	<ul> <li>Nelson, Joyce E. (0149-2) (0149-4) (0149-11)</li> </ul>
	Ortiz, Natalia (0372-1)
	Palmer, Majorie (0360-2)
	Perez, Danica (0184-1)     Provest. Aller (0220-2)
	Provost, Allan (0339-2)
	Puchades, Mary (0616-1)     Bowling, Stove (0642-4)
	<ul> <li>Rawlins, Steve (0642-4)</li> <li>Baggelada, Tamag (0515, 7) (0721, 4, 4)</li> </ul>
	<ul> <li>Regalado, Tomas (0515-7) (0721-4-4)</li> <li>Boitor, Bon (0020, 2)</li> </ul>
	<ul> <li>Reiter, Ben (0080-2)</li> <li>Robertson, Alyce (0117-2)</li> </ul>
	<ul> <li>Rodriguez, Barbara (0034-3)</li> <li>Rodriguez, Jose Javier (0675-5) (0721-1-7)</li> </ul>
	<ul> <li>Roedel, Kitty (0055-6)</li> </ul>
	<ul> <li>Roque, Julio (0024-2) (0328-1)</li> </ul>
	<ul> <li>Schwab, Roy (0579-4)</li> </ul>
	<ul> <li>Schwartz, Matthew (0721-22-3) (0721-22-5) (0723-9-9) (0723-9-11)</li> </ul>
	<ul> <li>Shlackman, Jed (0356-3)</li> </ul>
	<ul> <li>Sifko, Basilio (0408-1) (0408-2) (0408-3) (0408-4) (0408-6) (0408-8)</li> </ul>
	<ul> <li>Stoddard, Philip K. (0721-2-14)</li> </ul>
	<ul> <li>Trencher, Ruth (0115-8)</li> </ul>
	<ul> <li>Trowbridge, Mark (0723-2-8)</li> </ul>
	<ul> <li>Vayu, Satya (0370-4)</li> </ul>
	• Wegner, Geri (0048-2)
	<ul> <li>Whitlock, Catherine (0701-2)</li> </ul>
Meteorology and Air	<ul> <li>Frederickson, Kelly (0188-1)</li> </ul>
Quality	<ul> <li>Harris, Walter (0721-6-2)</li> </ul>
~	<ul> <li>Maher, William (0619-2-22)</li> </ul>
	<ul> <li>Marier, William (0019-2-22)</li> <li>Mueller, Heinz J. (0617-2-3) (0617-4-9)</li> </ul>
	<ul> <li>Platt, George Seth (0710-3)</li> </ul>
	<ul> <li>Riley, Bill (0722-9-8) (0722-9-10)</li> </ul>

• Riley, Bill (0722-9-8) (0722-9-10)

Comment Category	Commenter (Comment ID)
	<ul> <li>Roff, Rhonda (0721-11-1) (0721-11-7)</li> </ul>
	<ul> <li>Schwartz, Matthew (0721-22-9) (0723-9-17)</li> </ul>
	• Stoddard, Philip K. (0721-2-11)
	Trowbridge, Mark (0723-2-5)
	• Tweeton, Tanya (0340-3)
Need for Power	Almirola, Alejandro (0721-31-4)
	• Barczak, Sara (0112-1) (0112-4)
	• Bethune, David (0615-1-4) (0615-1-13)
	• Breslin, Tom (0721-17-1)
	• Cavros, George (0721-8-1) (0721-8-4) (0721-8-8) (0721-8-10)
	Commenters, Multiple (0379-4)
	• de Azevedo, Ricardo (0119-3)
	• England, Peter (0722-10-2)
	• Finver, Jody (0008-3)
	<ul> <li>Goldmeier, Barry (0015-1) (0015-8) (0015-12)</li> </ul>
	<ul> <li>Henry, Jim (0723-12-1) (0723-12-4)</li> </ul>
	• Hickey, Alan (0653-3)
	Hubbard, Stanley S. (0680-4)
	<ul> <li>Keating, Tim (0545-6)</li> </ul>
	Larrabee, Laura (0035-3)
	<ul> <li>Maher, William (0619-5-12) (0619-5-13)</li> </ul>
	<ul> <li>Martin, Drew (0641-8) (0721-13-5)</li> </ul>
	<ul> <li>McDuffie, Stephen (0723-8-3)</li> </ul>
	<ul> <li>Mendez, Victoria (0721-5-2)</li> </ul>
	• Miami, City (0456-22)
	• Nelson, Joyce E. (0149-7)
	Philips, Sally B. (0337-2)
	• Platt, George Seth (0710-6) (0710-7)
	• Porter, Jeff (0722-1-1)
	Rapuano, Shannon (0594-4)
	Read, Alice Gray (0022-5)
	• Riccio, Jim (0716-6)
	Rodriguez, Jose Javier (0721-1-9)
	• Rodriguez, Manuel J. (0721-27-1)
	<ul> <li>Saporito, Thomas (0010-4) (0010-10)</li> <li>Sitila Dapilia (0409.5)</li> </ul>
	Sifko, Basilio (0408-5)     Silva Nicelae (0722-5-2)
	Silva, Nicolas (0722-5-2)
	Trencher, Ruth (0115-4)     Troubridge, Mark (0722-2-2)
	<ul> <li>Trowbridge, Mark (0723-2-2)</li> <li>Wallace, Otis (0723-1-1)</li> </ul>
	<ul> <li>Wallace, Otis (0/23-1-1)</li> <li>Williams, Paul (0041-1)</li> </ul>
Opposition-Licensing	Ackerman, Frank (0565-1)
Action	• Allen, Maureen (0154-1)
	• Almirola, Alejandro (0178-1) (0178-4) (0721-31-1) (0721-31-11) (0721-31-
	13)
	<ul> <li>Alvarez, Chad (0664-1)</li> <li>Anderson, Clan (0321.1)</li> </ul>
	<ul> <li>Anderson, Glen (0321-1)</li> <li>Anderson, Vaughn (0380, 1)</li> </ul>
	<ul> <li>Anderson, Vaughn (0380-1)</li> <li>Anonymous, Anonymous (0239-1) (0331-1) (0351-1) (0354-1) (0628-3)</li> </ul>
	• Anonymous, Anonymous $(0239-1)(0331-1)(0351-1)(0354-1)(0628-3)$

## Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	(0644-1) (0644-5)
	<ul> <li>Anonymous, Charity (0638-4)</li> </ul>
	Anonymous, Elena (0662-1)
	<ul> <li>Anonymous, Judi (0537-1) (0537-4)</li> </ul>
	Anonymous, Lynn (0161-1)
	Aronson, Murray (0391-1)
	Avers, Pamela Dee (0090-1)
	• Bach, Lili (0128-1)
	<ul> <li>Bagwell, Wilson Knox (0306-1)</li> </ul>
	<ul> <li>Ball, Cheri (0472-1) (0472-3)</li> </ul>
	<ul> <li>Barczak, Sara (0112-10)</li> </ul>
	Barlow, Jeffrey (0218-2)
	Barnidge, Virginia (0672-1)
	Bastidas, Mauricio (0720-3)
	<ul> <li>Baumwall, Douglas (0329-1)</li> </ul>
	<ul> <li>Bazzi, Noell (0047-1)</li> </ul>
	<ul> <li>Bazzone, Barbara (0159-1) (0159-7)</li> </ul>
	Beattie, Jane (0417-1)
	<ul> <li>Beckman, Yvonne and Douglas (0060-1) (0060-2)</li> </ul>
	• Beiriger, Mary (0287-1) (0287-2)
	Bejarano, Antonio (0019-1)
	<ul> <li>Benson, Mary (0081-1) (0081-6) (0081-7)</li> </ul>
	<ul> <li>Berendsohn, Catherine (0723-11-9)</li> </ul>
	Bernabei, Catharina (0721-18-5)
	Bernatis, Jenn (0520-1)
	<ul> <li>Berndgen, Michelle (0361-1) (0361-4)</li> </ul>
	<ul> <li>Bethune, David (0615-1-12) (0615-3-11) (0615-3-12) (0721-23-9)</li> </ul>
	<ul> <li>Birsh, Arthur and Joan (0083-1)</li> </ul>
	• Blanck, Heidi (0397-1)
	<ul> <li>Bloom, Justin (0253-1) (0253-6)</li> </ul>
	<ul> <li>Bodiford, Loretta (0444-1)</li> </ul>
	<ul> <li>Boone, James (0533-2)</li> </ul>
	• Boone, Jim (0436-1)
	<ul> <li>Boyce, Sheila (0091-1) (0091-4)</li> </ul>
	Bremen, Gary (0181-3)
	<ul> <li>Brinn, Ira (0148-1) (0148-3)</li> </ul>
	Bromage, Joan (0386-1)
	Brown, Bradford (0667-1)
	• Bryan, David (0507-1)
	Buechler, Jerry (0718-3)
	• Bump, Deborah (0535-1)
	• Bunker, Diane (0426-1)
	<ul> <li>Burge, Laura (0540-2) (0540-4)</li> </ul>
	• Burns, Terry (0647-3)
	• Buyea, Thomas (0505-1) (0505-3)
	• Campbell, Cara (0253-1) (0253-6)
	<ul> <li>Cardona, Alfredo (0343-1) (0343-2)</li> </ul>
	Carlson, John (0158-3)
	Casey Sr. Pobert I (0368.3)

• Casey, Sr., Robert J. (0368-3)

Comment Category	Commenter (Comment ID)
	Castro, Alyssa Tomasi (0665-1)
	Cathey, Turner (0079-2)
	• Causey, Charlie (0253-1) (0253-6)
	<ul> <li>Cavros, George (0253-1) (0253-6)</li> </ul>
	<ul> <li>Chenoweth, Mike (0253-1) (0253-6)</li> </ul>
	<ul> <li>Chiszar, Benjamin J. (0677-1) (0677-7)</li> </ul>
	• Clapp, Linda (0028-1) (0028-2)
	<ul> <li>Cleland, Noel (0207-1) (0207-8) (0288-1)</li> </ul>
	• Cobb, Tanya (0413-1)
	Coffey, Rotraud (0516-2)
	• Cohen, Howard (0567-1)
	<ul> <li>Colby, Helen (0124-3) (0242-2) (0733-1)</li> </ul>
	• Colls, Ana (0125-1)
	• Colson, Clay G. (0602-1)
	• Commenters, Multiple (0044-1) (0044-9) (0067-1) (0067-4) (0073-7)
	(0102-1) (0102-7) (0102-8) (0103-1) (0103-8) (0104-1) (0104-6) (0240-1)
	(0379-1)
	• Compel, Jr., Joseph (0283-1)
	<ul> <li>Cook, Cherie (0163-1) (0163-3)</li> <li>Cook, Cherie (0201.1)</li> </ul>
	• Cooper, Fran (0204-1)
	• Cooper, Joe (0165-1)
	• Cornely, Tina (0633-1)
	• Corral, Oscar (0133-1) (0133-5)
	Courliss, William (0604-2)
	Crystal, Chris (0334-1)
	• Cullen, Sarah (0597-1)
	• Cummings, Frank (0709-1) (0709-3)
	Cunningham, Sue (0114-1)     Curider, Terese (0127,1) (0127,6)
	<ul> <li>Cusidor, Teresa (0127-1) (0127-6)</li> <li>Dely, Mag (0076-4) (0252-1) (0252-6)</li> </ul>
	<ul> <li>Daly, Meg (0076-4) (0253-1) (0253-6)</li> <li>Daniels, Bonnie (0341-1) (0341-4)</li> </ul>
	<b>o</b>
	<ul> <li>Dauerty, Barbara (0614-1)</li> <li>de Armas, Maria Cristina (0077-5)</li> </ul>
	<ul> <li>de Azevedo, Ricardo (0119-1) (0119-4)</li> <li>Defoggi, Virginia (0266-1)</li> </ul>
	<ul> <li>Deloggi, virginia (0200-1)</li> <li>Degges, Frank (0447-1)</li> </ul>
	<ul> <li>Degges, Frank (0447-1)</li> <li>Demaria, Karen (0262-1)</li> </ul>
	<ul> <li>Dent, William (0319-1)</li> </ul>
	<ul> <li>Deutsch, Steven (0552-1)</li> </ul>
	<ul> <li>Dietrich, Chris OMeara (0295-1) (0295-5)</li> </ul>
	<ul> <li>Dimondstein, Carla (0564-1)</li> </ul>
	<ul> <li>Dorn, Kathryn (0693-2) (0693-5)</li> </ul>
	<ul> <li>Dougherty, Kate (0394-1)</li> </ul>
	<ul> <li>Douglas, Carolyn (0486-2)</li> </ul>
	<ul> <li>Draper, Lonnie M. (0511-1)</li> </ul>
	<ul> <li>Draper, Lonnie M. (03111)</li> <li>Drew, Virginia (0399-1)</li> </ul>
	• Dronsky, Rick (0142-1)

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	• Dunn, Elmo (0402-1)
	<ul> <li>DuPriest, William Robert (0093-1)</li> </ul>
	• Duran-Pinzon, Jaime (0243-1) (0243-4)
	• Durieux, P. (0451-1)
	Dutton, Julene (0640-1)
	<ul> <li>Dwyer, John P. (0264-8) (0673-9)</li> </ul>
	<ul> <li>Dwyer, Karen (0674-1) (0674-8) (0674-9)</li> </ul>
	<ul> <li>Earnshaw, Shinann (0326-2)</li> </ul>
	Edmond, Gabriel (0721-7-8)
	Edwards, Suzi (0600-1)
	• Egan, June (0690-1)
	Ehrenfried, Jennifer (0544-1)
	<ul> <li>Elton, Wallace (0229-1) (0229-2)</li> </ul>
	Engelberg, Jodi (0004-1)
	<ul> <li>England, Margaret (0253-1) (0253-6)</li> </ul>
	Erven, Marlene (0314-1)
	• F****SH, Peter (0547-1)
	Faber, Davenie (0006-1)
	<ul> <li>Felinski, Julee (0625-1) (0625-5)</li> </ul>
	<ul> <li>Fernandez, Maria Cristina (0064-1)</li> </ul>
	• Field, Fran (0258-1)
	Fielding, Ed (0232-1)
	<ul> <li>Finver, Jody (0008-1) (0008-12)</li> </ul>
	Fischer, Antoinette (0365-1)
	<ul> <li>Fishman, Zelma (0395-1)</li> </ul>
	Fitzpatrick, Deirdre (0217-1)
	<ul> <li>Fox, Kristi (0506-1)</li> </ul>
	<ul> <li>Franzmann, Paul (0384-1) (0384-3)</li> </ul>
	Frederickson, Kelly (0188-2)
	<ul> <li>Freel, Susan (0166-1)</li> </ul>
	<ul> <li>Fuentes, Mariana (0574-1)</li> </ul>
	<ul> <li>Fuller, Manley (0253-1) (0253-6)</li> </ul>
	Galbreath, Jerry (0489-1)
	Galles, Camilla (0624-1)
	Garcia, Ruslan (0116-1)
	<ul> <li>Gavel, Deborah (0098-1) (0098-3)</li> </ul>
	• Geary, Craig W. (0097-1)
	Ghosh, Susan (0595-1)
	Glass, Rachel (0222-2)
	Goldberg, Laura (0568-2)
	<ul> <li>Goldman, Emanuel (0153-3) (0153-5)</li> </ul>
	• Gomez, Albert (0721-34-3)
	Gomez, Gustavo (0101-1)
	Gomez, Lissett (0030-1)
	Gomez, Toni Thoman (0504-1)
	Gonzalez, Carlos (0714-1)
	<ul> <li>Graffagnino, Mary Ann and Frank (0403-1)</li> </ul>
	Grant, Randy (0146-1)
	<ul> <li>Greenwald, Ken (0385-1)</li> </ul>

• Greenwald, Ken (0385-1)

**Comment Category** Commenter (Comment ID) Greer, Tom (0392-1) (0392-3) • • Griffith, Ed and Harriet (0366-1) (0366-12) • Grill, Helen (0043-1) Griswold, Dave (0631-1) • Gross, Cheryl A. (0463-6) (0463-7) • Guy, Sharon (0654-1) • H., Pat (0550-5) • Haber, Rochelle (0244-1) (0244-3) • Haffmans, Edmund (0371-1) (0371-6) • Halligan, Melody (0491-1) • Hanna, Jane (0588-1) • Hansen, Yvonne (0439-1) • Harden, Ronald (0195-1) • Hardie, Daniel (0562-1) • Harris, Walter (0721-6-5) • Harrison, J. M. M. (0508-1) • Hart, Barbara (0196-1) • Haselhurst, Richard (0639-1) • Hawkes, Holly Forrester (0031-1) (0031-2) Hayes, Linda (0275-1) • Heiney, Jamie (0713-1) (0713-4) • Herrera, Luis (0721-33-1) (0721-33-3) • Hickey, Alan (0653-1) • Hilderbrandt, Todd (0585-1) • Hoegler, Jean (0438-1) • Hoffmeyer, Lisa (0546-1) • Holland, Karen (0059-1) • Houghton, Francis (0735-1) • Hoyle, Lester and Judy (0440-1) (0440-5) • Hubler, Gina Marie (0089-1) (0089-3) (0095-1) • Hudson, Harold J. (0099-1) • Hurley, Paula (0362-1) (0362-6) Hyams, Charles (0213-1) • Imbesi, Nan (0058-1) • Jackalone, Frank (0288-1) • Jacobs, Lee (0677-1) (0677-7) (0679-1) • Jacobs, Leslye (0634-1) • Jennings, Cara (0323-2) • Jens-Rochow, Steve (0666-1) • Jimenz, Lawrence (0301-1) • Joannou, Jr., Benjamin (0643-3) (0643-4) (0643-6) • Johannsen, Christian (0045-1) (0045-3) • Johnson, Nadine (0007-1) (0007-3) • • Johnson, Rheta (0696-1) Johnston, Judy (0734-1) • Jones, Diane (0130-1) • Jones, George L. (0253-1) (0253-6)

Table E-2. (contd)

- Jones, Joan and Robert (0147-1) (0147-3) •
- Jones, Michael E. (0082-1)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	<ul> <li>Jurczewski, Carol (0490-1)</li> </ul>
	• K., Jeff (0335-1)
	Kadis, Patricia (0248-2)
	Karlow, Edwin (0226-1)
	<ul> <li>Kassel, Kerul (0676-1)</li> </ul>
	<ul> <li>Kaul, Devika (0722-14-1) (0722-14-6)</li> </ul>
	<ul> <li>Kavanaugh, Daniel (0338-2)</li> </ul>
	<ul> <li>Kaye, Jackie (0407-1)</li> </ul>
	<ul> <li>Keating, Tim (0545-1)</li> </ul>
	<ul> <li>Keller, Alan (0253-1) (0253-6)</li> </ul>
	Kern, Madeleine Fisher (0411-1)
	<ul> <li>Kirschbaum, Saran (0466-1)</li> </ul>
	<ul> <li>Klopfer, Carol (0677-1) (0677-7) (0678-1)</li> </ul>
	<ul> <li>Koenigsberg, Linda (0721-26-4) (0721-26-7)</li> </ul>
	<ul> <li>Kowalski, Kathleen S. (0049-3)</li> </ul>
	<ul> <li>Lague, Victoria (0061-1) (0061-4)</li> </ul>
	• Lane, N. Jo (0569-2)
	<ul> <li>Lange, Alexandra (0087-1) (0087-2) (0087-4) (0088-8)</li> </ul>
	<ul> <li>Langlieb Greer, Evelyn (0510-2)</li> </ul>
	<ul> <li>Larsen, Shannon (0160-1)</li> </ul>
	<ul> <li>Lawrence, Diane (0086-1) (0086-4)</li> </ul>
	<ul> <li>Lawrence, Theresa (0580-1) (0580-3)</li> </ul>
	<ul> <li>Lawson, Ken (0225-1)</li> </ul>
	Le Cronier, Micki (0652-1)
	<ul> <li>Lebatard, David (0192-1) (0192-7)</li> </ul>
	<ul> <li>Lee, Nancy (0373-1) (0373-15)</li> </ul>
	<ul> <li>Lenz, Andrew (0470-3)</li> </ul>
	• Leo, Carlos (0428-1)
	<ul> <li>Lerner, Cindy (0254-1) (0254-7)</li> </ul>
	<ul> <li>Lettieri, Tammy (0259-3) (0259-4) (0559-1)</li> </ul>
	<ul> <li>Levy, Morgan I. (0136-5)</li> </ul>
	<ul> <li>Lindsey, Jerrie (0245-1) (0245-7)</li> </ul>
	Lish, Christopher (0555-3)
	Livingston, Catherine (0374-1)
	<ul> <li>LoBiondo, Roana and Michael (0359-3)</li> </ul>
	<ul> <li>Lopez, Jaclyn (0113-1-14) (0113-2-15)</li> </ul>
	<ul> <li>Lopez, Josie (0284-1) (0284-6) (0284-7)</li> </ul>
	<ul> <li>Lucas, Carmen (0141-1) (0141-3) (0141-5)</li> </ul>
	Macraith, Bonnie (0186-1)
	<ul> <li>Mahoney, Robert S. (0364-1)</li> </ul>
	<ul> <li>Mahoney, Stephen (0288-1)</li> </ul>
	<ul> <li>Malone, Peggy (0539-1) (0539-2)</li> </ul>
	Malyon, Hilary (0669-1)
	Manter, Larry (0471-2)
	<ul> <li>Manuel, Becky Randel (0137-1)</li> </ul>
	• Martin, Drew (0253-1) (0253-6) (0641-1)
	• Martinez, Orlando A. (0570-1) (0570-5)
	Matheny, Kent (0453-1)
	Matthews Debbie (0288-1)

• Matthews, Debbie (0288-1)

**Comment Category Commenter (Comment ID)** Mauri, Tom (0132-3) • • Mayer, Karen (0475-1) Mazzarella, Rebecca (0495-1) • McCall, Eric (0056-1) (0056-4) (0056-5) • McCarthy, Dawn (0330-1) (0330-2) • Mcintyre, Frances (0572-1) Mckee, Sarah (0492-1) (0492-4) • McLaughlin, Caroline (0113-1-14) (0113-2-15) (0253-1) (0253-6) (0721-9-• 1) (0721-9-8) (0723-4-1) (0723-4-10) McVicker, Micah (0177-1) • Merino, Miriam (0092-1) • Metje, Melodie (0606-1) • Meyer, Paul (0122-1) Meyer-Steele, Shawn (0187-1) (0187-6) • • Miami, City (0456-1) (0456-25) Mikan, Edward (0536-1) • Miller, Howard R. (0138-1) • Miller, Melissa (0285-1) (0285-3) • Miller, Nyana (0626-1) (0626-4) • Mitzkewich, Yuri (0523-1) • Morgan, Karen (0155-1) • Mosher, Paul (0249-1) • Nagel, Karen (0527-1) • Nappe, Judith (0695-1) • Nelson, Joyce E. (0149-1) (0149-3) (0149-14) • Neway, Roberta (0057-1) (0057-5) Newman, Donna (0156-1) • Nickerson, Nancy (0692-2) • Nieto, Victor (0717-1) • Norman, Ronald (0358-1) (0358-4) (0358-5) • Nye, Janet (0281-1) • O'Donahoo, Gayle (0698-1) • O'Donahoo, Roger (0698-1) • Odierna, Cynthia (0542-1) • Oliva, Vivian (0349-1) (0349-4) • Oria, Jordan (0171-2) • Ortiz, Natalia (0003-1) (0003-3) (0372-2) (0372-5) • Orzechowicz, Holly (0263-2) (0263-6) (0263-7) • Osborne, Martin (0216-1) Otis, Martha (0150-1) (0150-4) • Otto, Peter (0509-3) Padilla, Dora (0238-1) (0238-3) • Padron-Delgado, Blanca (0257-1) (0257-3) • Pareto, Rolando and Marlene (0040-1) (0040-5) • Parker, Richard (0316-1) • •

Table E-2. (contd)

- Pattison, Janet (0646-1)
- Pearce, J. B. (0479-1) •
- Perez, Danica (0184-2) (0184-3) •
- Peterman, Andy (0274-1) (0274-2)

Table E-2. (contd)

omment Category	Commenter (Comment ID)
	Peters, Emily (0363-1)
	Petersen, John (0347-2)
	Peterson, Ted (0423-1)
	<ul> <li>Phillips, Monica D. (0084-3)</li> </ul>
	Pinto, Theresa (0499-1)
	Piper, Cynthia (0183-1)
	<ul> <li>Platt, David (0109-1) (0109-3)</li> </ul>
	Platt, George Seth (0710-1)
	Polifroni, Josephine (0182-1)
	<ul> <li>Pontier, Christine Hughes (0126-1)</li> </ul>
	Poole, Diane (0457-1)
	<ul> <li>Portela, Ana C. (0409-1)</li> </ul>
	<ul> <li>Portuondo, Pilar (0241-1) (0241-3)</li> </ul>
	<ul> <li>Post, Patrick (0671-2-2)</li> </ul>
	Provost, Allan (0339-5)
	Prugue, Jorge and Paloma (0068-1)
	• Punnett, Daniela (0553-1) (0553-3)
	Purcell, Douglas (0427-1)
	Purdy, Shyam and Mohini (0233-1)
	• Quinn, George (0410-1)
	• Raits, Eric (0062-1)
	Ramankutty, Vishnu (0578-1)
	<ul> <li>Rawlins, Steve (0642-1) (0642-6)</li> <li>Devolution Termony (0054.4) (0054.5) (0545.0)</li> </ul>
	<ul> <li>Regalado, Tomas (0254-1) (0254-7) (0515-8)</li> <li>Dation Data (0000 4)</li> </ul>
	• Reiter, Ben (0080-1)
	Rennie, Edwyna (0224-1)
	<ul> <li>Reyneri, Juan (0121-1)</li> <li>Boyradda, Loura (0112, 1, 14) (0112, 2, 15) (0252, 4) (0252, 6) (0724, 10, 5)</li> </ul>
	<ul> <li>Reynolds, Laura (0113-1-14) (0113-2-15) (0253-1) (0253-6) (0721-10-5)</li> <li>Bhadaa, Karaa (0140-4)</li> </ul>
	Rhodes, Karen (0140-4)     Disharda Marria (0450-2)
	Richards, Margie (0450-2)     Biffind, David (0721, 16, 7)
	Rifkind, David (0721-16-7)     Babbin Valoria (0222-1)
	<ul> <li>Robbin, Valerie (0223-1)</li> <li>Roborta Linda (0006-2) (0006-4)</li> </ul>
	<ul> <li>Roberts, Linda (0096-2) (0096-4)</li> <li>Robertson, Alveo (0117, 1) (0117, 4)</li> </ul>
	<ul> <li>Robertson, Alyce (0117-1) (0117-4)</li> <li>Rodriguez, Barbara (0034-1)</li> </ul>
	<ul> <li>Rodriguez, Jose Javier (0675-1) (0721-1-11)</li> </ul>
	<ul> <li>Roedel, Kitty (0055-1) (0055-7) (0055-9)</li> </ul>
	<ul> <li>Roff, Rhonda (0288-1)</li> </ul>
	<ul> <li>Roos, Monica (0052-3)</li> </ul>
	<ul> <li>Roque, Julio (0022-3)</li> </ul>
	<ul> <li>Rose, Simon (0009-1)</li> </ul>
	<ul> <li>Roseberry, Bill (0179-1)</li> </ul>
	<ul> <li>Rosenfeld, Alice (0566-1)</li> </ul>
	<ul> <li>Ross, Robert and Teresa (0212-1)</li> </ul>
	<ul> <li>Rothstein, Debbie (0292-1)</li> </ul>
	<ul> <li>Royce, M. (0353-7)</li> </ul>
	<ul> <li>Ryan, Jim (0543-1) (0543-3)</li> </ul>
	<ul> <li>Salatino, Freda (0299-5)</li> </ul>

Comment Category	Commenter (Comment ID)
	• Sanfilippo, Val (0636-1)
	<ul> <li>Saporito, Thomas (0010-1) (0010-2)</li> </ul>
	Sasiadek, Alfred (0053-1)
	Scherr, Matthew (0684-1)
	Schilling, Judy (0429-1)
	• Schlackman, Mara (0721-32-10)
	<ul> <li>Schwab, Roy (0579-1) (0579-6)</li> </ul>
	<ul> <li>Schwartz, Matthew (0113-1-14) (0113-2-15)</li> </ul>
	• Scott, John (0288-1)
	• Scott, Ruth (0548-1)
	<ul> <li>Segal-Wright, Nicholas (0661-1)</li> </ul>
	<ul> <li>Seiman, Rhonda (0635-1) (0635-2) (0635-4)</li> </ul>
	• September, P. J. (0267-1)
	Shapiro, Eugene (0357-1)
	• Shark, Jason (0120-1)
	• Sharp, Andrea Heuson (0210-1) (0210-7)
	• Shasky, Mike (0350-1)
	Shelley, Cynthia (0556-1)
	• Shepard, J. (0143-1)
	• Shipe, Kathleen (0193-3)
	• Shlackman, Jed (0356-15) (0356-17)
	• Shlackman, Mara (0246-1) (0246-7)
	<ul> <li>Silverstein, Rachel (0113-1-14) (0113-2-15) (0253-1) (0253-6) (0722-7-1) (0722-7-2)</li> </ul>
	• Simmerman, Scott (0480-1)
	• Simon, Gary P. (0050-1) (0050-3)
	• Skove, Ellen H. (0081-1) (0081-6) (0081-7)
	Slaton, Marina (0531-1)
	• Smay, Betty (0063-1)
	• Smith, David W. (0051-1) (0051-4)
	• Smith, Pamela (0730-1)
	• Smythe, Ana (0557-1)
	• Sockloff, Judith (0175-1)
	• Sommers, Andrea (0270-1)
	Sophia, Tristan (0221-1)
	• Sorenson, Katy (0596-1) (0596-3)
	• Southern, Tom (0620-1)
	Speno, Charlie (0484-3)     Stanlard, Carl (0071-2)
	Stanley, Gael (0071-2)
	• Stevens, Lisa (0310-1)
	• Stoddard, Philip K. (0254-1) (0254-7)
	Streit, Christopher V. (0075-2)
	• Streit, Didi (0074-1)
	• Strouble, Jackie (0297-1) (0297-3)
	• Suda, Maryska (0534-1)
	• Svensson, Bo (0478-1)
	Tambussi-Brechon, Linda (0042-1)     Tansa Jim (0000 4) (0700 5 4)
	<ul> <li>Teas, Jim (0288-1) (0723-5-1)</li> <li>Thiel, Markus (0135-3)</li> </ul>
	<ul> <li>I hiel, Markus (0135-3)</li> </ul>

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	• Thomas, Bill (0355-3)
	Thomas, Gina (0271-1)
	Timberlake, Ralph (0282-1)
	Tingle, Peggy (0352-3)
	<ul> <li>Tompkins, Constance (0081-1) (0081-6) (0081-7)</li> </ul>
	Trauner, Keith (0573-1)
	<ul> <li>Trencher, Ruth (0115-1) (0115-3)</li> </ul>
	<ul> <li>Tucker, Lauren (0105-1)</li> </ul>
	<ul> <li>Turner, William P. (0663-1)</li> </ul>
	<ul> <li>Tweedy, Mary (0581-1)</li> </ul>
	<ul> <li>Tweeton, Tanya (0340-6)</li> </ul>
	<ul> <li>Ullman, John (0721-30-1) (0721-30-5) (0721-30-12)</li> </ul>
	• Ullman, Jonathan (0288-1)
	Umpierre, Diana (0209-1)
	<ul> <li>Underwood, John (0416-1)</li> </ul>
	<ul> <li>Van Leer, Sam (0252-13) (0252-20)</li> </ul>
	<ul> <li>Van Pelt, Jason (0300-4)</li> </ul>
	<ul> <li>Van Thienen, Mateo (0033-1)</li> </ul>
	<ul> <li>Vance, Richard (0289-1)</li> </ul>
	<ul> <li>Vayu, Satya (0370-1) (0370-14)</li> </ul>
	<ul> <li>Vermeulen, Mary (0433-1)</li> </ul>
	<ul> <li>Vinciguerra, Anthony (0032-1)</li> </ul>
	<ul> <li>Violich, Francesca (0039-1) (0039-5)</li> </ul>
	• Wade, Pat (0582-1)
	<ul> <li>Wade, Thomas M. (0046-1)</li> </ul>
	Wallington, Victoria (0308-2)
	<ul> <li>Warzalla, Jim (0144-1)</li> </ul>
	Watson, Fran (0528-1)
	• Weber, Gae (0157-1)
	Weber, Zorina (0469-2)
	Wegner, Geri (0048-4)
	Weiss, Arwen (0518-1)
	• West, Eric (0435-2)
	• White, Barry J. (0721-12-8)
	<ul> <li>White, Holly (0206-1) (0206-3)</li> </ul>
	<ul> <li>White, Paton (0253-1) (0253-6)</li> </ul>
	Whitfield, Isabelle (0251-1)
	<ul> <li>Wilansky, Laura Sue (0078-4) (0078-14) (0721-28-5) (0721-28-12)</li> </ul>
	Willett, Bett (0658-1)
	• Williams, Elinor (0253-1) (0253-6)
	Winters, Gracie (0398-1)
	<ul> <li>Wong, Christina (0066-1) (0066-2) (0066-4)</li> </ul>
	• Wry, Ellen (0290-1) (0290-2) (0290-3)
	• Yeager, Jerry (0228-1) (0228-8)
	• Yost, Gaylord (0430-1)
	<ul> <li>Young, Kim (0651-1) (0651-2) (0651-3) (0651-5)</li> </ul>
	• Yount, Madeline (0422-1)
	• Yovel, Ephrat (0721-29-1) (0721-29-3)
	• Zakon, Allan (0118-1)

Comment Category	Commenter (Comment ID)
	• Zarsky, Terry (0541-1)
	<ul> <li>Zerulla, Tanja (0214-3) (0214-8)</li> </ul>
	• Zuniga, Family (0272-2)
Opposition-Licensing	• Bethune, David (0721-23-2)
Process	• Breslin, Tom (0721-17-3)
	Edmond, Gabriel (0721-7-3)
	• Lee, Nancy (0373-14)
	• Lerner, Cindy (0721-3-5)
	Schwartz, Matthew (0721-22-11)
	Stoddard, Philip K. (0721-2-1)
	• White, Barry J. (0721-12-13)
Opposition-Nuclear	• Aha, Chas (0708-1)
Power	Almirola, Alejandro (0178-3)
	• Alvarez, Chad (0664-2)
	Alvarez, Susana (0025-1)
	• Andersen, Paul (0388-1)
	• Anderson, Vaughn (0380-2)
	• Anonymous, Anonymous (0327-2) (0336-1) (0336-4) (0346-1) (0603-1)
	(0628-1) (0645-1) (0705-1) (0715-1) (0719-1) (0719-2)
	• Bach, Lili (0128-4)
	Barnes, Janice (0558-1)
	Baumwall, Douglas (0329-2)
	Bereczki, Patricia (0393-1)
	• Bernabei, Catharina (0721-18-1) (0721-18-2)
	Bonilla-Jones, Carmen Elisa (0231-1) (0231-3)
	• Brandariz, Anita (0529-1) (0529-3)
	Bratcher, Suzanne (0498-1)
	Brexel, Sr., Charles (0592-4)
	• Bubb, Ken (0462-1)
	Campbell, Grant (0482-1)
	<ul> <li>Chiszar, Benjamin J. (0677-2) (0677-4) (0677-8) (0677-9)</li> </ul>
	Chrissos, H. L. Chris (0164-2)
	<ul> <li>Cleland, Noel (0207-2) (0207-4) (0207-5) (0288-15)</li> </ul>
	Cohen, Howard (0567-2)
	Colby, Helen (0124-1)
	Compel, Jr., Joseph (0283-7)
	• Cook, J. (0577-1)
	Corey, Sheffield (0424-1)
	Cummings, Frank (0709-2)
	Cusidor, Teresa (0127-5)
	<ul> <li>Davis, S. K. (0412-1)</li> </ul>
	Dolben, Hollis (0627-3)
	<ul> <li>Draper, Lonnie M. (0511-2) (0511-5)</li> </ul>
	Dulicai, Linda (0697-1)
	<ul> <li>DuPriest, William Robert (0093-3)</li> </ul>
	Duran-Pinzon, Jaime (0243-2)
	<ul> <li>Earnshaw, Shinann (0326-1)</li> </ul>
	Engelberg, Jodi (0004-3)

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	Faber, Davenie (0006-2)
	Farnsworth, Stu (0464-1)
	• Forbes, J. (0189-1)
	<ul> <li>Fray, Antje (0648-1)</li> </ul>
	<ul> <li>Fulks, Anna Louise (0250-9)</li> </ul>
	• G., Ambriel (0561-1) (0561-4)
	Gavel, Deborah (0098-2)
	Gibson, David (0324-1)
	Glasshof, Wendy (0587-2)
	Goldberg, Laura (0568-1)
	Gomez, Lissett (0030-2)
	Grant, Randy (0146-2)
	<ul> <li>Griffith, Ed and Harriet (0366-10)</li> </ul>
	<ul> <li>Gross, Gary (0017-1)</li> </ul>
	<ul> <li>Haffmans, Edmund (0371-4)</li> </ul>
	Hardin, Lillian (0455-2)
	Hartmann, Donald (0657-2)
	Hicklin, Mary (0431-2)
	• Hogle, Dick (0293-1)
	<ul> <li>Jackalone, Frank (0288-15)</li> </ul>
	<ul> <li>Jacobs, Lee (0677-2) (0677-4) (0677-8) (0677-9)</li> </ul>
	<ul> <li>Jacobs, Leslye (0634-2)</li> </ul>
	<ul> <li>Jens-Rochow, Steve (0666-2)</li> </ul>
	<ul> <li>Jezierski, Elisabeth (0302-2)</li> </ul>
	<ul> <li>Joannou, Jr., Benjamin (0023-1) (0643-2)</li> </ul>
	<ul> <li>Juras, Randy (0419-1)</li> </ul>
	<ul> <li>Khajeh-Noori, Jeri (0609-1)</li> </ul>
	<ul> <li>Klopfer, Carol (0677-2) (0677-4) (0677-8) (0677-9)</li> </ul>
	<ul> <li>Koenigsberg, Linda (0721-26-5)</li> </ul>
	<ul> <li>Larsen, Shannon (0255-1)</li> </ul>
	<ul> <li>Lettieri, Tammy (0259-2)</li> </ul>
	<ul> <li>Lundholm, Mark (0309-1)</li> </ul>
	<ul> <li>Mahoney, Stephen (0288-15)</li> </ul>
	<ul> <li>Matthews, Debbie (0288-15)</li> </ul>
	<ul> <li>Mccroskey, Carol (0530-1)</li> </ul>
	McDaniel, Diana (0203-1)
	Miller, Nyana (0626-2)
	<ul> <li>Moll, Wolfgang (0632-3)</li> </ul>
	<ul> <li>Moore, Linda (0199-1)</li> </ul>
	<ul> <li>Morgan, Carol (0387-1)</li> </ul>
	<ul> <li>Mosca-Clark, Vivianne (0442-1)</li> </ul>
	<ul> <li>Mosher, Paul (0249-4)</li> </ul>
	• Myers, B. J. (0256-1)
	• Neal, Kevin (0027-2)
	Nelson, Wendy (0468-1)
	• O'Brien, Lance (0029-1)
	Oliva, Vivian (0349-5)
	• Olson, Diane (0432-1)
	<ul> <li>Padron-Delgado, Blanca (0257-2)</li> </ul>

• Padron-Delgado, Blanca (0257-2)

**Comment Category** Commenter (Comment ID) Philips, Sally B. (0337-1) • • Pikus, Barbara (0303-1) Polk, J. D. (0369-1) • Provost, Allan (0339-3) • Punnett, Daniela (0553-2) • Rapuano, Shannon (0594-3) • Reed, Jennifer (0496-1) • Reid, Sarah (0201-2) (0201-4) • Rhodes, Karen (0140-1) • Richardson, Don (0296-1) • Rodriguez, Jose Javier (0721-1-3) • Roehl, Richard Ralph (0513-2) • Roff, Rhonda (0288-15) • Roos, Monica (0052-1) • Rosenberry, Casara (0367-1) • Royce, M. (0353-1) • Schwartz, Matthew (0723-9-6) • Scott, John (0288-15) • Shahsavar, Mehran (0012-1) • Shlackman, Jed (0356-6) • Silver, William (0021-1) • Simmerman, Scott (0480-2) • Smith, Leigh Emerson (0020-1) (0020-3) • Socie, Robert (0521-1) • Stamps, Gail (0586-1) • Star, Priscilla (0723-3-4) (0723-3-6) • Szabo, Liz (0481-1) (0481-2) • Teas, Jim (0288-15) (0723-5-2) (0723-5-3) • Thompson, Muhammad (0683-1) • Ullman, John (0721-30-2) (0721-30-4) • Ullman, Jonathan (0288-15) • Van Leer, Sam (0252-1) (0252-19) • Vayu, Satya (0370-5) • Veit, Eberhard (0607-1) • Vorachek, Mary (0291-1) • Ward, Richard (0348-1) • Westaway, Katharine (0014-1) • White, Barry (0100-1) • White, Barry J. (0598-4) • Whitlock, Catherine (0701-1) • Wilansky, Laura Sue (0078-2) (0721-28-3) • Williams, Penelope (0576-1) • Zerulla, Tanja (0214-1) • • Zhivelev, Leon (0656-1) Zimmermann, John (0304-1) • Zook, Caryl (0589-1) • Zuniga, Family (0272-1) **Opposition-Plant** Brown, Bradford (0667-2) •

Table E-2. (contd)

Brown, Bradford (0667-2)
 Buochlor, Jorny (0718-4)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	Buyea, Thomas (0505-2)
	Cava, Daniella Levine (0172-7)
	Daniels, Bonnie (0341-2)
	• Gomez, Albert (0721-34-1)
	<ul> <li>Logan, Brian (0072-1)</li> </ul>
	<ul> <li>Lopez, Josie (0284-4)</li> </ul>
	Nelson, Joyce E. (0149-5)
	Neway, Roberta (0057-2)
	Reynolds, Laura (0721-10-1)
	Roberts, Linda (0096-1)
	• Roedel, Kitty (0055-2)
	• Sanchez, Sergio and Irma (0660-3)
	• Tamargo, Jorge J. (0494-2)
	• Trencher, Ruth (0115-2) (0115-9)
	• Van Leer, Sam (0252-17)
	• White, Barry J. (0721-12-1)
Outside Scope-	Anonymous, Anonymous (0336-3)
Emergency	Berendsohn, Catherine (0723-11-8)
Preparedness	• Bethune, David (0615-2-14) (0615-3-7) (0615-3-9)
	Commenters, Multiple (0044-6)
	• Dwyer, John P. (0264-1) (0673-1)
	Johannsen, Christian (0045-2)
	• Lee, Nancy (0373-5) (0373-13)
	Lettieri, Tammy (0259-6)
	<ul> <li>Martin, Drew (0641-6)</li> <li>MacCalinan Data et (0722-45-2) (0722-45-4)</li> </ul>
	<ul> <li>McColgan, Robert (0722-15-3) (0722-15-4)</li> <li>Mayor Steals, Shown (0197-2)</li> </ul>
	Meyer-Steele, Shawn (0187-2)     Mueller, Heinz, L. (0617, 4, 15)
	• Mueller, Heinz J. (0617-4-15) • Orzachowicz, Holly (0262-4)
	<ul> <li>Orzechowicz, Holly (0263-4)</li> <li>Pareto, Rolando and Marlene (0040-3)</li> </ul>
	<ul> <li>Pareto, Rolando and Marlene (0040-3)</li> <li>Philips, Sally B. (0337-5)</li> </ul>
	<ul> <li>Robbin, Valerie (0223-2)</li> </ul>
	<ul> <li>Roedel, Kitty (0055-8)</li> </ul>
	<ul> <li>Samole, Sharon (0234-1)</li> </ul>
	<ul> <li>Van Leer, Sam (0252-8)</li> </ul>
Outside Scope-	
Viscellaneous	<ul> <li>Abalos, Jessica (0659-1)</li> <li>Almor, Apossa (0712-5)</li> </ul>
Miscellaneous	<ul><li>Almer, Anessa (0712-5)</li><li>Anderson, Vaughn (0560-1)</li></ul>
	<ul> <li>Anderson, vaughin (0500-1)</li> <li>Anonymous, Anonymous (0645-3)</li> </ul>
	<ul> <li>Batista, Carlos (0685-12) (0685-13)</li> </ul>
	<ul> <li>Beckman, Yvonne and Douglas (0060-6)</li> </ul>
	<ul> <li>Berendsohn, Catherine (0723-11-10)</li> </ul>
	<ul> <li>Black, Mary Beth (0107-1)</li> </ul>
	Botill Beatriz (0235-1)
	<ul> <li>Bofill, Beatriz (0235-1)</li> <li>Boling, Steve (0723-7-2)</li> </ul>
	• Boling, Steve (0723-7-2)
	<ul> <li>Boling, Steve (0723-7-2)</li> <li>Brown, Robert (0383-1)</li> </ul>
	<ul> <li>Boling, Steve (0723-7-2)</li> <li>Brown, Robert (0383-1)</li> </ul>

Comment Category	Commenter (Comment ID)
	<ul> <li>Daniels, Bonnie (0341-5)</li> <li>Dwyer, John P. (0264-5) (0673-5)</li> </ul>
	<ul> <li>Eastman, John (0721-24-5)</li> </ul>
	<ul> <li>Ehrmann, Nancy (0454-1)</li> </ul>
	• Family, Manzi (0593-2)
	• Finver, Jody (0008-11)
	• Fitzpatrick, Deirdre (0389-1)
	• G., Ambriel (0561-3)
	Geiger, Marcia (0312-1)
	<ul> <li>Gomez, Albert (0721-34-4) (0721-34-6)</li> </ul>
	Harper, Diane (0583-1)
	Harris, Walter (0721-6-4)
	• Harrison, J. M. M. (0508-3)
	<ul> <li>Henry, Jim (0723-12-10) (0723-12-11)</li> </ul>
	<ul> <li>Jennings, Cara (0323-3)</li> </ul>
	Larsen, Shannon (0610-1)
	• Lenz, Andrew (0470-2)
	• Oria, Jordan (0171-1)
	• Pew, Don (0500-1)
	Quarles, Greyson (0085-1)
	Schlackman, Mara (0721-32-2)
	<ul> <li>Schwartz, Matthew (0723-9-4)</li> <li>Shark Japan (0120-2)</li> </ul>
	<ul> <li>Shark, Jason (0120-2)</li> <li>Shifflett, Jr., James E. (0687-1)</li> </ul>
	<ul> <li>Shiftlett, Jr., James E. (0687-1)</li> <li>Timberlake, Ralph (0282-2)</li> </ul>
	<ul> <li>Van Pelt, Jason (0300-2)</li> </ul>
	<ul> <li>Wilansky, Laura Sue (0721-28-1)</li> </ul>
	<ul> <li>Zhivelev, Leon (0656-3)</li> </ul>
Outside Scope-NRC	
Oversight	<ul> <li>Batista, Carlos (0685-8)</li> <li>Bethune, David (0615-3-10)</li> </ul>
Oversignt	<ul> <li>Boling, Steve (0723-7-3)</li> </ul>
	<ul> <li>Garmon, Toni (0477-1)</li> </ul>
	<ul> <li>Gomez, Albert (0721-34-7) (0721-34-8) (0721-34-9)</li> </ul>
	<ul> <li>Schwartz, Matthew (0723-9-21)</li> </ul>
	• Smith, David W. (0051-2)
	• Wallace, Otis (0723-1-4)
Outside Scope-	• Anonymous, Anonymous (0333-1) (0333-2)
Safety	<ul> <li>Bethune, David (0615-1-1) (0615-1-16) (0615-1-17) (0615-1-18) (0615-2-</li> </ul>
	1) (0615-2-2) (0615-2-3) (0615-2-4) (0615-2-5) (0615-2-6) (0615-2-8)
	(0615-2-9) (0615-2-10) (0615-2-11) (0615-2-12) (0615-2-13) (0615-2-15)
	(0615-2-16) (0615-2-18) (0615-2-20) (0615-2-21) (0615-2-23) (0615-2-28)
	(0721-23-1) (0721-23-3) (0721-23-4) (0721-23-6) (0721-23-10)
	• Cleland, Noel (0288-6)
	• Commenters, Multiple (0044-4) (0240-5)
	Delateur, Marc (0230-1)
	• Dwyer, Karen (0674-3)
	• Finver, Jody (0008-4)

Table E-2. (contd)

Finver, Jody (0008-4)
Hyams, Charles (0213-3)
Jackalone, Frank (0288-6)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	• Keating, Tim (0545-4)
	• Lamb, Deborah S. (0070-3)
	• Lee, Nancy (0373-10)
	• Mahoney, Stephen (0288-6)
	• Martin, Drew (0641-5) (0721-13-1)
	• Matthews, Debbie (0288-6)
	<ul> <li>Mendez, Victoria (0721-5-3) (0721-5-6)</li> </ul>
	• Mueller, Heinz J. (0617-2-2)
	Nelson, Joyce E. (0149-12)
	Orzechowicz, Holly (0263-8)     Dention, Christian Ulyubas (0126-2)
	Pontier, Christine Hughes (0126-2)     Bhadaa, Karan (0140-2)
	Rhodes, Karen (0140-2)     Boff Bhonda (0288 6)
	<ul> <li>Roff, Rhonda (0288-6)</li> <li>Scott, John (0288-6)</li> </ul>
	<ul> <li>Star, Priscilla (0723-3-2)</li> </ul>
	<ul> <li>Swenson, Cyndee (0722-17-2)</li> </ul>
	<ul> <li>Tacher, Ian (0001-1)</li> </ul>
	<ul> <li>Tamburr, C. (0655-1)</li> </ul>
	<ul> <li>Teas, Jim (0288-6)</li> </ul>
	<ul> <li>Ullman, Jonathan (0288-6)</li> </ul>
Outside Scope-	
Security and	<ul> <li>Anonymous, Anonymous (0333-3)</li> <li>Bathuna David (0615-2-7) (0615-2-25)</li> </ul>
Ferrorism	<ul> <li>Bethune, David (0615-2-7) (0615-2-25)</li> <li>Kosting, Tim (0545-5)</li> </ul>
renonsm	Keating, Tim (0545-5)     Kaanigabara, Linda (0721, 26, 6)
	<ul> <li>Koenigsberg, Linda (0721-26-6)</li> <li>Mauri, Tom (0122-2)</li> </ul>
	<ul> <li>Mauri, Tom (0132-2)</li> <li>Provost, Allan (0339-4)</li> </ul>
	<ul> <li>Riccio, Jim (0716-11)</li> </ul>
	<ul> <li>Shlackman, Jed (0356-5)</li> </ul>
Process-ESP-COL	Barczak, Sara (0112-9)     Barthana David (0215-1-0)
	Bethune, David (0615-1-6)
	Boone, James (0533-1)
	• Daly, Meg (0076-5)
	• Harris, Walter (0721-6-1)
	• Herrera, Luis (0721-33-2)
	<ul> <li>Keating, Tim (0545-8)</li> <li>Kipnis, Dan (0722-2-4)</li> </ul>
	<ul> <li>Lerner, Cindy (0145-1)</li> </ul>
	<ul> <li>Lopez, Jaclyn (0113-1-1)</li> </ul>
	<ul> <li>Maher, William (0619-1-1)</li> </ul>
	<ul> <li>Malefatto, Alfred (0211-3)</li> </ul>
	<ul> <li>Malefatto, Affred (0211-3)</li> <li>McLaughlin, Caroline (0113-1-1)</li> </ul>
	<ul> <li>Miami, City (0456-26)</li> </ul>
	<ul> <li>Mueller, Heinz J. (0617-1-1)</li> </ul>
	<ul> <li>Reynolds, Laura (0113-1-1)</li> </ul>
	<ul> <li>Regnolds, Ladra (0113-1-1)</li> <li>Riccio, Jim (0716-4) (0716-5) (0716-13)</li> </ul>
	<ul> <li>Riccio, Jill (0718-4) (0718-5) (0718-13)</li> <li>Ritz, David (0208-4)</li> </ul>
	<ul> <li>Kitz, David (0206-4)</li> <li>Schwartz, Matthew (0113-1-1) (0721-22-2) (0721-22-19) (0723-9-22)</li> </ul>
	<ul> <li>Schwarz, Matthew (0113-1-1) (0721-22-2) (0721-22-19) (0723-9-22)</li> <li>Silverstein, Rachel (0113-1-1)</li> </ul>
	<ul> <li>Star, Priscilla (0723-3-1)</li> </ul>
	$\bullet$ otal, r houlia (0720-0-1)

Comment Category	Commenter (Comment ID)
	• Stoddard, Philip K. (0106-1) (0721-2-16)
	• White, Barry J. (0598-1)
Process-NEPA	<ul> <li>Austin, Stan (0622-1-1) (0622-2-6) (0622-2-16) (0623-1) (0623-10) (0623-11) (0623-13)</li> </ul>
	• Ball, Cheri (0472-4)
	<ul> <li>Bethune, David (0615-1-2) (0615-1-7)</li> </ul>
	Hanna, Jane (0588-5)
	• Hull, Meagan (0344-3)
	• Lopez, Jaclyn (0113-1-2) (0113-2-13)
	• Maher, William (0619-3-1)
	<ul> <li>McLaughlin, Caroline (0113-1-2) (0113-2-13)</li> </ul>
	• Mueller, Heinz J. (0617-1-5) (0617-1-34)
	<ul> <li>Regalado, Tomas (0515-1) (0721-4-1)</li> <li>Reynolds, Laura (0113-1-2) (0113-2-13)</li> </ul>
	<ul> <li>Reynolds, Laura (0113-1-2) (0113-2-13)</li> <li>Riccio, Jim (0716-1) (0716-2) (0716-3) (0716-12)</li> </ul>
	<ul> <li>Ritz, David (0208-10)</li> </ul>
	<ul> <li>Saporito, Thomas (0010-3) (0010-7) (0010-8)</li> </ul>
	• Schwartz, Matthew (0113-1-2) (0113-2-13) (0721-22-1) (0723-9-8)
	• Silverstein, Rachel (0113-1-2) (0113-2-13)
Site Layout and	• Kuraza, Devon (0721-15-12)
Design	• Maher, William (0619-1-14) (0619-2-23) (0619-3-17) (0619-3-18) (0619-3-
-	19) (0619-3-20) (0619-3-21)
Socioeconomics	• Almirola, Alejandro (0721-31-2) (0721-31-9)
	• Austin, Stan (0622-1-11) (0622-1-13) (0622-1-30)
	• Bazzone, Barbara (0159-5)
	<ul> <li>Beckman, Yvonne and Douglas (0060-5)</li> </ul>
	• Benson, Mary (0081-4) (0081-5)
	• Boyce, Sheila (0091-3)
	<ul> <li>Brito, Rosa (0723-10-1) (0723-10-4)</li> <li>Chiazar, Banjamin L (0677-6)</li> </ul>
	<ul> <li>Chiszar, Benjamin J. (0677-6)</li> <li>Cleland, Noel (0207-6) (0288-11)</li> </ul>
	<ul> <li>Daly, Meg (0076-2)</li> </ul>
	<ul> <li>Dudley, Dwight (0254-6)</li> </ul>
	<ul> <li>Duquette, Bill (0722-13-3) (0722-13-4)</li> </ul>
	• Garcia, Javier (0721-20-2)
	• Goldmeier, Barry (0015-4) (0015-7) (0015-11)
	<ul> <li>Henry, Jim (0723-12-2) (0723-12-8)</li> </ul>
	Hubbard, Stanley S. (0680-3)
	<ul> <li>Hudak, Jill (0722-19-2)</li> </ul>
	Infante, Jose Renee (0722-12-1)
	• Jackalone, Frank (0288-11)
	<ul> <li>Jacobs, Lee (0677-6)</li> <li>Koul, Dovika (0722, 14, 5)</li> </ul>
	<ul> <li>Kaul, Devika (0722-14-5)</li> <li>Klopfer, Carol (0677-6)</li> </ul>
	<ul> <li>Klopler, Carol (0077-0)</li> <li>Knowles, Yvonne (0722-11-1)</li> </ul>
	<ul> <li>Kuraza, Devon (0721-15-9)</li> </ul>
	<ul> <li>Lawrence, Theresa (0580-2)</li> </ul>
	• Lerner, Cindy (0254-6)
	<ul> <li>Lopez, Jaclyn (0113-1-12)</li> </ul>

Table E-2. (contd)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	Macher, Nathan (0378-4)
	<ul> <li>Maher, William (0619-1-6) (0619-2-21) (0619-2-24) (0619-2-25) (0619-5- 19)</li> </ul>
	Mahoney, Stephen (0288-11)
	• Martin, Patrick (0721-21-2)
	Matthews, Debbie (0288-11)
	• McCall, Eric (0056-3)
	McDuffie, Stephen (0723-8-2)
	McLaughlin, Caroline (0113-1-12)
	<ul> <li>Miami, City (0456-2)</li> </ul>
	Mueller, Heinz J. (0617-3-1)
	• Murphy, Mike (0723-6-2)
	Nelson, Joyce E. (0149-9)
	Norman, Ronald (0358-2)
	Regalado, Tomas (0254-6)
	Reynolds, Laura (0113-1-12)
	• Rifkind, David (0721-16-5)
	• Riley, Bill (0721-19-3) (0722-9-3) (0722-9-4) (0723-14-4)
	Robertson, Alyce (0117-3)
	Rodriguez, Jose Javier (0675-4)
	Rodriguez, Manuel J. (0721-27-2)
	Roedel, Kitty (0055-10)
	<ul> <li>Roff, Rhonda (0288-11)</li> </ul>
	<ul> <li>Schwartz, Matthew (0113-1-12) (0721-22-6) (0723-9-7) (0723-9-19)</li> </ul>
	• Scott, John (0288-11)
	Shlackman, Mara (0246-6)
	Sifko, Basilio (0408-7)
	<ul> <li>Silva, Nicolas (0722-5-1)</li> </ul>
	<ul> <li>Silverstein, Rachel (0113-1-12) (0722-7-7)</li> </ul>
	• Simon, Gary P. (0050-2)
	<ul> <li>Simpson, Chris (0723-13-2)</li> </ul>
	<ul> <li>Skove, Ellen H. (0081-4) (0081-5)</li> </ul>
	• Stanley, Joyce (0227-15)
	<ul> <li>Stoddard, Philip K. (0106-3) (0106-13) (0254-6) (0721-2-13)</li> <li>Teas, Jim (0288-11)</li> </ul>
	• Tompkins, Constance (0081-4) (0081-5)
	• Trowbridge, Mark (0723-2-7) (0723-2-9)
	• Ullman, John (0721-30-11)
	• Ullman, Jonathan (0288-11)
	• Wallace, Otis (0723-1-5) (0723-1-7)
	• White, Barry J. (0721-12-5) (0721-12-11)
	• Wilansky, Laura Sue (0078-12) (0721-28-13)
Support-Licensing	• Batista, Carlos (0685-4) (0685-7) (0685-9) (0685-10)
Action	<ul> <li>Boling, Steve (0723-7-5)</li> </ul>
	<ul> <li>Brito, Rosa (0723-10-3) (0723-10-6)</li> </ul>
	<ul> <li>Carpenter, Rory (0694-1) (0694-2) (0694-4)</li> </ul>
	<ul> <li>Christie, Grazie (0013-2)</li> </ul>
	<ul> <li>Duquette, Bill (0722-13-2) (0722-13-9)</li> </ul>
	<ul> <li>England, Peter (0722-10-4)</li> </ul>

• England, Peter (0722-10-4)

<b>Comment Category</b>	Commenter (Comment ID)
Comment Category	<ul> <li>Garcia, Javier (0721-20-1)</li> <li>Goldmeier, Barry (0015-9) (0015-10) (0015-14) (0015-16) (0015-17)</li> <li>Hamilton, Brent (0002-1)</li> <li>Hubbard, Stanley S. (0680-1)</li> <li>Hudak, Jill (0038-1)</li> <li>Infante, Jose Renee (0722-12-2)</li> <li>Jackson, Donald L. (0286-1) (0286-3)</li> <li>Knowles, Yvonne (0722-11-2)</li> <li>Kuraza, Devon (0721-15-14)</li> <li>Lamb, Deborah S. (0070-1)</li> <li>Larrabee, Laura (0035-1)</li> <li>Macher, Nathan (0378-1)</li> <li>Martin, Allan (0722-6-1)</li> <li>Massa, Arturo (0018-1)</li> <li>McDuffie, Stephen (0723-8-7)</li> <li>Moo, Patrick (0722-4-1)</li> <li>Pheil, Edward (0707-1)</li> <li>Porter, Jeff (0722-1-3)</li> <li>Riley, Bill (0721-19-4) (0722-9-1) (0722-9-5) (0722-9-7) (0722-9-12) (0721-12-4)</li> <li>Rossin, A. David (0345-1)</li> <li>Rowe, James (0011-1)</li> <li>Simpson, Chris (0723-13-1) (0723-13-3)</li> <li>Slonim, Roberta (0041-2) (0069-1)</li> </ul>
Support-Licensing Process	<ul> <li>Berendsohn, Catherine (0723-11-1)</li> <li>Chatterton, Andrew (0722-3-2)</li> <li>Duquette, Bill (0722-13-1)</li> <li>England, Peter (0722-10-1)</li> <li>McDuffie, Stephen (0723-8-5)</li> <li>Schwartz, Matthew (0723-9-1)</li> </ul>
Support-Nuclear Power	<ul> <li>Brito, Rosa (0723-10-5)</li> <li>Chatterton, Andrew (0722-3-1)</li> <li>Christie, Grazie (0013-1)</li> <li>Duquette, Bill (0722-13-6)</li> <li>Glynn, Simon (0111-1) (0111-2) (0111-3)</li> <li>Goldmeier, Barry (0015-3) (0015-6)</li> <li>Jackson, Donald L. (0286-2)</li> <li>Kuraza, Devon (0721-15-3) (0721-15-5) (0721-15-6) (0721-15-8) (0721-15-11)</li> <li>Macher, Nathan (0378-3) (0378-5) (0378-6)</li> <li>Martin, Patrick (0721-21-1) (0721-21-3)</li> <li>McDuffie, Stephen (0723-8-1)</li> <li>Moo, Patrick (0722-4-2) (0722-4-3)</li> <li>Mulet, Tomas (0123-1)</li> </ul>

Table E-2. (contd)

Table E-2. (d	contd)
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Comment Category	Commenter (Comment ID)
	<ul> <li>Murphy, Mike (0723-6-1)</li> <li>Pheil, Edward (0707-3) (0707-5)</li> <li>Riley, Bill (0723-14-3)</li> <li>Roberts, Kenneth (0575-2)</li> <li>Rodriguez, Manuel J. (0721-27-3)</li> <li>Silva, Nicolas (0722-5-3)</li> <li>Streit, Christopher V. (0075-1)</li> <li>Trowbridge, Mark (0723-2-3)</li> <li>Wallace, Otis (0723-1-2)</li> </ul>
Support-Plant	<ul> <li>Batista, Carlos (0685-5)</li> <li>Bertelson, Bob (0723-15-1) (0723-15-4)</li> <li>Berzowski, Bill (0722-18-1)</li> <li>Boling, Steve (0723-7-1) (0723-7-4)</li> <li>Brito, Rosa (0723-10-2)</li> <li>Duquette, Bill (0722-13-5) (0722-13-8)</li> <li>England, Peter (0722-10-3)</li> <li>Goldmeier, Barry (0015-2)</li> <li>Hamilton, Brent (0002-2)</li> <li>Kuraza, Devon (0721-15-1) (0721-15-13)</li> <li>Larrabee, Laura (0035-2)</li> <li>McDuffie, Stephen (0723-8-6)</li> <li>Murphy, Mike (0723-6-4)</li> <li>Porter, Jeff (0722-1-2)</li> <li>Riley, Bill (0721-19-2) (0722-9-2) (0722-9-6) (0722-9-11) (0723-14-2)</li> <li>Trowbridge, Mark (0723-2-1) (0723-2-4) (0723-2-10)</li> <li>Wallace, Otis (0723-1-3)</li> <li>Wasilewski, Joe (0721-14-1)</li> </ul>
Transportation	<ul> <li>Goldmeier, Barry (0015-5)</li> <li>Maher, William (0619-1-11) (0619-5-2) (0619-5-3) (0619-5-4) (0619-5-5) (0619-5-6) (0619-5-10)</li> </ul>
Uranium Fuel Cycle	<ul> <li>Anonymous, Anonymous (0551-2) (0603-6) (0644-4) (0645-2)</li> <li>Barczak, Sara (0112-8)</li> <li>Bethune, David (0615-1-10)</li> <li>Bloom, Justin (0253-5)</li> <li>Brandariz, Anita (0529-2)</li> <li>Brexel, Sr., Charles (0592-10)</li> <li>Brumleve, Charles (0502-2)</li> <li>Campbell, Cara (0253-5)</li> <li>Carlson, John (0158-1) (0158-2)</li> <li>Causey, Charlie (0253-5)</li> <li>Cavros, George (0253-5)</li> <li>Chenoweth, Mike (0253-5)</li> <li>Chenoweth, Mike (0253-5)</li> <li>Chrissos, H. L. Chris (0164-3)</li> <li>Commenters, Multiple (0104-5) (0240-7)</li> <li>Dahlgren, Shelley (0434-1)</li> <li>Daly, Meg (0253-5)</li> <li>Datz, Amy (0621-1)</li> <li>Dolben, Hollis (0627-2)</li> </ul>

• Dudley, Dwight (0254-4)

Comment Category	Commenter (Comment ID)
	<ul> <li>Dwyer, John P. (0264-2) (0264-7) (0673-2) (0673-7)</li> </ul>
	• Dwyer, Karen (0674-5)
	• Eastman, John (0721-24-1)
	England, Margaret (0253-5)
	Felinski, Julee (0625-2)
	• Fischer, Antoinette (0365-8)
	• Fuller, Manley (0253-5)
	• G., Ambriel (0561-2)
	• Grant, Randy (0146-3)
	• Griffith, Ed and Harriet (0366-11)
	• Gross, Cheryl A. (0463-4)
	• H., Pat (0550-3)
	Haffmans, Edmund (0371-3)
	Hartmann, Donald (0657-3)
	Hicklin, Mary (0431-1)
	• Hurley, Paula (0362-4)
	• Joannou, Jr., Benjamin (0643-5)
	• Jones, George L. (0253-5)
	• Kassel, Kerul (0676-10)
	• Keller, Alan (0253-5)
	Lebatard, David (0192-6)
	Ledbetter, Carolyn (0406-1)
	• Leibowitz, Arthuir (0404-1)
	• Lerner, Cindy (0254-4)
	• Lindsey, Jerrie (0245-4)
	<ul> <li>Lucas, Carmen (0141-4)</li> <li>Mahar William (0040 5 1)</li> </ul>
	Maher, William (0619-5-1)     Martin Draw (0252.5)
	<ul> <li>Martin, Drew (0253-5)</li> <li>Mayor, David (0120-2)</li> </ul>
	<ul> <li>Mayer, Doug (0129-3)</li> <li>MaCalgar, Dabatt (0722-15-1)</li> </ul>
	McColgan, Robert (0722-15-1)     Mal aughlin, Carolina (0252-5)
	McLaughlin, Caroline (0253-5)     Mikewaki, Caerge (0282-1)
	Mikowski, George (0382-1)     Mell, Walfaang (0622-2)
	• Moll, Wolfgang (0632-2)
	<ul> <li>Otto, Peter (0509-1)</li> <li>Regalado, Tomas (0254-4)</li> </ul>
	5
	<ul> <li>Reid, Sarah (0201-3)</li> <li>Reynolds, Laura (0253-5)</li> </ul>
	<ul><li>Rush, Charlene (0448-1)</li><li>Saporito, Thomas (0010-9)</li></ul>
	<ul> <li>Schlackman, Mara (0721-32-7) (0721-32-8)</li> </ul>
	<ul> <li>Schoene, William (0037-1)</li> </ul>
	<ul> <li>Schwab, Roy (0579-3)</li> </ul>
	<ul> <li>Schwab, Roy (0379-3)</li> <li>Shark, Jason (0120-3)</li> </ul>
	<ul> <li>Sharp, Andrea Heuson (0210-6)</li> </ul>
	<ul> <li>Shlackman, Jed (0356-14)</li> </ul>
	<ul> <li>Shlackman, Mara (0246-4)</li> </ul>
	<ul> <li>Silverstein, Rachel (0253-5)</li> </ul>
	<ul> <li>Stewart, Berkeley (0273-1)</li> </ul>
	<ul> <li>Stoddard, Philip K. (0254-4)</li> </ul>
	$\bullet$ otoduaru, r hilip N. (0204-4)

Table E-2. (contd)

Comment Category	Commenter (Comment ID)
	<ul> <li>Tweeton, Tanya (0340-5)</li> </ul>
	• Vayu, Satya (0370-13)
	<ul> <li>Veijalainen, Pertti (0467-1)</li> </ul>
	• Weber, Zorina (0469-1)
	• White, Paton (0253-5)
	Williams, Elinor (0253-5)

Table E-2. (contd)

# E.2 Comments and Responses

Table E-3 is a list of the comment categories included in this appendix in the order in which they appear. This section presents the comments and responses organized by topic category. When the comments resulted in a change in the text of the draft EIS, the corresponding response refers the reader to the appropriate section of the EIS where the change was made. Throughout the final EIS, with the exception of this new Appendix E, revisions to the text (other than editoral) from the draft EIS are indicated by vertical lines (change bars) in the margin beside the text. Additionally, for purposes of this review, DEIS and FEIS are abbreviations for draft EIS and final EIS.

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E.2.3	Comments Concerning Site Layout and Design	E-85
E.2.4	Comments Concerning Land Use - Site and Vicinity	E-87
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E.2.6	Comments Concerning Geology	E-111
E.2.7	Comments Concerning Hydrology - Surface Water	E-117
E.2.8	Comments Concerning Hydrology - Groundwater	E-182
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E.2.10	Comments Concerning Ecology - Aquatic	E-280
E.2.11	Comments Concerning Socioeconomics	E-306
E.2.12	Comments Concerning Environmental Justice	E-323
E.2.13	Comments Concerning Historic and Cultural Resources	E-325
E.2.14	Comments Concerning Meteorology and Air Quality	E-331
E.2.15	Comments Concerning Health - Nonradiological	E-335
E.2.16	Comments Concerning Health - Radiological	E-340
E.2.17	Comments Concerning Accidents - Severe	E-351
E.2.18	Comments Concerning the Uranium Fuel Cycle	E-370
E.2.19	Comments Concerning Transportation	E-379

E.2.20	Comments Concerning Decommissioning E-381
E.2.21	Comments Concerning Cumulative Impacts E-382
E.2.22	Comments Concerning the Need for Power E-383
E.2.23	Comments Concerning Alternatives - No-Action E-392
E.2.24	Comments Concerning Alternatives - Energy E-393
E.2.25	Comments Concerning Alternatives - System Design E-429
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E.2.27	Comments Concerning Benefit-Cost Balance E-446
E.2.28	Comments Concerning Climate Change E-452
E.2.29	General Comments in Support of the Licensing Action E-454
E.2.30	General Comments in Support of the Licensing Process E-460
E.2.31	General Comments in Support of Nuclear Power E-461
E.2.32	General Comments in Support of the Existing Plant or the Applicant E-465
E.2.33	General Comments in Opposition to the Licensing Action E-468
E.2.34	General Comments in Opposition to the Licensing Process E-515
E.2.35	General Comments in Opposition to Nuclear Power E-516
E.2.36	General Comments in Opposition to the Existing Plant or the Applicant E-530
E.2.37	Comments Concerning Issues Outside Scope - Emergency Preparedness E-532
E.2.38	Comments Concerning Issues Outside Scope - Miscellaneous E-535
E.2.39	Comments Concerning Issues Outside Scope - NRC Oversight E-542
E.2.40	Comments Concerning Issues Outside Scope - Safety E-543
E.2.41	Comments Concerning Issues Outside Scope - Security and Terrorism E-554
E.2.42	General Editorial Comments E-555

## E.2.1 Comments Concerning Process - COL

**Comment:** At the very least the United States Nuclear Regulatory Commission, the agency that will be licensing this project, should complete a supplementary environmental impact statement to more thoroughly review these matters and the portions of the project that are related to the reactor site, its backup cooling systems, and their adverse impacts on water quality. (**0076-5** [Daly, Meg])

**Comment:** The Turkey Point 6 & 7 Draft EIS [DEIS] has serious omissions in analysis that make it impossible to determine the likely effects of plant operation on the environment. (**0106-1** [Stoddard, Philip K.])

**Comment:** We ask that you address these concerns and take the following into consideration for a sorely needed supplemental EIS[.] (**0208-4** [Ritz, David])

**Comment:** It is clear from the actions of the NRC's poorly-informed staff that due diligence was not performed in researching and writing the draft EIS for Turkey Point 6 and 7. The NRC has

failed to meet its obligation to protecting people and the environment by ignoring or failing to discover crucial information about the environmental and health impacts of siting two new nuclear plants alongside two existing plants and near to such a large, water-starved population. In addition to the comments I presented orally last night, I add my voice to the many others at the meeting who demand a revised and complete Environmental Impact Statement which address the issues outlined in this letter. (0615-1-6 [Bethune, David])

**Comment:** So that's ten different points in which I believe the Environmental Impact Statement Draft is incomplete and it may require a supplemental draft in order to address these points. (0721-2-16 [Stoddard, Philip K.])

**Comment:** At any rate, we demand a supplemental EIS from this agency to cover all the unanswered questions that everybody is bringing up and we basically say this is the wrong project in the wrong location. Let's move on to something that's going to work. (0721-22-19 [Schwartz, Matthew])

**Comment:** They haven't done that. It's not in the Draft. And just at the outset I'm saying, I'm requesting the agency undertake a supplemental EIS to deal with many of the unanswered questions that have been brought up today and which will be brought up in further comments. (0721-22-2 [Schwartz, Matthew])

**Comment:** I'm not against nuclear power, I'm against the EIS the way it's written here without taking this into consideration seriously. And I really hope that if we're going to spend \$30 billion that we have to look at getting our money's worth for it. (**0722-2-4** [Kipnis, Dan])

**Comment:** This application should be rejected. At the very least a supplemental EIS needs to be written to address all of these concerns that people are raising and do not rush into a project of this caliber. (0723-9-22 [Schwartz, Matthew])

**Response:** The comments state that the draft EIS is incomplete and request the NRC to supplement it. To the extent the commenters identify specific environmental topics as incompletely discussed in the DEIS in support of the request for supplementation, the NRC staff addresses such comments under the associated subject matter headings in this response document (Appendix E to the final EIS). To the extent the NRC staff agrees with the commenters' specific comments, the staff has so indicated in its responses in the specific subject matter sections below; the staff has also indicated which of those comments warranted inclusion of additional or modified discussion in the final EIS. Comments not identifying specific information related to environmental topics did not provide any significant new information not considered by the review team in the draft EIS, and therefore did not identify any reason to supplement the DEIS.

One of the purposes of circulating a draft EIS for public comment is to obtain additional insight into the environmental issues evaluated in the draft EIS and augment the EIS discussion as warranted. However, the mere fact that a final EIS includes additional or modified information as a result of public comments does not necessarily indicate that a draft EIS requires supplementation.

Specifically, the NRC regulations outlined in 10 CFR 51.72 describe when the staff should produce a supplement to a draft EIS. According to 10 CFR 51.72, the NRC staff will issue a supplement to an EIS if: (1) there are substantial changes in the proposed action that are relevant to environmental concerns, or (2) there are significant new circumstances or

information relevant to the environmental concerns and bearing on the proposed action or its impacts. For the Turkey Point COL draft EIS, the staff has determined there have been no substantial changes to the proposed action in the Florida Power & Light (FPL) COL relevant to environmental concerns or significant new information associated with environmental issues that would trigger a supplement. Accordingly, supplementation is not required, and the staff has determined not to issue a supplement to the draft EIS.

**Comment:** Please do not reward, poorly thought out proposals because that is your job (at the NRC). (**0545-8** [Keating, Tim])

**Response:** The staff has independently verified information in the applicant's Environmental Report (ER; Part 3 of the Application dated October 29, 2014 (ML14311A715)), and has performed literature searches and field studies in doing so. The draft EIS reflects the staff independent evaluation of the environmental effects of the proposed action. The comment did not warrant any change to the final FEIS.

**Comment:** On behalf of the National Parks Conservation Association, Center for Biological Diversity, Miami Waterkeeper, South Florida Wildlands Association, and Tropical Audubon Society, we thank you for the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for Combined Licenses (COLs) for Turkey Point Units 6 & 7, released by the Nuclear Regulatory Commission (NRC) under Docket ID NRC-2009-0337 and as publicly noticed by the U.S. Army Corps of Engineers (Corps), 2009-02417 (SP-MLC). We are deeply concerned about the potential wide-ranging environmental impacts to regional water resources, national parks, wildlife, and sensitive wetlands resulting from the construction and operation of Units 6 & 7 and ancillary facilities. (0113-1-1 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** ACI appreciates your consideration of the foregoing comments, and we look forward to the final EIS adequately addressing the issues raised. (**0211-3** [Malefatto, Alfred])

**Comment:** I'm writing this letter because this issue is important to me. I hope it is to you as well. (0533-1 [Boone, James])

**Comment:** The DEIS provides useful information and covers a variety of complex environmental issues related to the COL process for the proposed new units. We appreciate your coordination and outreach to us to discuss the numerous technical issues and our environmental concerns regarding this project, and your response to our request for additional review time for this DEIS. We look forward to working with the NRC to reduce this project's impacts, and to provide environmental protection for future generations. We request that the FEIS address our concerns, which are detailed in the enclosed comments. (0617-1-1 [Mueller, Heinz J.])

**Comment:** FPL appreciates the opportunity to review and provide comments on the DEIS to assist the Commission and U. S. Army Corps of Engineers in disclosing an accurate and complete evaluation of potential impacts in the final EIS (FEIS). FPL recommends that the inconsistencies identified in the attached comments be reconciled in the FEIS. Many comments can be categorized as (1) significant overestimation of environmental impacts (such as the statement that FPL seeks approval to discharge fill into 1,000 acres of federal jurisdictional wetlands or describing impacts to the entirety of a pipeline or transmission corridor, when only a relatively narrow right-of-way would ultimately be affected), (2) minor discrepancies between values in the DEIS and the values in the cited references, and (3) overlooking updates to FPL's

application documents, many of which result from binding Conditions of Certification recently imposed under the Florida Power Plant Siting Act process. Given the NRC's delayed comment closing deadline of July 17, FPL hopes sufficient, timely resources are engaged to address all comments and maintain the NRC's Phase 3 milestone of February 2016 for publication of the FEIS, since publication of the FEIS is a prerequisite for permitting activities required before FPL can proceed with the project. (**0619-1-1** [Maher, William])

**Response:** These comments express support for the NEPA review process for eliciting and receiving comments on the draft EIS as implemented by the NRC. To the extent the comments identified specific information regarding the environmental impacts of the proposed action, that information is discussed in the comment responses on specific impacts below. No changes were made in response to these comments.

**Comment:** We believe it is important to mention problems experienced with public accessibility and public notifications associated with the release of the DEIS and related public hearings. Initially there were discrepancies in the meeting times for the afternoon public meeting in Homestead, Florida on April 23, 2015 -- both on the NRC's website and in NRC public meeting notices. There were also different email and mailing addresses to submit public comments to the NRC as listed in separate NRC public notices that were also different than what was listed in the Federal Register Notice. There was also a problem with the DEIS itself in that hyperlinks included in the DEIS were not active, yet appeared to be resulting in the reader receiving an "Authentication Required" error message. In terms of the inactive hyperlinks, we were told that it was a publication problem that occurred during the printing process, that the links were supposed to be removed before printing and that this would be resolved when the FEIS is issued. All of this caused confusion among the public and SACE staff spent significant time researching and bringing this to the attention of NRC staff. Though NRC staff were cordial and prompt in responding to our concerns, these discrepancies should not have happened. We hope that in the future, a more thorough review process can occur before issuing such important public notices. (0112-9 [Barczak, Sara])

**Comment:** EVERY SINGLE FOOTNOTE IN THE DEIS IS HIDDEN BEHIND A FIREWALL! [FIGURE: Authentication Required; The server <u>https://earrth.pnnl.gov:443</u> requires a username and password. User Name: Password: Log In Cancel] (0716-4 [Riccio, Jim])

**Comment:** NEPA requires agencies to ensure professional and scientific integrity by setting forth the methodologies used and making "explicit reference by footnote [to] the scientific and other sources relied upon for conclusions in the statement." (Earth Island Inst. v. U.S. Forest Serv., 442 F.3d 1147, 1160 (9th Cir. 2006), abrogated on other grounds by Winter v. Natural Res. Def Council, Inc., 555 U.S. 7 (2008).

When the NRC staff was informed that every single citation in the DEIS was broken their reply was that it would be repaired in the final draft. OUTRAGEOUS! NRC has sought public comment on a two volume EIS totaling 1458 pages where every single citation is hidden behind a fire wall and the agency somehow thinks this is adequate? This pathetic inadequacy in citation wouldn't pass muster in a high school science class but somehow the NRC thinks it's appropriate for a DEIS to construct two nuclear reactors. (0716-5 [Riccio, Jim])

**Response:** The comment refers to administrative discrepancies associated with the Federal Register Notice, Public Meeting Notice, and draft EIS published in support of proposed Turkey Point Units 6 and 7. Each of these errors was quickly corrected as soon as the staff was notified. For instance, the NRC website and public meeting notice were updated to reflect the

correct public meeting times. As for the different mailing addresses, each was within the NRC Administration Division therefore, all comments submitted were accounted for within the Turkey Point COL review process. Finally, hyperlinks or tracking numbers (e.g. TN3792) were inadvertently left active in the publicly distributed electronic copies of the draft EIS. This error occurred during the printing process but was corrected immediately in electronic copies in NRC's ADAMS; and will be remedied in any future EIS publication. If active, these hyperlinks would not have provided access to information beyond that in draft EIS Chapter 11. Draft EIS Chapter 11, "References," properly cited and included all the references that are not copyrighted. References in Chapter 11 include ADAMS accession numbers where available, allowing the reader to access these documents at http://www.nrc.gov/reading-rm/adams.html. Web links are also included where available. The staff regrets any inconvenience or confusion these errors may have caused.

**Comment:** Why at the next meeting they going to do? There's two meetings only. Why the next meeting this in Homestead? They no inviting in the news. All the people going there. And they going to find out some more against it. (**0721-33-2** [Herrera, Luis])

**Comment:** I don't know what you've been listening to for the last several years. I've been to a lot of the NRC meetings. And when people ask questions, nobody answered any of them. When they asked what you thought of sea level rise, you actually just said -- you quoted the company, you didn't actually say what you thought. When they asked, what is the need for this, you said the -- a Public Service Commission had recommended it. (0721-6-1 [Harris, Walter])

**Comment:** I came here a little bit afraid that if I opposed this plan there would be people looking at me right now that might be angry with things that I'd say so I want to make sure that whatever I say I'm going to feel safe when I leave. So I'd like that assurity. (0723-3-1 [Star, Priscilla])

**Response:** It is NRC policy to involve the public in the Commission's decision-making process; therefore, it elects to conduct open public meetings to collect comments on the environmental aspects of a proposed project. The NRC generally holds meetings in locations accessible to the largest population that will experience the most direct environmental impact as a result of the proposed action. In the case of the draft EIS on the proposed Turkey Point Units 6 and 7, the NRC held three public meetings, one in Miami on April 22, 2014 and two in Homestead, Florida on April 23, 2014. The NRC held a meeting in Miami to make it more convenient for people from the nearby population center to participate in the meeting; the NRC held meetings in Homestead to make it more convenient for people from the communities closest to the site proposed for power plant construction to attend and comment. The NRC staff attends these meetings to listen to the comments to improve their understanding of the public concerns as part of its independent review. In some cases there is insufficient time available to respond to comments during a meeting. Nonetheless, the NRC responds to all comments on the draft EIS in Appendix E of the final EIS.

Regarding the comment about the security of these public meetings, the NRC had security personnel present at all of the public meetings to ensure the safety of all participants. The NRC takes the safety of the meeting participants very seriously.

No changes were made to the EIS as a result of these comments.

**Comment:** To the extent that certain of these comments are determined to be outside the scope of the environmental review, the City requests that those comments be addressed

through the safety review process or the review undertaken by the U.S. Army Corps of Engineers. (**0456-26** [Miami, City])

**Response:** The NRC conducts a concurrent safety review of each COL application along with the environmental review; the results of the NRC's safety review of Turkey Point Units 6 and 7 will be published in a Final Safety Evaluation Report, scheduled for publication in November 2016. Further information on the safety review and how to members of the public can participate should be directed to the NRC Safety Project Manager, Manny Comer. Mr. Comar can be reached at Manny.Comar@nrc.gov. In addition, comments received by the public comment process are being reviewed by the U.S. Army Corps of Engineers under a Department of Army permit application, who is a cooperating agency on this EIS. No changes were made to the EIS as a result of this comment.

**Comment:** As the Nuclear Regulatory Commission awaits the final NEPA required studies, including the Environmental Impact Statement (EIS) and the Final Safety Analysis Report, there are significant environmental impacts that have not been adequately addressed in the Draft EIS and on behalf of our residents, we register our concerns through these written comments to the draft statement issued. (0145-1 [Lerner, Cindy])

**Response:** The licensing process for combined construction permit and operating license (COL) applications is specified in Title 10 of the Code of Federal Regulations (CFR), Part 52. The process includes a detailed review by the NRC of an applicant's COL application to determine the safety and environmental effects of construction and operation of a nuclear power facility. Public involvement and comments are invited and encouraged throughout the environmental review of major Federal actions; the NRC formally solicits both written and oral comments from members of the public at the beginning of the process during environmental scoping for the environmental impact statement (EIS) and when the draft EIS is issued. Specific information regarding the environmental impacts of the proposed action is discussed in the comment responses for specific impacts below. No changes were made in response to this comment.

**Comment:** Even if the draft EIS weren't fatally flawed by the lack of functioning footnotes, the NRC has failed to meets its responsibilities under NEPA to address the impacts of the proposed federal action. (0716-13 [Riccio, Jim])

**Response:** The NRC implements NEPA according to its regulations in 10 CFR Part 51. The NRC uses these regulations as the basis for preparing EIS's in support of NEPA. This comment is general in nature and provides no specific information related to the environmental review. No changes were made to the EIS as a result of this comment. The comment also refers to hyperlinks or tracking numbers (e.g. TN3792) that were inadvertently left active in the publicly distributed electronic copies of the draft EIS. This error occurred during the printing process but was corrected immediately in electronic copies in NRC's Agencywide Documents Access and Management System (ADAMS); and will be remedied in any future EIS publication. If active, these hyperlinks would not have provided access to information beyond that in draft EIS Chapter 11. Draft EIS Chapter 11, "References," properly cited and included all of the references that are not copyrighted. References in Chapter 11 include ADAMS accession numbers where available, allowing the reader to access these documents at http://www.nrc.gov/reading-rm/adams.html. Web links are also included where available. The staff regrets any inconvenience or confusion these errors may have caused. The NRC implements National Environmental Policy Act (NEPA) according to its regulations in 10 CFR Part 51. The NRC uses these regulations as the basis for preparing EIS's in support of

NEPA. This comment is general in nature and provides no specific information related to the environmental review. No changes were made to the EIS as a result of this comment.

**Comment:** Please consider the relevant issues in the attached documents regarding the environmental impact of the operation of proposed reactors 6 & 7 at Turkey Point, FL by FPL. (0598-1 [White, Barry J.])

**Response:** This comment is referring to a motion submitted by the Citizens Allied for Safe Energy, Inc. (CASE) in the ongoing Atomic Safety and Licensing Board (ASLB) proceeding on the Turkey Point Units 6 and 7 combined licenses, docket numbers 52-040 and 52-041 COL. Information regarding the legal proceedings can be found on the electronic hearing docket at https://adams.nrc.gov/ehd/. This comment is legal in nature, has been addressed in the ASLB proceeding, and outside of the environmental review. No changes were made to the EIS in response to this comment.

## E.2.2 Comments Concerning Process - NEPA

Comment: Potential Mitigation Measures Are Speculative, Inadequate, and Based on **Incomplete Information.** The U.S. Army Corps of Engineers has an independent responsibility under Section 404 of the Clean Water Act to determine if the project is consistent with the "public" interest and if impacts to the Waters of the United States have been adequately avoided, minimized, or mitigated. As a cooperating agency, the Corps will depend on information included in the EIS to comply with the requirements of NEPA in issuing a permit under the Clean Water Act. The Corps makes this determination through its own Record of Decision (ROD) and Department of Army (DA) permit. The potential mitigation measures proposed in the DEIS are speculative and inadequate and their effectiveness is not properly examined as required under NEPA. NEPA is "our basic national charter for protection of the environment," [Footnote 48: 40 C.F.R.§ 1500.1(a).] ensuring that federal agencies identify and analyze detailed information regarding significant environmental impacts of proposed projects and that such information is disseminated to a wide audience. Within an EIS, the EIS must describe the environmental impacts of the proposed action; "adverse environmental effects which cannot be avoided should the proposal be implemented;" alternatives to the action proposed; "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity;" and any "irreversible or irretrievable commitment of resources which would be involved in the proposed action should it be implemented." [Footnote 49: 42 U.S.C. §4332(2)(c).] The proposed project will impact approximately 1000 acres of tidal and freshwater wetlands in order to construct Units 6 & 7. [Footnote 50: Gattiana, J. L., United States Environmental Protection Agency Letter to Colonel Alan M. Dodd, U.S. Army Corps of Engineers, April 9, 2015, 1.] Portions of the project, as outlined in permit application number 2009-02417 (SP-MLC), include (1) new transmission lines, (2) Units 6 & 7 site, (3) pipelines for potable and reclaimed water, (4) equipment barge unloading area, (5) transmission line crossing under the Miami River, (6) access roads, (7) radial collector wells located under Biscayne Bay, and (8) pre-treatment building. Impacted wetlands include mangrove swamp, sawgrass marsh, seagrass, mixed wetland hardwoods, freshwater and saltwater marsh, and wetland shrub. [Footnote 51: lbid. 1.] The project will directly impact approximately 300 acres of high quality mangrove wetlands, 40 acres of sawgrass marshes, and one acre of submerged aquatic vegetation, all of which are considered by the U.S. Environmental Protection Agency to be aquatic resources of national importance (ARNI). [Footnote 52: Ibid., 1-2.] (0113-2-13 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** The USACE will complete an independent evaluation of the proposed project after publication of the final EIS. The USACE's independent Record Of Decision (ROD) regarding the proposed permit will reference the analyses in the EIS and will also present any additional information required by the USACE to support its permit decision. This will include the USACE's determination on the Least Environmentally Damaging Practical Alternative (LEDPA), the consideration of impacts to the aquatic environment, Public Interest Review (PIR) factors, a consideration of all comments received, and compliance with applicable laws and regulations. Mitigation for the resource areas described in the comments are discussed in Sections 4.3.1 and 5.3.1 and support the NRC's NEPA review, and includes information for the EIS, the USACE final decision document is separate from the EIS and will not be completed until after the final EIS is published. The comments, however, provided no specific information not already discussed in the draft EIS, and did not warrant any change to the final EIS. No changes were made to the EIS as a result of these comments.

**Comment:** According to the requirements of the National Environmental Policy Act (NEPA) and NRC regulations, the DEIS must present an analysis that examines and considers the environmental impacts, including direct, indirect, and cumulative impacts, of the proposed action; the environmental effects of alternatives to the proposed action; and mitigation alternatives that would reduce or avoid adverse environmental impacts. [Footnote 1: United States Regulatory Commission, Draft Environmental Impact Statement - Contents, 2014, 10 C.F.R. 51.71(d). The DEIS fails to adequately discuss and analyze potential adverse environmental impacts and provides insufficient proposals for mitigation. Due to the deficiencies of the DEIS, as outlined in this letter, it would be premature and inappropriate to issue COLs for Turkey Point Units 6 and 7. (0113-1-2 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** According to the requirements of the National Environmental Policy Act (NEPA) and NRC regulations, the DEIS must present an analysis that examines and considers the environmental impacts, including direct, indirect, and cumulative impacts, of the proposed action; the environmental effects of alternatives to the proposed action; and mitigation alternatives that would reduce or avoid adverse environmental impacts.1 [Footnote 1: United States Regulatory Commission, Draft Environmental Impact Statement-Contents, 2014, 10 C.F.R. § 51.71(d)]. The DEIS fails to adequately discuss and analyze potential adverse environmental impacts and contains insufficient proposals for mitigation. Due to the deficiencies of the DEIS, as outlined in this letter, it would be premature and inappropriate to issue COLs for Turkey Point Units 6 & 7. (0208-10 [Ritz, David])

**Comment:** It is telling that no fewer than four local mayors and a state representative were in attendance to speak out against the draft EIS on behalf of their constituents. The meeting facilitator made a grievous error in trying to hurry the mayor of Miami off the podium as he continued to point out the appalling environmental impacts of the proposed plants, particularly on our drinking water supply. The fact that our elected representatives have no power over the NRC's licensing process other than to stand at the podium like their fellow citizens shows that the licensing process for nuclear power plants in this country is anything but democratic. (0615-1-7 [Bethune, David])

**Comment:** The NRC has failed to produce an EIS for the proposed nuclear reactors at Turkey Point that is easily amenable to public review. Even if the draft EIS werent fatally flawed by the lack of functioning footnotes, the NRC has failed to meets its responsibilities under NEPA to address the impacts of the proposed federal action. (0716-1 [Riccio, Jim])

**Comment:** Since this a discussion on a Draft EIS that's been prepared under the auspices of NEPA, I'd like to talk -- just make one statement about NEPA that really wasn't made when we started this meeting, and it's important for people to understand what NEPA requires. And I took this from the Citizens Guide to NEPA, prepared by the Council on Environmental Quality. To implement these policies NEPA requires agencies -- in this case the NRC as the lead agency - to undertake an assessment of the environmental effects of their proposed actions prior to making decisions. In common language we call that the hard look. The agency is required to take a hard look at all of the environmental impacts and human impacts from this major Federal action before it takes place. (0721-22-1 [Schwartz, Matthew])

**Comment:** The purpose of NEPA is to evaluate the environmental impacts of a project before it is built, thoroughly. Take what's called a hard look. This EIS did not do that in any way, shape or form. (0723-9-8 [Schwartz, Matthew])

**Response:** The review team agrees that NEPA calls for a hard look at the environmental impacts of a major Federal action having a significant effect on the environment. The NRC licensing process for nuclear power plants includes a thorough review of the proposed plant's impacts on the environment in accordance with NRC regulations. The EIS analyses of the potential adverse environmental impacts from building the proposed units are described in Chapter 4 and the potential adverse environmental impacts from the operation of the proposed units are described in Chapter 5. Alternatives to the proposed action are analyzed in Chapter 9. Mitigation proposed by the applicant and imposed on the applicant by local, state and Federal regulatory agencies other than the NRC during construction and operation are documented in Chapters 4 and 5, respectively. The draft DEIS summarizes the staff analyses of the impacts of the proposed action, which are based on extensive staff work that includes literature search, field work, modeling, and independent staff consideration of all pertinent information. To the extent the comments identified specific information regarding the environmental impacts of the proposed action, that information is discussed in the comment responses on specific impacts below. Otherwise, the comments provided no specific information not already discussed in the draft EIS, and did not warrant any change to the final EIS.

In regard to public participation, Congress included in NEPA a requirement to circulate each draft EIS for public comment. The NRC implements that requirement in 10 CFR 51.73. In accordance with 10 CFR 51.74, the NRC staff distributed the draft EIS to appropriate State and local agencies authorized to develop and enforce relevant environmental standards. This ensures that local governments with authority to regulate the impacts of the proposed action have the opportunity to participate in the NEPA process and provide information to the NRC to inform the NRC staff analysis of the impacts. The NRC staff typically holds public meetings on draft EISs to elicit comments from the public. In that regard, the NRC staff process is designed to allow all of those who wish to speak that opportunity by allotting approximately equal speaking time to each speaker. Normally, elected officials are afforded the courtesy of speaking before members of the public at large. Every public meeting, however, is finite in length, and to ensure every member of the public who seeks to speak has the opportunity to do so, the NRC allots an approximately equal time to each speaker, given the available time and the number of speakers. One who speaks far beyond the time allotted—even an elected public official—will be informed that his or her time is up. Nonetheless, the public can submit comments (i.e. via electronic or U.S. postal mail), which compensates for the practical limits for receiving comments in the public meeting setting.

No changes were made to the EIS as a result of these comments.

**Comment:** Thank you for listening to logic and reason. (0344-3 [Hull, Meagan])

**Comment:** Thank you for listening to the wishes, promises, and concerns of this one voice in the large pool of Floridian voices. (0472-4 [Ball, Cheri])

**Comment:** Thank you for the opportunity to comment on the draft Environmental Impact Statement ("'DEIS") for Turkey Point Nuclear Plant Units 6 & 7. Attached to this letter, please find the City of Miami's comments prepared by the Office of the City Attorney. (**0515-1** [Regalado, Tomas])

**Comment:** Thank you for considering my deeply felt and knowledgeable concerns. (**0588-5** [Hanna, Jane])

**Response:** These comments express support for the NEPA review process for eliciting and receiving comments on the draft EIS as implemented by the NRC. To the extent the comments identified specific information regarding the environmental impacts of the proposed action, that information is discussed in the comment responses on specific impacts below. Otherwise, the comments provided no specific information not already discussed in the EIS, and did not warrant any changes to the EIS.

**Comment:** Last night, I attended the NRC's public meeting on the draft Environmental Impact Statement for Turkey Point units 6 and 7. I must say the lack of preparedness and poor access to information demonstrated by the NRC staff at this meeting were most distressing. NRC staff were essentially unable to answer any public questions of significance. (**0615-1-2** [Bethune, David])

**Response:** The purpose of the NRC's public meetings on the draft EIS was to provide an opportunity for members of the public to submit comments on the draft EIS for FPL's Turkey Point Units 6 and 7 COL application. The NRC staff were present primarily to assure that they heard and understood the comments. Because of the large number of people who signed up to provide comments there was little time for the NRC staff to respond. Responses to all comments on the draft EIS are provided in Appendix E of the final EIS. No changes were made to the EIS as a result of this comment.

**Comment:** The NPS strongly encourages the NRC to consider the important anthropocentric value (i.e. enjoyment) of wildlife that is reflected in the NPS Organic Act and the enabling legislation that established both Biscayne and Everglades NPs. The Organic Act states that "wild life" must be conserved for the "enjoyment" of future generations. Biscayne NP's enabling legislation states the NPS must "preserve and protect ... for the enjoyment of present and future generations a rare combination of terrestrial, marine, and amphibious life. Lastly, Everglades NP was established as a "public park for the benefit of the people" that preserves the "ecological integrity of the unique flora and fauna." This statutory context, and the fact the NPS is a cooperating agency, makes the EIS for Units 6 and 7 unique among environmental reviews the NRC may have prepared in the past. It also elevates the value that should be given by the NRC to the human environment, which includes the relationship of people with the environment. (0622-2-16 [Austin, Stan])

**Comment:** The construction and operation of Units 6 and 7 and related infrastructure has the potential to adversely affect NPS resources and potentially make more difficult ongoing federal, state, and county efforts to restore the broader everglades ecosystem via CERP and the BBCW Project. This section provides the NRC and USACE concepts for mitigation that would be necessary if Units 6 and 7 and supporting infrastructure were approved. Upon review, the NPS

maintains that FPL's Turkey Point Units 6 & 7 Mitigation Plan Rev. 2, which was prepared in July 2011, is far from being sufficient to offset the potential for the impacts to NPS resources for which we have expressed concern.

While the NPS understands that the NRC and USACE will be considering mitigation that complies with their own internal guidance, we encourage you to consider Secretarial Order Number 3330 Improving Mitigation Policies and Practices of the Department of the Interior (DOI). A central component of DOI's strategy is taking "a landscape-scale approach to identify and facilitate investment in key conservation priorities in a region." Another component encourages agencies to focus "on mitigation efforts that improve the resilience of our Nation's resources in the face of climate change." Because NPS lands and resources would be significantly impacted by this project, we assert that an innovative mitigation package that contains measures that take a landscape-scale approach and account for climate change would be essential if the project and associated infrastructure were to be approved.

The NPS understands that it is difficult to compare this project to other projects elsewhere in the country that would similarly impact a national park, let alone two parks. Nonetheless, we encourage both agencies to consider the following two case studies as they may provide helpful context.

<u>Skagit River Project, Washington[.]</u> In 1995, the Federal Energy Regulatory Commission (FERC) accepted several settlement agreements (SA) to mitigate various environmental, operational, and recreational issues relating to the relicensing of the Skagit River Hydroelectric Project (FERC Project No. 553), which is located within Ross Lake National Recreation Area and along the Skagit River in northwest Washington State. Under the SA, Seattle City Light (SCL), the licensee that operates the dams, helped fund the construction of the North Cascades Environmental Learning Center, which has become an internationally renowned center for environmental education and a source of pride for SCL. They also set aside \$17 million for land acquisition to conserve wildlife habitat in the Skagit River watershed. Since relicensing, over eight thousand acres of high-value conservation lands have been acquired. The SA also included an additional \$17 million to support recreation access along the river. According to Dean Shumway, the former Director of FERC's Office of Hydropower Licensing, the SA have been recognized by many as a national model and have been called "the most comprehensive set of Settlement Agreements for the public good ever submitted to FERC."

<u>Susquehanna to Roseland Transmission Line Upgrade, Pennsylvania. New York, and New</u> <u>Jersey[.]</u> In 2012, the NPS approved construction of the 4.5 mile section of the proposed 146 mile Susquehanna-Roseland Transmission Line across Delaware Water Gap National Recreation Area. Importantly, the new transmission line is located entirely along existing rightsof-way held by the companies for decades and that predate the parks' establishment. In an effort to minimize impacts to the park, the companies partnered with The Conservation Fund and contributed \$56 million for the acquisition of critical lands within and near the park. An additional \$10 million was provided to mitigate for visual impacts of the project to the Appalachian National Scenic Trail. Lastly, the applicants funded a number of NPS staff for five years for construction monitoring. (**0622-2-6** [Austin, Stan])

**Comment:** After a thorough review of the DEIS, the NPS has identified a number of concerns regarding assumptions contained in the DEIS, the analysis of impacts, and the conclusions related to severity of impacts on resources managed by the NPS. The NPS remains concerned that federal actions associated with permitting and operating the proposed facility could result in adverse impacts to NPS resources and values including water quality and quantity, wetlands,

wildlife and fisheries resources (including species listed under the Endangered Species Act), scenery, and the experience of park visitors that may affect our ability to manage these resources for their preservation for current and future generations. Although we recognize nuclear power as one of the means to achieve energy independence from fossil fuel, we also recognize the unique situation posed by the proposed expansion of the Turkey Point power plant immediately adjacent to two national parks. Both Biscayne and Everglades NPs are located within the greater Everglades ecosystem, which is not only one of the nation's most iconic landscapes, but also the focus of the largest intergovernmental watershed restoration program in the world. (**0623-1** [Austin, Stan])

**Comment:** The NPS asserts that the DEIS impact analysis associated with construction and operation of proposed Units 6 and 7 does not sufficiently address issues related to the environmental impacts of the proposed action on resources managed by the NPS. Based on our review of the DEIS, we have strong concerns that impact analysis described in the DEIS does not:...provide for opportunities to eliminate or mitigate risks to NPS resources. (**0623-10** [Austin, Stan])

**Comment:** It is for these reasons, we respectfully request that NRC and USACE revise the DEIS to address these issues. An update to the DEIS analysis should: 1) more fully evaluate potential impacts on NPS resources[.] (**0623-11** [Austin, Stan])

**Comment:** It is for these reasons, we respectfully request that NRC and USACE revise the DEIS to address these issues. An update to the DEIS analysis should:...development of this additional information would better inform NRC licensing and USACE's permitting decisions. Specifically, additional analysis of the outstanding issues we have identified may assist USACE in determining the Least Environmentally Damaging Practicable Alternative and consideration of the public interest. Moreover, this information would better inform the public regarding the extent of potential impacts and the decision-making process. The NPS is ready to collaborate with the NRC and USACE on this effort. (0623-13 [Austin, Stan])

**Response:** The National Park Service (NPS) presents recommended mitigation measures for impacts to NPS resources resulting from project construction and operation. The ecological impacts of building and operating the proposed units are described in Sections 4.3 and 5.3, respectively. Visual and aesthetic impacts are addressed in Sections 4.4 and 5.4. The applicant, FPL, has proposed a series of specific wetland mitigation measures that are described in Section 4.3.1 of the EIS. Because the applicant develops mitigation measures in conjunction with State, local, and Federal agencies other than the NRC that have jurisdiction over such matters, the NRC only rarely imposes mitigation requirements on the applicant. The NRC staff nonetheless accounts for such mitigation matters, in its environmental evaluation. The USACE determines the adequacy of proposed compensatory mitigation for unavoidable impacts to aquatic resources pursuant to 33 CFR Part 332. Furthermore, the USACE determines whether mitigation is required in order for a proposed project not to be contrary to the public interest pursuant to 33 CFR § 320.4(r).

The NRC staff responses to the specific NPS comments regarding the environmental impacts of the proposed action are set forth in the comment responses on specific subjects below. In regard to the specific subjects identified in the comment, other NPS comments provided more detailed information that is addressed in the responses below. The general or otherwise prefatory statements in the NPS comment do not provide the type of specific information set forth in the NPS-specific comments discussed in the subject matter sections below, and do not

warrant any change to the EIS. No change was made to the EIS as a result of the general comments.

**Comment:** The National Park Service provides the following detailed technical comments regarding the determinations reached in the DEIS. Based on our review of the DEIS, the NPS has identified updated information relevant to environmental concerns that were not included in the DEIS and need to be addressed to more fully incorporate environmental impacts of the proposed action into the decision-making process. (**0622-1-1** [Austin, Stan])

**Response:** The NRC appreciates the NPS's continued participation in the development of the EIS as a cooperating agency. Information provided by the NPS throughout the entire environmental review was considered by the review team as the EIS was developed and included in the draft and final EIS, as appropriate.

**Comment:** Today we must discuss a matter of vital importance to the future of our citizens and their children. Specifically, we must have an honest and critical discussion about FPL's plan to expand the nuclear plant at Turkey Point. When I say that we must have a 'discussion,' I mean it in the truest sense. We need our citizens and residents to be informed on the expansion and then speak up and make their voices heard to the Federal Regulators entrusted with our safety. (0721-4-1 [Regalado, Tomas])

**Response:** The NRC prepared a draft EIS to assess the environmental impacts if the NRC grants FPL's application to construct and operate two new nuclear power plants at the Turkey Point site. A 75-day comment period began on March 6, 2015 when the EPA published its Notice of Availability of the draft EIS to allow members of the public to comment on the results of the environmental review. During the public comment period, three public meetings were held, one in Miami on April 22, 2015 and two in Homestead, Florida on April 23, 2015. Members of the review team described the results of the environmental review, provided members of the public with information to assist them in formulating comments on the EIS, and accepted comments on the EIS. Of those attending the public meetings, the NRC staff received approximately 11,300 additional pieces of correspondence. The review team considered the comments received at the public meetings and through correspondence as it developed the final EIS. Appendix E of the EIS outlines the comments received and responses to the comments on the EIS were made as a result of this comment.

**Comment:** The NRC's apparent failure to properly consider the harm to the environment that FPL's Turkey Point Nuclear Units 6 & 7 will cause is <u>alarming</u> and should be investigated by the NRC's Office of the Inspector General (OIG). To this extent -the NRC Staff is hereby requested to provide a copy of this document and all related NRC documents to the NRC's OIG -to enable that agency to make an informed decision as to whether the NRC Staff acted improperly in these circumstances to protect public health and safety and to <u>protect the environment</u>. (0010-3 [Saporito, Thomas])

**Comment:** To the extend that the NRC wholly relied on the FPSC's "NEED" determination - the agency <u>failed</u> to consider the benefits of these grid-tied solar power home energy systems in completing the agency's EIS determination in this matter. Accordingly - the NRC should reject and/or deny and/or revoke FPL's COL and the agency's EIS in their entirety as a matter of law. Moreover, to the extent that the NRC failed in its mission to protect public health and safety - and the environment as a whole in issuance of a "flawed" EIS in this matter - the NRC is requested to self-identify - to the NRC OIG accordingly. (0010-7 [Saporito, Thomas])

**Comment:** The NRC's EIS is <u>flawed</u> insofar as the EIS wholly relied upon the FPSC's "NEED" determination in authorizing FPL's COL and other licenses for the construction and operation of the proposed Turkey Point Nuclear Units 6 & 7 near Homestead, Florida. In so doing - the <u>NRC</u> jeopardized public health and safety and failed to protect the environment as a matter of law - and therein - violated the agency's mission statement. Thus, the NRC OIG must investigate the NRC in this instance as a matter of law accordingly. (0010-8 [Saporito, Thomas])

**Comment:** In conclusion, it is Greenpeace's view that the NRC's Environmental Impact Statement for Combined Licenses (COLs) for Turkey Point Nuclear Plant Units 6 and 7, Draft Report for Comment (NUREG-2176) should be pulled from public consideration unless and until the footnotes in the document actually work. I am amazed that the NRC even allowed the Draft EIS to see the light of day with every footnote hidden behind a fire wall. It is both a measure of the extent to which the NRC is captured and a measure of the disdain it has for the law and the public it supposedly serves. If NRC fails to withdraw and repair the document, I fail to see how the agency can conclude that the public has been given an adequate opportunity to comment. As the OIG Report reported, "NRC ought to break down the information 'in a common sense approach so the average person can do a quick read and learn how they may be impacted by the action." (<u>http://pbadupws.nrc.gov/docs/ML1323/ML13232A192.pdf</u>) The NRC has failed to produce an EIS for the proposed nuclear reactors at Turkey Point that is easily amenable to public review. (**0716-12** [Riccio, Jim])

**Comment:** The U.S. Nuclear Regulatory Commission (NRC) has once again displayed its disdain for both the National Environmental Policy Act (NEPA) and the public it supposedly serves. The NRC's failure to comply with the terms of NEPA as well as own regulations in the preparation of environmental impact statements was the subject of a 2013 NRC Office of the Inspector General (OIG) Report. (<u>http://pbadupws.nrc.gov/docs/ML1323/ML13232A192.pdf</u>) (**0716-2** [Riccio, Jim])

**Comment:** The OIG report found that NRC's NEPA documentation "does not clearly present, in an accessible way, the proposed action, alternatives, and conclusions to stakeholders" and "undermines its extensive efforts to be clear, open, and transparent." OIG Report at 12. The OIG criticized NRC's EIS documents for being "lengthy and complex" and "overwhelming to the average person." OIG Report at 7, 10-15.

(<u>http://pbadupws.nrc.gov/docs/ML1323/ML13232A192.pdf</u>) The OIG's criticisms were not meant as a road map for continued NRC malfeasance. (**0716-3** [Riccio, Jim])

**Response:** The comments refer to a 2013 report of the NRC Office of the Inspector General (OIG), "Audit of NRC's Compliance With 10 CFR Part 51 Relative to Environmental Impact Statements," OIG-13-A-20, dated August 20, 2013 (NRC 2013-TN4804). The portions of the OIG report to which the comment refers focus on (1) the record of decision (ROD) (OIG Report at 7, 10-11) and (2) the model format for an EIS in 10 CFR Part 51, Appendix A (OIG Report at 12-15). Neither the NRC nor the U.S. Army Corps of Engineers (USACE) has issued a ROD on the proposed action, and the NRC fully intends to comply with the NRC regulations that govern the issuance of RODs in 10 CFR 51.102 and 51.103. The NRC staff took the appropriate steps to address recommendations expressed in the report. Members of the public can review how the staff responded to the recommendations on the OIG website at http://www.nrc.gov/reading-rm/doc-collections/insp-gen/2013/. Any additional inquires and/or follow up regarding this case should be directed to the NRC's OIG at 1-800-233-3497. No changes to the EIS were made as a result of this comment.

**Comment:** *CWA 404 Permit NEPA Documentation:* EPA understands that the NRC is addressing impacts of the onsite facility, and that offsite facilities, such as the transmission lines and other related facilities, will not be considered in detail for the purposes of this EIS. The EPA also understands that the USACE intends to adopt the NRC's EIS for the purposes of their CWA Section 404 permit action. However, many of the associated and connected actions, such as construction of the transmission lines, are not considered in the NRC's EIS. For the purposes of permit issuance, the USACE should state how they plan to address associated NEPA documentation for these offsite facilities, as those impacts are directly related to this project. NEPA coverage for these permit actions should be included within NRC's FEIS.

**Recommendations:** EPA recommends that the NRC document the USACE intentions for addressing their NEPA documentation and timing with NRC's FEIS and permit issuance. The FEIS should include a mitigation plan which details how the proposed mitigation is in compliance with the <u>Federal Compensatory Mitigation Rule</u>, dated April 2008. (**0617-1-34** [Mueller, Heinz J.])

**Response:** The final EIS does provide a NEPA alternatives analysis for the transmission corridor alignment alternatives, see Appendix K. The USACE will conduct its Least Environmentally Damaging Practicable Alternative (LEDPA) analysis and public interest review (PIR) in its ROD and will potentially provide the draft LEDPA/PIR for public review and comment. The final EIS addresses mitigation measures, including avoiding, minimizing, rectifying, reducing, eliminating, and compensating for impacts to the extent required by the NEPA statute (42 U.S.C. Section 4321 et seq.), the Council on Environmental Quality (CEQ) regulations at 40 CFR Parts 1500-1508, and CEQ guidance (e.g., CEQ January 14, 2011 Memorandum on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact). These NEPA authorities and guidance do not require an action agency to detail how proposed mitigation is in compliance with 33 CFR Part 332 in the final EIS. The USACE will review the sufficiency of the proposed compensatory mitigation for unavoidable losses of aquatic resources at the appropriate point in the Clean Water Act Section 404(b)(1) Guidelines process, which is after avoidance and minimization. 33 CFR Section 332.1(c). The Corps will determine the LEDPA and determine the sufficiency of the proposed mitigation plan pursuant to 33 CFR Part 332 in its ROD.

**Comment:** DEIS Section 1.3, Page 1-9, Lines 25-28: The DEIS states: "The purpose and need of the NRC proposed action—NRC authorization of the construction and operation of two AP1000 units at the Turkey Point site—is to provide additional baseload electrical generation capacity for use in the FPL service territory." ER Subsection 1.1.1, Purpose and Need, states: "FPL's purpose is to provide additional baseload generation to maintain system reliability, increase fuel diversity, and allow progress toward meaningful CO<sub>2</sub> emissions reductions." (0619-3-1 [Maher, William])

**Response:** The comment offers a more detailed purpose and need statement written in the applicant's ER for the proposed Turkey Point Units 6 and 7 (COL Application Part 3). While the comment does provide more detail regarding the overall purpose and need for the application, the staff thinks the purpose and need as stated in the EIS is sufficient. Furthermore, the NRC does not promote any particular form of energy generation, including nuclear. No changes were made to the EIS.

**Comment:** The EPA has numerous concerns regarding the analyses, data and mitigation required for the CWA Section 404 permitting application. We noted a number of details and data that need to be clarified, with additional information provided to the EPA prior to the publication

of the FEIS, in order for the FEIS to meet the needs of all the project's permitting requirements. The EPA reviewed the permit application number 2009-02417(SP-MLC) submitted to the U.S. Anny Corps of Engineers (USACE} by Florida Power & Light (FPL), and responded in writing on April 9, 2015 and May 4, 2015. EPA's letters state our CWA Section 404 concerns regarding the proposed project. These comments should be considered and responded to by the project team, with further information provided in the FEIS. (**0617-1-5** [Mueller, Heinz J.])

**Response:** The Corps is in receipt of the EPA comments dated April 9, 2015 and May 4, 2015. The Corps will review the sufficiency of the proposed compensatory mitigation for unavoidable losses of aquatic resources at the appropriate point in the Clean Water Act Section 404(b)(1) Guidelines process, which is after avoidance and minimization. 33 C.F.R. Section 332.1(c). The Corps will determine the Least Environmentally Damaging Practicable Alternative and determine the sufficiency of the proposed mitigation plan pursuant to 33 C.F.R. Part 332 in its Record of Decision.

# E.2.3 Comments Concerning Site Layout and Design

**Comment:** There are instances in the DEIS where the reclaimed water pipeline is not correctly illustrated. Instances in the DEIS include: a. DEIS Subsection 2.2.2.1, Page 2-16, Figure 2-5: DEIS Figure 2-5 contains the following inconsistencies: i. A reclaimed water pipeline route is illustrated that does not take into account the width of the corridor for the northern section of the pipeline as it approaches the Miami-Dade County WASD. ER Figure 2.2-5 shows the pipeline corridor in this section to be 1 mile wide. ii. The reclaimed water pipeline route is illustrated following the transmission line corridor as it approaches the Turkey Point site. ER Figure 2.2-3 shows the pipeline route following the L-31 E canal south until it enters the RWTF. b. DEIS Subsection 3.2.2, Page 3-7, Figure 3-4: DEIS Figure 3-4 has the reclaimed water pipeline exiting the Reclaimed Water Treatment Facility but also has a reclaimed water pipeline along 344th St. ER Figure 2.2-3 illustrates the current configuration of the reclaimed water pipeline route which does not include the routing along 344th Street. c. DEIS Appendix F-3, Section 3.1.1, Page 3-4, Figure 3-3: Appendix F-3 Figure 3-3, illustrates the reclaimed water pipeline as it approaches the RWTF from the north and is not shown correctly. ER Figure 2.2-3 shows the pipeline following the L-31 E canal south until it enters the RWTF. (0619-1-14 [Maher, William])

**Comment:** DEIS Subsection 3.2.2.2, Page 3-10, Lines 13-14; Appendix F-3, Subsection 3.1.1.1, Page 3-5, Lines 34-35; and Appendix F-4, Subsection 2.3.4, Pages 2-9/2-10, Lines 40/1: DEIS (Subsection 3.2.2.2) states: "A typical injection well steel casing would be lined with...with grout in the annulus..." Similar descriptions occur in Appendix F-3 (Subsection 3.1.1.1) and Appendix F-4 (Subsection 2.3.4). In contrast, in a letter dated April 22, 2014, FPL submitted a supplemental response to NRC Request for Additional Information Letter No. 72 (eRAI 6985), ML14113A411, which states: "The annular space...will be filled with a non-hazardous corrosion inhibitor (e.g., one percent Baracor 100 solution)..." This supplemental response indicates that the annular space will be lined with a non-hazardous corrosion inhibitor. Additionally, ER Figure 3.4-3 illustrates that the annular space is filled with "1% Baracor 100 solution". (emphasis added) (0619-3-18 [Maher, William])

**Comment:** DEIS Subsection 3.2.2.3, Page 3-16, Lines 23-25: The DEIS states: "FPL plans to build...It would be sized to serve the operational workforce of both units (approximately **500** workers)...workforce expected to be onsite during an **outage (approximately 1,000 workers)**." The operational workforce and outage workforce numbers should reflect the values indicated in the supporting documentation. ER Subsection 3.10.3 states: "... it is estimated that the onsite operations workforce would be 403 personnel for each unit, or **806** personnel..." Additionally,

ER Subsection 5.8.2 states: "Refueling outages for each unit would occur every 18 months, last approximately 30 days, and require **the addition of approximately 600-1000** temporary workers." (emphasis added) (**0619-3-19** [Maher, William])

**Comment:** DEIS Subsection 3.4.4.2, Page 3-38/3-39, Table 3-5: DEIS Table 3-5 reflect constituents' concentrations (or stated value in the case of conductivity) that are not consistent with those reported in ER Table 3.6-3 for saltwater. These include: Nitrate as N; Total Organic Compounds, Total Dissolved Solids; Barium; Copper; Silica as SiO2; and conductivity. The listed sources for DEIS Table 3-5 are: FPL 2014-TN4058 (ER Revision 6) and FPL 2012-TN263 (FPL response to RAI No. 4.2-2). The listed constituents' concentrations (or stated value in the case of conductivity) are consistent with DEIS reference FPL 2012-TN263. However, subsequent to the submission of RAI response 4.2-2, the values were revised as reflected in ER Revision 6. (0619-3-20 [Maher, William])

**Comment:** DEIS Subsection 3.4.4.3, Page 3-39, Lines 4-7: The DEIS states: "Based on four operating hours per month for each engine, the estimated annual emissions...and **24,004 lb of hydrocarbons and nitrogen oxides** (FPL 2014-TN4058)." ER Table 3.6-4 lists 11.83 tons/year which is equivalent **to 23,660** lbs. (11.83 tons x 2000 lbs/tons = 23,660 lbs.). (emphasis added) (**0619-3-21** [Maher, William])

**Response:** EIS Figures 2-5 and 3-4, Table 3-5, and text in Sections 3.2 and 3.4 were revised to incorporate the identified changes. Appendices F-3 and F-4 contain species and habitat consultation documents submitted to the National Marine Fisheries Service (NMFS) as part of Endangered Species Act (ESA) Section 7 consultation and Magnuson-Stevens Act Essential Fish Habitat (EFH) consultation. Once consultation documents are submitted to the regulatory agency they cannot be modified. No changes were made to the submitted consultation documents as a result of these comments.

**Comment:** And we have extra barriers and defenses in place to make sure that that can't happen here. But that doesn't mean that we can't learn from it. And we did. And we've made further upgrades and further modifications, not just to our procedures but to our actual plant equipment. We've turned Turkey Point and the future designs into basically a plug-and-play type of design. So now we don't just look at, hey, what's the worst hypothetical thing that can happen. We try to not even look at the what-ifs. We just say, if it happens, how do we mitigate it. We've implemented new designs and new strategies, new approaches, to make sure that we have extra margin of safety. (0721-15-12 [Kuraza, Devon])

**Response:** This comment relates to how the site layout and design developed by FPL for the Turkey Point site would prevent the kind of accident that happened at Fukushima from happening at the Turkey Point site. Site layout and design are discussed in Chapter 3 of the EIS, but this comment relates to safe operation of the proposed units and, as such, is outside the scope of the environmental review. A safety assessment for the proposed licensing action was provided as part of the application. The NRC is developing a Safety Evaluation Report that will analyze all aspects of reactor and operational safety for the proposed units; this document is slated to be issued in November 2016 and can found on the NRC's Turkey Point homepage (http://www.nrc.gov/reactors/new-reactors/col/turkey-point/documents.html#nrcDocuments). No changes were made in the EIS as a result of this comment.

**Comment:** DEIS Subsection 3.2.2.1, Page 3-8, Lines 21-22 and DEIS Subsection 3.3.1.1, Page 3-23, Lines 19-20: The DEIS (Subsection 3.2.2.1) states: "The proposed stormwater-discharge locations for the main plant area, laydown area, and administration/training/parking

area are shown on Figure 3-4." Additionally, the DEIS (Subsection 3.3.1.1) states: "EIS Section 3.2.2.1 provides a description of the drainage system and Figure 3-4 shows the stormwater outfall locations." The text indicates that stormwater discharge locations and stormwater outfall locations are shown on Figure 3-4. However, neither the stormwater discharge locations nor the stormwater outfall locations are shown on this figure. (**0619-3-17** [Maher, William])

**Response:** The text in Sections 3.2 and 3.3 of the EIS were revised to delete the reference to Figure 3-4.

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 3.2.2.3, Page 3-18, Table 3-2: The total length of the "Clear Sky-Turkey Point" route for the East Corridor is listed as **0.4 miles**. ER Subsection 3.7.2: In the first paragraph of ER Subsection 3.7.2, the length of the "Clear Sky-Turkey Point (230 kV)" transmission line is characterized as **0.5 miles**. (**0619-2-23** [Maher, William])

**Response:** Table 3-2 has been revised to be consistent with Revision 6 of the ER.

### E.2.4 Comments Concerning Land Use - Site and Vicinity

**Comment:** There are two national parks, an aquatic preserve, a wetland preserve and a national wildlife refuge within six miles of the proposed expansion site. Obviously an expansion of Turkey Point could jeopardize the area's habitat, endangering wildlife including a wide range of federally protected endangered species. The Nuclear Regulatory Commission's rules state that "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." The area certainly fits the accepted criteria for "unsuitable" and the plan for "unacceptable impacts". (0463-5 [Gross, Cheryl A.])

**Response:** The comment suggests that the ecological costs of the proposed action, in combination with the site's proximity to nearby public lands, are so high as to make the site unsuitable for nuclear power. The principal costs and benefits of the proposed action are summarized in Chapter 10 of the EIS. The summary is derived from careful assessment of ecological impacts across the terrestrial and aquatic environmental interfaces affected by the action during construction (Section 4.3) and during operations (Section 5.3). In addition, the cumulative terrestrial and aquatic ecologic impacts of the action are presented in Chapter 7. These impact discussions frame the assessment of overall project benefits and costs that are within the staff's scope to assess. The NRC staff determined that the overall benefits of the proposed action outweigh the expected environmental costs. No changes to the EIS were made as a result of this comment.

Comment: The impacts of additional roads and pads [is] unacceptable. (0245-6 [Lindsey, Jerrie])

**Comment:** It will be necessary to fill in our precious wetlands, build new roads, bridges, new electrical transmission line corridors etc. all which threaten to degrade the restoration efforts of recently carried out CERP projects and perhaps also threaten to damage the very fragile marine ecosystems of Biscayne National Park! (0340-4 [Tweeton, Tanya])

**Response:** These comments express opposition to the roads and transmission tower pads that are part of the proposed project. The impacts of building roads and transmission lines are described in Section 4.1 and 4.3.1. No changes were made to the EIS as a result of these comments.

Comment: Miami-Dade County's Environmentally Endangered Lands (EEL)[.] The NPS supports the Miami-Dade County's request that certain FPL owned land be transferred and/or otherwise made available through easements to the County's Environmentally Endangered Lands (EEL) Program's South Dade Wetlands Project Area. This request was outlined in letter from George M. Burgess, County Manager, to FPL dated April 22, 2010. EEL was approved by Miami-Dade County voters in 1990 and was created to "acquire, preserve, enhance, restore, conserve, and maintain environmentally-endangered lands for the benefit of present and future generations." According to the County, over 19,500 acres of land has been conserved since the establishment of the EEL program in 1990. The letter also identified that FPL owns 3.388 acres of non-mitigation lands that are on the EEL list. FPL's proposed mitigation plan indicates that they would dedicate 812 acres of land outside of mitigation banks for conservation. Importantly, the County's EEL map identifies conservation priority lands west of the Biscayne NP contained within the Biscayne Bay Greenprint (shown in Figure 2 [Biscayne Bay Greenprint map showing BNP adjacent lands protection and overall conservation priorities]). We encourage close consideration of the County's request that FPL's entire 3,388 acres be given to EEL as a part of their mitigation package. Additionally, we encourage FPL to create a restoration fund to combat invasive species, reverse salt water intrusion, and restore the full ecological function of these lands. (0622-2-8 [Austin, Stan])

**Response:** The commenter presents specific recommended mitigation measures for wetland impacts resulting from building the proposed project. The applicant, FPL, has proposed a series of specific wetland mitigation measures which are described in Section 4.3.1.6 of the EIS. The review team does not itself impose natural resources mitigation requirements on the applicant, but in its assessment does account for the mitigation measures that the applicant develops in conjunction with other regulatory agencies. No change was made to the EIS as a result of this comment.

**Comment:** There are instances in the DEIS where there are inconsistencies and/or discrepancies relating to authorizations, permitting and certifications. Instances in the DEIS include (emphasis added):...DEIS Subsection 5.1.1.1, Page 5-3, Lines 28-29: The DEIS states: "The applicant would be required to obtain a Coastal Zone Consistency Determination from the State of Florida prior to initiating work." As noted in the Conditions of Certification issued by the State of Florida Department of Environmental Protection, Section A, Subsection XXIII: "Pursuant to Sections 373.428 and 403.511, F.S., certification of the Certified Facilities constitutes the State's concurrence that the licensed activity or use is consistent with the federally approved program under the Florida Coastal Management Act." (0619-2-11 [Maher, William])

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Section 2.1, Page 2-1, Lines 35-36 "The location for the proposed Units 6 and 7 is within portions of Sections 33 and 34 of Township **58S** Range 40E (FPL 2014-TN4058)" ER Section 2.1 "The Units 6 & 7 plant area would be located in portions of Sections 33 and 34 of Township **57S**, Range 40E." (**0619-2-18** [Maher, William])

**Comment:** There are instances in the DEIS with respect to the presented land use values in their respective tables, which are inconsistent with the cited source or not current with the most recent documentation/reference. Instances in the DEIS include (emphasis added):...DEIS Subsection 4.1.1.1, Pages 4-5 and 4-6, Table 4-1: DEIS Table 4-1 reports the disturbed area acreage for the Turkey Point Site. The following acreage values do not reflect the values in ER Table 4.3-1 Revision 6, but rather reflects those of ER Table 4.3-1 Revision 4 prior to the relocation of the FPL Reclaimed Wastewater-Treatment Facility: i. The following "FPL Reclaimed Wastewater-Treatment Facility" FLUCFCS codes and associated acreages are

reported (612B: 42.82 acres; 617: 0.78 acres; and 814: 0.31 acres). ER Table 4.3-1, Revision 6, reports the same facility with FLUCFCS codes and associated acreages as (437: 7.79 acres; 510: 3.07 acres; 511: 0.30 acres: 612-B: 19.80 acres; 619: 0.61 acres; 619-AP: 0.16 acres; 6411: 11.93 acres; and 814: 0.26 acres). ii. Additionally, FLUCFCS land-use codes and acreages are reported in DEIS Table 4-1 for disturbed areas for the "Treated Reclaimed Delivery Pipelines" category. Per note in ER Table 4.3-1, Revision 6: "The treated reclaimed water supply pipeline is now fully within the heavy haul road disturbed area and is not separately considered". g. DEIS Subsection 4.1.1.1, Page 4-7, Table 4-2: DEIS Table 4-2 contains acreages for the project elements by major FLUCFCS codes. The following inconsistencies with the cited source, DEIS Table 4-1, and/or the corresponding source for DEIS Table 4-1, ER Table 4.3-1, are noted: i. The "Heavy Haul Roads" project element, under code 500, 0.30 acres is listed; and under code 700, 0.21 acres is listed. DEIS Table 4-1 and ER Table 4.3-1 both report 0.15 acres under code 500. The summed values for code 700 listed in both DEIS Table 4-1 and ER Table 4.3-1 is 0.22 acres for the same project element, ii. The "Equipment Barge-Unloading Area" project element, under code 600, 0.73 acres is listed. Both DEIS Table 4-1 and ER Table 4.3-1 reports this acreage under code 800 not 600. iii. The "Radial Collector Well Delivery Pipeline" project element does not have acreage listed under code 700, while both DEIS Table 4-1 and ER Table 4.3-1, report 9.21 acres under code 700 for the same project element. iv. The acreages for the "FPL Reclaimed Wastewater Treatment Facility" and "Treated Wastewater Delivery Pipelines" project elements do not reflect the revised location of the FPL Reclaimed Water Treatment Facility detailed in ER Table 4.3-1, Revision 6. (0619-2-3 [Maher, William])

**Comment:** There are instances in the DEIS with respect to the presented land use values in their respective tables, which are inconsistent with the cited source or not current with the most recent documentation/reference. Instances in the DEIS include (emphasis added):...h. DEIS Subsection 4.1.1.3, Pages 4-10 and 4-11, Table 4-3: DEIS Table 4-3 contains acreage values by FLUCFCS codes for the reclaimed water and potable water pipelines. The following inconsistencies are noted with the source cited for DEIS Table 4-3, (FPL 2014-TN4058): i. The acreages for the "Reclaimed Wastewater Pipeline" do not reflect the revised location of the FPL Reclaimed Water Treatment Facility detailed in ER Table 4.3-1, Revision 6, but rather reflect those of the initial location with the acreages and percentages matching ER Table 4.3-1, Revision 4. ii. The acreages for the "Potable Water Pipeline" do not reflect the values in ER Table 4.3-1 Revision 6, but rather reflects those of ER Table 4.3-1 Revision 4. i. DEIS Subsection 4.1.1.3, Pages 4-12 and 4-13, Table 4-4: DEIS Table 4-4 reports acreage values by FLUCFCS codes for the access roads. The following inconsistency is noted with the source cited for DEIS Table 4-4, (FPL 2014-TN4058): i. For "SW 359th Ave. East", DEIS Table 4-4 does not list FLUCFCS code 534 "Reservoirs Less Than 10 Acres (4 Hectares) Which Are Dominant Features" and its corresponding acreage and percent total. However, ER Revision 6 Table 2.2-7, lists FLUCFCS code 534, under the "SW 359th Ave. East" area with a corresponding acreage and percent total of 0.06 and 0.13, respectively, j. DEIS Subsection 4.1.2.1, Page 4-16 through 4-19, Table 4-5: DEIS Table 4-5 contains acreages for the transmission line routes by FLUCFCS codes. The following inconsistencies with the source cited in the text for DEIS Table 4-5, (FPL 2014-TN4058) are noted: i. DEIS Table 4-5 contains information listed as "Clear Sky to Levee 2nd Leg (Consensus Corridor)." From ER Table 2.2-3, these acreages are actually acreages from "Clear Sky to Levee 2nd Leg (Secondary Corridor)." The West Secondary Corridor was removed from consideration in 2013. [DEIS Reference (FPL 2013-TN2941)]. Acreages should be provided for the West Consensus Corridor, which are found in DEIS reference (FPL2013-TN2941). ii. DEIS Table 4-5 lists the total acres for the proposed Clear Sky to Levee 1st Leg as 1378.9. ER Table 2.2-3 and DEIS Table 2-5 list the correct total acreage, 1365.43, for the same route. Seven of the values for the Clear Sky to

Levee 1st Leg are inconsistent with the ER, which is cited as the reference. DEIS Table 4-5 for codes 437, 510, 511, 612-B, 619, 6411, and 814 lists 0.84, 219.01, 0.92, 73.16, 57.07, 11.47 and 12.27 respectively, while the values listed on ER Table 2.2-3 for codes 437, 510, 511, 612-B, 619, 6411, and 814 are 0.08, 218.11, 0.67, 63.96, 56.46, 9.97, and 12.03, respectively. (emphasis added) iii. DEIS Table 4-5 contains information listed as "Clear Sky to Levee 2nd Leg (Preferred Option). There is one category missing-category 619, Exotic Wetlands Hardwood, which should be listed with an acreage value of 74.62 acres.[ ER Table 2.2-3, DEIS reference (FPL2014-TN4058)]. iv. DEIS Table 4-5 does not contain acreages for the Clear Sky to Levee 3rd Leg (Consensus Corridor) per DEIS Reference (FPL 2013-TN2941). (**0619-2-4** [Maher, William])

**Comment:** There are instances in the DEIS where there are inconsistencies and/or discrepancies relating to authorizations, permitting and certifications. Instances in the DEIS include (emphasis added): a. DEIS Subsection 4.1.2.1, Page 4-20, Lines 5-7: The DEIS states: "The State certification review process also includes a determination of land-use consistency with local land-use plans and zoning ordinances (Fla. Stat. 29-403.50665-TN1470)." However, under the Power Plant Siting Act, land use consistency determination does not apply to transmission lines. The land use consistency determination made was for the site and associated facilities that constitute development under state law. Transmission lines are not "development" under Florida law and, therefore, local government land use and zoning ordinances are not applicable. See 403.50665 and 380.04 Fla. Stat. (**0619-2-8** [Maher, William])

**Comment:** DEIS Subsection 2.2.1.6, Page 2-14, Lines 12-13: The DEIS states: "Agricultural land composes approximately **9 percent (3,500 ac)** of land use within the 6 mi vicinity of the Turkey Point site (Figure 2-4; **Table 2-2**)." DEIS Subsection 2.2.1.6, page 2-8,Table 2-2 details the acreage related to the Turkey Point site, where no agricultural land use is designated, rather than the 6 mi vicinity. DEIS Subsection 2.2.1.6, page 2-8/2-10, **Table 2-3**, contains the agricultural land acreage within the 6 mi vicinity. However, the total land use acreage depicted in DEIS Table 2-3 and ER Table 2.2-1 is 62,941.15 acres; 9 percent of 62,941.15 acres is approximately 5,665 acres not 3,500 acres (3,500 acres is approximately 5.6 percent). From DEIS Table 2-3 and ER Table 2.2-1, agricultural land composes approximately **4.5 percent (2,850 ac)**. (emphasis added) (**0619-3-3** [Maher, William])

**Comment:** DEIS Subsection 2.2.2.3, Page 2-20, Lines 25-27: The DEIS states: "Existing land uses in the area to be disturbed by the potable water pipelines would be approximately **20** percent agricultural land, **19** percent urban or built-up land, and approximately **30** percent marsh and wetland (FPL 2014-TN4058)." The cited reference in the DEIS text, (FPL 2014-TN4058), is FPL's ER Revision 6. Taking into consideration the acreages in DEIS Subsection 2.2.3, page 2-20, Table 2-6 and ER Table 2.2-6, the percentages are approximately 21 percent for agricultural land; **6** percent for urban or build-up; and **49** percent for marsh and wetland. (emphasis added) (**0619-3-5** [Maher, William])

**Comment:** DEIS Subsection 2.2.3.2, Page 2-25, Lines 9-11: The DEIS states: "Most of this land is wetland...urban or built-up lands account for approximately **15** percent (FPL 2014-TN4058)." Taking into consideration the acreages in DEIS Subsection 2.2.3, page 2-23, Table 2-7 and ER Table 2.2-8, the percentage for urban or build-up is approximately **13** percent. (emphasis added) (**0619-3-6** [Maher, William])

**Response:** The review team verified the suggested changes in these comments and revised the EIS accordingly. The conclusions of the EIS were not altered by this information.

**Comment:** It does not appear that potential adverse impacts to CERP were adequately evaluated during the DEIS process. CERP was approved by the U.S. Congress and has required and will require significant funding in the future for the implementation of the BBCW project. Therefore, the EIS should re-evaluate the impacts of the construction and operation of the proposed RCW to evaluate the project consistency with CERP or a supplemental EIS should be performed. (0110-1-11 [Hefty, Lee N.])

**Response:** The EIS presents the impacts of the construction and operation of the project on sensitive wetlands and wildlife in Section 4.3 as part of the discussion of ecological impacts of preconstruction/construction and in Section 5.3 as part of the discussion of ecological impacts of operation. Interactions between actions planned under the Comprehensive Everglades Restoration Plan (CERP) and the actions proposed by FPL for Turkey Point Units 6 and 7 are discussed in Sections 7.2 (Water) and 7.3 (Ecology).

The review team has expanded the discussion in the EIS regarding how the proposed action could potentially conflict with the CERP. The expanded discussion has not altered the conclusions regarding potential impacts on land use or terrestrial ecology in the EIS.

**Comment:** Miami-Dade County notes that the discussion on MDC's CDMP in Section 2.2.1.4 appears to be limited to selected policies within the Land Use Element; no references or summaries are provided for other CDMP elements. Miami-Dade County asks whether the NRC specifically considered the consistency of the proposed project with Land Use Element Policy LU-3A, which requires consistency with all elements of the CDMP, including Objectives CON-4, CON-7, and CON-9 of the Conservation, Aquifer Recharge and Drainage and Coastal Management Elements, as well as with all applicable environmental regulations; the referenced objectives and policies address protection of the aquatic environment and endangered and threatened species and consistency with the Comprehensive Everglades Restoration Program. If so, the NRC should provide citations from the DEIS where this information was presented. If the NRC did not consider the consistency of the proposed project with Land Use Element Policy LU-3A, including consistency with the referenced policies of the Conservation, Aquifer Recharge and Drainage Element, please provide an explanation for why this analysis was not performed. (0110-1-4 [Hefty, Lee N.])

**Response:** The land use reviewers on the review team considered the entirety of the MDC CDMP when arriving at the conclusions regarding land use conflicts in Sections 4.1 and 5.1. The review team recognizes that the CDMP also includes issues that fall outside of traditional land use considerations. The EIS evaluates the impact of building and operating the proposed units on water resources in Sections 4.3 and 5.3 and on ecological resources including wetlands in Sections 4.4 and 5.4. No changes were made to the EIS in response to this comment.

**Comment:** DEIS Subsection 2.2.2.3, Page 2-20, Lines 12-15: The DEIS states: "The reclaimed wastewater pipelines from the FPL RWTF would be routed south along the eastern side of the cooling canals to the makeup-water reservoir, **traversing a mangrove forest**..." The Turkey Point Units 6 & 7 Mitigation Plan, Revision 2, DEIS Reference (FPL 2011-TN1012), Section 2.3.2 states: "The treated reclaimed water pipeline between the FPL reclaimed water treatment facility potential alternative location and the Site would be **installed within construction access roadways**, avoiding additional wetland impact." (emphasis added) (**0619-3-4** [Maher, William])

**Response:** Data on acreages of terrestrial habitat affected by pipeline installation have been updated in Sections 4.1 and 4.3.1 of the EIS. Additionally, the review team has added information about in situ restoration activities planned for the reclaimed water pipeline to Section 4.1 of the EIS to describe why some impacts from this pipeline can be considered temporary. However, the review team expects forested wetlands (i.e., mangroves) to be converted to herbaceous wetlands and to remain so for the operational life of the pipelines because standard practice dictates exclusion of woody vegetation from pipeline corridors due to root intrusion and subsequent maintenance issues. Although no net loss of wetlands would occur within the reclaimed water pipeline corridors, the conversion of forested wetlands to herbaceous wetlands within the corridors must be regarded as a permanent impact (at least for the operational life of the pipelines). The updated data do not alter any conclusions presented in the EIS.

**Comment:** The DEIS text refers to the "**9,640 ac** Turkey Point site". The reference listed in the DEIS is FPL 2014-TN4058, FPL's ER. The ER text denotes this same area as the "approximately **9400-ac** Turkey Point plant property". (emphasis added) Instances in the DEIS include: a. DEIS Section 1.0, Page 1-1, Line 12. b. DEIS Section 2.1, Page 2-1, Line 23. c. DEIS Section 3.1, Page 3-1, Line 30. d. DEIS Section 10.0, Page 10-1, Line 12. e. DEIS Appendix F-3, Section 1.0, Page 1-2, Line 10. References to the approximate **9400-ac** Turkey Point plant property in the ER include (emphasis added): a. ER Subsection 1.1.2.2. b. ER Section 2.1. c. ER Subsection 2.2.1.1.1. d. ER Table 2.2-1 which lists **9459.94** acres as total land for Turkey Point Property. (**0619-1-17** [Maher, William])

**Response:** The review team has reviewed all acreage figure information and updated acreage figures as appropriate in Chapters 1 and 3 and Sections 2.4, 4.3, and 5.3 of the EIS. The updated acreage figures did not alter the conclusions presented in the EIS.

### E.2.5 Comments Concerning Land Use - Transmission Lines

**Comment:** I am opposed to above ground transmission line towers being installed along roads where citizens live. (0007-2 [Johnson, Nadine])

**Comment:** I was quite surprised this plan was going through given the public hearings and continued comments about...the overwhelming opposition to high voltage transmission lines running the US1 corridor right near residential neighborhoods. (**0008-2** [Finver, Jody])

**Comment:** Second, the infrastructure necessary to support this project, including power cables traversing some of the best communities in South Florida, will lower property values and increase health concerns for our families. (**0024-2** [Roque, Julio])

**Comment:** and the cities along US 1 where fp&l wants to put the huge transmission lines is being fought in court. (**0055-6** [Roedel, Kitty])

**Comment:** There are other sites where high voltage poles can be placed that would cause less impact than placement so close to such a historically significant neighborhood as the Miami Roads neighborhood. The placement of these poles and lines are not even in sync with the presently existing criteria governing their building or placement. (**0073-3** [Commenters, Multiple])

**Comment:** I am also concerned about the loss of value of our homes due the close proximity of these lines through our neighborhood. Should the lines be placed in the neighborhood, they

should be buried underground to a level that will not pose a hazard to the neighborhood or those traversing the area. (**0073-6** [Commenters, Multiple])

**Comment:** 3. Placing high voltage poles in a historically significant neighborhood such as the Miami Roads or South Miami Avenue Association is not the best of ideas. The placement of these poles in areas where they would cause less impact and where they would synchronize better with presently existing criteria governing their placement. 4. The hazards of 100 foot high electric poles within 50 feet of our homes where hurricanes or tornados could cause massive damage to both life and property by toppling onto roofs and causing fires. (**0077-3** [de Armas, Maria Cristina])

**Comment:** Brickell Neighbors, I oppose the 10 Story Transmission Lines across Brickell Avenue. (**0088-2** [Lange, Alexandra])

**Comment:** In addition to the underestimating the environmental impacts, FPL will degrade the quality of life of people in the pathway of the transmission lines. (**0117-2** [Robertson, Alyce])

**Comment:** My townhouse is less than 250 feet from the 110 foot high transmission lines that will be built to carry the power from these new reactors. The effect upon my property value will not be positive, and FP&L will not reimburse us. (**0205-1** [Hamilton, McHenry])

**Comment:** As a resident of Coconut Grove, I want to express my deep concerns over the power line plans routing over our neighborhood. Health concerns and property value issues should be a consideration when making routing plans. (**0328-1** [Roque, Julio])

**Comment:** I am shocked to hear that FPL is planning to construct two (count them, two) new nuclear reactor units at Turkey Point. This ill-advised and high-risk project will engender miles of 100-foot oversized poles with high-voltage lines throughout Miami-Dade county, including the historic and-at the moment-desirable neighborhood of The Roads. (0339-2 [Provost, Allan])

**Comment:** I live in Miami in an area called The Roads. We will be directly impacted by the FPL high voltage lines. (0372-1 [Ortiz, Natalia])

**Comment:** I oppose the expansion of the Turkey Point Nuclear Plant if it causes the placement of above ground power lines through any residential neighborhoods. (**0377-1** [Hughes, David])

**Comment:** I oppose FPL's proposal to string a high-voltage, aboveground power line along US Hwy One. (0408-1 [Sifko, Basilio])

**Comment:** I worked amicably with FPL on many projects but must express deep and substantial opposition to the installation of high intensity power poles along US 1, a project which will impact the many diverse communities along this corridor and near Turkey Point in Miami-Dade County. (**0510-1** [Langlieb Greer, Evelyn])

**Comment:** Should the lines be placed in the neighborhood, they should be buried underground to a level that will not pose a hazard to the neighborhood or those traversing the area. (**0685-3** [Batista, Carlos])

**Comment:** Also costs to quality of life. I think some of the questions were about these 105 feet --5 foot transmission towers, which, as it happens, would cut my District in half, along commercial and residential corridors. (0721-1-7 [Rodriguez, Jose Javier])

**Comment:** I'm shocked to hear that FP&L is planning to construct two, count them, two, new nuclear reactor units at Turkey Point. This ill-advised and high-risk project will endanger miles with 100 foot oversized poles with high-voltage lines throughout Miami-Dade County, including the historic and at the moment desirable neighborhood of the Roads. Who know what will happen then. Are they going to buy our properties? Are they going to buy all of us out? I doubt it. (0721-26-3 [Koenigsberg, Linda])

**Comment:** Number three is that there are other sites where high voltage poles can be placed that would cause less impact then placement so close to such a historically significant neighborhood as the Miami Roads neighborhood. Now, the placement of these poles and lines aren't even in sync with the present of the existing criteria governing their building or placement. (0721-31-6 [Almirola, Alejandro])

**Response:** These comments express concerns regarding the proposed assemblage and locations of transmission lines to distribute power into Miami-Dade County from proposed Turkey Point Units 6 and 7. The review team considered the environmental impacts of electrical transmission in EIS Section 4.1.2 and 5.1.2 for land use; 4.6 and 5.6 for historic and cultural impacts; 4.4 and 5.4 for socioeconomics impacts; and 5.8 for nonradiological health impacts. Electrical transmission, its siting and safety are outside the regulatory authority of the NRC and, in Florida, are regulated by the Florida Public Service Commission and appropriate state agencies. No changes were made to the EIS as a result of these comments.

**Comment:** My biggest concern with this project is the proposed Power Lines that FPL is not willing to place underground, rather they're willing to place the lives of this community at risk by choosing the cheapest route. Erecting poles 150ft above ground is not only a eye sore but it's also poses a huge risk to the residents of this community during Hurricane Season. We've been fortunate thus far but in the event another Hurricane Andrew were to hit our community there is no guarantee that those poles could survive the devastating impact of high force winds. This poles should automatically be laid underground with FPL paying for the cost which is ultimately paid by the consumers of this community. Expecting municipalities to cover the cost of 8 million dollars per mile is absolutely ludicrous and doing so will most likely result in higher property taxes for the residents of the municipalities affected. (**0034-3** [Rodriguez, Barbara])

**Comment:** Constructing the associated new 110' tall High Voltage Electrical Power Line Transmission towers, exempted from the high velocity hurricane zone requirements of the Florida Building Code, in a location that historically experiences Very High Velocity Hurricane force winds, at 200 foot intervals along the length of US One, the major north -south evacuation route for Dade County, poses unacceptable risks to the population of Dade County. Doing so is simply inviting catastrophe in the event of a natural or man-made disaster requiring evacuation. (**0044-7** [Commenters, Multiple])

**Comment:** In addition to the plants, FPL wants to erect more power lines along US 1. During a hurricane, exposed power lines are the first things to fall. Why are these not being place underground as other new power lines around the state? It is doable, a little more expensive at first to put in but we would have power during bad storms and there would be minimal repair costs, saving money in the long run. (0048-2 [Wegner, Geri])

**Comment:** Hurricane Andrew show me unrivaled destruction I couldn't have imagined nor can I forget if I live for a thousand years, I do seriously believe that if you construct 110 foot high carrier lines along US-1 on purpose, any decent hurricane will down those towers, and endanger millions of citizens[.] (0056-2 [McCall, Eric])

**Comment:** I am concerned about the hazards of 100 foot high electric poles that are within 50 feet of our homes and, in a hurricane or tornado could cause massive damage, including toppling onto rooftops and causing fires. (**0073-4** [Commenters, Multiple])

**Comment:** The Underline is an initiative to transform the land below Miami's Metrorail from the Brickell area to Dadeland South into a 10-mile linear park and urban trail. Miami is one of the country's most dangerous places to bike and walk in the country. The Underline will be Miami's first off-road mobility corridor providing a safe haven for bicyclists and pedestrians, greatly improving our city's bike and pedestrian infrastructure, safety and while also taking cars off our roads improving our traffic problems. What does this have to do with FPL? At the same time the vision for The Underline was ramping up, FPL was finalizing its preferred corridor for transmission line placement - right in the same place as the future Underline. (0076-1 [Daly, Meg])

**Comment:** The towers for the power line will be ten-stories tall (up to 105-feet), 4-feet wide, and placed every 200-400 feet. Moreover, they will not be built to Florida hurricane safety standards. This aspect of FPL's expansion project alone will make it more difficult to create beautiful, urban spaces, like the Underline, that improve public safety. (**0076-3** [Daly, Meg])

**Comment:** Furthermore, 100 foot towers for transmission lines represents old technology and is dangerous. When we went through hurricane Wilma in 2006, only the city of Weston, with underground transmission lines, had power. (**0080-2** [Reiter, Ben])

**Comment:** I sincerely hope you will withdraw your proposal to build additional nuclear plants and to install more giant size transmission poles in South Florida. I live in the City of West Miami and objected to the installation of the poles on SW 62nd avenue to no avail. Many countries in Europe have installed necessary transmission lines underground. What are we waiting for? (0131-1 [Brown, Judith O.])

**Comment:** And the idea to route massive, unsightly power lines through a beautiful part of the city is just tone deaf to the residents of the area. Those power lines can snap when a hurricane hits because they aren't hurricane resistant strength. (0133-3 [Corral, Oscar])

**Comment:** If we have a hurricane and any of these poles fall, who is liable? If it falls on my house, will they fix my house? How long will it take to fix homes, roadways, buildings, etc? We need proof of liability. If placed underground, it should include a maintenance plan and who will pay for that? (**0149-11** [Nelson, Joyce E.])

**Comment:** Why can't the lines be underground. They exist all over the world!!!! There are already plans to do a Green Link for biking and walking under the Metrorail from Dadeland to downtown Miami. The path would be directly next to these huge power poles. Check out the plan on greenlink.org. Has there been a coordinated plan with all projects for US1? Land use and zoning does not recommend this. Coral Gables, Pinecrest, and the City of Miami has filed a lawsuit and others will follow.! (0149-4 [Nelson, Joyce E.])

**Comment:** My street is favored as the "preferred alternative route" for the giant power transmission lines referenced below, which has been approved by Gov. Rick Scott and his entire cabinet. To construct such power lines on a residential street, which combines low-rise condominiums, a church and small businesses, is a complete travesty of justice that endangers our health, welfare and property values. (0184-1 [Perez, Danica])

**Comment:** The proposed towers will create a danger to all those living and working in close proximity to them, they will be an unnecessary eyesore running through some of Miami's nicest neighborhoods, and exponentially increase the traffic situation on US1 during the construction phase. (**0187-5** [Meyer-Steele, Shawn])

Comment: Wires need to be underground. (0334-2 [Crystal, Chris])

**Comment:** Power lines must be underground near or through or neighborhoods! (0377-2 [Hughes, David])

**Comment:** It is wholly unjustifiable to place a high-voltage, aboveground power line along US Hwy 1. FPL has ample resources to place it belowground. The only justification for aboveground placement is to save a few dollars on one-time placement costs at the expense of our communities, which demonstrates FPL's utter contempt for residents who are also its customers. (0408-2 [Sifko, Basilio])

**Comment:** It is dangerous. Traffic accidents are not scripted...they happen. This is why they are called precisely those...accidents. Even reinforced concrete poles crack, break and fall when impacted by tractor-trailers and fuel-laden delivery vehicles traveling at 55 miles per hour, weighing several tons plus the weight of cargo or flammable liquid, namely, gasoline, to the Florida Keys. The assurances of FPL Counsel of absolute safety notwithstanding. (**0408-3** [Sifko, Basilio])

**Comment:** It will negatively affect tourism. Along this same corridor, millions of tourists travel on their way to the world-known and widely visited ...Florida Keys. Imagine a tourist from any city flying into MIA, renting their car and traveling southbound on US Hwy 1. The welcome they would receive to the Florida Keys is a very visible, very unsightly and very dangerous high-voltage, aboveground power line strung for mile after mile. (**0408-4** [Sifko, Basilio])

**Comment:** Homeowners and affected businesses along the proposed route will not watch passively and accept a situation in which a tiny handful of power company executives, who, by virtue of: vast power (by "power" I do not mean electricity); considerable influence at all government levels; and immense economic resources arbitrarily impose their will. We are actively organizing opposition. (0408-6 [Sifko, Basilio])

**Comment:** It would behoove counsel for FPL/NextERA to revisit a court case as old as me: Microwave Communications Inc. vs. (AKA MCI) American Telephone & Telegraph Company (AKA AT&T). The guarrel began in 1963 and the resolution was implemented January 1, 1984. Careful examination strongly suggests similarities. MCI only asked for a license to provide two-way radio communications for truckers traveling Route 66 from Chicago to Joilet, Illinois. AT&T flexed its power, influence and economic resources in opposition. In the final analysis, Judge Harold Greene's decision ended the monopoly privilege enjoyed by AT&T. A monopoly privilege almost exactly as that enjoyed by FPL. I use the term "monopoly" because it is correct. There are substitutes but who among us uses candles to light our home? So we depend on FPL to generate and distribute power...safely. Some of us strongly believe some markets are what economists call "natural monopolies". Best served where the company can operate serving an "economy of scale". We do not seek to remove the privilege FPL enjoys under a monopoly pricing structure. We only ask FPL place its high-voltage power line belowground. FPL's latest Balance Sheet lists the account, "Goodwill & Intangibles", as an asset account with a zero balance. A protracted battle with the entities listed below and the inevitable media exposure will result in, "Goodwill & Intangibles", shifting to the Liabilities section and an

account balance. How much of a balance is contingent upon FPL's intransigence and insistence at aboveground placement. There is a direct relationship between the two; the more FPL insists on aboveground placement, the more FPL's "brand" will suffer. The homeowners who would be adversely affected by this "quick-and-dirty" proposal are actively organizing to assure this proposal never becomes reality. We will do our best to make the proposal so public, and therefore so costly, the "fallout" will render it untenable. US Supreme Court Associate Justice Louis Brandeis was guoted as saying. "the best disinfectant is the sun". We agree and hoping (some of us praying) for bright sunny days until this issue is resolved to the satisfaction of the citizens of Miami-Dade and Monroe Counties. Nature supports our position ... for we are the Sunshine State. The NRC (Nuclear Regulatory Commission), the Florida Department of Tourism, The Florida Public Service Commission, environmentalist organizations, NGO's, affected municipalities and businesses will be contacted. Homeowners of record six city-blocks east and west and north and south will be culled from public records. Direct mail will be used to inform them how and why their property values will drop. Just as important are the residents and "mom-and-pop" businesses of Monroe County, specifically those in the Florida Keys whose primary source of income is tourism. It is they who will suffer the most economically. In the event moral suasion does not convince FPL to recognize right...as well as reality, available legal channels will be used; moratoriums and class-actions are possible eventualities. Preliminary research indicates legal fees alone could rival the marginal difference in underground placement We expect and are prepared for a protracted legal battle given the resources of FPL. Make no mistake there is a countervailing force to FP&L / NextERA's vast resources. It is called Democracy and we will exercise it. Lastly, we will see this ill-conceived, counterproductive and unsafe proposal never becomes reality. (0408-8 [Sifko, Basilio])

Comment: Expand Consideration of Transmission Line Impacts. ... the impacts of FPL's proposed transmission lines are not limited to construction-related disruptions. Comment 17: The final Environmental Impact Statement should disclose risks related to transmission lines not built to Florida hurricane safety standards. The transmission lines associated with this project will not be constructed to conform to Florida's Building Code, which specifically accounts for the high velocity hurricane zones common throughout South Florida. Instead, the transmission lines will be erected according to an industry-created minimum safety standard known as the National Electrical Safety Code (NESC). In short, structures built using NESC standards are significantly less hurricane resistant than structures built to Florida Building Code standards. The NESC is too large to attach to these comments. However, it is contained in the Site Certification Application that FPL submitted to the State of Florida. NESC Table 253-1 shows the load factors for the highest velocity winds contemplated under that code. The table lists the relevant load factor as 1.00. Essentially, a load factor is a safety factor that accounts for construction error and establishes the amount of additional stress from wind, and related swaying, that the structure is able to withstand; designs using this standard will have 60% less loading, and less reliability, than required by building codes which account for high velocity hurricanes. This is a significant concern when many of the transmission poles proposed in the Turkey Point Nuclear Plant Units 6 & 7 application are over ten-stories tall. (0456-24 [Miami, City])

**Comment:** Moreover, the transmission line FPL plans to run through Miami will not be built to Florida hurricane safety standards. In a storm, the ten-story poles could collapse onto homes or the Metrorail. (0515-7 [Regalado, Tomas])

**Comment:** While transmission lines may be an eyesore, that is not the biggest issue with what is being proposed. The biggest issue IMO is that these transmission lines will not even be up to hurricane code (ie able to withstand hurricane force winds). As someone who has lived through

several hurricanes in south florida, this is absolutely a NON-STARTER. I cannot build or remodel a home without it being to code, so FPL should NOT be allowed to construct these without ensuring that they can withstand hurricanes. (**0570-2** [Martinez, Orlando A.])

Comment: Comment 18: The final Environmental Impact Statement should disclose risks related to transmission lines not built to Florida hurricane safety standards. The transmission lines associated with this project will not be constructed to conform to Florida's Building Code, which specifically accounts for the high velocity hurricane zones common throughout South Florida. Instead, the transmission lines will be erected according to an industry-created minimum safety standard known as the National Electrical Safety Code ("NESC"). Structures built using NESC standards are significantly less hurricane resistant than structures built to Florida Building Code standards. The NESC is too large to attach to these comments. However, it is contained in the Site Certification Application that FPL submitted to the State of Florida. NESC Table 253-1 shows the load factors for the highest velocity winds contemplated under that code. The table lists the relevant load factor as 1.00. Essentially, a load factor is a safety factor that accounts for construction error and establishes the amount of additional stress from wind, and related swaying, that the structure is able to withstand; designs using this standard will have 60% less loading, and less reliability, than required by building codes which account for high velocity hurricanes. This is a significant concern when many of the transmission poles proposed in the Turkey Point Nuclear Plant Units 6 & 7 application are over ten-stories tall. (0611-17 [Haber, Matthew S.])

**Comment:** The thought of FPL poles dotting US1 is unbearable. Haunting images in my head, I cannot understand how the poles would even be a consideration. We are the United States, one of the most advanced countries in the world. In other developed countries this issue is dealt by placing the cables underground. How is it possible that we, in the United States, would be taking a step forward with The Underline project and two steps back with how we deal with unsightly, antiquated, industrial-age ideas? (**0616-1** [Puchades, Mary])

**Comment:** In addition the FPL plan requires the building of transmission lines through populous residential areas to downtown Miami. According to an editorial in the Miami Herald, these lines will not be built to Florida hurricane safety standards. Having lived through Hurricane Andrew in 1992, I am appalled by any such plan which would endanger the lives and property of thousands of our citizens. (**0642-4** [Rawlins, Steve])

**Comment:** The proposed transmission lines will not be built to Florida hurricane safety standards. If a tower buckles during a storm, it could destroy the Metrorail and surrounding homes. (0675-5 [Rodriguez, Jose Javier])

**Comment:** Therefore, the solution proposed in #8 [burial of the transmission lines] is not an acceptable alternative to the plan. (**0701-2** [Whitlock, Catherine])

**Comment:** And also, five, I'm concerned about the hazards of 100 foot high electric poles that are within 50 feet of our homes, and a hurricane or a tornado could cause massive damage, you know, toppling these things onto, you know, close by to my house. I live on 20th Road, you know, next to the Shell Gas Station on 20th and Coral Way, and I just think it's just a really bad idea that they're going to put those ugly things that nobody wants, and they're going to crash and ruin our neighborhood. Just terrible. (**0721-31-7** [Almirola, Alejandro])

**Comment:** And the transmission line towers will be ten stories tall and will not be built to Florida Hurricane Safety Standards. If the NRC does not grant the licensing then the transmission lines also will not be built. (0721-4-4 [Regalado, Tomas])

**Comment:** And finally whereas transmission interconnection between the Turkey Point facility and the transmission system will be needed in order to support the electrical supply and reliability means of Miami Dade County customers. (**0723-2-8** [Trowbridge, Mark])

**Response:** These comments express concerns regarding the proposed assemblage, capability, and placement of transmission lines to distribute power into Miami-Dade County from proposed Turkey Point Units 6 and 7. The review team considered the environmental impacts of electrical transmission in EIS Sections 4.1.2 and 5.1.2 for land use; 4.6 and 5.6 for historic and cultural impacts; 4.4 and 5.4 for socioeconomics impacts; and 5.8 for nonradiological health impacts. Electrical transmission, its siting and safety are outside the regulatory authority of the NRC and, in Florida, are regulated by the Florida Public Service Commission and appropriate state agencies. No changes were made to the EIS as a result of these comments.

**Comment:** [I strongly oppose] the installation of the transmission lines through our neighborhoods or the everglades. (**0092-2** [Merino, Miriam])

**Comment:** I recommend that you disapprove any further processing of their Turkey Point Nuclear Power plant expansion proposal for the reasons summarized below 4) The proposed project includes massive new transmission lines through Everglades National Park and the heart of Miami-Dade's densely populated commercial and residential areas on 105-foot tall steel towers. The towers would deface Dixie Highway and traverse residential neighborhoods in Pinecrest, South Miami, Coral Gables, Coconut Grove, and then go along Brickell Avenue on their way to downtown Miami. Apart from their appalling visual impacts, these lines would remove tens of millions annually from the county's tax base. Worse, FPL -- evidently to save costs -- proposes erecting those transmission towers <u>without meeting Florida State hurricane</u> <u>safety standards</u>. FPL did not adequately evaluate the risk of those towers buckling during the region's relatively frequent hurricane force storms. Their location would almost certainly risk those transmission lines and towers falling onto the adjacent MetroRail and surrounding homes. The costs in life and property, not to mention of disruption of transportation and electrical service during the aftermath of a storm would be catastrophic. This cost was not adequately assessed by FPL in their proposal. (**0094-4** [Fairchild, David])

**Comment:** Does the DEIS consider that the area of proposed impact within ENP is a designated UNESCO World Heritage Site in Danger, a Ramsar Wetland of International Importance, a Specially Protected area under the Cartagena Convention and an Outstanding Florida Water and a Miami-Dade County designated Area of Critical Environmental Concern where the proposed roads are specifically prohibited in portions of the proposed corridor? (0110-1-2 [Hefty, Lee N.])

**Comment:** Florida Power & Light plans to erect a series of huge concrete light poles each more than 100 feet tall, with a 35 square foot footprint. These concrete structures are intended to carry the energy created by the new reactors north so the energy can, for the near future at least, be sold. FPL would like to run its gigantic poles through our national park, the Everglades! This would have a huge impact on this national treasure and severely impact the plants and animals in the park., Local cities, as well as citizen groups, have protested the erection of these towers, asking instead that the lines be buried. FPL says it will consider burial only of the local communities provide the money. Although the power is not intended for the citizens in these

cities and the towers provide no benefits to the community, they want us to pay to have the lines buried! Their plan is to run the power towers parallel to US 1, a major thoroughfare for our residents. First, it would run north on the west side of US 1, totally destroying the value of homes nearby. It would continue north, running by the Metrorail, our local mass transit system, a narrow strip of land currently a bicycle path and planned as an urban linear park. (0115-8 [Trencher, Ruth])

**Comment:** Florida, Power, and Light is planning to place 2 nuclear reactors and transmission lines of high voltage, approximately 80-105 feet tall and the size of a 10 story building, along US1 from the Homestead to Downtown Miami. If built, such transmission lines will impact my community. FPL will be contacting you and the cabinet for approval and we want you all to know our community along this route is outraged. Please defer this until all questions are answered, reviewed and the constituents are informed. (**0149-2** [Nelson, Joyce E.])

**Comment:** [I] oppose the transport of energy across or through the fragile Everglades. Our river of grass which feeds into Florida Bay and supports and entire eco system has been devastated in the past by the effects of phosphorus and fertilizer from the sugar industry and has killed off the grasses in the bay where shrimp spawn. (**0360-2** [Palmer, Majorie])

**Comment:** I also don't like that the power lines would run through the Shark River Slough. There are power lines running north along 27. Let there be areas that are just wild. (**0361-3** [Berndgen, Michelle])

### Comment: 7) <u>Description of the Affected Environment, Especially Relating to the State of</u> <u>Florida Site Certification Process</u>

The DEIS does not provide accurate geographical descriptions, hydrology, and Western Corridor language pertaining to the Florida Site Certification Process and up-to-date information relating to the Western Corridor which represents the location for the transmission power lines that was approved in the Siting Order. Although the Final Siting Order has been appealed, the DEIS should be updated to include not only the Final Siting Order as it relates to the proposed expansion and the location of the powerlines, but also the Conditions of Certification for these features that are the subject of this DEIS as it provides the anticipated framework for the implementation of these features. (0622-1-15 [Austin, Stan]) Comment:

### Status of State of Florida Site Certification Process Pertaining to Western Corridors

Introductory text on pages 1-1 to 1-2 regarding the State of Florida's May 2014 certification of the Turkey Point project is incomplete. As written, it suggests the certification process has concluded and FPL has all the State, regional and local permits needed for the project. We encourage a revision of this section to note that Miami-Dade County has appealed the certification of the West Preferred Corridor for transmission lines and three municipalities have appealed the location of transmission lines in the Eastern Corridor. Certification of the West Consensus Corridor was not appealed. The appeal process is anticipated to continue through the fall of 2015 or longer. Until there is a non-appealable Final Order, FPL does not have the State, regional, and local approvals needed to use the West Preferred Corridor as the backup location for its western transmission lines.

Text on page 2-18 regarding the Site Certification Process is incomplete. We recommend adding the following text to describe the Final Order and the Siting Board's direction to

maximize use of the West Consensus Corridor to avoid siting transmission lines in Everglades NP:

["]On May 19th, 2014, Florida's Governor and Cabinet, sitting as the Siting Board, issued a Final Order (FO) of Certification that approved FPL 's application to construct and operate two new nuclear generating units at Turkey Point, approved the transmission lines to be located in the East Preferred Corridor, and approved the western transmission lines to be located in the West Consensus Corridor with the West Preferred Corridor as the backup location if a right-of-way in the West Consensus Corridor cannot be obtained in a timely manner and at a reasonable cost. The FO directs FPL, the affected rock mining companies, and the South Florida Water Management District to pursue the option of fully accommodating the western transmission right-of-way to the east of the L-31N canal to avoid siting any transmission lines in Everglades NP. In areas where FPL is unable to build and maintain its structures east of the L-3JN canal (outside of ENP), the FO directs that FPL shall only use the minimum amount of land west of the L-31N canal (inside the current boundaries of ENP) that is necessary to build and maintain the structures, and FPL shall return to installing structures to the east side of the L-31N canal at the first available and practicable location. The Siting Board's certification of the West Preferred Corridor and the East Corridor is currently under appeal. The timeline for a decision by the Appeals Court is anticipated to continue through the fall of 2015.["]

<u>Section 2.2.2.1 Western Corridors[.]</u> We are concerned with the accuracy and completeness of information regarding the West transmission corridor on page 2-17. Text on lines 5-7 states FPL has "two options for the West corridor that differ primarily with respect to where the corridor would pass near Everglades NP (even though no part of the corridor would actually pass through the park)." The last half of this sentence is inaccurate. The West Preferred and West Consensus corridors overlap and traverse five to six miles of lands currently within the park boundary.

Similarly, the West Preferred Corridor text (page 2-17, lines 13-24) states that the West Preferred Corridor runs just east of the park boundary. This is inaccurate at the present time. The West Preferred Corridor north of SW 120 St. and west of the L-31N canal includes 260 acres of NPS land along 6.5 miles of the eastern park boundary. NPS is currently preparing an EIS that considers exchanging park lands in the West Preferred and West Consensus corridors for FPL lands farther west in the park. The Final NPS EIS and Record of Decision on the potential land exchange are anticipated to be complete in December 2015. Until the ROD is signed, the existing status of NPS lands in the West corridor should be described in the NRC's EIS.

The West Consensus Corridor text (page 2-17, lines 25-31) states that portions of the Consensus Corridor "have been shifted to the east to avoid abutting the eastern perimeter of Everglades National Park." This is partially accurate but omits noting that the Consensus corridor overlaps the West Preferred corridor for 5 miles and includes approximately 200 acres within the current park boundary. It may be several years after a non-appealable Final Order of Certification is issued before FPL knows if it will be able to use any of the Consensus Corridor for the west transmission lines. The following text is recommended to be included in a revised DEIS to provide a more complete description of the corridor:

["]The Consensus Corridor follows the West Preferred Corridor until it reaches a point approximately six miles south of Tamiami Trail. There, the Consensus Corridor expands the width of the corridor by 600 feet to the east of the West Preferred Corridor for a distance of about 5 miles until it reaches a point one mile south of Tamiami Trail. This segment includes approximately 200 acres of land within the current boundary of Everglades National Park and rock-mining lands on the east side of the L-31N canal. Then, the Consensus Corridor turns to the east for a distance of about 2.5 miles, turns northeast through the Bird Drive Basin and passes through the Pennsuco wetlands north of Tamiami Trail to intersect with the West Preferred Corridor. The Consensus Corridor differs from the West Preferred Corridor in that it is wide enough to potentially allow FPL to locate the full right-of-way on the east side of the L-31N Canal to avoid siting transmission lines within the current boundary of Everglades National Park. The alignment through the Bird Drive Basin and Pennsuco wetlands would locate transmission lines farther to the east of endangered Wood stork colonies in Everglades National Park and Water Conservation Area 3-B. This corridor still crosses a landscape consisting mostly of wetlands and disturbed wetlands, but FPL states that its use would reduce the potential for adverse impacts on multiple federally endangered species (FPL 2013-TN2941).["] (0622-1-16 [Austin, Stan])

**Comment:** It is for these reasons, we respectfully request that NRC and USACE revise the DEIS to address these issues. An update to the DEIS analysis should:...more fully address the current information related to the Florida Siting Board's Conditions of Site Certification that address features of the plant components that may affect the environment, including the RCWs and other associated infrastructure, including the construction of power lines. (**0623-12** [Austin, Stan])

**Comment:** The heart of Everglades restoration, the reason we're doing Everglades restoration, now we're going to align it with three massive power lines and that's what hundreds of thousands of visitors are going to see when they come to Everglades National Park. The first thing they're going to see is these three 150-foot power lines going up over there...[and] the pads... (0723-9-11 [Schwartz, Matthew])

**Response:** These comments express concerns regarding the potential effects of the proposed transmission lines to support Turkey Point Units 6 and 7 on ecological resources including the Everglades National Park. Although electrical transmission and its safety and siting are outside the regulatory authority of the NRC, the review team considered the environmental impacts of electrical transmission, which are described in Sections 4.1.2 and 5.1.2 for land use; 4.3.1, 4.3.2, 5.3.1, and 5.3.2 for terrestrial and aquatic resources including the Everglades National Park; and 4.4 and 5.4 for socioeconomics impacts.

Regarding Everglades National Park, the NPS signed a ROD transferring 260 ac of land to FPL in exchange for 360 ac of FPL property within the East Everglades Expansion Area (EEEA)(NPS 2016-TN4532). The ROD incorporates the Conditions of Certification from the Final Order on Certification from the State of Florida Siting Board dated May 19, 2015 (State of Florida 2014-TN3637). As a result of this land exchange, no portion of any proposed power line corridor would fall within Everglades National Park. A description of the land exchange was added to Section 2.2. In addition, the designation of Everglades National Park as a Miami-Dade County designated area of critical environmental concern was added to Section 2.2. The status of the State of Florida site certification process was updated in Sections 1.0 and 2.2.

**Comment:** The East Preferred Corridor for the transmission lines runs through the Homestead Air Reserve Base (HARB) Accident Potential Zone II (APZ II). APZ II is an area beyond the end of runway which possesses a measurably higher potential for aircraft accidents. This area is identified in the base Air Installation Compatible Use Zone (AICUZ) Study. Recommendations

from the base's AICUZ should be a major consideration in any planning process. (0670-1 [Hyden, Brent A.])

**Comment:** The goal of the Department of Defense's (DoD) long standing AICUZ program is to promote public health, safety and general welfare while also protecting military airfields from encroachment that would in turn jeopardize the military mission. The land use guidelines for the Air Force AICUZ programs are outlined in DoD Instruction 4165.57, Change 1, 12 March 2015. The suggested land use compatibility guidelines for APZ II are located in the referenced DoD instruction, Appendix 2, Enclosure 3, Recommended Land Use Compatibility in APZs, which begins on page 16. Here you will find Table 1 which includes the Standard Land Use Coding Manual (SLUCM). Utilities are listed on page 17 of this Table. SLUCM 48 (Utilities) shows that while some utilities are allowed in APZ II, note 6 states: "No above ground passenger terminals and no above ground power transmission or distribution lines. Prohibited power lines include high-voltage transmission lines and distribution lines that provide power to cities, towns, or regional power for unincorporated areas". HARB recognizes the fact that FPL owns a right-ofway in this area. HARB also recognizes that transmission lines already exist. However, we feel that adding more transmission lines coupled with the fact that these new lines will also be positioned higher than the existing lines, will put our pilots and the public at increased risk. Should an aircraft impact these transmission lines, the consequences could be a loss of life, and a loss of electrical power to a large part of the county. As such, we recommend that the transmission lines be routed through either the West Preferred Corridor or the West Secondary Corridor. Both of these corridors would run the transmission lines through areas outside of the APZs and therefore not put at risk U.S. Air Force pilots or the community. (0670-2 [Hyden, Brent A.])

**Response:** The Air Installation Compatible Use Zone (AICUZ) was reviewed as a part of the analysis performed for the EIS, and is cited in Section 4.1 of the EIS. The new transmission line proposed in the East Corridor would be collocated with the existing transmission line as described in that section of the EIS, and as noted by the commenter. The portion of the transmission line that would traverse the Accident Potential Zone II (APZ II) alongside the existing transmission line between the Clear Sky and Davis substations would be a little less than a mile long at the end of the zone delineated in the AICUZ (Figure 3-1). The EIS has been revised to include this information.

**Comment:** And we have modeled the same costs from the transmission lines infrastructure which turn out to be significantly greater than the temporary benefits. The permanent costs per year are greater than the temporary benefits that are going to end. (**0721-2-14** [Stoddard, Philip K.])

**Response:** Section 10.6 of the EIS presents a benefit-cost balance performed by the review team for the Units 6 and 7 project, including associated new transmission line infrastructure. While Table 10-4 of the EIS acknowledges potentially MODERATE costs associated with the land use and terrestrial ecology impacts, the analysis in Section 10.6 concludes that the benefits of the project likely outweigh the costs. Therefore, no changes to the EIS were made as a result of these comments.

**Comment:** There are instances in the DEIS with respect to the presented land use values in their respective tables, which are inconsistent with the cited source or not current with the most recent documentation/reference. Instances in the DEIS include (emphasis added): a. DEIS Subsection 2.2.2.1, Page 2-15, Table 2-4: In DEIS Table 2-4 contains acreages for the existing and proposed transmission corridors. The following inconsistencies are noted with the cited

source for DEIS Table 2-4, (FPL 2014-TN4058) (areas where the data is inconsistent with the most current reference are also indicated): i. Information for the West Secondary Corridor is included, while information for the West Consensus Corridor is not included. The West Secondary Corridor was removed from consideration in 2013 at the time the West Consensus Corridor was adopted. [DEIS Reference (FPL 2013-TN2941)]. ii. The acreage for the proposed "Clear Sky-Levee Leg 1"/ "Clear Sky-Pennsuco Leg 1" is listed as 1378.9. ER Table 2.2-3 and DEIS Table 2-5 lists the total acreage, 1365.43, for the same route. (Note the total acreages for mentioned corridors are accordingly inconsistent.) iii. The total length of the "Clear Sky-Levee" is listed as 44 miles. ER Subsection 2.2.2.2 lists the total length as 43 miles. iv. The intermediary lengths for the co-located legs of "Clear Sky-Levee" and "Clear Sky "Pennsuco" is listed as 27.5, 13, and 4.5 for Leg 1, Leg 2, and Leg 3, respectively, and gives the total of these three legs as 44. ER Subsection 2.2.2.2 lists the total length as 43 miles and no intermediary lengths are provided in the ER. b. DEIS Subsection 2.2.2.1, Page 2-18, Table 2-5: In DEIS Table 2-5 contains total acres of transmission line corridors and access roads by major FLUCFCS code. The following inconsistencies are noted with the cited sources for DEIS Table 2-5, [(FPL 2014-TN4058) and (FPL 2013-TN2941)]: i. Listed under "West Consensus Access Roads" are 11 different segments. As stated in DEIS Section 2.2.2.1, Transmission-Line Corridors, and DEIS reference (FPL 2013-TN2941), only four proposed access road corridors for the West Consensus corridor have been designated: NW 12th Street, Tamiami Trail, L-31 Canal and Levee, and SW 88th Street. ii. The acreage listed for FLUCFCS code 600 under "West Consensus Access Corridor", segment for the L-31 Canal is 4.2 ac. DEIS reference (FPL 2013-TN2941) Table 1 lists this entry as **4.7 ac.** ii. The presented summation of the acreage for FLUCFCS code 800 listed for both the "West Preferred Corridor" and "West Consensus Corridor", segments for the Levee to Pennsuco is 24.8 ac. ER Table 2.2-3 provides the individual acreage by FLUCS code subcategory. For code 800, under the Levee to Pennsuco route, the sum is 34.8 ac. c. DEIS Subsection 2.2.2.3, Page 2-20, Table 2-6: DEIS Table 2-6 contains total acres of reclaimed water pipeline and the potable water pipeline by major FLUCFCS land-use categories. The following inconsistencies are noted with the source cited for DEIS Table 2-6, (FPL 2014-TN4058): i. Four of the values for the reclaimed water pipeline are inconsistent with the ER. DEIS Table 2-6 for codes 200, 500, 600, and 800 lists 496.64, 74.89, 447.80, and 672.05, respectively, while the summation of the values listed on ER Table 2.2-6 for codes 200, 500, 600, and 800 are 496.65, 78.06, 457.75, and 669.29, respectively. ii. Four of the values for the potable water pipeline are inconsistent with the ER. DEIS Table 2-6 for codes 400, 500, 600, and 800 lists 7.69, 24.75, 159.95, and 39.21, respectively, while the summation of the values listed on ER Table 2.2-6 for codes 400, 500, 600, and 800 are 7.65, 24.72, 158.95, and 39.19, respectively. d. DEIS Subsection 2.2.3, Page 2-23, Table 2-7: DEIS Table 2-7 reports the acres within the 50 mile region using FLUCFCS. The following inconsistency is noted with the source cited for DEIS Table 2-7 (FPL 2014-TN4058): i. Two of the values, for codes 600 and 800, listed as 1,409,912 and 42,570, respectively, are inconsistent with ER Table 2.2-8. The summation provided in ER Table 2.2-8 for codes 600 and 800, are 1,416,931 and 42,588, respectively. (0619-2-1 [Maher, William])

**Comment:** Numerical value inconsistencies within the draft EIS: Subsection 4.1.2.2, Page 4-23, Lines 7-10 "The affected land comprises... **1.81 ac of existing electric power facility land** (FLUCFCS Code 831)...plus...**0.52 ac of adjoining land designated as exotic wetland hardwoods** (FLUCFCS Code 619)." DEIS Subsection 4.3.1.2 Page 4-50, Lines 29-31 ER Table 2.2-5 DEIS Section 4.3.1.2: "Approximately **1.81 ac...is classified as exotic wetland hardwoods**, and the remaining **0.52 ac is existing electric power facilities** (FPL 2014-TN4058)." ER Table 2.2-5 lists the Levee Substation acreage for FLUCCS code 619, **Exotic Wetland Hardwoods, as 1.81 ac**, and for FLUCCS code 831, **Electric Power Facilities as 0.52 ac**. (**0619-2-34** [Maher, William])

# **Response:** The review team updated acreage information in the EIS to be consistent with data provided in Revision 6 of the ER or more recent responses to Requests for Additional information (RAI). The conclusions in the EIS were not altered by these changes.

**Comment:** If the Army Corps of Engineers will have to decide to issue, deny, or issue with modifications a Department of the Army (DA) permit for the portions of the West corridor that would be constructed within wetlands, shouldn't the DEIS provide all available information on what alternatives are potentially available? Miami-Dade County requests that the NRC explain why only the West Preferred and West Consensus transmission corridors were considered as West corridor alternatives in the DEIS, when several alternatives for the West corridor were presented to the State of Florida and "all of the western alternate corridors met the criteria for certification" (State of Florida, Division of Administrative Hearings, Application No. PA 03-45A3, Florida Power & Light Company Turkey Point Units 6 & 7 Power Plant Siting Case No. 09-3575EPP, Recommended Order, Section III.C.2.d., paragraph 511). Miami-Dade County requests that the NRC explain why the DEIS does not provide information or analysis of all of the alternative corridors presented to the State of Florida, including the West Consensus and West Preferred corridors, that includes an assessment of which of these are practicable, which of the alternatives have less adverse impact on the aquatic environment, and which of the alternatives have other significant adverse environmental consequences. Miami-Dade County requests that the DEIS be revised or a supplemental EIS performed in order to evaluate and compare all of the possible western alternate corridors that met the criteria for certification under provisions of the State of Florida Transmission Line Siting Act, and at a minimum, evaluate which of these are practicable (including which of the alternatives meet local regulatory and land use requirements), which of the alternatives have less adverse impact on the aquatic environment, and which of the alternatives have other significant adverse environmental consequences that the Army Corps of Engineers should consider. It is Miami-Dade County's position that that the corridor submitted by the National Parks Conservation Association (NPCA) for certification by the State of Florida is the only proposed corridor other than the West Consensus corridor that could meet Miami-Dade County's strict environmental regulations for the East Everglades Area of Critical Environmental Concern. Miami-Dade County asserts that the NPCA corridor is a practicable alternative to the West Preferred corridor and has significantly less adverse impact on the aguatic environment because it does not require the construction of transmission lines and associate infrastructure within the current boundaries of Everglades National Park and because it avoids impacts to high quality wetlands in this area. This alternative therefore meets the requirements for the Section 404(b)(1) Guidelines that "no discharge of dredged or fill material into waters of the United States (including jurisdictional wetlands) shall be permitted if there is a practicable alternative that would have a less adverse impact on the aguatic environment, as long as the alternative does not have other significant adverse environmental consequences". (0110-1-3 [Hefty, Lee N.])

**Response:** The USACE will complete an independent evaluation of the proposed project after publication of the final EIS. The USACE's independent ROD regarding the proposed permit will reference the analyses in the EIS and will also present any additional information required by the USACE to support its permit decision. This will likely include the USACE's determination on the LEDPA, the consideration of impacts to the aquatic environment, PIR factors, consideration of all comments received, and compliance with applicable laws and regulations. The USACE's final decision document was not addressed in this EIS because the document is separate and independent and will not be completed until after the final EIS is issued. The siting of the electrical transmission lines is outside the regulatory authority of the NRC so the NRC does not propose alternatives to the routes included in the application submitted by FPL. However, the review team (which includes the USACE) considered the environmental impacts of electrical

transmission, which are described in Sections 4.1.2 and 5.1.2 (land use); 4.3.1, 4.3.2, 5.3.1, and 5.3.2 (ecological impacts); 4.6 and 5.6 (historic and cultural impacts); 5.7.3 (meteorological and air quality impacts); and 5.8 (nonradiological health impacts). No changes were made to the EIS as a result of this comment.

**Comment:** The NPS suggests that revisions to the DEIS consider the specific purposes the Everglades NP Protection and Expansion Act of 1989, which expanded the boundaries of the park to include approximately 109,600 acres. This analysis is especially important for USACE as they consider their public interest review. The NPS's DEIS found that the construction and operation of powerlines in the West Preferred Corridor would have adverse impacts on park resources and values that would be inconsistent with the Expansion Act purposes. (See DEIS pp 54-55 Table 2, How Alternatives Meet Project Objectives.) (**0622-1-27** [Austin, Stan])

**Response:** This comment references the NPS findings in its final EIS for acquisition of a parcel of land owned by FPL in the EEEA of Everglades National Park. Concerns regarding the location of transmission lines near Everglades National Park are noted in Section 4.1.2 of this EIS. Although the siting of the electrical transmission lines is outside the regulatory authority of the NRC, the review team (which includes the USACE) considered the land use impacts of electrical transmission, which are described in Sections 4.1.2 and 5.1.2.

**Comment:** [Three new sets of power lines will cause] changes to the hydrology of the Shark River Slough (the "crown jewel" of Everglades restoration) due to tower pads and road construction[.] (**0240-10** [Commenters, Multiple])

**Comment:** [A] new, unsightly, industrial landscape - visible for miles - for visitors to one of our country's most unique and popular wilderness areas. (**0240-11** [Commenters, Multiple])

**Comment:** NRC is planning three new sets of power lines to run across and through the eastern section of Everglades National Park. (**0250-3** [Fulks, Anna Louise])

**Comment:** In addition, power lines from the expanded plant could be run across the eastern side of Everglades National Park. (0356-3 [Shlackman, Jed])

**Comment:** There are also three sets of massive power lines going inside Everglades National Park at the heart of Everglades restoration. (**0366-3** [Griffith, Ed and Harriet])

**Comment:** Power lines from the expanded plant could also be run across the eastern side of Everglades National Park. (0366-8 [Griffith, Ed and Harriet])

**Comment:** Power lines from the expanded plant would likely run across the eastern side of Everglades National Park, further impacting the natural treasures of this area. (0370-4 [Vayu, Satya])

**Comment:** In addition, the power lines through the Everglades, a World Heritage site and the location near the Biscayne NP, is reprehensible. (**0550-2** [H., Pat])

**Comment:** Much of the energy that this expansion of Turkey Point produces will be directed to other areas of the state requiring massive power line towers that are dangerous to migrating birds and an eyesore for the hundreds of thousands of visitors to Everglades National Park. (**0579-4** [Schwab, Roy])

**Comment:** <u>Transmission line impacts</u>. We have concerns regarding the proposed transmission line corridor route potentially impacting the Everglades National Park. The second and third legs of the West Preferred Corridor would traverse a landscape just east of the Everglades National Park characterized by wetlands and disturbed wetlands; a portion of the second leg would be adjacent to the eastern perimeter of the park (page 2-17). EPA is concerned with the lack of information in the DEIS regarding the National Park Services' (NPS) DEIS (*Acquisition of Florida Power & Light Company Land in the East Everglades Expansion Area Draft Environmental Impact Statement*, January 2014). The NPS decision regarding the land exchange action will greatly influence which transmission corridor is viable. *Recommendations:* The FEIS should clarify the impacts to the Everglades (particularly to the Everglades National Park) associated with the Western Preferred Corridor, and better describe the NPS land exchange DEIS. Efforts should be made to avoid impacts to the extent feasible, and to effectively mitigate impacts where they are unavoidable. (0617-4-11 [Mueller, Heinz J.])

**Comment:** FPL's Eastern Corridor would include the addition of a 230 kV (up to 90 ft. tall) powerline. The Eastern Corridor crosses a portion of Biscayne NP along a FPL easement and crosses the road leading to the entrance to the park's visitor center. The conclusion that locating the Eastern Corridor along U.S. Highway One and the metro rail line would result in minimal visual impacts is unsubstantiated. FPL's West Preferred and West Consensus corridors cross lands located within and near the Everglades NP boundary. Either route would contain two 500 kV transmission lines (up to 160 ft. tall) and one 230 kV (up to 90 ft. tall) powerline. Importantly, the NPS's Acquisition of FPL land in the East Everglades Expansion Area DEIS found that the construction and operation of three powerlines and associated fill pads and access roads in West Preferred Corridor would result in minor to major impacts on park visual resources.

If powerlines are built in FPL's West Preferred Corridor, they would be located west of the L3IN levee road on roadless wetlands currently inside Everglades NP (not east of the canal on SW 187th Ave). The NPS DEIS found that the introduction of three powerlines, fill pads, and access roads inside the current NPS boundary would result in minor to major adverse impacts on visual resources. The most severe impacts would be where the powerlines cross Tamiami Trail and from the L-31N canal levee road. See NPS DEIS pages 364-370, and photo simulations of powerlines looking west from the L-3IN Canal (Figure 59 on page 361) and looking northwest from the L-31N Canal (Figure 63 on page 369), and looking west on Tamiami Trail (Figure 61 on page 365).

If powerlines are built in the West Consensus Corridor, east of L-31N canal along SW 187th alignment, the impacts to park visual resources could be less depending on how much of the Consensus Corridor is used. The NPS questions how a horizontal road would "attenuate" the visual contrast of a powerline, which has vertical structures and elevated horizontal conductors. Because the access road along the levee isn't substantially elevated and is generally unnoticeable from the park, we maintain this statement should be revised to indicate the expected level of contrast and visibility of the powerline. (0622-1-12 [Austin, Stan])

**Comment:** One of the requirements of this evaluation is to look at the impacts of this plant on the two national parks. These parks are situated next to the Turkey Point Power Plant. The building of two additional reactors will increase the need for power lines near or in Everglades National Park. These power lines will impact birds and affect the visual expansiveness of the park. They are an extreme negative to visitors in the area. The power lines are a direct effect of permitting the two new reactors. (**0641-10** [Martin, Drew])

**Comment:** In addition, power lines from the expanded plant could be run across the eastern side of Everglades National Park. (0676-3 [Kassel, Kerul])

**Comment:** The power lines through Everglades National Park on the eastern side are part of this project. My organization has been fighting that for years. Many, many questions remain about those. What are the impacts from building a major power line corridor along the east side of Everglades National Park with access roads, pads for many, many towers that are standing there. (0721-22-3 [Schwartz, Matthew])

**Comment:** [You've got] changes to the hydrology of Shark River Slough. That place was added to Everglades National Park in 1989 for the restoration of the Shark River Slough, the crown jewel of Everglades's restoration. And now it's going to be lined with three major FP&L power lines from the Turkey Point plant that points north? (0721-22-5 [Schwartz, Matthew])

**Comment:** Furthermore, FP&L has proposed constructing power lines in Everglades National Park. These power lines would severely endanger the incredible viewsheds that really define the experience in Everglades National Park, and could threaten endangered Wood Stork habitat. (0721-9-4 [McLaughlin, Caroline])

**Comment:** But then I didn't even realize three power lines in the Everglades? (0723-11-6 [Berendsohn, Catherine])

**Comment:** Furthermore, FPL has proposed constructing power lines in Everglades National Park. This could severely affect and endanger wood stork habitat and some of the incredible views that really just define the visitor experience in the Everglades. (0723-4-5 [McLaughlin, Caroline])

**Comment:** First of all, this application includes three master power lines across Everglades National Park. (0723-9-9 [Schwartz, Matthew])

**Response:** Although electrical transmission is outside the regulatory authority of the NRC, the review team considered the potential impacts of transmission lines in Sections 4.1.2, 4.3.1.2, 4.4.1.6, 5.1.2, 5.3.1.2, and 5.4.1.6. The text of the EIS has been revised to reference the findings of the NPS in its EIS on the NPS's acquisition of FPL land in the EEEA regarding visual impacts of construction and operation of a transmission line in or near the Everglades National Park.

**Comment:** <u>Considerations for Mitigating Impacts from Project Infrastructure</u>[.] Below are suggestions for mitigating impacts to NPS resources from proposed project infrastructure. We have aligned each topic area according to USACE's public notice from March 13, 2015.

*New Transmission Lines[.]* As discussed previously, FPL's two western corridors are adjacent to and within Everglades NP. It would contain two 500 kV powerlines (up to 150 ft. tall) and one 230 kV (up to 105 ft. tall) powerline. FPL's eastern corridor would contain a single 230 kV (up to 90 ft. tall) powerline that would be built alongside an existing FPL powerline corridor. The corridor crosses a section of Biscayne NP. For wetland impacts in the western corridor, we support FPL's proposal to conduct mitigation within the "Hole in the Donut," which is within Everglades NP. We also recommend preparation of a planning study to consider the effectiveness of transferring soil to Miami-Dade County to use in raising the elevation of certain levees and for agricultural use to potentially reduce impacts of flooding. To offset added visual and ecological impacts to Biscayne NP from the eastern corridor, we suggest consideration be given to the purchase of the Ragged Keys, which are located on the end of Elliot Key. Ragged Key 5 and 2 are priority lands for the park and are the only fee-simple lands within the park boundary not yet owned by the NPS.

The NPS recommends that FPL work with NPS to identify and remove unnecessary transmission infrastructure within Everglades NP, such as that which remains in the Chekika area of the park. In addition, we recommend FPL work with Everglades NP and other Everglades restoration partners to relocate the powerline located along the Old Tamiami Trail within the park, south of the current U.S. Hwy 41 west of the L-67 canal. Converting this powerline to an underground transmission line along the current U.S. 41 alignment could improve reliability of electrical service to the Miccosukee Reservation, allow for removal of the Old Tamiami Trail to achieve restoration benefits, and reduce impacts to wildlife from the current aerial transmission line.

*Units 6 & 7 Site[.]* The Nuclear Island, which includes Units 6 and 7 and other reactor buildings, would encompass approximately 300 acres, most of which are mud flat wetlands that provide important bird habitat. As discussed, nitrogen and phosphorus organics from the muck could further degrade the IWF. To offset ecological impacts related to the construction on Nuclear Island, the NPS encourages USACE to consider the NPS's ongoing efforts to eradicate invasive plants and restore three spoil islands and adjacent peninsulas within the Biscayne NP. These restoration projects involve stabilizing eroding shorelines, removing exotic vegetation, and planting native species. The resulting sites benefit submerged vegetation such as seagrass, improve water quality of coastal waters, and provide high quality native habitat for coastal birds and wildlife. Further, spoil island restoration offers the community opportunities to learn about the benefits of environmental restoration, to "get dirty" in an actual restoration project, and to observe birds and wildlife in their native habitat. (0622-2-9 [Austin, Stan])

**Response:** The commenter presents specific recommended mitigation measures intended to offset the loss of wetlands and other natural habitats, especially those within Biscayne National Park and Everglades National Park. The applicant, FPL, has proposed a series of specific natural resource mitigation measures that are described in Section 4.3.1.6 of the EIS. The NRC staff does not impose natural resources mitigation requirements on the applicant, but in its assessment does account for the mitigation measures that the applicant develops in conjunction with other regulatory agencies. No change was made to the EIS as a result of this comment.

**Comment:** DEIS Subsection 4.1.2.1, Page 4-21, Table 4-6: DEIS Table 4-6 contains the header "L-31 Canal (West Consensus)". DEIS reference, (FPL2013-TN2941), refers to this transmission line access corridor as "L-31N Canal and Levee". (emphasis added) (0619-4-1 [Maher, William])

**Response:** In response to this comment and to various other comments received from the applicant (FPL), the review team has provided more precise details regarding the anticipated extent of impacts on terrestrial and wetland habitats from each proposed offsite transmission line. Tables 4-5 and 4-6 have been updated accordingly.

**Comment:** Miami-Dade County requests that the NRC undertake a thorough review of the proposed project, and especially the West transmission corridor alternatives, for consistency with local land use objectives and policies and local environmental regulations prior to issuing the FEIS, and update the document conclusions accordingly. For example, how did the NRC evaluate the transmission lines for the proposed project with regards to the provisions of Land Use Element Policy LU-3A and Section 24-48.4 of the Miami-Dade County Code? This section

of the Code provides for mitigation for projects that are otherwise acceptable under the evaluation factors provided in Section 24-48.3 of the Code, but that nevertheless result in adverse environmental impacts. Miami-Dade County notes that the mitigation methods elaborated in Section 24-48.4(1)-(4) of the Code must be considered in the priority order listed, and avoiding the impact altogether as provided in Section 24-48.4(1) is the first (and highest) priority, followed by minimizing impacts by limiting the degree or magnitude of the action or its implementation (Section 24-48.4(2)). Please explain how the NRC justified consistency of the West Preferred corridor with the adopted local comprehensive plan and applicable environmental regulations, given the existence of a transmission line alternative (NPCA corridor) that has been accepted by both FPL and the State of Florida as certifiable (State of Florida, Division of Administrative Hearings, Application No. PA 03-45A3, Florida Power & Light Company Turkey Point Units 6 & 7 Power Plant Siting Case No. 09-3575EPP, Recommended Order, Section III.C.2.d., paragraph 511), does not have any fatal flaws, according to testimony presented by FPL's witness during the administrative hearings (Proposed Recommended Order filed by the National Parks Conservation Association and Miami-Dade County, State of Florida, Division of Administrative Hearings, Application No. PA 03-45A3, Florida Power & Light Company Turkey Point Units 6 & 7 Power Plant Siting Case No. 09-3575EPP, Section 11(a), Paragraph 165, attached), and which is fully consistent with Land Use Element Policy LU-3A because it meets the requirements of the Conservation, Aquifer Recharge and Drainage Element and other applicable CDMP policies, as well as Section 24-48.4(1) of the Miami-Dade County Code. The NPCA corridor avoids and minimizes adverse environmental impacts to the highest quality wetlands in the region because it: does not require that transmission lines or associated infrastructure be built within the current boundary of Everglades National Park; does not require a land swap that will reduce the overall size of Everglades National Park; avoids impacts to feeding and nesting habitat for the federally endangered snail kite by avoiding the high guality wetlands west of L-31N where feeding and nesting habitat for snail kites have been documented; and avoids impacts to the federally endangered wood stork by avoiding the 1-mile buffer zone between wood stork rookeries and high tension power lines that is recommended by the USFWS wood stork management plan. In addition, the NPCA corridor does not require the construction of transmission lines and associated road infrastructure in areas within the East Everglades Area of Critical Environmental Concern where roads are not allowed, and otherwise meets the environmental standards of Chapter 33B, Miami-Dade County Code. (0110-1-5 [Hefty, Lee N.])

**Response:** Section 4.1.1 describes how FPL has worked to minimize land-use impacts from the transmission lines as part of its corridor selection process using Florida State criteria. The siting criteria include potential disruption to such areas as national, state, and county parks; wildlife refuges; estuarine sanctuaries; landmarks; and historical sites. Section 4.1.1 also describes how FPL would implement other mitigation measures for the transmission lines such as installing erosion-control devices, using matting and wide-track vehicles when working in wetlands, and restoring wetlands following temporary disturbances. Additionally, Section 4.3.1.6 of the EIS summarizes the review team's independent analysis of FPL's proposed mitigation for terrestrial ecology impacts, including installing avian protective measures on transmission lines and conducting wetland enhancement measures that would benefit the wood stork. Finally, the USACE, a cooperating agency on the EIS, will identify the LEDPA for the Units 6 and 7 project prior to issuing a Department of the Army permit under Section 404 of the Clean Water Act. The LEDPA determination will include a consideration of various project alternatives possible, including alternative transmission line routes such as those noted in the comment. Appendix K of the EIS includes the USACE analysis of alternative transmission lines.

**Comment:** Miami-Dade County asserts that the DEIS is inadequate with respect to the West transmission line corridor. It is our understanding that as a cooperating agency, the Army Corps of Engineers will use the EIS in their review and processing of the requisite regulatory permits for this proposed activity. However, the DEIS does not provide the Army Corps of Engineers with the information needed to support a "*decision to issue, deny, or issue with modifications a Department of the Army (DA) permit to perform certain dredge and fill activities in waters of the United States and to construct structures in navigable waters of the United States related to the project*" (DEIS Abstract, Lines 7-10). Specifically, the DEIS does not include an adequate alternatives analysis for the West transmission corridor. (0110-1-1 [Hefty, Lee N.])

**Response:** The USACE review of the project will continue after the publication of the final EIS. If additional information is needed during that review, the applicant will be required to submit the necessary information. Please note that as a result of this comment regarding an alternatives analysis for the West Transmission Corridor, Appendix K was added to the final EIS.

## E.2.6 Comments Concerning Geology

**Comment:** Well, not exactly, according to Dr. Donald McNeill, a University of Miami Geologist. The DEIS contends that the confining layer is over 1,000 feet thick and will not let the newly-introduced water percolate upward into the upper Floridan aquifer from which Hialeah, coral reef, the Keys, and other draw their water. However, Dr. McNeill found that at the Southern Miami-Dade Water Treatment Plant, about nine miles from Turkey Point, the presumed very thick, low permeability confining layer was only about 14 feet thick, just above the Boulder Zone at a depth of 2,456 to 1,443 feet. Ten of the 17 deep injection wells for the effluent came out above the low permeability zone. And this area of low permeability rises from the area of Turkey Point and continues to the northwest, the location of the treatment plant relative to Turkey Point. So the Boulder Zone at Turkey Point is not like Las Vegas. What is injected at Turkey Point will not stay at Turkey Point. It will migrate to the northwest where the natural fissures in the thin, confining layer will allow it to percolate upward. Like the DEIS reports, the Boulder Zone confining layer has may fissures and the DEIS reports the general westward movement of water in the Boulder Zone from Turkey Point. (0721-12-7 [White, Barry J.])

**Response:** As described in Section 2.3.1.2 of the draft EIS, upward migration of injected effluent out of the Boulder Zone has been observed at a minority of injections sites in Florida. The extent, causes and impacts of upwelling at these sites has been widely studied and these studies were evaluated as part of the EIS development to understand potential impacts of proposed injection at the Turkey Point site.

As part of development of the final EIS, the staff reviewed two studies from Dr. McNeill, who is cited in the comment above, which evaluated the upwelling that has occurred at the Miami-Dade SDWWTP north of the Turkey Point site (McNeill 2000-TN4572; McNeill 2002-TN4571). Together these studies identified an "important low-permeability interval" dolomite layer which "appears to act as a competent confining unit" between the Boulder Zone and MCU. The two studies indicated that 10 of 17 injection wells were drilled through this unit but were completed above it, leaving an open hole and upward pathway for injected effluent. In the 2002 study, McNeill concluded that the dolomite confining unit appeared continuous throughout southeast Florida and provided "additional effective confinement of upwardly buoyant injected fluids." McNeill (2002-TN4571) indicated that while there is local variability in the bottom depth of the "dolomite confining unit" which may cause buoyant injectate to flow westward at the SDWWTP site, the overall dip of the structure to the southwest would cause any migration

within the Boulder Zone beyond the site to move northeast, away from areas of use in the upper aquifers. The review team concluded that this could also apply to injectate at the Turkey Point site.

Maliva et al. (2007-TN1483) coupled an analysis of core plug vertical hydraulic conductivity data from the MCU at 29 South Florida injection well systems (including the SDWWTP) with variable density solute-transport modeling. Based on this, they observed that "matrix hydraulic conductivies of the limestone and dolostones that constitute the confining strata between the injection zone and the base of the USDW in South Florida are sufficiently low to retard significant vertical fluid movement" and that vertical migration would be limited by thin sections where vertical hydraulic conductivity was low (10<sup>-6</sup> cm/sec or less), as is seen at the Turkey Point site.

Based on a review of well logs and water chemistry data at the SDWWTP, Walsh and Price (2010-TN3656) determined that enhanced vertical flow pathways that allowed upwelling likely resulted from well installation issues identified by Dr. McNeill, because "no fracturing of the confining strata had been reported" and effluent appeared to bypass deeper monitored intervals before being detected higher. Walsh and Price found that upwelling did not extend into the upper portion of the MCU and the Upper Floridan aquifer and concluded that this may be because "rapid vertical pathways did not appear to extend up to the Upper Floridan aquiferA" and because once upwelling reached the APPZ of the MCU, "the transport mechanism appeared to be a horizontal flow with mixing of ambient waters" (Walsh and Price 2010-TN3656).

Cunningham (2012-TN4576; Cunningham 2013-TN4573; Cunningham 2014-TN4051; Cunningham 2015-TN4574) evaluated injection sites for natural vertical high conductivity features (such as karst collapse structures) using seismic-reflection data. In the absence of seismic data, Cunningham (2015-TN4574) suggests that, "other evidence for karst collapse includes borehole log signatures that indicate highly fractured rock" and that fractures would be indicated by "high travel times measured on borehole sonic log data." Using sonic logs from injection sites in South Florida, Maliva et al (2007-TN1483) depicted log signatures and travel times for both fractured and unfractured rock. The NRC staff evaluated return velocities in sonic logs obtained at well EW-1 at the Turkey Point site and found large sections of the MCU to have log signatures and transit times consistent with unfractured rock.

One study evaluating the human and ecological impacts of various methods of wastewater disposal in South Florida, concluded that the overall health risk for deep well injection was "low where there have been impacts to USDWs" and that "the risk would be further reduced when the injected wastewater is treated to reclaimed water standards" (EPA 2003-TN4759). The water proposed for injection at the Turkey Point site would be treated beyond the secondary treatment referred to here before it is sent to the Turkey Point site, where it would be further treated and diluted before injection.

As a result of this information, staff determined it was reasonable to conclude that properly installed injection wells that are cased and cemented through the confining zone will provide adequate confinement of the injected wastewater. If upward leakage of wastewater through the confining layers did occur, it is not likely it would impact the Upper Floridan aquifer and could be detected onsite in the overlying monitoring wells and mitigated as required by the FDEP UIC program. Additional information has been added to Sections 2.3 and 5.2 of the EIS to reflect the discussion above.

**Comment:** A petition was submitted to EPA on April 28, 2015, to designate the entire Floridan aquifer system as a Sole Source Aquifer (SSA) under 40 CFR Part 149. The area in the petition includes the Lower Floridan, which contains the Boulder Zone. Although the Boulder Zone is saline, it is hydraulically connected to fresh water zones lying above. If confinement of the overlying layer is not sufficient, the injection of effluent into the Boulder Zone could result in waste, including radionuclides, being emplaced into the lowermost USDW. EPA's review of the petition is in progress. The MDWSD installed Class I injection wells for discharging effluent from the South District wastewater treatment plant (WWTP) into the Boulder Zone; injection began in 1983. This facility is located approximately 8 miles north of the Turkey Point facility. In 1994, MDWSD notified the Florida Department of Environmental Protection (FDEP) that ammonia and total kjeldahl nitrogen (TKN) had been found outside the injection zone in the freshwater aquifer protected by the Safe Drinking Water Act (SDWA) as a USDW. (EPA's well classification information: http://water.epa.gov/type/groundwater/uidwells.cfm) EPA issued consent order 4-UICC-006-95 in 1995, which became effective in 1997. This order included testing to determine whether confinement existed, as required by federal and state regulations, for Class I wells. In February 2001, the report "Evaluation of Confining Layer Integrity Beneath the South District Wastewater Treatment Plant, Miami-Dade Water and Sewer Department, Dade County, Florida," by R.C. Starr, T.S. Green, and L.C. Hull was completed. The conclusions included the finding that the geologic data provided for review were not sufficient to demonstrate that the Middle Confining Unit is a competent, low hydraulic conductivity layer capable of preventing upward migrations of fluids from the Boulder Zone into the overlying underground source of drinking water. Also, the geochemical data showed that groundwater in the Upper Floridan aquifer is contaminated with treated wastewater. Based upon EPA's review of the available scientific information and data, there is no information to show that sufficient confinement exists to meet the Underground Injection Control (UIC) regulatory requirements for Class I wells. Class I wells must meet the "No-Migration Clause" of the UIC regulations at 40 CFR § 144.12(b). Recent USGS studies indicate that karst collapse features and possibly transmissive faults exist in the subsurface in the south Florida area, and modeling for the proposed Class I wells should determine whether the proposed wells would meet the criteria in order to comply with UIC Class I permit requirements. It is not clear whether the installation of a desalinization unit has been considered, in order to reduce or control the salinity of the water in the cooling canal system, and decrease the rate of migration of the hypersaline plume towards the water supply wells completed in the Biscayne sole source aquifer. *Recommendations:* The FEIS should include more information regarding the proposed deep injection wells to be used for wastewater disposal, including the status of the permitting process of the 12 deep injection wells that are proposed, the planned timeline for permitting of these wells, and planning for surface discharge of effluents in the event that delays occur in the permitting process. In addition, the FEIS should include information regarding subsurface karst delineation, aguifer testing and modeling that will be required to demonstrate that this project will be protective of the USDWs in the Upper Floridan. Also, the FEIS should evaluate the other alternatives that are being considered for effluent discharge. In addition, the FEIS should include details of a robust monitoring plan to ensure the protection of the Biscayne aguifer, the public drinking water supply, and prevention of migration of injectate into freshwater. The proposed injection wells are contingent upon future issuance of applicable UIC permits, for which substantial issues will need to be addressed. More data and modeling is needed to determine whether all requirements will be met in order to issue the required permits. Since the proposed planning for disposition of blowdown/effluent is contingent upon issuance of the required permits by FDEP, alternatives will need to be developed. (0617-1-23 [Mueller, Heinz J.])

**Response:** In keeping with its responsibility under NEPA, the NRC has developed the EIS to inform the decision of whether or not to grant FPL's application for combined licenses for

proposed Turkey Point Units 6 and 7. Information requested in the comment demonstrating protection of the underground sources of drinking water (USDWs) through monitoring and confinement by the Middle Confining Unit (MCU) is required by and would be described in the underground injection control (UIC) permit for the proposed injection wells, which is granted by the Florida Department of Environmental Protection (FDEP). The NRC regulates the release of radiological constituents and a conservative evaluation of the expected impacts of the radiological component of the injected effluent at Turkey Point is documented in Final Safety Evaluation Report (FSER) Section 11.2 and EIS Section 5.9. The NRC recognizes that responsibility for regulation of non-radiological pollutant discharges "rests by statute with the Environmental Protection Agency" (10 CFR 51.10(c)).

NRC staff evaluated the expected impacts of deep well injection and documented this evaluation in updated Sections 2.3, 5.2, 7.2, and Appendix G of the final EIS. This evaluation includes an extensive literature review of many studies concerning the adequacy of the Boulder Zone to receive and the MCU to confine injected effluent. Specifically, the staff reviewed studies of; the local and regional hydrogeology of the Floridan aquifer system, the nature and competency of the MCU using geologic and geophysical investigation techniques, behavior of injected wastewater at current injection facilities and causes of documented upwelling, relative risk assessments of wastewater disposal methods including deep well injection, and ranges of hydrogeological parameters that inhibit upwelling. NRC staff also performed an independent conservative evaluation of injected effluent migration assuming a non-fractured MCU matrix as well as an evaluation of instantaneous migration to a hypothetical drinking water well at the site boundary, which assumes total, instantaneous failure of the MCU. Based on this evaluation the impacts were determined to be SMALL.

The NRC would like to clarify several issues raised in the comment. The comment states that the Boulder Zone is "hydraulically connected to fresh water zones lying above." The staff notes that the Upper Floridan aquifer is brackish in southeast Florida. Despite this, the Upper Floridan aquifer is mixed with fresher water and used municipally in the vicinity of the site (draft EIS Section 2.3.2.2). The overlying Biscayne Aquifer, which is a Sole Source Aquifer, has been impacted by saltwater intrusion up to 4 mi inland along the coast and also by infiltration of hypersaline waters from the cooling-canal system (CCS) in the vicinity of the Turkey Point site. However, the NRC staff understands that the UIC program requires protection of these resources from upward migration of effluent.

The degree of hydraulic connection between the Upper Floridan aquifer and the Boulder Zone has been the subject of many studies. These studies have determined that, in general, the MCU provides confinement and that incidences of upwelling have been coincident with features that provide vertical pathways for upward migration. As for potential contamination of the Biscayne aquifer, the Biscayne aquifer is a near-surface aquifer that is separated from the Boulder Zone at the Turkey Point site by about 2,800 ft, a large portion of which is confining strata. As mentioned earlier, recent studies of the impacts of deep well injection in South Florida indicate that the Upper Floridan aquifer (UFA) has not been impacted by deep well injection. Therefore, impact to the Biscayne Aquifer is very unlikely.

The comment also states that the Upper Floridan aquifer has been "contaminated with treated wastewater", repeating a conclusion made by Starr et al. (2001-TN1251) and other reports published around the same time. More recent studies, such as those by Maliva et al. (2007-TN1483) and Walsh and Price (2010-TN3656), have clarified that while migration has reached the USDW at some Class I injection facilities, no impact has been reported for the Upper Floridan aquifer in southeast Florida. This may be explained as follows: in some places, the

USDW (total dissolved solids (TDS) concentrations exceed 10,000 mg/L) is below the Upper Floridan aquifer within the MCU. In this regard, more recent reviews of hydrostratigraphy, such as Reese and Richardson (2008-TN3436) have recognized that a permeable unit known as the Avon Park Permeable Zone (APPZ) occurs within the MCU and "...has been identified in previous studies as the...lower part of the Upper Floridan aquifer in...the southern part of southeastern Florida." A comparison of the depth where impact has been detected relative to the revised stratigraphy indicates that upwelling has only impacted the APPZ and not the Upper Floridan aquifer. These clarifications are discussed in greater detail in the EIS and below.

NRC staff previously reviewed the study identified in the comment, which the draft EIS refers to as Starr et al. (2001-TN1251). This study was an independent review of "existing information that describes geology, hydrogeology, and geochemistry at the SDWWTP [South District Wastewater Treatment Plant]..." which was conducted by the Idaho National Engineering Laboratory at the request of the EPA Region 4 to determine the ability of the MCU to prevent fluid upward migration. The NRC staff disagrees that this and other available studies should be interpreted to indicate that there is "no information to show that sufficient confinement exists" as stated in the comment above. Rather, the study expressed concern about the amount and type of data then available for evaluation. According to the Starr et al. (2001-TN1251) report, a few of the shortcomings of the data set include; "The review of the available geologic data set resulted in the conclusion that it is insufficient for performing this analysis..", "it is not possible to perform an evaluation of the stratigraphy or physical attributes of the confining units without sonic and density logs", "...the validity of the hydrographs is suspect...", "the hydraulic head data available for review are inadequate to provide a useful understanding of head relationships...", and "the hydraulic conductivity values reviewed may not reflect the effective vertical hydraulic conductivity of the confining units above the Boulder Zone." Rather than indicating a lack of confinement by the MCU, the study concludes that "the MCU and/or upper portion of the Lower Floridan Aquifer is a better confining unit than indicated" by the data set that was reviewed. The study concluded that overall, the spatial distribution of contaminants "suggests that isolated conduits, such as inadequately sealed wells or natural features, provide pathways for contaminated water to migrate upward from the Boulder Zone, but contaminants are not migrating upward through the MCU across a broad area." The study also recommended additional collection of specific types of data. This additional data collection as well as modeling, which has also been requested in this comment, has been performed in subsequent studies and further data are required and will be collected as part of the UIC permitting process.

The conclusion reached by the Starr et al. study that upward migration at the SDWWTP resulted from flow along enhanced vertical flow pathways has been strengthened by findings from later studies, including those by McNeill (2002-TN4571), Maliva et al. (2007-TN1483), and Walsh and Price (2010-TN3656).

In a 2002 study of upwelling at the SDWWTP (2002-TN4571), Dr. McNeill indicated that 10 of 17 injection wells were drilled through an "important low-permeability interval" that "appears to act as a competent confining unit" between the Boulder Zone and MCU, but completed above it, leaving an open hole and upward pathway for injected effluent.

Maliva et al. explored this subject by studying core plug vertical hydraulic conductivity data from the MCU at 29 South Florida injection well systems (including the SDWWTP) and variable density solute-transport modeling Maliva et al. (2007-TN1483). Maliva et al. observed that "matrix hydraulic conductivies of the limestone and dolostones that constitute the confining strata between the injection zone and the base of the USDW in South Florida are sufficiently low to retard significant vertical fluid movement." Accordingly, the Maliva et al. study concluded that observed vertical fluid migration from injection zones likely occurred due to enhanced vertical flow pathways created by natural features (such as fractures) or improper well installation.

Walsh and Price (2010-TN3656) evaluated well logs and water chemistry data at the SDWWTP and determined that enhanced vertical flow pathways that allowed upwelling likely resulted from well installation issues identified by Dr. McNeill, because "no fracturing of the confining strata had been reported". Walsh and Price found that upwelling did not extend into the upper portion of the MCU and the Upper Floridan aquifer and concluded that this may be because "rapid vertical pathways did not appear to extend up to the upper Floridan aquifer" and because once upwelling reached the APPZ of the MCU, "the transport mechanism appeared to be a horizontal flow with mixing of ambient waters" (Walsh and Price 2010-TN3656). This conceptual model was also illustrated in a numerical modeling scenario by Maliva et al. (2007-TN1483). This indicates that, even where migration through the bottom portion of the MCU has occurred, impact to the upper MCU and the overlying Upper Floridan aquifer may not be possible. This could partially explain why recent studies have indicated that impact to the Upper Floridan aquifer has not occurred at injection sites.

Cunningham (2012-TN4576; Cunningham 2013-TN4573; Cunningham 2014-TN4051; Cunningham 2015-TN4574) evaluated injection sites for natural vertical high conductivity features (such as karst collapse structures) using seismic-reflection data. Cunningham stated that "if present at or near wastewater injection utilities, these features represent a plausible physical system for the upward migration of effluent injected into the Boulder Zone to overlying EPA-designated USDW in the upper part of the Floridan aquifer system." At a municipal wellfield for the City of Sunrise, where upwelling was coincident with a karst collapse feature, migration had not occurred above the Lower Floridan aquifer.

While seismic data has been collected near the Turkey Point site, there is no deep seismic data at the site. In the absence of seismic data Cunningham (2015-TN4574) suggests that "other evidence for karst collapse includes borehole log signatures that indicate highly fractured rock" and that fractures would be indicated by "high travel times measured on borehole sonic log data." Using sonic logs from injection sites in south Florida, Maliva et al. (2007-TN1483) depicted log signatures and travel times for both fractured and unfractured rock. The NRC staff evaluated return velocities in sonic logs obtained at well EW-1 at the Turkey Point site and found sections of the MCU to have log signatures and transit times consistent with unfractured rock.

The draft EIS states that at the Turkey Point site "The bottom of the deepest underground source of drinking water (USDW) was determined to be between 1,430 and 1,505 ft below ground surface based on water samples collected during packer testing, and was estimated at 1,450 ft based on specific conductance logging (FPL 2012-TN1577). The deepest USDW is within the Avon Park Formation, and is considered part of the Upper Floridan aquifer because of its relatively low salinity." The NRC staff revised the EIS to more clearly describe the status of the Avon Park Formation in general, and the APPZ in particular. The State of Florida granted a permit for FPL to use the exploratory well drilled at the Turkey Point site (EW-1) as an injection well under the Florida State UIC program. The permit rests, in part, on the status of the Upper Floridan aquifer, which is designated as a USDW.

Based on the information presented above and discussed in updated text within the final EIS, the staff finds it reasonable to conclude that adequate confinement of injected wastewater would occur if injection wells are properly installed through the MCU. If upward leakage of wastewater

through the confining layers did occur at the site, it would likely be detected in the overlying monitoring wells and mitigated as required by the FDEP UIC program. Modeling performed as part of the EIS analysis also indicates that the extent of migration of the injected effluent within the Boulder Zone would be limited over the life of the proposed plant.

Even in the event that upward migration occurs, studies evaluating the human and ecological impacts of various methods of wastewater disposal in South Florida have concluded that the overall health risk for deep well injection was "low where there have been impacts to USDWs" and that "the risk would be further reduced when the injected wastewater is treated to reclaimed water standards" (EPA 2003-TN4759). The reclaimed wastewater would be treated beyond the secondary treatment referred to here before it is sent to the Turkey Point site. At the Turkey Point site, it would be further treated and diluted before injection at rates lower than those currently used at the SDWWTP. This study also reinforces the staff conclusion regarding the requirements of the UIC permit by stating that "the [FDEP UIC] permit process offers better opportunities to evaluate the suitability of specific well sites and injection zones. The permit process is also designed to anticipate and prevent potential problems related to well operation (and adverse impacts resulting from injection)." The construction and operation of proposed Turkey Points Units 6 and 7 would have only a negligible effect (through salt drift) on the salinity of the existing cooling canals associated with the operation of Turkey Point Units 3 and 4, and need not be discussed further in the EIS. Possible measures to address the salinity of the existing cooling canals are outside the scope of this EIS. The potential impact of upward leakage of wastewater injected in the Boulder Zone is assessed in Appendix G of the EIS and discussed in EIS Section 5.2.1.3.

### E.2.7 Comments Concerning Hydrology - Surface Water

**Comment:** The concern related to expected sea level rise throughout the world which is anticipated to occur over the coming decades and measured in feet and it's possible impacts on any coastal development activity needs to be fully addressed. (**0005-1** [Larsen, Paul])

**Comment:** I certainly don't want two reactors being built using outdated scientific sea rise models. (**0008-14** [Finver, Jody])

**Comment:** The facts speak for themselves: the cooling ponds at Turkey Point were at dangerously high temperatures late last summer with no end in sight for increasing water temperatures in Biscayne Bay; even the more conservative estimates of sea level rise would cause cascading and catastrophic results to a nuclear reactor in the event of major storm coupled with storm surge at the plant site. (0009-3 [Rose, Simon])

**Comment:** FPL should be denied a license for Turkey Point expansion for many reasons:...4. Sea level rise will make Turkey Point an island (**0022-4** [Read, Alice Gray])

**Comment:** Has anyone considered the raising of the ocean waters? How will that affect the nuclear reactors? This should be another concern. (**0040-4** [Pareto, Rolando and Marlene])

**Comment:** Sea level rise makes Turkey Point a bad place for nuclear plants. The new transmission lines are tied to development of two new nuclear reactors at Turkey Point, situated between two national parks on a hurricane-swept coastline subject to storm surge and inundation from sea level rise. Just this past week reports came out naming our area as one of the worst regarding rising sea levels. (0049-2 [Kowalski, Kathleen S.])

**Comment:** Building any such plants on the shores of Florida, which will see the sea rise up to 10 feet in 50 years, is lunacy. (**0053-4** [Sasiadek, Alfred])

**Comment:** with global warming, Miami and Florida will be the first affected areas in the nation with sea level rise. so how can anyone, NRC, fp&I, propose adding two more nuclear reactors at turkey point in that scenario. (**0055-3** [Roedel, Kitty])

**Comment:** As a related matter, we also do NOT need any more irresponsible, out of control, development in our tenuous environmental situation with the global warming and sea level rising. The latter is especially dire in our peninsula because we have water on three sides and, to date no ways the ameliorate the rapid continuation of this pending threat. (**0060-4** [Beckman, Yvonne and Douglas])

**Comment:** These reactors would pose a danger not only in a hurricane, but the location doesn't take into account the reality of rising seas caused by climate change. (**0086-2** [Lawrence, Diane])

**Comment:** I recommend that you disapprove any further processing of their Turkey Point Nuclear Power plant expansion proposal for the reasons summarized below. 1) The National Oceanic and Atmospheric Administration (NOAA) recommends that new power plants account for three feet to 6.6 feet of sea-level rise. FPL's application proposes to accommodate <u>only one</u> <u>foot of sea-level rise over the proposed 60-year project life</u>. (**0094-1** [Fairchild, David])

**Comment:** I recommend that you disapprove any further processing of their Turkey Point Nuclear Power plant expansion proposal for the reasons summarized below 5)FPL's proposes operating the new reactors for 60 years, or at least until 2080. One foot of sea-level rise will certainly occur during that time frame, inundating the area surrounding Turkey Point and turning the power plant into an island, possibly flooding radioactive waste storage facilities and releasing radioactivity into the surrounding water during storm surges. The proposal fails to adequately assess that risk. The proposal fails to use the latest and most authoritative forecasts of sea-level rise at the site, nor the probability of <u>storm surges releasing radioactive waste</u> <u>storage</u> there. FPL's assertion that the new reactors will be safe from storm surges does not properly account for these and other impacts to the plant from expected sea level rise plus storm surges heights at the site. (**0094-5** [Fairchild, David])

**Comment:** The site proposed for expansion is located directly on the shores of Biscayne National Park in an area that is extremely susceptible to sea level rise and the impacts of climate change. (0102-2 [Commenters, Multiple])

**Comment:** The proposed construction site is located directly on the shores of Biscayne National Park in an area that's extremely susceptible to sea-level rise and the storm surges that will come with climate change. (0103-2 [Commenters, Multiple])

**Comment:** [E]xpanding a nuclear power plant in an area that's ground zero for sea level rise puts South Florida at unacceptable risk. (0103-7 [Commenters, Multiple])

**Comment:** Clearly, South Florida is highly vulnerable to sea level rise and the impacts of climate change. This site was never an acceptable location for the Turkey Point facility there today and many decades later it has only become an even more unacceptable location. (0104-4 [Commenters, Multiple])

Comment: Comment 3. The DEIS fails to take NOAA's guidance of planning for the highest estimates of SLR, and likely underestimates SLR by using consensus global projections for future SLR that are below the <u>ongoing</u> local rates of SLR measured by regional experts at the University of Miami's Rosenstiel School of Marine and **Atmospheric Science -** Appendix I of the DEIS addresses climate change and sea level rise: "Sea level is projected to rise 1 to 4 ft globally by 2100." [DEIS, p. I-3] While several reports list project such global figures, scientists at the University of Miami's Rosenstiel School of Marine and Atmospheric Science (RSMAS) have actually measured SLR in the Miami region that indicates higher SLR rates are already happening locally: "...over the past 15 years, the average annual increase [in sea level] is roughly 0.27./year, but over just the past 5 years, it's about 0.97./year." [McNoldy 2014] Existing SLR rates measured locally yield a range of 2 to 6.5 feet of rise over the life of the plant stated in DEIS Appendix I, but scientists agree the rate of rise is going to accelerate exponentially. The NOAA states: "The Highest Scenario [for SLR] should be considered in situations where there is little tolerance for risk (e.g. new infrastructure with a long anticipated life cycle such as a power plant)." [NOAA 2012] The final EIS must better estimate effects of sea level rise (SLR) by considering how measured local rates of SLR differ from projected global rates, and the effect of uncertainty in SLR on viability of the project. (0106-6 [Stoddard, Philip K.])

Comment: Comment 4. The DEIS is incomplete in failing to consider loss of the main cooling water supply through reduction of the wastewater stream resulting from reduced residential demand caused by forced water conservation - Sea level rise (SLR) will limit cooling water availability in ways that were not considered in the DEIS. One foot of sea level rise will overwhelm the saltwater exclusion dams in Miami-Dade County, and produce significant saltwater intrusion upon the wellfields. The freshwater supply will be supplemented, at considerable expense, with desalinated water from the Upper Floridan Aquifer, a process that has already begun in parts of Miami-Dade County. Since saltwater intrusion from SLR will impose staunch water conservation measures, either by regulation or by economics, the amount of water available from the Southern Waste Water Treatment Facility will undoubtedly decline over time. Thus the amount of water available today from the Southern Waste Water Treatment Facility will not be available for use as cooling water over the projected operational life of TPN 6&7. The final EIS must consider loss of wastewater as cooling water source because of reduced residential demand from water conservation measures addressing SLR induced saltwater intrusion on freshwater supply. (0106-7 [Stoddard, Philip K.])

**Comment:** Comment 6. The DEIS is incomplete in failing to consider access restriction and ocean vulnerability caused by SLR that could eliminate treated wastewater as a source of cooling water for TPN 6&7 - SLR will complicate road access to the Southern Waste Water Treatment Facility, making plant operation difficult. Although a causeway could be built to keep the plant operational, the price could make operation uneconomical. Further, Elliot Key, which currently shields the region from open ocean effects, will be underwater. Ocean swell, east winds, storms, and tides will have greater effects on plant accessibility and operations. If Miami-Dade County finds operation of the plant has become uneconomical because of SRL, then TPN 6&7 could lose its primary source of cooling water. The final EIS must consider possible loss of treated wastewater as a cooling water source because SLR will impair site access and operability of the Southern Waste Water Treatment Facility. (0106-9 [Stoddard, Philip K.])

**Comment:** The direct, indirect, and cumulative impacts of sea level rise on the construction and operation of Units 6 & 7 and ancillary facilities are not adequately analyzed. (**0113-1-8** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

Comment: Failure to Adequately Analyze the Direct, Indirect, and Cumulative Impacts of Sea Level Rise on the Construction and Operation of Units 6 & 7 and Ancillary Facilities. Preparing for the impacts of impending sea level rise and ensuring that development, both existing and planned, takes into account these potential impacts is one of the most critical challenges facing South Florida. In considering such impacts, the DEIS fails to adequately address the direct, indirect, and cumulative impacts of sea level rise on the construction and operation of Units 6 & 7 and ancillary facilities. Turkey Point is located close to sea level, with an elevation of -2.4 feet to 0.8 feet. Over the last 100 years, sea level in the area of Turkey Point has risen approximately 9-12 inches. [Footnote 40: South Florida Water Management District, FPL Turkey Point Units 6 & 7, Site Certification Application, First Completeness Review, July 30, 2009, 34-35.] According to the Miami-Dade Climate Change Task Force, by 2050, sea level rise could be between 1.5 and 5 feet. [Footnote 41: Ibid., 34-35.] With FPL seeking a COL valid for 40 years, Units 6 & 7 could still be operating when these predictions come to fruition. However, the DEIS fails to adequately analyze the potential impacts associated with this level of sea level rise. The DEIS acknowledges that global sea level is projected to rise by 1 to 4 feet by 2100 and that the vulnerability of Turkey Point to sea level rise is "high" to "very high." [Footnote 42: NRC, DEIS, I-3.] According to the U.S. Global Change Research Program, as cited in the DEIS, there is "an imminent threat of increased inland flooding during heavy rain events in lowlying coastal areas such as southeastern Florida" and sea level rise will "accelerate saltwater intrusion into freshwater supplies" [Footnote 43: Ibid. I-3.] Predictions for sea level rise globally and in specific regions can vary widely and the DEIS accounts for a very conservative estimate of sea level rise in its analysis. NOAA discourages decision makers from using only the most likely sea level rise scenarios when considering future impacts of sea level rise on development. Rather, in terms of the construction of power plants, NOAA recommends that a projection of over six feet of sea level rise by 2100 be used for planning purposes. [Footnote 44: Parris, A., P. Bromirski, V. Burkett, D. Cayan, M. Culver, J. Hall, R., Horton, K. Knuuti, R. Moss, J. Obejsekera, A. Sallenger, and J. Weiss. Global Sea Level Rise Scenarios for the US National Climate Assessment, NOAA Tech Memo OAR CPO-1, 2012, 2.] Under such recommendations, three feet of sea level rise by 2060 should be accounted for, which is within the lifetime of Units 6 & 7. Despite the fact that new units would be constructed on elevated pads, transmission line facilities, reclaimed water pipelines, industrial wastewater facilities, access roads, and other facilities would be located at the current elevation of the plant. The DEIS omits an adequate discussion on how sea level rise could potentially impact these facilities and the operations of Units 6 & 7. Sea level rise could cut off road access to the Southern Waste Water Treatment Facility, impacting the plant's operations. Moreover, considering the porosity of the Biscayne Aquifer, increasing sea level rise could also increase groundwater levels in the region. [Footnote 45: South Florida Water Management District, FPL Turkey Point Units 6 & 7, Site Certification Application, First Completeness Review, July 30, 2009, 34-35.] Impacts of sea level rise could affect the operations of the radial collector wells, particularly in regards to the percentage of water drawn from Biscayne Bay versus freshwater from the Biscayne Aquifer. The NRC should also look at the impacts of sea level rise beyond the 40 year lifetime of the plant, especially as nuclear waste will be stored onsite. In addition, the DEIS does not adequately discuss the increased vulnerability of Units 6 & 7 to storm surge as a result of sea level rise. While sea level rise occurs slowly, impacts from storm surge can be sudden and immediate. Turkey Point is located between Biscayne Bay to the east and low-lying wetlands to the west. As sea level rises, Florida Bay could also border the Turkey Point site. Therefore, when anticipating future scenarios, storm surge could potentially come at the plant from three directions. Elliott Key, which currently acts as a barrier to the impacts of storms, may be underwater, leaving the facility more vulnerable to storm surge, high tides, winds, and ocean swell. Given projections, it is extremely likely that water from Biscayne Bay will rise to or above levels of water within the cooling canal system at some point in the project's lifetime. During storm events, it is possible

that water levels may breach the height of the berms surrounding the CCS, causing Bay water to mix with CCS water before the water returns to Biscayne Bay. [Footnote 46: West, B. United States Department of the Interior, National Park Service Letter to A. Williamson, U.S. Nuclear Regulatory Commission, November 25, 2014, SER PC, 9.] The end result would be the increased presence of cooling canal system water in the bay, which could lead to nutrient loading and potentially devastating algal blooms within the bay. [Footnote 47: Ibid., 9.] The DEIS must account for such future scenarios and direct, indirect, and cumulative impacts of sea level rise and storm surge in its analysis of project impacts. (0113-2-12 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The current reactors and the proposed two new reactors are located along the south east Florida coast on low lying land. We are already actively seeing the effects of sea rise; the city of Miami Beach, some 10-15 miles from the plant, has been suffering from flooding during high tides, and is spending millions of dollars installing huge pumps to move the water back into the sea. Nuclear reactors should not be built on the coast, an location threatened by sea rise, an area mere feet above current sea level (Miami Dade County has a maximum height of 13.5 feet above sea level). (0115-6 [Trencher, Ruth])

**Comment:** Even one foot of sea-level rise will inundate the area surrounding Turkey Point and turn the power plant into a remote island. A difference of two feet of sea-level rise will dramatically affect the height of future storm surges. (**0122-2** [Meyer, Paul])

**Comment:** I herewith want you to note my objection to FPL's planned new nuclear power plans - a dangerous and superfluous proposition, given our climate change[.] (**0135-1** [Thiel, Markus])

**Comment:** I am writing today from my home to oppose the approval of FPL's two new nuclear power plant at Turkey Point for the following reasons: 1. This location is too vulnerable to storm surges in a hurricane prone location. Sea level rise is not a fantasy and will subject Turkey Point to serious damage as well as costly preventative measures. (**0136-1** [Levy, Morgan I.])

**Comment:** The biggest risk in Florida would be from flooding, and that risk increases every year because of people like our idiot governor who deny climate change. (**0140-3** [Rhodes, Karen])

**Comment:** Secondly, the draft Environmental Impact statement fails to thoroughly review and address the fact that the FPL proposed plan does not adequately take into account the plan for the sea level rise that is certain to come over the next 40 - 60 years, the lifespan of the two new reactors. The plan must be compliant with the NOAA Dec 6 2012 report, Global Sea Level Rise Scenarios for the United States National Climate Assessment. In that review, the report indicates that over Eight million people live in areas at risk of coastal flooding, and many of the nation's assets related to military readiness, energy, commerce and ecosystems are already located at or near the ocean. The report establishes a high confidence (greater than 9 in 10 chances that global mean sea level will rise at least 8 inches, and no more than 6.6 feet by 2100. The report indicates that the highest scenario should be considered in situations where there is little tolerance for risk, eg new infrastructure with a long anticipated life cycle, such as a power plant. The FPL plan only accounts for one foot of rise. The draft EIS utterly fails to address the commonly accepted levels of impact of projected sea level rise on the site, as well as the surrounding land, according to the US Global Change Research, which will all be several feet under water within the lifetime of the nuclear plants over 50 years. The NRC review study failed to rely on the US Global Change Research, which rates the Vulnerability of the Turkey

point area to sea level rise as "high" to "very high" and notes an "imminent threat of increased inland flooding during heavy rain events in low lying coastal areas such as Southeastern Florida, where just inches of sea level rise will impair the capacity of Stormwater drainage systems to empty into the ocean." (0145-11 [Lerner, Cindy])

**Comment:** The access roads, and all accompanying infrastructure would make the Plant site eventually, during the projected life and operation of the plant inaccessible to maintain operation, and most importantly, crisis management would not be feasible. For example, the planned Miami Dade County reclaimed water pipeline will run 9 miles to the plant site, approximately 4-5 feet underground. By not accounting adequately for sea level rise, there would not be access to the pipeline along the 9 mile track, which would then be several feet underwater and therefore inaccessible to necessary repair. The Draft EIS fails to consider the impact of different weather events combined with scenarios of Sea Level Rise, which according to the NOAA report is crucial to developing hazard profiles for emergency planning and vulnerability impact and adaptation assessment, all of which are required to be done by the Global Change Research Act and in addition, the US Army Corp of Engineers Guidance for Coastal Decision Makers. (0145-12 [Lerner, Cindy])

**Comment:** The Florida climate is not safe for this reactor. Hurricane's, tropical storms, sea level changes, etc. According to scientific research, the area could be below sea level in less than 30 years. (0146-4 [Grant, Randy])

**Comment:** Sea rise is a major threat in and of itself; what it Will do to the present facility is deeply concerning.... But to a hugely expanded plant? Terrifying. (**0163-2** [Cook, Cherie])

**Comment:** This location is exceedingly vulnerable to sea level rise from climate change. (0172-2 [Cava, Daniella Levine])

**Comment:** And finally, expanding a nuclear power plant in an area that's ground zero for sea level rise, as well as hurricane threats, puts South Florida at unacceptable risk. (**0180-1** [Demello, Christine])

**Comment:** Expanding Turkey Point power plant is a fool's errand in light of undeniable sea level rise. (0181-1 [Bremen, Gary])

**Comment:** South Florida has already experienced a sea level rise of almost 5" over the last 10 years. Increasing the size and scope of a plant that will be susceptible to yearly hurricane events, ever powerful storm surge and rising sea levels is irresponsible and I am sure one day will be recognized as criminal. (**0187-4** [Meyer-Steele, Shawn])

**Comment:** Clearly, South Florida is highly vulnerable to sea level rise and the impacts of climate change. (0192-4 [Lebatard, David])

**Comment:** Florida is subject to some rather alarming affects of global warming, including the influx of salt water due to the rising seas. Florida has beautiful natural resources that deserve protection. (0193-1 [Shipe, Kathleen])

**Comment:** The location of the Turkey Point power plant will begin (if it hasn't already) to feel the affects of climate change very soon. It will exponentially get worse as time passes. This is not the right location or timeframe to be adding new reactors to Turkey Point. (0194-1 [Mayotte, Monica])

**Comment:** The site proposed for expansion is located directly on the shores of Biscayne National Park in an area that is extremely susceptible to sea level rise and the impacts of environmental degradation. (0197-1 [Wicht, Dan])

**Comment:** The direct, indirect, and cumulative impacts of sea level rise on the construction and operation of Units 6 & 7 and ancillary facilities are not adequately analyzed. (**0208-9** [Ritz, David])

**Comment:** Furthermore, South Florida is vulnerable to the impacts of climate change, including storm surge, sea level rise, and increased incidents of other types of flooding. (**0210-5** [Sharp, Andrea Heuson])

**Comment:** In addition, proper reporting and evaluation of present and forecasted climatological changes and how they might affect the power plant operations is of critical importance. (**0211-2** [Malefatto, Alfred])

**Comment:** In addition, the assumptions made about sea level rise are inaccurate. If they are, the plant will be an island before the units are taken out of service. (**0212-2** [Ross, Robert and Teresa])

**Comment:** The site proposed for expansion is located directly on the shores of Biscayne National Park in an area that is extremely susceptible to sea level rise and the impacts of climate change. (0228-2 [Yeager, Jerry])

**Comment:** Furthermore, expanding a nuclear power plant in an area that is ground zero for sea level rise threatens the future of South Florida. (**0228-7** [Yeager, Jerry])

**Comment:** I am especially worried that neither FPL nor the NRC have addressed the issue of sea level rise, which has the potential to reach up to six feet by the end of this century. (**0236-1** [Enfield, David])

**Comment:** The low-lying wetlands which surround Turkey Point contain some of the lowest elevations in South Florida. Even a half foot of sea level rise will be enough to inundate the 5,000 acres of canals used to cool the two reactors currently operating at this location. They are filled with hot and extremely salty water - as well as chemicals used to kill a recent algae outbreak in the canals. With scientists measuring ever-increasing sea level rise from the melting of our planet's remaining ice in addition to thermal expansion due to increased temperatures, those 6 inches of sea level rise are a virtual certainty. New nuclear reactors in this location will be sitting on islands in Biscayne Bay - quite possibly in the not so distant future. (0240-6 [Commenters, Multiple])

**Comment:** There are many concerns that have been brought but my biggest concern is that the Turkey Point site is not safe, because it is vulnerable like Fukushmia to sea level rise and because it has problems with cooling its existing units. Neither of these concerns are addressed in the application submitted to your agency. (**0244-2** [Haber, Rochelle])

**Comment:** Expanding in this location that is so vulnerable to sea level rise and severe hurricanes is irresponsible. (0245-2 [Lindsey, Jerrie])

**Comment:** The aforementioned article from Climate Central pointed out the deficiencies in FPL's projections concerning sea level rise and storm surges for its application for Units 6 and 7: [Commenter submitted the following two paragraphs from a website article regarding

maximum storm surge] During its safety assessment for the new reactors' applications at Turkey Point, FPL has modeled a worst-case scenario, based on what they estimate to be the highest tide conditions paired with the worst potential hurricane to strike the area -- plus an additional 10 percent for an extra margin of safety. Based on these estimates, FPL predicts the maximum storm surge at the location of the new Turkey Point reactors would likely be no higher than 24.8 feet, which is 1.2 feet below the plant's safety facilities. In particular, these calculations of a likely maximum storm surge include an estimate that sea level could rise by between 0.78 and 1 foot in Biscayne Bay during the next century. This rate of sea level rise was based on observations taken at a nearby NOAA tide gauge between the years 1931 and 1981 and then extrapolated forward. Scientists, however, have observed that in recent decades the rate of sea level rise has been accelerating. According to a Climate Central analysis of sea level rise in the same region, but based on readings for the most recent 30-year period, the rate of sea level rise around Turkey Point is already about 15 percent higher, or about 1.1 feet-per-century, than what FPL used in its assessment. Consequently, FPL's assessment that Turkey Point can withstand a worst-case scenario storm might fall short. There is already a growing consensus among scientists that the rate of sea level rise is higher than the IPCC estimated in their 2007 report. For example, a <u>2010 report from the National Academy of Sciences</u> confirmed that the future rate of sea level rise may actually be higher than that projected by the 2007 IPCC assessment, because that report didn't take into account future ice losses from Greenland and Antarctica. Consequently, FPL has likely failed to account for how much sea level will rise at Turkey Point in the next 100 years. Because these rates of sea level rise are included in the calculations of how large storm surges could be at Turkey Point, FPL may also be underestimating their "worstcase scenario." (0246-3 [Shlackman, Mara])

**Comment:** I would also be so bold to suggest to you that you contact Dr. Harold R. Wanless, Professor and Chair, Department of Geological Sciences at the University of Miami regarding the increase sea level rise in our State. (0250-6 [Fulks, Anna Louise])

**Comment:** [E]xisting nuclear power reactors at Turkey Point have already exceeded the carrying capacity of the existing water resources, and have become dysfunctional. (**0252-3** [Van Leer, Sam])

**Comment:** As Sea-Level Rise (SLR) progresses, these problems will only get worse. There will be more salt intrusion into the aquifer, more hypersaline water, more algae bloom, and more toxic chemicals. (**0252-9** [Van Leer, Sam])

**Comment:** Furthermore, South Florida is vulnerable to the impacts of climate change, including storm surge, sea level rise, and increased incidents of other types of flooding. (**0253-4** [Bloom, Justin] [Campbell, Cara] [Causey, Charlie] [Cavros, George] [Chenoweth, Mike] [Daly, Meg] [England, Margaret] [Fuller, Manley] [Jones, George L.] [Keller, Alan] [Martin, Drew] [McLaughlin, Caroline] [Reynolds, Laura] [Silverstein, Rachel] [White, Paton] [Williams, Elinor])

**Comment:** Furthermore, South Florida is extremely susceptible to the impacts of climate change, including sea level rise, storm surge, and increased incidents of other types of flooding. (**0254-4** [Dudley, Dwight] [Lerner, Cindy] [Regalado, Tomas] [Stoddard, Philip K.])

**Comment:** If expanded, Turkey Point would become one of the largest nuclear power facilities in the country, located in an area that is ground zero for sea level rise. (**0258-2** [Field, Fran])

**Comment:** We surmise that a tsunami isn't necessary to poison the Atlantic; sea level rise alone will do it, assisting the Corexit and BP oil polluted Gulf Stream. The low-lying wetlands which surround Turkey Point contain some of the lowest elevations in South Florida. Even a half

foot of sea level rise will be enough to inundate the 5,000 acres of canals used to cool the two reactors currently operating at this location. They are filled with hot and extremely salty water - as well as chemicals used to kill a recent algae outbreak in the canals. (**0264-3** [Dwyer, John P.])

**Comment:** If expanded, Turkey Point would become one of the largest nuclear power facilities in the country, located in an area that is ground zero for sea level rise. (**0284-2** [Lopez, Josie])

**Comment:** Additionally, President Obama issued an Executive Order 13653 on November 1, 2013 that directs all agencies - federal, state and local - to incorporate sea level rise projections into planning and construction along US coasts (reference: <u>https://www.whitehouse.gov/the-press-office/2013/11/01/executive-order-preparing-united-states-impacts-climate-change</u>). Had that order been followed, the NRC would have automatically concluded that construction and operation of two additional reactors at Turkey Point, in an area that will be submerged due to sea level rise and to increased storm surges from stronger storms, is untenable and poses an unacceptable risk to a region that is ground zero for sea level rise. It poses an unacceptable risk for the South Florida, the state and the nation. (**0288-14** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** Florida and Power Light seeks to add two additional reactors to this location. The new reactors would not be immune from the underlying environmental and logistical problems affecting the existing reactors, in fact, they would exacerbate them. While there is a litany of concerns about the four reactors, an overwhelming factor against their future viability is climate change. According to government agencies, sea level rise will inundate the Turkey Point site within the lifetime of the proposed reactors. (**0288-4** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** There can be no fair analysis that does not take into effect climate change on the entire Turkey Point site: hotter water temperatures, significant sea level rise, increase storm surge and more severe hurricanes. (**0288-5** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** Even if FPL were to elevate the new reactors with limestone rock fill, they still cannot escape the impacts of sea level rise, storm surge, increased salinization, higher water tables, and increased severity of storms. These impacts will negatively affect plant access, operation, transmission and safe storage of nuclear waste. (**0288-9** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** The proposed expansion site is on the shores of Biscayne National Park in an area that is extremely susceptible to sea level rise and the impacts of climate change, making this a public safety issue. (**0295-3** [Dietrich, Chris OMeara])

**Comment:** We need to be pulling back from coastal development, particularly in Florida which is extremely vulnerable to the effects of sea rise and other factors of our changing climate. (0297-2 [Strouble, Jackie])

**Comment:** With climate change sea level will rise. A nuclear plant in Florida will be very vulnerable to this sea level rise. If we do not also consider the effects on sea level on this expansion of Turkey Hill, we will also be wasting money and putting Florida's citizens at risk. (0298-1 [Cafarelli, Cenie])

**Comment:** The site proposed for expansion of the Turkey Point Power Plant, in Homestead, Florida, is located directly on the shores of Biscayne National Park in an area that is extremely susceptible to sea level rise and the impacts of climate change[.] (**0299-1** [Salatino, Freda])

**Comment:** Finally, expanding a nuclear power plant in an area that is ground zero for sea level rise threatens the future of South Florida. (**0299-4** [Salatino, Freda])

**Comment:** Expanding this facility in the face of sea level rise is profoundly irrational and dangerous, as you surely know. (0318-1 [Teasley, Regi])

**Comment:** The site proposed for expansion is located directly on the shores of Biscayne National Park in an area that is extremely susceptible to sea level rise, hurricanes and the impacts of climate change like large shifts of sand, changes in salinity of fresh water. (0320-1 [Ericson, Del])

**Comment:** if global warming hits the planet, fla will be under water (**0327-1** [Anonymous, Anonymous])

**Comment:** It is fool-hardy to place such risky reactors at the very edge of a rising sea level. The eventual damage to people and the environment is too great for such a venture. (**0337-4** [Philips, Sally B.])

**Comment:** I wish we could see more debate in public about the wisdom of siting two more reactors at a site that will be ground zero for sea level rise and extreme weather and that is upwind of a vast, densely-populated urban area. (0342-1 [Merleaux, Derek])

**Comment:** Putting nukes on Biscayne Bay has got to be one of the most senseless actions you could take. Are you paying no attention at all to what government scientists are saying about sea level rise? Are you planning to put these nukes on the equivalent of an offshore oil rig? (0355-1 [Thomas, Bill])

**Comment:** The consensus of the scientific community is that, within ten years, today's high temperatures will be tomorrow's lows. NASA scientists have also predicted a world wide drought. We see that drought has been ongoing in California (for four years with no relief in sight) and other States as well as other countries, worldwide. We have experienced droughts here in South Florida in the past, and we know that the possibility exists for more droughts. (**0365-6** [Fischer, Antoinette])

**Comment:** I would like you to meet with University of Miami Professor Harold Wanless. (0373-11 [Lee, Nancy])

**Comment:** The tide is rising. We don't want two more nuclear power plants built on fill. (0373-3 [Lee, Nancy])

**Comment:** Until you talk to Harold Wanless Geologist about rising sea water this is really a stupid idea. I just don't think you are thinking straight. (**0373-8** [Lee, Nancy])

**Comment:** If the sea levels were to rise to a level of contact with the reactors, the consequences would be devastating. (0400-1 [Eckert, Brenda])

**Comment:** Is this a new solution to the age-old problem of cooling a nuke reactor - by putting it under six feet of sea water?!? Wake UP and 'get more smarter'!! (0414-1 [Standley, Ron])

**Comment:** Expansion will take place in an area susceptible to sea level rise and the f climate change, with a sensitive ecological habitat and f limited freshwater resources. Please halt the widespread negative environmental and public health and safety impacts and the serious threats to Biscayne National Park. (0417-2 [Beattie, Jane])

**Comment:** How anyone could consider placing a nuclear power plant in Florida despite the projected sea level rise is dumbfounding. (0440-3 [Hoyle, Lester and Judy])

**Comment:** At this very moment, Miami is spending \$400 million to build sea walls and pumps and raise sidewalks 2 feet to cope with current and projected conditions. Since we don't answer to Rick Scott here's some concepts you must learn: Global Warming, Climate Change, Sea Level Rise, Sustainability. (0440-4 [Hoyle, Lester and Judy])

**Comment:** Has anyone thought about the rising tides from climate change brought on by all that extra CO2? You know, as Fukashima showed, reactors don't work so well under water. Oh, I forgot; it's illegal to talk about that global warming thing in Florida. Forget it; just don't tell the NSA I brought it up. (**0443-1** [Jones, Gary])

Comment: Comment 8: The final Environmental Impact Statement should incorporate higher sea-level rise projections and local measurements of sea-level rise rates into its analysis of the risks presented by the Turkey Point Nuclear Plant Units 6 & 7 project. The DEIS states that "[s]ea level is projected to rise 1 to 4 ft. globally by 2100." DEIS at I-3. This figure comes from the U.S. Global Change Research Program, which is the only source for sealevel rise projections cited in the DEIS. In contrast, the National Oceanic and Atmospheric Administration (NOAA) has stated that "[n]o widely accepted method is currently available for producing probabilistic projections of sea level rise at actionable scales (i.e. regional and local)." http://tinyurl.com/NOAA-SLR at 1. Furthermore, there is broad uncertainty regarding the specific effects that glacial melting and thermal expansion of the oceans will have on rising sea levels. i. at 2. "[O]ne of the functions of a NEPA statement is to indicate the extent to which environmental effects are essentially unknown .... Reasonable forecasting and speculation is thus implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as 'crystal ball inquiry." Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n, 481 F.2d 1079, 1092 (D.C. Cir. 1973); see also N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1079 (9th Cir. 2011) (same). Therefore, when data is incomplete or uncertain as with sea-level rise projections, "reasonably foreseeable" includes "impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason." 40 CFR § 1502.22 (emphasis added). Based on the above, the final Environmental Impact Statement should account for multiple sea-level rise projections, including those with the highest projected sea-levels. In 2012, NOAA released four sea-level rise planning scenarios, the highest of which projected 6.6 feet of sea-level rise by 2100. Concerning these scenarios, NOAA recommended: The Highest Scenario should be considered in situations where there is little tolerance for risk (e.g. new infrastructure with a long anticipated life cycle such as a power plant). http://tinyurl.com/NOAA-SLR at 2 (emphasis added); see id. at 12 and 15. Moreover, scientists at the University of Miami have measured sea-level rise locally, finding even higher rates than predicted: [O]ver the past 15 years, the average annual increase [in sea level] is roughly 0.27./year, but over just the past 5 years, it's about 0.97"/year. http://www.rsmas.miami.edu/blog/2014/10/03/sea-level-rise-in-miami/ (emphasis added). Using this information and modeling from the National Hurricane Center, the City of Miami and the Village of Pinecrest commissioned a sea-level rise assessment for the proposed site of the new

reactors. That assessment is attached to these comments as **COM -- D**. It accounts for SLOSH MOM scenarios, the planned increases in elevation for the new facilities, and uses storm surge data for southern Biscayne Bay. The findings of this assessment demonstrate that even by the year 2030, storm surges could isolate the reactor site and inundate the industrial wastewater facility. It is important to note that this assessment displays information for mean tides only. The effects of a storm surge would be greater in a hurricane at high tide. Due to the uncertain nature of the data presented in the DEIS and the new reactors' low tolerance for risk, NEPA requires that the final Environmental Impact Statement consider greater potential sea levels based on existing credible scientific evidence. Additionally, the final Environmental Impact Statement should include existing, local measurements of rates of sea-level rise and account for more than static sea-level rise, which by itself does not reveal risks associated with more frequent and severe flooding. (0456-14 [Miami, City])

# Comment: Comment 9: In addition to Appendix I, the final Environmental Impact Statement should integrate subsections related to sea-level rise throughout its review.

Appendix I of the DEIS contains the majority of the discussion on climate change and sea-level rise. Sea-level rise was likely relegated to a single appendix for ease of reference and to consolidate discussion on a complicated problem. Nevertheless, it is not the kind of problem that should be acknowledged separately from the rest of the environmental review. Instead, the potential consequences of sea-level rise should be incorporated into, and analyzed at, every stage of the review process. For example, the section discussing the transportation of radiological materials would benefit from its own analysis of how rising sea-levels might affect this particular process. (0456-15 [Miami, City])

Comment: Comment 10: The final Environmental Impact Statement should examine how the Turkey Point Nuclear Plant Units 6 & 7 project's adverse environmental impacts are likely to undermine efforts at sea-level rise adaptation. The DEIS notes that, among other problems caused by climate change, "[s]ea-level rise will also push the freshwater-seawater interface further inland. This will put further stresses on freshwater resources inland." DEIS at I-5. These problems are likely to occur due to sea-level rise regardless of future activities at the Turkey Point site. However, the U.S. Environmental Protection Agency (EPA) has stated, in its April 2015 letter to the U.S. Army Corps of Engineers (USACE), that FPL's project "may result in substantial and unacceptable impacts to mangrove wetlands, sawgrass marshes and [submerged aquatic vegetation], which we consider to be [aquatic resources of national importance]." Attached as COM -- B. These environmental resources are significant not only in the context of the Clean Water Act, but also to the discussion concerning sea-level rise impacts. The problem of saltwater intrusion cannot be separated from sea-level rise, storm surge, and other threats to the public's potable water supply. Even without extreme rises in sea-level, storm surges can exacerbate saltwater intrusion. In contrast, mangrove roots stabilize shorelines and enhance water clarity. Sawgrass marshes function as natural water filtration systems. Placing the new reactors at Turkey Point threatens 300 acres of mangrove wetlands and 40 acres of sawgrass marshes. Hence, Miami agrees with the EPA's requests for additional analysis and its conclusion that the project should not be approved as currently proposed. Moreover, as these environmental resources provide important benefits related to water quality, the final Environmental Impact Statement should examine how their loss will exacerbate the consequences of sea-level rise and limit efforts at successful adaption. Similarly, NRC RAI EIS 7.2-3 (RAI No. 5768 Revision 2) requests from FPL a discussion of adaptions being considered to account for changes in environmental impacts due to sea-level rise up to the year 2050. This discussion should also be included in the final Environmental Impact Statement. (0456-16 [Miami, City])

Comment: Comment 11: The final Environmental Impact Statement's analysis should include worst case and plausible scenarios. The DEIS notes that: Climatological changes might affect the average environmental risks of severe accidents because of changes in either severe accident probabilities or associated consequences. While the potential severity of storms and other natural phenomena might increase, nuclear power plants must be designed to withstand all creditable natural events at the site of concern. Increases in the severity of hurricanes with associated storm surges could increase the chance that a challenged safety system may not function. However, the core damage frequencies (CDFs) for the Advanced Passive 1000 (AP1000) pressurized water reactor design are very low and climate change is unlikely to change the CDFs appreciably. Therefore, even if consequences change as a result of climate change, severe accident risk is likely to remain SMALL because CDFs are so low. DEIS at I-13. It further states that "as long as floodwaters did not rise to the level of the plant grade, there would be no contribution to CDF. More detail [sic] evaluation of external flooding at Turkey Point site also confirmed that the flood level at probable maximum precipitation will be below the plant grade." DEIS at 5-130. These statements in the DEIS raise three questions that should be addressed in the final Environmental Impact Statement: •What sea-level rise projection was used to generate the maximum probable storm-surge contemplated above? •What operational lifetime was projected for the new reactors? •Was the worst case scenario hurricane drawn from a proper sample of storms? The first question does not require additional explanation. Concerning the second question, the U.S. Nuclear Regulatory Commission's Office of Nuclear Regulatory Research has confirmed that it is investigating the possibility of licensing reactors to operate for a total of 80 years and that it expects the first applications for these licenses to be submitted in the next couple years. Currently, nuclear reactors may not be licensed beyond a total of 60 years. FPL's most recent filings before the Florida Public Service Commission show that it plans to delay operation of the new reactors to the late 2020s. If the new reactors were eventually approved for a total of 80 years, it would extend their operation up to the year 2100, when NOAA's projections contemplate 6.6 feet of sea-level rise. Therefore, the final Environmental Impact Statement should account for an 80 year operating life of the proposed reactors when analyzing the potential impacts of sea-level rise near Turkey Point. Concerning the third question, new research into deeper climate histories suggests that, due to natural variability, the storm hazard profile of the recent era could be lower than what might be experienced in the future. See Donnelly and Woodruff, attached to these comments as COM -C. In short, it is possible that the intensity of future storms is being underestimated. (0456-17 [Miami, City])

Comment: Comment 7: The final Environmental Impact Statement should examine and clarify how the operation of the Turkey Point Nuclear Plant Units 6 & 7 project, as currently proposed, might constrain attempts to adapt to climate change and to remedy the history of destabilizing uses and impacts the regional ecosystem has already suffered. The DEIS contemplates that demand for water by all users will increase significantly in Miami-Dade County before the new reactors begin operating. See DEIS at 2-176. Similarly, "[t]hermoelectric demand for power use is projected to increase from 2.1 Mgd (four-tenths of one percent of total demand) to 69.8 Mgd (about 10 percent of total demand) from 2005 to 2025, respectively." Id. At the least, this information should be updated to include the water being diverted to the FPL industrial wastewater facility. Moreover, the DEIS concludes that the "[a]dditional extraction of groundwater by [Miami-Dade County] to meet plant requirements for potable and service water is negligible compared to the current demand. Therefore, the [DEIS] concludes that operational groundwater-use impacts would be SMALL, and mitigation beyond the FDEP final Conditions of Certification would not be warranted." DEIS at 5-26. The conclusion that groundwater-user impacts would be small stands in contrast to the projection that thermoelectric demand will grow to 10 percent of all water demand in Miami-Dade County.

The relationship between these determinations should be explained more directly in the final Environmental Impact Statement. To the extent that an Environmental Impact Statement is a decision-making tool, it should also clarify the tradeoffs of pursuing the Turkey Point Nuclear Plant Units 6 & 7 project as currently proposed. As has been made clear, FPL facilities consume large volumes of water in a region that already has extremely limited freshwater resources. Any conflicts presented by the operation of the new reactors with investments in the Comprehensive Everglades Restoration Plan (CERP), protecting the Biscayne Aquifer from saltwater intrusion, or the consumption of potable water by the public should be made clear, not only in the body of the final Environmental Impact Statement, but also in the executive summary. As an additional matter, any decision based on the final Environmental Impact Statement would benefit from an examination of how the placement of the new reactors at Turkey Point might affect regional adaptation strategies. As sea levels rise, saltwater intrusion intensifies, and drinking water becomes more expensive, the South Florida region will be required to pursue a variety of adaptation strategies. The majority of these adaptations will be forced to occur during the operating life of the new reactors. The need for power identified in the DEIS is predicated on assumptions that may not be in line with these adaptive strategies and potential inconsistencies should be explored further. (0456-27 [Miami, City])

## Comment: Expand Consideration of Sea-Level Rise Scenarios and Related Impacts

Turkey Point is a low-lying peninsula bordered by a shallow bay to the east and the Everglades to the west. The proposed site of the new reactors is a mud island southwest of the current plant that is surrounded by the industrial wastewater facility and borders Biscayne Bay. DEIS at 3-2. The proposed site will be raised with fill to a finished grade elevation of 25.5 ft North American Vertical Datum 1988 (NAVD88). Id. As noted by the DEIS, the U.S. Global Change Research Program rates the vulnerability of the Turkey Point area to sea-level rise as "high" to "very high." DEIS at I-3. The DEIS further acknowledges that: Sea-level rise also is expected to "...accelerate saltwater intrusion into freshwater supplies from rivers, streams, and groundwater sources near the coast" and agricultural areas around Miami-Dade County "...are at risk of increased inundation and future loss of cropland with a projected loss of 37,500 acres in Florida with a 27-inch sea level rise." Water demand in southeastern Florida is projected to increase by more than 50 percent by 2060, relative to 2005, based on combined changes in population, socioeconomic conditions, and climate. Id. However, the DEIS merely acknowledges these issues as a matter distinct from the rest of its analysis. It does not incorporate the consequences of climate change into its broader review of the cumulative impacts that may be associated with the siting of new reactors at Turkey Point. (0456-28 [Miami, City])

**Comment:** Seriously? You all want to expand a nuke plant in a prime spot for sea level rise? Is there no end to the stupidity that can be permitted by the NRC? Beyond poor siting (next to Biscayne National Park), consider also what will happen when this site is inundated by sea water, either through ocean rise or major storms. (**0459-1** [Smyke, Pete])

**Comment:** The proposed construction site is very susceptible to damage from storm surges and hurricanes. Both the facility and the required long-term radioactive waste storage would be at risk from such weather events and would also be susceptible over the long term to rises in sea level already being triggered by climate change. (**0463-3** [Gross, Cheryl A.])

**Comment:** It would also be incredibly dumb to build a couple more nukes that close to sea level, even if the science denying governor refuses to notice sea level rise. (0470-1 [Lenz, Andrew])

**Comment:** With sea level rise, freshwater resources are in danger of sea contamination. (0474-1 [Robinson, Angel])

**Comment:** No more nuclear plants in precarious and sensitive locations! Our nation needs to get real about the rising sea levels, an event we will witness in our lifetimes, and build our power grid accordingly, or we could pay for our folly with inestimable environmental damage. Florida is particularly vulnerable. (0476-1 [Monfort, Brooke])

**Comment:** Furthermore, expanding a nuclear power plant in an area that is ground zero for sea level rise threatens the future of South Florida, especially with the Antarctic ice sheets melting so swiftly. (**0488-1** [Liesche, Ken])

**Comment:** The expansion of Turkey Point in Biscane National Park is an irreplaceable national treasure in an area that is susceptible to sea level rise and the impacts of climate change. (0493-1 [Davidson, Penny])

**Comment:** And projected sea level rise could have an adverse effect on this project. (0497-1 [Brstow, Mary])

**Comment:** I am concerned for the future of my community. We are confronted by sea-level rise and a diminishing drinking water supply. FPL's project, as proposed, may needlessly endanger our sole source of freshwater by exacerbating saltwater intrusion. (**0515-2** [Regalado, Tomas])

**Comment:** Isn't anyone noticing the constant flooding episodes in Miami already? Sea levels are rising, especially noticeable here in Florida. Why stick our heads in the sand, and make believe it is not happening? (**0516-1** [Coffey, Rotraud])

**Comment:** The estimated sea level rise by the end of this century is from 1 to 2 meters(7 feet), maybe higher. While the proposed reactors and mechanical draft cooling towers may be sufficiently elevated and safe from day to day flooding. FPL's customer base will NOT have similar protections, hundreds of thousands, maybe more than a million South Florida's households will be risk of flooding during high tide & storm events. I.E. Demand for electricity will drop off as large portions of South Florida flood in a semi-permanent fashion. (0545-2 [Keating, Tim])

**Comment:** Sea level rise makes the location of these plants irresponsible. I have lived in Florida all of my rather long life and seen what hurricanes can do in coastal areas; this is especially true in South Florida. (0550-1 [H., Pat])

**Comment:** The low-lying wetlands which surround Turkey Point contain some of the lowest elevations in South Florida. Even a half foot of sea level rise will be enough to inundate the 5,000 acres of canals used to cool the two reactors currently operating at this location. They are filled with hot and extremely salty water -as well as chemicals used to kill a recent algae outbreak in the canals. With scientists measuring ever-increasing sea level rise from the melting of our planet's remaining ice in addition to thermal expansion due to increased temperatures, those 6 inches of sea level rise are a virtual certainty. New nuclear reactors in this location will be sitting on islands in Biscayne Bay -quite possibly in the not so distant future. (**0551-1** [Anonymous, Anonymous])

**Comment:** If expanded, Turkey Point would become one of the largest nuclear power facilities in the country, located in an area that is AT GROUND ZERO FOR SEA LEVEL RISE. (**0584-1** [Mazzuca, Rich])

**Comment:** Not only is it too near a National Park, it is also an area of ;potential sea level rise in our increasingly warmer oceans. This would threaten the freshwater in the area. (**0588-6** [Hanna, Jane])

**Comment:** This is 2015 and given the impact of climate change and the resulting sea level rise, one would think that intelligent forward thinking individuals would not consider an expensive, water intensive option like nuclear energy. (**0590-2** [Johnson, Diane])

**Comment:** In addition, South Florida is highly vulnerable to continuing and worsening drought as climate change continues to worsen. New nuclear power requires extreme amounts of precious fresh water supplies. Solar and wind power do not require any use of precious fresh water supplies. Nuclear power plants in Alabama and Tennessee and other states have been shut down because of drought. More nuclear power plants will be shut down when drought continues to get worse because of worsening climate change. (**0592-8** [Brexel, Sr., Charles])

**Comment:** The site is also vulnerable to the impacts of rising seas. Logically, it does not add up. (**0594-2** [Rapuano, Shannon])

**Comment:** It would be extremely irresponsible to site a nuclear reactor in South Florida where rising sea levels will threaten a major nuclear accident. (**0599-2** [Rock, Andrew])

Comment: Comment 9: The final Environmental Impact Statement should incorporate higher sea-level rise projections and local measurements of sea-level rise rates into its analysis of the risks presented by the Turkey Point Nuclear Plant Units 6 & 7 project. The DEIS states that "[s]ea level is projected to rise 1 to 4 ft. globally by 2100." DEIS at I-3. This figure comes from the U.S. Global Change Research Program, which is the only source for sealevel rise projections cited in the DEIS. In contrast, the National Oceanic and Atmospheric Administration ("NOAA") stated that "[n]o widely accepted method is currently available for producing probabilistic projections of sea level rise at actionable scales (i.e. regional and local)." http://tinvurl.com/NOAA-SLR at 1. Furthermore, there is broad uncertainty regarding the specific effects that glacial melting and thermal expansion of the oceans will have on rising sea levels. See id. at 2. "[O]ne of the functions of a NEPA statement is to indicate the extent to which environmental effects are essentially unknown .... Reasonable forecasting and speculation is thus implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as "crystal ball inquiry." Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n, 481 F.2d 1079, 1092 (D.C. Cir. 1973); see also N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1079 (9th Cir. 2011) (same). Therefore, when data is incomplete or uncertain as with sea-level rise projections, "reasonably foreseeable" includes "impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason." 40 CFR § 1502.22 (emphasis added). Based on the above, the final Environmental Impact Statement should account for multiple sea-level rise projections, including those with the highest projected sea-levels. In 2012, NOAA released four sea-level rise planning scenarios, the highest of which projected 6.6 feet of sea-level rise by 2100. Concerning these scenarios, NOAA recommended: The Highest Scenario should be considered in situations where there is little tolerance for risk (e.g. new infrastructure with a long anticipated life cycle such as a power plant). http://tinyurl.com/NOAA-SLR at 2 (emphasis added); see id. at 12 and 15; see also Horton, Radley, et al. "New York City Panel on Climate Change 2015 Report Chapter 2: Sea Level Rise and Coastal Storms." Annals of the New York Academy of Sciences 1336.1 (2015): 36-44; Kopp, Robert E., et al. "Probabilistic 21st and 22nd century sea-level

projections at a global network of tide-gauge sites." Earth's Future 2, no. 8 (2014): 383-406. Moreover, scientists at the University of Miami have measured sea-level rise locally, finding even higher rates than predicted: [O]ver the past 15 years, the average annual increase [in sea level] is roughly 0.27 /year, but over just the past 5 years, it's about 0.97 /year. http://www.rsmas.miami.edu/blog/2014/10/03/sea-level-rise-in-miami/ (emphasis added). The acceleration measured by the University of Miami may stem from natural variability. Nonetheless, natural variability could exacerbate climate change signals for periods spanning multiple decades. Using this information and modeling from the National Hurricane Center, the City of Miami and the Village of Pinecrest commissioned a sea-level rise assessment for the proposed site of the new reactors. That assessment is attached to these comments as COM -**D**. It accounts for SLOSH MOM scenarios, the planned increases in elevation for the new facilities, and uses storm surge data for southern Biscayne Bay. The findings of this assessment demonstrate that even by the year 2030, storm surges could isolate the reactor site and inundate the industrial wastewater facility. It is important to note that this assessment displays information for mean tides only. The effects of a storm surge would be greater in a hurricane at high tide. Likewise, climate models predict longer stretches of dry days between more intense rain events in the subtropics. The combination of these conditions increases the likelihood of more severe floods in the region. Climate Change and Water Management in South Florida: Interdepartmental Climate Change Group, SOUTH FLORIDA WATER MANAGEMENT DISTRICT (Nov. 2009). Further, weakening of the Gulf Stream implies additional sea-level rise, which is not accounted for in the DEIS. Due to the uncertain nature of the data presented in the DEIS and the new reactors' low tolerance for risk, NEPA requires that the final Environmental Impact Statement consider greater potential sea levels based on existing credible scientific evidence. Additionally, the final Environmental Impact Statement should include existing, local measurements of rates of sea-level rise and account for more than static sea-level rise, which by itself does not reveal risks associated with more frequent and severe flooding. See, e.g., Sweet, William V., and Joseph Park. "From the extreme to the mean: Acceleration and tipping points of coastal inundation from sea level rise." Earth's Future 2.12 (2014): 579-600. (0611-11 [Haber, Matthew S.])

**Comment:** Comment 10: In addition to Appendix I, the final Environmental Impact Statement should integrate subsections related to sea-level rise throughout its review. Appendix I of the DEIS contains the majority of the discussion on climate change and sea-level rise. Sea-level rise was likely relegated to a single appendix for ease of reference and to consolidate discussion on a complicated problem. Nevertheless, it is not the kind of problem that should be acknowledged only separately from the rest of the environmental review. Instead, the potential consequences of sea-level rise should be incorporated into, and analyzed at, every stage of the review process. For example, the section discussing the transportation of radiological materials would benefit from its own analysis of how rising sea-levels might affect this particular task. (0611-12 [Haber, Matthew S.])

**Comment:** Comment 11: The final Environmental Impact Statement should examine how the Turkey Point Nuclear Plant Units 6 & 7 project's adverse environmental impacts are likely to undermine efforts at sea-level rise adaptation. The DEIS notes that, among other problems caused by climate change, "[s]ea-level rise will also push the freshwater-seawater interface further inland. This will put further stresses on freshwater resources inland." DEIS at I-5. These problems are likely to occur due to sea-level rise regardless of future activities at the Turkey Point site. However, the U.S. Environmental Protection Agency ("EPA") stated, in its April 2015 letter to the U.S. Army Corps of Engineers ("USACE"), that FPL's project "may result in substantial and unacceptable impacts to mangrove wetlands, sawgrass marshes and [submerged aquatic vegetation], which we consider to be [aquatic resources of national

importance]." Attached as COM - B. These environmental resources are significant not only in the context of the Clean Water Act, but also to the discussion concerning sea-level rise impacts. The problem of saltwater intrusion cannot be separated from sea-level rise, storm surge, and other threats to the public's potable water supply. Even without extreme rises in sea-level, storm surges can exacerbate saltwater intrusion. In contrast, mangrove roots stabilize shorelines and enhance water clarity. Sawgrass marshes function as natural water filtration systems. Placing the new reactors at Turkey Point threatens 300 acres of mangrove wetlands and 40 acres of sawgrass marshes. Hence, Miami agrees with the EPA's requests for additional analysis and its conclusion that the project should not be approved as currently proposed. Moreover, as these environmental resources provide important benefits related to water quality, the final Environmental Impact Statement should examine how their loss will exacerbate the consequences of sea-level rise and limit efforts at successful adaption. Similarly, NRC RAI EIS 7.2-3 (RAI No. 5768 Revision 2) requests from FPL a discussion of adaptions being considered to account for changes in environmental impacts due to sea-level rise up to the year 2050. This discussion should also be included in the final Environmental Impact Statement. (0611-13 [Haber, Matthew S.])

Comment: Comment 8: The final Environmental Impact Statement should examine and clarify how the operation of the Turkey Point Nuclear Plant Units 6 & 7 project, as currently proposed, might constrain attempts to adapt to climate change and to remedy the history of destabilizing uses and impacts the regional ecosystem has already suffered. The DEIS contemplates that demand for water by all users will increase significantly in Miami-Dade County before the new reactors begin operating. See DEIS at 2-176. Similarly, \*[t]hermoelectric demand for power use is projected to increase from 2.1 Mgd (four-tenths of one percent of total demand) to 69.8 Mgd (about 10 percent of total demand) from 2005 to 2025, respectively." Id. At the least, this information should be updated to include the water being diverted to the FPL industrial wastewater facility. Moreover, the DEIS concludes that the \*[a]dditional extraction of groundwater by [Miami-Dade County] to meet plant requirements for potable and service water is negligible compared to the current demand. Therefore, the [DEIS] concludes that operational groundwater-use impacts would be SMALL, and mitigation beyond the FDEP final Conditions of Certification would not be warranted." DEIS at 5-26. The conclusion that groundwater-user impacts would be small contradicts the projection that thermoelectric demand will grow to 10 percent of all water demand in Miami-Dade County. The relationship between these determinations should be explained more directly in the final Environmental Impact Statement. To the extent that an Environmental Impact Statement is a decision-making tool, it should also clarify the tradeoffs of pursuing the Turkey Point Nuclear Plant Units 6 & 7 project as currently proposed. As has been made clear, FPL facilities consume large volumes of water in a region that already has extremely limited freshwater resources. Likely climate change scenarios for South Florida include a 3-11% and up to 20% reduction in rainfall that will further tax freshwater demand. See Vasubandhu et al., Climate Scenarios: A Florida-centric View, STATE UNIV. SYSTEM OF FLORIDA (Nov. 2011) (citing Enfield et al., Mid-Century Expectations for Tropical Cyclone Activity and Florida Rainfall); see also Climate Change and Water Management in South Florida: Interdepartmental Climate Change Group, SOUTH FLORIDA WATER MANAGEMENT DISTRICT (Nov. 2009). Any conflicts presented by the operation of the new reactors with investments in the Comprehensive Everglades Restoration Plan (\*CERP"), protecting the Biscayne Aquifer from saltwater intrusion, or the consumption of potable water by the public should be made clear, not only in the body of the final Environmental Impact Statement, but also in the executive summary. As an additional matter, any decision based on the final Environmental Impact Statement would benefit from an examination of how the placement of the new reactors at Turkey Point might affect regional adaptation strategies. As sea levels rise, saltwater intrusion intensifies, and drinking water

becomes more expensive, the South Florida region will be required to pursue a variety of adaptation strategies. The majority of these adaptations will be forced to occur during the operating life of the new reactors. The need for power identified in the DEIS is predicated on assumptions that may not be in line with these adaptive strategies and potential inconsistencies should be explored further. (**0611-18** [Haber, Matthew S.])

## Comment: Expand Consideration of Sea-Level Rise Scenarios and Related Impacts

Turkey Point is a low-lying peninsula bordered by a shallow bay to the east and the Everglades to the west. The proposed site of the new reactors is a mud island southwest of the current plant that is surrounded by the industrial wastewater facility and borders Biscayne Bay. DEIS at 3-2. The proposed site will be raised with fill to a finished grade elevation of 25.5 ft North American Vertical Datum 1988 (\*NAVD88"). Id. As noted by the DEIS, the U.S. Global Change Research Program rates the vulnerability of the Turkey Point area to sea-level rise as \*high" to \*very high." DEIS at I-3. The DEIS further acknowledges that: Sea-level rise also is expected to \*\*accelerate saltwater intrusion into freshwater supplies from rivers, streams, and groundwater sources near the coast" and agricultural areas around Miami-Dade County \*\* are at risk of increased inundation and future loss of cropland with a projected loss of 37,500 acres in Florida with a 27inch sea level rise." Water demand in southeastern Florida is projected to increase by more than 50 percent by 2060, relative to 2005, based on combined changes in population, socioeconomic conditions, and climate. Id. However, the DEIS merely acknowledges these issues as a matter distinct from the rest of its analysis. It does not incorporate the consequences of climate change into its broader review of the cumulative impacts that may be associated with the siting of new reactors at Turkey Point, nor does it assess the probability of 27 inches of sea-level rise being exceeded at various points in time. (0611-19 [Haber, Matthew S.])

**Comment:** I understand that the Safety Evaluation Report is not subject to public hearing. Based on discussions with local experts on sea level rise, the USACE's projected one foot rise over the 35 year life of the project seems overly conservative. If FPL's nuclear unit 6 and 7 are approved and built, and they become islands within the next 1015 years due to one foot of SLR, the NRC will face review of its approval. (**0612-7** [Teas, James])

**Comment:** Section 3.2.2.1, Landscape and Stormwater Drainage (pg. 3-8): The proposed nuclear reactor Units 6 and 7, including cooling towers, makeup water reservoir, new substation and associated facilities, would be built on a filled "218 acre island" enclosed by a stabilized earth wall to the north, east, and west. A reinforced concrete wall could be constructed to the south. The elevation within the fill island would range from 19 feet to 26 feet North American Vertical Datum of 1988. With the threat of sea level rise in the foreseeable future, the EPA has concerns on what effect this may have on the surrounding infrastructure to this created island; there are concerns that rising sea levels could potentially surround the island at some point in the future during the lifespan of this project. Please provide information in the FEIS which would support construction of the project, considering the fact that even though the power units will be constructed on this island, the surrounding landscape may be impacted by sea level rise or storm surges that may affect the feasibility of the project, given the project purpose. FPL has stated that they provided substantial scientific data and testimony regarding the effects of sea level rise during the State site certification proceedings, and that the Recommended Order, adopted in the Final Order on Certification states: "The plant design elevation accounts for more than maximum storm surge plus sea level rise. FPL has provided reasonable assurance that the project is not contrary to the public interest as it relates to the sea level rise." The FEIS should evaluate, document and clarify the effectiveness of proposed measures to protect the facility from storm surges and rising sea level. (0617-1-8 [Mueller, Heinz J.])

Comment: Climate Change and Sea Level Rise. The Turkey Point site is in a low-lying, floodprone, (Section 2.2.1.4, p. 2-6) coastal area at or near sea level. It is often flooded by tides or freshwater runoff (Section 2.4.1.1, p. 2-74). Additionally, it is bounded by Biscayne Bay to the east, Card Sound to the south, and wetlands to the west. Florida Power & Light proposes to build the proposed action on a filled "island" (Section 3.2.2.1, p. 3-8). This island would contain the proposed two new nuclear units' power blocks and most of the associated infrastructure: the mechanical draft cooling towers, makeup-water reservoir, substation, underground injection control wells, and various small associated buildings. This island would be constructed on a vacant 218-acre mudflat, known as "Mud Island" (Section 4.1.1. I, pp. (4-4) - (4-6)). This 218acre mudflat is to be excavated down to XX feet and then filled to a plant grade of 26 feet. This elevation is above the design basis flood elevation of 24.8 ft. (Section 5.11.2.4, p. 5-129). Additionally, this land island is to be enclosed by a stabilized earth perimeter wall on the north, east, and west sides and a reinforced concrete wall on the south side (Section 3.2.2.1, p. 3-8). This land island will also be surrounded by 4,370 acres (Section 2.3 .1, p. 2-42) or 5,900 acres (Section 2.2.1.6, p. 2-7) of existing man-made, unlined cooling canals of the industrial waste facility. It is unclear whether the land island will be 26 feet above these existing cooling canals. Climate Change Adaptation: NRC's analysis of climate-change effects (Appendix I) does not consider potential climate-change impacts to the proposed action, nor subsequent impacts to the surrounding environment. Instead it documents NRC's qualitative determination of the likely changes described in Chapter 5 (operational impacts) if the environment is altered in a manner consistent with current climate-change predictions (Appendix I, p. 1-1). Recommendations: EPA recommends NRC discuss potential climate-change impacts to the facility, resulting impacts to the surrounding communities, ecosystems, infrastructure, land uses, etc., and mitigation opportunities. Additionally, EPA recommends NRC use available sea-level rise and storm-surge models to guantify impacts to the proposed action, which can facilitate identification of associated impacts to the affected environment. For example, the USACE's Sea Level Rise analysis where alternatives are evaluated using "low," "intermediate," and "high" rates of future sea level rise for both "with" and "without" project conditions. [Footnote 1: Incorporating Sea Level Change in Civil Works Programs (31 December 2013) Department of the Army, U.S. Army Corps of Engineers, ER 1100-2-8162, Regulation No. 1100-2-8162, available at http://www.publications.usace.army.mil/Portals/76/Publications/EngineerRegulations/ER 1100-2-8162.pdf] (0617-4-1 [Mueller, Heinz J.])

Comment: Sea Level Rise and Regional Stormwater Management. As noted by NRC, land was drained by a series of canals to support urban and agricultural development (Section 7.3.2.1, p. 7-22). The anticipated encroaching sea-level can reverse water transport by moving sea water into these canals. Thereby raising the water-surface level and decreasing stormwater storage potential within these canals. Moreover, the rising water-surface level within these canals reflects the saturation of the surrounding soils. Saturated soils are unable to store storm water. Additionally, sea level rise is expected to decrease the water elevation gradient along this canal-drainage system. Thereby reducing the capacity for gravity-driven drainage through the canal network. *Recommendations:* EPA recommends NRC consider the effects of sea level rise, storm surge, and extreme storm events upon the regional canal system and surrounding saturated soils and associated impacts to the proposed action. EPA recommends this analysis include the stability of the proposed 218-acre, 26-foot elevated, land island having a three-sided earthen berm. For example, FPL proposes to include the underground injection control wells within the elevated, 218-acre, land island (Section 4.1.1.1, p. 4-4). EPA recommends NRC discuss whether these canals, UIC wells, and the four proposed radial collector wells, will act as conduits to transport ground water under the influence of sea level rise into the proposed facility. As NRC has noted, the drainage canals also provide a conduit for seawater to flow inland at high tide (Section 2.3.3.2, p. 2-66). Additionally, the analysis should include the combined

effects of sea level rise combined storm surge and a heavy precipitation event. As NRC noted (Appendix I), the U.S. Global Change Research Program rates the vulnerability of the Turkey Point area to sea-level rise as "high" to "very high," and notes an "imminent threat of increased inland flooding during heavy rain events in low-lying coastal areas such as southeastern Florida, where just inches of sea level rise will impair the capacity of stormwater drainage systems to empty into the ocean." (0617-4-4 [Mueller, Heinz J.])

**Comment:** <u>Sea Level Rise and Land Subsidence</u>: Prior work suggests that land subsidence rates in South Florida could be in the 0. 7 to 1.8 mm per year range, with Dade County at 1.1 mm per year, which could add 7 to 18 cm (or more) to sea level rise estimates for this area through the year 2080. [Footnote 3: Climate Change in Coastal Areas in Florida: Sea Level Rise Estimation and Economic Analysis to Year 2080, Center for Economic Forecasting and Analysis (2008). Available at

http://www.cefa.fsu.edu/content/download/472341327898]. **Recommendations:** EPA recommends NRC discuss the potential impacts of filling a 218-acre mudflat, and thereby raising it to the proposed 26-foot plant grade, upon the Turkey Point area's land subsidence rate and affected environment. Additionally, EPA recommends NRC discuss this impact in context of projected sea level rise, storm surge, and extreme precipitation events. As stated earlier, the U.S. Global Change Research Program predicts the occurrence of more category 4 and 5 storms. (0617-4-5 [Mueller, Heinz J.])

Comment: Sea Level Rise and Shoreline erosion: The proposed action is to be located in a low lying coastal area subject to shoreline erosion. It will impact 591 coastal acres. This includes 182 acres of mudflat, 32 acres of open water, and 89 acres of various mangrove types, sawgrass marsh, and mixed wetland hardwood (Section 4.3.1.1, pp. (4-40) - (4-42)). Additionally, the industrial wastewater facility covers another 5,600 acres along 5 miles of the Biscayne Bay shoreline (Section 2.3.1.1, p. 2-44). Moreover an existing barge-turning basin is to be enlarged by 4,356 ft<sup>2</sup> to accommodate large barges (Section 4.2.1.1, p. 4-27). Approximately 328 miles (40 percent) of Florida's sandy beaches are eroding enough to threaten existing developments and recreation areas. [Footnote 4: Saving Florida's VANISHING Shores, http://www.epa.gov/climatechange/Downloads/impacts-adaptation/saving FL.pdf] According to the state Department of Environmental Protection, 485 miles of beaches (59%) already are experiencing erosion, with 387 miles experiencing "critical erosion. [Footnote 5: Florida's Resilient Coasts: A State Policy Framework for Adaptation to Climate Change, http://www.ces.fau.edu/files/projectslclimate change/FI ResilientCoast.pdf]." Recommendatio ns: EPA recommends NRC examine the potential for shoreline erosion impacts associated with rising sea levels, storm surges, and increasing occurrence of Category 4 and 5 storms on the proposed action and associated impacts upon the affected environment. (0617-4-6 [Mueller, Heinz J.])

## Comment: 4) <u>Evaluation of Sea-Level Rise, Future Hurricanes and Storms, and Climate</u> <u>Change Impacts</u>

The NPS is concerned that the DEIS does not include a sufficient analysis of how sea-level rise, hurricanes and storms, and climate change may impact the proposed project and NPS resources affected by these changing conditions. These potential environmental impacts should be included in the DEIS. The DEIS does not include an analysis of sea-level rise as it pertains to the proposed action or the present facility, and its conclusions do not contain information which would indicate the effect of sea-level rise, including hurricanes and storms, demonstrating the potential effect on park resources. As discussed earlier, the concerns related to the IWF include the transfer of IWF water into the bay as a result of storm surge, including hurricanes.

As the NRC and USACE are aware, there is a broad range of sea-level rise projections for South Florida. While predicted sea-level for the life of the project varies, projections agree about one key feature - sea-level is rising and it will continue to rise at an increasing rate. Most importantly, sea-level rise at a particular site is not a smooth, steady rate of increase, but rather it will be varied and include pulses from climatic events (notably storm surge from hurricanes) that could connect, as noted earlier, the IWF with Biscayne Bay and release pollutants from the IWF and other facilities that are not elevated and strongly reinforced. The DEIS currently has no analysis or discussion of the impacts on movement of materials (especially toxic materials, nutrients, and turbidity) from the Units 6 and 7 to Biscayne NP and Biscayne Bay that may occur with hurricanes, storms, and storm surge on the site. The impact of these higher, more forceful storm surges must be evaluated.

The rate of sea-level rise in the region of the IWF is currently 2.4 mm/year and increasing. Projections by the Intergovernmental Panel on Climate Change (IPCC Fifth Assessment, 13.5, 2013) show coastal water levels gaining between 0.40 and 0.63 m by the end of the century, with related increases in coastal erosion and additive impacts on storm surge. Additionally, sea-level in Miami is directly affected by the flow rate of the Florida Current I Gulf Stream system. Reductions in flow rate and associated increases in sea-level along the East Coast of North America above the global sea-level rise rates are predicted for this system. At a minimum, a monitoring and adaptive management program that tracks local sea level, measures connectivity between the IWF and the Bay, and acts to minimize risk from IWF contaminants to Biscayne NP (by decreasing these contaminants and the connectivity between the IWF facility and Bay waters), should be in place.

Although the DEIS generally acknowledges that there is a range of potential sea level rise of 1 to 4 feet by the end of this century (the U.S. National Climate Estimate predicted up to 6.6 feet), there is no analysis of the impacts of even within this range of sea-level rise on the Turkey Point Facility, its infrastructure, IWF, or access roads. The DEIS contains no elevation comparisons with the estimated sea-level rise, showing how much of the site land would be lost under the estimated sea level rise scenarios. The analysis needs to consider how this land loss would affect plant operations. The NRC should analyze whether the plant will be able to operate under these various sea level scenarios and, if so, how environmental risks vary with differing operational and sea-level scenarios. Sea-level rise assessment should also include consideration of the South Miami-Dade Waste Water Treatment Plan, as this facility is proposed as the primary source of cooling water for the proposed Units 6 and 7.

Draft climate change guidance from the Council for Environmental Quality (CEQ) on how to consider the effects of greenhouse gas emissions and climate change in the evaluation of federal actions, as well as, guidance related to sea level rise and siting infrastructure from National Oceanic and Atmospheric Agency (NOAA) are available. Further guidance on this subject is provided by USACE Engineering and Construction Bulletin No. 2014-10 "Guidance for Incorporating Climate Change Impacts to Inland Hydrology in Civil Works Studies, Designs, and Projects"; Regulation No 1100-2-8162 "Incorporating Sea Level Change in Civil Works Programs"; and ETL 1100-2-1 Technical Letter 1100-2-1 "Procedures to Evaluate Sea Level Change: Impacts, Responses, and Adaptation. " The NPS recommends that NRC review these documents and update the DEIS as appropriate to account for climate change/sea level rise.

The DEIS should include assessment of how climate change and sea-level rise vulnerability changes risks associated with the proposed project and its long-term operations both in the analysis of alternatives as well as cumulative impacts. In this evaluation, climate change and sea-level rise related risks are dismissed as an criterion for risk assessment, with a statement

(page 941) that equates the risk of all alternatives: "The inland alternative sites could experience fewer impacts from sea-level rise, but may also experience greater impacts from other climate change indicators, such as rising temperature."

Because the NPS is required to manage parks for "future generations," we recommend that a revised DEIS provide more detail as to how radioactive waste would be stored before and after the forty-year license expire. Storing hazardous waste adjacent to Biscayne NP indefinitely poses great concern, especially because the region will face increased storm events and possibly more intense resulting from climate change and sea-level rise and it is unclear whether the storage facilities are capable of withstanding increased storm events resulting from climate change and sea-level rise.

The NPS acknowledges that a storm related analysis may be contained in the NRC's Safety Report and will not receive a public review. To increase transparency with the public, this information should be clearly articulated in revisions to the DEIS. We recognize the NRC may be constrained by their regulations and guidance to include applicable environmental information in their DEIS. (0622-1-10 [Austin, Stan])

**Comment: Climate Change and Sea-Level Rise[.]** The NPS is concerned that the DEIS does not include a sufficient analysis of how sea-level rise, hurricanes and storms, and climate change may impact the proposed project and NPS resources affected by these changing conditions. As an example, the DEIS does not address how sea-level rise may impact plant operations or the availability of cooling water sourced from the South Miami-Dade Wastewater facility and a greater reliance on the RCWs. There is recent draft climate change guidance from the Council on Environmental Quality on how to consider the effects of greenhouse gas emissions and climate change in the evaluation of federal actions, as well as guidance related to sea level rise and siting infrastructure from National Oceanic and Atmospheric Administration. The NPS recommends that NRC review these or other related guidance documents and update the DEIS as appropriate to account for climate change/sea level rise. (0623-5 [Austin, Stan])

**Comment:** The NPS asserts that the DEIS impact analysis associated with construction and operation of proposed Units 6 and 7 does not sufficiently address issues related to the environmental impacts of the proposed action on resources managed by the NPS. Based on our review of the DEIS, we have strong concerns that impact analysis described in the DEIS does not: 1) sufficiently utilize the best science/data/information (e.g., current salinity data or sea-level rise projections for modeling) to analyze the environmental effects of the proposed action on the affected environment, including Biscayne and Everglades NPs[.] (0623-7 [Austin, Stan])

**Comment:** Green spaces and parks must be protected at all costs. It is now known by scientists that our country will be directly impacted from global warming due to arctic meltings. The Antarctic which scientist thought would be the glacier that would be the least impacted is melting at an accelerated rate both from the top and bottom (warm waters). The West side of the antarctic, ie the Amundson Sea, Larsen Band the Thwaites Ice Shelves will be gone in only a few years. The disappearance of the Amundson ice shelves will increase sea level by 15 feet! Miami and coastal communities need to act quickly to prevent and correct shoreline erosion. Our greenspaces, parks, green roofes, vertical/hanging gardens are key in prevent and reducing flooding. Dense communities have 55% runoff where green space communities only produce 10% runoff. (0633-2 [Cornely, Tina])

**Comment:** Not enough effort has been made to determine the risk from sea level rise. These two new reactors will be built in an area that could be under water in the future. Even if these

reactors are being decommissioned at this time how easy will this be if sea level has risen in the surrounding area? It could also impact these reactors during their life time. The estimates of sea level rise continue to be debated. The numbers you are using could be low estimates. What if your estimates are incorrect? I recommend that you look at additional sources for sea level rise estimates. (**0641-12** [Martin, Drew])

**Comment:** Climate change could increase salt water intrusion even further increasing this stress level. Why add on two new reactors to increase the competition for fresh water? (**0641-3** [Martin, Drew])

**Comment:** Lastly, the current proposed plan has not accounted for the anticipated sea level rise in our coastal region. NOAA recommends that power plants account for a 3 to 6.6 feet sea level rise. The proposed FPL plan only accounts for a 1 foot rise. In a area where we are already experiencing problems with sea level rise, this type of irresponsible planning is unacceptable. (**0642-5** [Rawlins, Steve])

**Comment:** We surmise that a tsunami isnt necessary to poison the Atlantic; sea level rise alone will do it, assisting the Corexit and BP oil polluted Gulf Stream. The low-lying wetlands surrounding Turkey Point contain some of the lowest elevations in South Florida. Even a half foot of sea level rise will be enough to inundate the 5,000 acres of canals used to cool the two reactors currently operating at this location: They are filled with hot and extremely salty water as well as chemicals. (0673-4 [Dwyer, John P.])

**Comment:** According to Professor Wanless, it's already too late. The oceans have already absorbed the critical amount of heat and are undermining the ice at the poles faster than anyone predicted. He says 75 years at best before the area south of Tampa/ Stewart is underwater--and notes that it will include Turkey Point's reactors and cooling pools containing 45 years worth of uranium rods. Miami will be Fukushima for the Atlantic. (**0673-8** [Dwyer, John P.])

**Comment:** Consider, too, that Biscayne Bay is at risk for sea-level rise. The low-lying wetlands that surround Turkey Point contain some of the lowest elevations in South Florida. Even a half-foot of sea level rise will be enough to inundate the 5,000 acres of canals used to cool the two reactors currently operating at this location. They are filled with hot and extremely salty water as well as chemicals used to kill a recent algae outbreak in the canals. With scientists measuring ever-increasing sea-level rise from the melting of our planet's remaining ice ill addition to thermal expansion due to increased temperatures, six inches of sea level rise are a certainty. New nuclear reactors in this location will be sitting on islands in Biscayne Bay quite possibly in the not so distant future. (0674-4 [Dwyer, Karen])

**Comment:** The original decision to build nuclear reactors at Turkey Point, on a hurricane-swept coastline vulnerable to storm surge, was made a half a century before we understood climate change and sea-level rise. FPLs new reactors would operate until 2080, during which, the National Oceanic and Atmospheric Administration (NOAA) recommends that power plants account for three feet to 6.6 feet of sea-level rise. FPLs application accounts for only one foot of sea-level rise for that period, clearly unrealistic given the five inches of sea-level rise measured locally in the past five years. Even one foot of sea-level rise will inundate the area surrounding Turkey Point and turn the power plant into a remote island. A difference of two feet of sea-level rise will dramatically affect the height of future storm surges. FPLs assertion that new reactors will be safe from a storm surge because they are 26-feet above sea level, overlooks the facts that FPLs sea level standard is 27 years old; and the project does not properly account for

realistic storm surge projections. FPL ignores these facts to double down on a dangerous position based on yesterdays science. (**0675-6** [Rodriguez, Jose Javier])

**Comment:** Please remember that as global warming continues, the water level in the bay will rise. We do not want a nuclear power plant surrounded by water. (**0688-1** [Albers, Harold])

**Comment:** The risk in doing this project should be considered to be severely prohibitive, especially with Larsen-B ice shelf degradation continuing. (**0691-1** [Drevicky, John])

**Comment:** Even if our governor is "not a scientist" and doesn't want Floridians to discuss climate change, I hope that the U.S. Nuclear Regulatory Commission and Army Corps of Engineers include scientists and people who are smart enough to know that we'll need to deal with rising sea levels if even we don't talk about them. (**0693-1** [Dorn, Kathryn])

**Comment:** When the sea rises it would be inundated, that would be crazy wouldn't it? Do not risk the consequences Ms.'s Bladley and Megan Clouser. (**0695-2** [Nappe, Judith])

**Comment:** I would like to add these PowerPoint slides to the public record for your review of the Turkey Point EIS. They are closeups of the Turkey Point showing .5-6 feet of sea level rise and were prepared by Dr. Peter Harlem of Florida Atlantic University. As you will see, sea level rise will have an immediate and ongoing effect on the plant site and it's surrounding environment [Commenter attached figure showing a map of the effects of 6 ft sea level rise]. (0702-1 [Kipnis, Dan])

**Comment:** Turkey Point EIS comments and slide #2 [Commenter attached figure showing a map of the effects of 6 ft sea level rise]. (**0703-1** [Kipnis, Dan])

**Comment:** The low-lying wetlands which surround Turkey Point contain some of the lowest elevations in South Florida: Even a half foot of sea level rise will be enough to inundate the 5,000 acres of canals used to cool the two reactors currently operating at this location. They are filled with hot and extremely salty water -as well as chemicals used to kill a recent algae outbreak in the canals. With scientists measuring ever-increasing sea level rise from the melting of our planet's remaining ice in addition to thermal expansion due to increased temperatures, those 6 inches of sea level rise are a virtual certainty. (0712-3 [Almer, Anessa])

### Comment: <u>NRC's Draft EIS is Flawed Because it Fails to Adequately Address the</u> <u>Impacts of Climate Change, Specifically, Sea Level Rise on the Turkey Point Site:</u>

According to the NRC's Environmental Impact Statement for Combined Licenses (COLs) for Turkey Point Nuclear Plant Units 6 and 7, Draft Report for Comment (NUREG-2176) (Here in after DEIS): The impact of sea level rise on the safe operation of the proposed units is considered in the NRC's safety review and is not within the scope of environmental review. Results of the safety review can be found in the Safety Evaluation Report (SER). However, sea level rise will be considered as one of the contributing factors to the cumulative impact of the proposed action and other past, present, and reasonably foreseeable actions in Chapter 7 of the EIS. (I won't bother with citing the footnote in NRC's Draft EIS since it does function!) Sadly, the Huffington Post did a better job framing the issue of sea level rise at Turkey point in one graphic than the NRC did in nearly 1500 pages. [FIGURE: Turkey Point Nuclear Generating Station] (http://www.huffingtonpost.com/2014/05/19/maps-rising-seas-storms-threaten-flood-coasta1nuclear-power-plantsn5233306.html) Yet NRC's DEIS seemingly fails to address the fact that the Turkey Point site will be an island during a storm surge by the time the proposed reactors would be operation should FP&L ever commit to building them. (0716-7 [Riccio, Jim]) **Comment:** Why build here when the Army Corp of Engineers estimates that by 2030 (less than 15 years from now) the projected sea level rise for this area is 3-7 inches. Already the existing plant is drawing so much water that it creates problems for the counties future water supply. What are the negative impacts of your allowed increase to 104 degrees and why is the lower level kept in place for all other nuclear power plants? (**0718-1** [Buechler, Jerry])

**Comment:** Three, the costs that are related to safety. The information that I have is that NOAA has recommended power plants account for between 3 and 6 feet of sea level rise. And if this application is granted, basically the application is seeking approval for two new units on a low peninsula into a shallow bay that's already highly vulnerable to storm surge. That is a -- that is going to present costs that are hard to calculate. (**0721-1-6** [Rodriguez, Jose Javier])

**Comment:** Now what happens if you get both entrainment and sea level rise taking out the reclaimed water supply? Where do you get your water from then? That's not in the Environmental Impact Statement, and we know darn well it's going to come out of the L-31-E, same as they're drawing right now for Turkey Point 3 and 4, and that's going to conflict massively with the Southeast Everglades restoration of Coastal Everglades. (0721-2-10 [Stoddard, Philip K.])

**Comment:** The third issue is an underestimation of sea level rise by a failure to consider how measured local rates of sea level rise differ from projected global rates and the effect of that uncertainty and viability of this project.

So Appendix I of the Impact Statement addresses climate change and sea level rise. And here's a quote: "Sea level is projected to rise 1 to 4 feet globally by the Year 2100." We heard where that came from earlier. So several reports list figures similar to this. But scientists at RSMAS, Rosenstiel School of Marine and Atmospheric Science at University of Miami on Virginia Key, have actually measured sea level rise rates in the Miami region, and it indicates higher rates of sea level rise are already happening locally. In the past five years the average rate has been .97 inches. That's almost an inch a year. So existing rates would yield a range of about 21 inches to about 78 inches, that's almost 2 feet to about 6-1/2 feet over the life of the plant. Now, that's just the current rate that we're seeing right now. And every scientific model indicates an exponential increase as we start seeing more of the ice melting at the poles. So the Draft Environmental Impact Statement likely underestimates sea level rise by using consensus global measures that don't match existing local rates of rise. (0721-2-5 [Stoddard, Philip K.])

**Comment:** There's a fourth issue, and that's failure to consider the loss of wastewater as a cooling source because of reduced residential demand from conservation measures resulting from sea level rise induced salt water intrusion on the fresh water supply. We know that one foot of sea level rise is going to render our salt water exclusion gates on our canals ineffective. The salt water intrusion is going to come in, it's going to become uncontrollable and we're going to lose our fresh water supply. Well, you can bet that we're going to put in stringent conservation measures at that point because we're going to be doing reverse osmosis and paying through the nose for our water. So there will be a lot less water going into the waste supply. And so the Draft Environmental Impact Statement is incomplete in failing to consider the reduction in wastewater stream from reduced residential demand and force water conservation. (0721-2-6 [Stoddard, Philip K.])

**Comment:** The fifth omission here is a failure to consider loss of wastewater as a cooling water source because of regional depopulation. Both the Miami-Dade Water Sewer Department and the Draft Environmental Impact Statement know that the people in Southeast Dade County are

likely to leave as the sea level comes up. If you're not there, you're not using water. The water treatment plant, even if it remains operational, is going to get less water in, less water out, less water to Turkey Point. (0721-2-7 [Stoddard, Philip K.])

**Comment:** So, there's a failure to consider loss of wastewater as a cooling source because sea level rise impairs site access. (0721-2-8 [Stoddard, Philip K.])

**Comment:** They're going to have to build causeways. They can build a causeway. It will be an island. Awkward but possible. (0721-2-9 [Stoddard, Philip K.])

**Comment:** And, furthermore, South Florida not only being porous and porous area for water, it is also an incredibly unstable area for weather in the past. It's going to get even more unstable because of climate change, which is happening here. (0721-29-2 [Yovel, Ephrat])

**Comment:** The studies that we have all relied on for the past six years as a region bring together a lot of science, a lot of reports, and an understanding that we, as a region, have come to use as our baseline of knowledge. Unfortunately it does not appear that those who are studying this very critical area, are appreciating and respecting the baseline of scientific data that we have all come to realize we must incorporate in to our responsibilities. Especially the elected officials who must be stewards for the future of our communities to assure that our land use and our building codes and our decision making in every realm of creating resilient communities incorporates what science tells us, which is, we are looking at anywhere from two to six feet of sea level rise by 2100. And when FPL comes in and says they will only be relying on one foot, that is inadequate to the needs that we all understand have to be incorporated. (0721-3-1 [Lerner, Cindy])

**Comment:** The Draft Statement fails to address a failure of the plan to adequately plan for the sea level rise that's certain to come. The plan must be compliant with the NOAA report of 2012, the global sea level rise scenario for national climate assessment. In that review the report indicates over 8 million people live in areas at risk of coastal flooding, and many of the nation's assets related to military readiness, energy, commerce and ecosystems, are already located at or near the ocean. We have all of those. The report establishes a high confidence greater than nine in ten chances that the global mean sea level will rise at least eight inches, no more than six feet by 2100. The report indicates the highest scenario should be considered in situations where there's little tolerance for risk. Two new nuclear power plants, there should be no tolerance for risk. The new infrastructure has a long anticipated life cycle with this power plant and the failure to include the planning for the --up to six foot sea level rise is a fatal flaw. (0721-3-3 [Lerner, Cindy])

**Comment:** Certainly we have different circumstances. We have sea level rise, and that in the end is what this really is all about. (0721-30-6 [Ullman, John])

**Comment:** The analysis of sea level rise by the NRC and by FP&L is woefully inadequate. (0721-30-8 [Ullman, John])

**Comment:** And I would suggest to you that the President's mandate is that all Federal agencies account for sea level rise. And this agency has failed to do so, and FP&L has failed to do so. And the President wants us to do that. (0721-30-9 [Ullman, John])

**Comment:** [These issues are dwarfed by] sea level rise and climate change impacts, and the list goes on as we've heard tonight. (0721-32-6 [Schlackman, Mara])

**Comment:** It does not realistically account for sea level rise, which is a safety concern as well. (0721-4-3 [Regalado, Tomas])

**Comment:** FPL's application only accounts for one foot of sea level rise despite the fact that NOAA recommended to account for three to five feet of sea level rise. And because Turkey Point is located directly on the shoreline of Biscayne National Park it's already vulnerable to sea level rise, storm surge, flooding, hurricanes, et cetera, as some other people have said before. So we don't feel like this plant is safe. (0722-14-3 [Kaul, Devika])

**Comment:** And the concern I want to raise today is one that probably won't occur in my lifetime so it's for the people of the future that I would like to talk. It seems that the estimates for sea rise have been continually been being raised. We have recently learned that the west end arctic ice sheet is inevitably going to slide into the sea. If that should ever happen with the east end arctic ice sheet, all bets are off as to how high the ocean is going to go. And that is my concern.

What I would suggest here is that a careful scientific analysis be made to determine at which point it would be prudent to say we now must close the plant if it is built. And if that point comes then there must be a plan already in place for the closing of the plant and the removal of all radioactive material from the coast to some safe place. And that safe place should be designated before the plant is built, not afterwards, and the method of removal should be designated before the plant is built and not afterwards.

Those are my concerns. I'm willing to assume, as we lawyers say, but not admit all of the good stuff. But the scientific estimates of the rise of the sea have all been too conservative and I think that should be taken into very careful consideration before this plant is built. (0722-16-1 [Segor, Joseph C.])

**Comment:** After listening to everything about the ecological impacts, which I'm concerned about, but I feel that there is no real evidence of sea water rise. I've heard nobody say last year it rose all that much. All they say is within 30 years it rose. So if we stick with clean, nuclear power like other people have said, we will not impact the carbon footprint. And as far as it -- if it does rise, where are we all going to go? (0722-19-1 [Hudak, Jill])

**Comment:** But I sat on the Miami Dade County Climate Change Task Force and I work with the City of Miami Beach Sea Level Rise Task Force and unfortunately the Mayor of Homestead probably won't like to hear this but the slides I'm talking about are sea level rise and it's environmentally important to this project. All of South Florida is going to change in the very near future; it's doing it right now.

I found it very interesting that the Army Corps of Engineers jurisdiction in the salt water is at the highest annual high tide. The Army Corps of Engineers under that scenario probably has jurisdiction over all of Miami Beach because we flood with saltwater at the highest tide of the year. That's what's going to happen in South Florida.

My objection to the siting of this plant and to the EIS is that it doesn't take the new and updated sea level rise predictions into consideration. It is using an older version of it, in the beginning it used no version of it at all, at least the NRC said it was not an issue. It's becoming an issue. One foot of sea level rise on the southeast coast will put most of Homestead and South Florida and Florida City and Cutler Bay and Turkey Point underwater. Now that's at high tide -- that's not at high tide, that's just under the water all the time at mean tide, all right?

At high tide you can add, if it's a three-foot tide or a four-foot tide, to that. My slides show this. It's very disturbing to see the amount of building going on down here and then a nuclear power plant knowing that this is going to happen. This is not "if," this is "when." And the latest observations by NOAA and even the Army Corps of Engineer talks about this, has a one-foot sea level rise sometime in the next 30 to 40 years. That means the plant would be finished and go into operation and it would be an island. (0722-2-1 [Kipnis, Dan])

**Comment:** Now I guess Miami Dade County would have to come in and raise the roads to be above high tide, so that's a three or four foot rise in the roads so the workers can get to work. Or additionally, as it's going up, we probably would have to raise roads just to get the equipment in there and the men that are building the plant there. (0722-2-2 [Kipnis, Dan])

**Comment:** Why build it when we know that environmentally it isn't going to help us there because we're going to run into problems that are not shown in that EIS because of sea level rise.

Two feet -- well, Miami Beach goes two feet also, so I have to tell you that. Doral's going three feet. We have about 67 percent of the land surface in Miami Dade County inside the UDB left so we're looking at a customer base that's really going to shrink because people are not going to live in the water. They won't be able to. (0722-2-3 [Kipnis, Dan])

**Comment:** In addition, as Captain Dan Kipnis noted there is only one foot of sea level rising accounted for in this plan which is better than no sea level rise. But it is still not adequate to meet what NOAA has recommended which is to consider three to four feet of sea level rise to be more realistic to models and more conservative in planning. You know, this is really a question of how Miami wants to move into the future and whether or not we want to face this issue head-on and really prepare and plan for it or whether we want to be caught off-guard like some other places in the world have been when flooding and storm surge and storms in themselves have impacted critical infrastructure. And we don't want that to happen here in this really fragile and important area. And to affect a nuclear power plant that we all rely on as well. So to be more cautious here is really the best way to go, in my opinion. (0722-7-6 [Silverstein, Rachel])

**Comment:** What I cannot understand, and I'm a simple fellow, is that if the president of the most powerful, respected nation in the world and our Federal government acknowledges and accepts the climate change is playing a role in endangering our water and our air, how can FPL deny an increasing footprint and power output will not stress an endangered environment? They have already answered higher acceptable water temperature levels. They are already using water from our canals that were set aside for restoration. They were already using waters from our aquifers on an emergency basis. (0722-8-1 [Gonzalez, Javier])

**Comment:** As I mentioned earlier, I'm a simple fellow with no degree in law or science and I know that a lot of fancy language is being used but I do know that someone at the present is concerned about -- and said that climate change will have no bigger impact than in South Florida. And maybe, just maybe us simple and smart folk should revisit FPL's plan. And maybe we can conduct a supplemental EIS to review the water quality and climate change. (0722-8-2 [Gonzalez, Javier])

**Comment:** And one of our biggest concerns and one of our residents' biggest concerns is climate change. It is the future. I won't get into the specifics and all the numbers but I know that [for] every young kid out there, this is a topic. And if this is a concern that we should be worried

about, truly FPL, you might want to take a look at this. This might not be the best idea. (0722-8-3 [Gonzalez, Javier])

**Comment:** I have two articles that I'd like to leave with you. I won't go into them too much other than to say one is in the..."Miami Herald," I believe it was, or the "Sun Sentinel" by Brower. And her comments were "numerous studies show that the effects of carbon pollution on the environment, the United Nations Interglobal Panel on Climate Energy and Climate Change shows that it is extremely likely that human activities and greater greenhouse gases are responsible for more than half of the observed rise in global temperatures and that the global sea level will rise another 26 to 98 centimeters by 2100." (0722-9-9 [Riley, Bill])

**Comment:** And even though I understand the Nuclear Regulatory Commission is not considering sea level rise as an important criteria in their Environmental Impact Statement, it's coming. It could be severe. We could be talking about a foot, worst case within ten, fifteen years. And we're talking about building nuclear power units on an island, basically, a future island. And I was here for Hurricane Andrew, as many of you were. I'm concerned about that. (0723-5-5 [Teas, Jim])

**Comment:** The commenter provided a handout entitled "Turkey Point Immediate effect of SLR" prepared by Peter Harlem of Florida International University. The series of slides show extrapolated inundation maps for 0.5 ft to 6.0 ft of sea level rise at the Turkey Point plant. (0725-1 [Kipnis, Dan])

**Comment:** If expanded, Turkey Point would become one of the largest nuclear power facilities in the country, located in an area that is ground zero for sea level rise. (**0728-1** [Gregory, Gregory B.])

**Response:** Appendix I of the EIS documents the review team's consideration of the potential changes in impacts that may occur as a result of the changes in the environment resulting from global climate change including sea-level rise. The changes that were considered include potential changes in temperature, rainfall and the occurrence of severe weather events. As discussed in Appendix I, the review team considered the assessment presented in the most recent National Assessment. The 2014 National Assessment was conducted by a team of more than 300 experts guided by a 60-member Federal Advisory Committee and extensively reviewed by the public and experts, including Federal agencies and a panel of the National Academy of Sciences. The review team has also considered more recent estimates of sea level rise. The review team has also considered more recent estimates of sea level rise. The review team has added mention of research into a localize sea-level rise in South Florida associated with changes in regional ocean currents.

The review team is aware that the sea-level rise of 1–4 ft by 2100 is not bounding. It is not implausible that sea level rise significantly in excess of 4 ft could occur by 2100. Such extreme sea-level rises would inundate much of South Florida making it uninhabitable. However, NEPA requires consideration of likely future scenarios not extreme future scenarios. However, the gradual increase in sea level and NRC's safety process protects the public health and safety.

Appendix I has been updated based on these comments.

**Comment:** I don't want what precious water we have used on this project. (**0008-15** [Finver, Jody])

Comment: We need the water for drinking, not cooling. (0060-3 [Beckman, Yvonne and Douglas])

**Comment:** The new reactors will require 90 million gallons a day of Miami-Dade's treated wastewater for cooling. (**0078-5** [Wilansky, Laura Sue])

**Comment:** FPL's expansion would consume additional large quantities of fresh water which is already in short supply. (**0079-1** [Cathey, Turner])

**Comment:** These resources are vital for our well being and health. Please DON'T let FPLS to endanger our clean source of water. (**0088-4** [Lange, Alexandra])

**Comment:** I recommend that you disapprove any further processing of their Turkey Point Nuclear Power plant expansion proposal for the reasons summarized below 3) Nuclear plants consume vast amounts of water to keep reactors cool. FPL claims the new primary cooling system will use reclaimed wastewater, but that water is sorely needed for other uses. The project will increase usage of all Miami-Dade's available water by ten times, from one to 10 percent of supply, a <u>massive impact for which there is no mitigation</u>, in view of the projected skyrocketing forecast of water demand and declining water supply in the region. The project's assessment of its claim on fresh and salt water in the region is inadequate, failing to assess the loss it would cause to water needed for a rapidly growing population and <u>severely threatened habitat</u> in the coastal Everglades, Biscayne National Park, and South Dade County generally. (**0094-3** [Fairchild, David])

**Comment:** Operating two new reactors at Turkey Point could also have huge impacts on the quantity and quality of precious freshwater resources. (0102-5 [Commenters, Multiple])

**Comment:** As you know operating two new reactors at Turkey Point could also have huge impacts on the quantity and quality of the area's limited freshwater supplies. (**0103-5** [Commenters, Multiple])

Comment: Comment 7. The DEIS is incomplete in failing to consider a third source of cooling water if the primary and secondary sources are compromised by SLR, or to consider the consequences of that outcome for residents and businesses of Miami-Dade County - The DEIS does not consider the possibility of losing both sources of cooling water, or the consequences. As detailed above, the treated wastewater eventually will be lost because of water conservation or regional depopulation, both caused by sea level rise. While the timeframe of SLR is uncertain at this date, the first loss scenario is almost certain to happen before the TPN 6&7 would be ready for decommissioning, and the second one could occur within that time frame as well. The proposed backup source of cooling water from under the cooling canals (IWF). So what happens if the reactors at TPN 6&7 lose both sources of cooling water? The plant would be forced to compete directly with residential and businesses for the remaining sources of fresh water. Ironically the DEIS notes a projected increase in residential demand for freshwater over the same time period. *The final EIS must consider the possibility and the consequence of losing both proposed cooling water sources.* (0106-10 [Stoddard, Philip K.])

**Comment:** Most of the problems and uncertainties identified concern cooling water operations. (0106-2 [Stoddard, Philip K.])

Comment: Comment 5. The DEIS is incomplete in failing to consider reduction of the wastewater stream from reduced number of residences and businesses producing wastewater - The Miami-Dade Water Sewer Dept. has noted that the residential service area of the Southern Waste Water Treatment Facility is low in elevation, and will likely depopulate in the

face of SLR. The DEIS likewise notes: "Climate change could lead to changes in the distribution of land use in Miami-Dade County and sea-level rise could lead to the loss of some inhabitable land in the county." [DEIS I.3.1.1 Land-Use Summary, p. I-4.] Reduction in the number of customers in the southeast coastal regions of Miami-Dade County will reduce the amount of wastewater sent to the Southern Waste Water Treatment Facility, and thus the amount of treated wastewater water available for cooling TPN 6&7. The final EIS must consider eventual loss of wastewater as a cooling water source because of regional depopulation due to SLR. (0106-8 [Stoddard, Philip K.])

**Comment:** The region surrounding the Turkey Point nuclear plant is an extremely complex and sensitive hydrological environment that is only becoming more complicated as human populations increase and the effects of global climate change emerge, including sea level rise. The history of the Everglades and the current costly restoration projects illustrate the long-term shortsightedness that has scarred Florida's waterways. When comparing types of energy generation, nuclear power has higher rates of both water withdrawal and consumption than traditional coal and natural gas and far more than renewable energy sources, such as wind and solar. Additionally, energy efficiency has the added benefit of substantially reducing energy needs, while simultaneously reducing water consumption. As we see FPL's projected figures for water demand increase for thermoelectric power generation, the NRC needs to fully evaluate <u>current</u> information about less water intensive energy alternatives, efficiency and renewables, including using a combination of these energy options. The NRC also needs to better analyze the impacts such a drastic increase in water demand from the power sector could cause to this area. (**0112-5** [Barczak, Sara])

**Comment:** The analysis of the impacts of the use and disposal of reclaimed wastewater is inadequate, particularly in terms of the characterization of constituents, the impacts of the construction of pipelines, and the impacts of wastewater reuse on CERP activities and goals. (**0113-1-5** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The potential adverse impacts from use and reservation of reclaimed wastewater from the South District Water Treatment Plant to CERP and specifically, to BBCW, are not adequately discussed in the DEIS. BBCW, intended to restore freshwater flows in and around Biscayne Bay's littoral zone, is premised on the conveyance of freshwater that may include treated wastewater from Miami Dade County. The DEIS does not discuss the potential negative impacts to Everglades restoration efforts that may arise from the use of up to 90 MGD of reclaimed water to cool Units 6 & 7, water that may otherwise be used to supply freshwater to the BBCW project. (0113-2-18 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The DEIS fails to analyze the potential for the operations of radial collector wells to negatively impact the implementation of CERP, specifically the Biscayne Bay Coastal Wetlands (BBCW) project. BBCW is intended to restore freshwater flow to Biscayne Bay and Biscayne National Park, recharging sources of fresh groundwater and addressing high salinity in nearshore environments. Using radial wells to collect cooling water for Units 6 & 7 could negatively impact CERP goals of restoring freshwater flow to Biscayne Bay. Radial wells located at a depth of 40 feet may withdraw freshwater from the aquifer, potentially offsetting attempts to deliver more freshwater to Biscayne Bay's littoral zone. [Footnote 29: Florida Department of Environmental Protection, Determination of Completeness, FPL Turkey Point Units 6 & 7, August 10, 2009, 2.] (0113-2-6 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The plant is already endangering the water supply[.] (0114-2 [Cunningham, Sue])

**Comment:** More reactors will need more cooling water....and that is not available. (0114-4 [Cunningham, Sue])

**Comment:** [The new reactors] is not a wise use of our fresh water, which will become a limited resource over the next several decades. (**0126-3** [Pontier, Christine Hughes])

**Comment:** This expansion is said to enhance the economic value of the community, but it is not the economy I am worried about. I am worried about our water, it's amount, it's quality, and it's endangerment (0127-2 [Cusidor, Teresa])

Comment: I do not want FPL to have 10% of waters usage. (0127-4 [Cusidor, Teresa])

**Comment:** Not only does it jeopardize drinking water, it also makes the facility more vulnerable to rising sea levels and storm surge. (0133-2 [Corral, Oscar])

**Comment:** I am writing today from my home to oppose the approval of FPL's two nuclear power at Turkey Point for the following reasons....2. The present plant and the new proposed plant use millions of gallons of fresh water and water from Biscayne Bay, ignoring the damage that will occur to the Everglades, Biscayne National Park and South Dade well fields. (0136-2 [Levy, Morgan I.])

**Comment:** The draft EIS fails to account for the adverse and potentially deadly competition between a thirsty nuclear power plant and almost 4 million people, in one of the most highly populate areas of Florida. And water demand in southeast Florida, is projected to increase by more than 50% by 2060, relative to 2005, based on combined changes in population, socioeconomic conditions and climate. (**0145-9** [Lerner, Cindy])

**Comment:** Additionally, the operation of the existing reactors interferes with the National objectives of Everglades Restoration and further development of this site should incorporate the Federal projects intended to flood the land where the Turkey Point plants are located in order to restore Biscayne National Park's shoreline to estuary conditions. (**0172-3** [Cava, Daniella Levine])

**Comment:** Furthermore, we: are concerned that the operation of two new nuclear reactors could have significant impacts on the quantity and quality of our limited freshwater resources. Maintaining South Florida's water supply is critical to ensuring the future of our environment and our communities. (**0210-3** [Sharp, Andrea Heuson])

**Comment:** <u>Radial collector wells</u>. The Department is concerned that the operation of the radial collector wells (CWs), installed to provide a backup source of cooling water for Units 6 and 7,) has the potential to affect the salinity of Biscayne Bay (Bay). The lateral pipes associated with the CWs will be located 25 to 40 feet beneath the bottom of the Bay, but will draw water from the Bay itself. During operation of the CWs, the water withdrawn from the Bay will be replaced mostly by ocean water containing a typical ocean salinity of about 35 practical salinity units (psu). Consequently, operation of the CWs could negatively affect salinity (mesohaline; 5-18 psu) in this area of the Bay, and may undermine efforts of the Comprehensive Everglades Restoration Plan (CERP) in the region. Results from U.S. Geological Survey (USGS) salinity modeling of the effects of CWs, as provided in the DEIS, indicate that under the most conservative scenario (continuous pumping) the maximum salinity increase was .3 psu above the base condition in the immediate vicinity of the lateral pipes of the

CWs. However, most of the time salinity was within psu of the baseline condition. If the modelling is correct, the magnitude of change in salinity is not likely be ecologically significant (*i.e.*, the flora and fauna probably will not be affected). Salinity in the Bay is frequently falls outside of the Restoration Coordination and Verification (RECOVER) performance measures targets established by CERP. Therefore, we are concerned that any further increases in the Bay's salinity may have adverse effects to the flora and fauna in area including the American crocodile. We recommend that FPL develop a monitoring plan to ensure that salinity in the Bay is consistent with the predicted modeling and develop an adaptive management plan to address what steps will be taken if salinity level exceed the 1 psu. We are also concerned that the operation of the CWs may exacerbate the hypersaline plume of ground water underneath the existing cooling canal network. The USGS modeling indicates that some hypersaline water beneath the cooling canals will be drawn into the CWs during extended periods of pumping. The increased gradient during CW pumping will likely increase the flow velocity of hypersaline water eastward under the Bay and may change the area affected by the hypersaline plume. It is unclear how this might affect salinity in the Bay; however, as previously indicated increased salinity in the Bay would have undesirable ecological effects to the Bay's ecosystem. Finally, operation of the CWs has the potential to adversely affect the local biota within the Bay due to the increase in downward vertical flow of water in the Bay's water column. The calculated average velocity of 0.0003 ft/min or about 0.4 ft/day is probably insignificant. However, a worst case modelling scenario presented in the DEIS, using an ultra-conservative approach, resulted in a vertical velocity of 0.43 ft/minute. This velocity could entrap small, weak-swimming organisms. Based on the design of the CW system, impingement and entrapment of organisms due to the operation of the CWs is unlikely. However, it could occur in a limited manner if the limestone above the CW laterals fractures and increase downwelling. Animals susceptible to impingement and entrapment include the eggs and larval forms of several species of fish and invertebrates. Also, a downward vertical flow would also likely replace high-nutrient pore water with low nutrient Bay water, and result in adverse effects to seagrasses. Other species potentially influenced by changes in sediment pore-water characteristics include polychaetes, amphipods, mollusks, and other benthic macro-invertebrates present in near shore locations above the CW laterals. Based on the potential adverse effects of the operation of the CWs, we recommend that a rigorous water monitoring program be employed in the Bay in association with the project. The Department supports the monitoring described in Section B of the Florida Department of Environmental Protection's Certificate of Conditions issued in May 2014. (0227-9 [Stanley, Joyce])

**Comment:** Operating two new reactors at Turkey Point would also have huge impacts on the quantity and quality of precious freshwater resources. (**0228-5** [Yeager, Jerry])

**Comment:** The operation of two new nuclear reactors at Turkey Point would also likely have significant impacts on the quantity and quality of our limited freshwater resources. Maintaining our water supply here in South Florida is critical to ensuring the future of our communities. We are concerned that withdrawing massive amounts of freshwater needed for the plant's operations could increase salinity levels within Biscayne National Park and hasten freshwater intrusion into our limited freshwater supplies. Avoiding these impacts will be a far less costly option than the cost associated with alternative water supply development. (**0254-3** [Dudley, Dwight] [Lerner, Cindy] [Regalado, Tomas] [Stoddard, Philip K.])

**Comment:** Turkey Point's operations are already impacting Biscayne Bay's habitat, water quality, and salinity, which are vital for the health and productivity of the bay. The expansion of the power plant would only intensify and expand these negative impacts, posing significant threats to sensitive ecological areas and critical freshwater supplies. (**0258-4** [Field, Fran])

**Comment:** South Florida's water supply is a finite, dwindling resource that needs to be conserved in order to support the population. According to the Union of Concerned Scientists, nuclear fission is the most water intensive method of the principal thermoelectric generation options in terms of the amount of water withdrawn from sources. (**0288-12** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** Now a giant saline plume containing radioactive elements has formed underneath the plant and is drifting west, threatening the water supply for the Florida Keys. (**0288-3** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** Moreover, operating two new reactors at Turkey Point could have huge impacts on the quantity and quality of precious freshwater resources. The withdrawal of massive amounts of water from under Biscayne Bay as back-up cooling water could increase salinity levels within the Bay and hasten saltwater intrusion into our limited freshwater supplies. (**0299-3** [Salatino, Freda])

**Comment:** [T]hey have enough problems (and use enough water) with the 2 reactors they already have. Doubling that will double the problems and water consumption. (**0334-3** [Crystal, Chris])

**Comment:** It wasn't that many years ago that we had drought problems. If FP&L needs all the water they do for cooling and dealing with algae bloom, what happens when we have a shortage of rain (like California) or we have in the past. (**0334-4** [Crystal, Chris])

**Comment:** Power is useless without drinkable water for the consumers. (0352-2 [Tingle, Peggy])

**Comment:** The new reactors will require 90 million gallons a day of Miami-Dades treated wastewater for cooling. (0353-3 [Royce, M.])

**Comment:** Florida Power and Light is seeking permission to build two new nuclear reactors at its existing plant next to Biscayne National Park and other natural areas; the project would be highly water-intensive, likely threatening Biscayne Bay and the Biscayne Aquifer. (**0356-1** [Shlackman, Jed])

**Comment:** If there is insufficient treated wastewater for cooling the reactors, the radial wells used for back-up cooling would become one of the largest well-fields in the Southeast and could lead to further saltwater intrusion into the Biscayne Aquifer, a major problem already impinging on South Floridas limited freshwater supply. (0356-12 [Shlackman, Jed])

**Comment:** The new reactors will require 90 million gallons a day of Miami-Dades treated wastewater for cooling. (**0356-9** [Shlackman, Jed])

**Comment:** There is too much water being used to cool the reactors if there isn't enough treated wastewater available, which I also don't like. There are already too many interests competing for our limited water supply, and I'm not even taking about the ecosystem and wildlife that depend on water. (**0361-2** [Berndgen, Michelle])

**Comment:** Wasting 90 million gallons of Miami-Dade's treated wastewater for cooling every day is not a good idea. (**0363-3** [Peters, Emily])

**Comment:** Construction and operations of the proposed nuclear reactors threaten to degrade water quality and damage the marine ecosystems of Biscayne National Park. In addition, the water usage of the additional units (projected by FPL in 2025 to include a 35% increase for public and commercial needs and a 3000% increase for thermoelectric power generation) is a threat to our aquifers and public water. (**0364-2** [Mahoney, Robert S.])

**Comment:** The amount of waste water 90 million gallons per day is inadequate for the cooling of the nuclear reactors. Although over 300 million gallons of waste water from Miami -Dade County Sewage Treatment Plant is pumped into Biscayne Bay on a daily basis, it is obviously impossible for that amount of water to be treated adequately for use at Turkey Point. The infrastructure simply does not exist. Miami-Dade County has made no progress whatsoever to begin the construction of a Sewage Processing Plant that will cleanse the water in a sustainable way, so that it would be reusable for Turkey Point or any other use. FPL has proposed building their own waste water treatment plant, and all parties need to take a good, hard look at that, as well. There remain many unanswered questions regarding the environmental impacts of such a plant, i.e. how and where would the resulting waste be disposed of? How many gallons of water per day could be cleansed properly for use at Turkey Point? (0365-3 [Fischer, Antoinette])

**Comment:** The balance of nature becomes ever more precarious as more and more water is needed because of unbridled development, and large corporate usage. The water in our aquifer will have to be used with great conservatism. (**0365-7** [Fischer, Antoinette])

**Comment:** The two new reactors are a clear and present danger to the water supply. With two new reactors, Turkey Point would become one of the largest nuclear facilities in the country. They will require 90 million gallons a day of Miami-Dade's treated wastewater for cooling. The project would be highly water-intensive, potentially threatening both the Biscayne Bay and the Biscayne Aquifer. If there is insufficient treated wastewater for cooling the reactors, the radial wells used for back-up cooling would become one of the largest well-fields in the Southeast and could lead to further saltwater intrusion into the Biscayne Aquifer, already a major problem impinging on South Florida's limited freshwater supply. (0366-9 [Griffith, Ed and Harriet])

**Comment:** The project would be highly water-intensive, potentially threatening Biscayne Bay and the Biscayne Aquifer. (0370-2 [Vayu, Satya])

**Comment:** The new reactors will require 90 million gallons a day of Miami-Dades treated wastewater for cooling. (0370-8 [Vayu, Satya])

Comment: I would like you to not allocate anymore water to the plant. (0373-12 [Lee, Nancy])

**Comment:** NO WAY is this going to happen. Fresh water is running out all over the country because of our wrecklessness. This has become a matter of life and death. DO NOT destroy what's left of our fresh water. (0401-1 [Foster, Beverly])

**Comment:** Operating two new reactors at Turkey Point will also have huge impacts on the quantity and quality of precious freshwater resources. (**0413-4** [Cobb, Tanya])

Comment: Comment 4: The final Environmental Impact Statement should include an analysis of alternatives to the radial collector well backup cooling system that are less likely to adversely impact the Biscayne Aquifer. The DEIS acknowledges that "[r]emoving relatively large volumes of water from the inland aquifer could lower the water table in the inland portion of the aquifer, affecting existing water-supply wells and increasing saltwater intrusion to

the Biscayne aguifer." DEIS at 5-13. In addition, it states that "the volume of water that would be removed [by the radial collector wells] from the inland aquifer is difficult to predict with certainty because it depends on several hydrogeologic features and parameters that are incompletely quantified." DEIS at 5-14. According to the DEIS, the highest estimated "volume of groundwater that could be removed from the Biscayne aquifer is 4,500 gpm during [radial collector well] operation . . . ." DEIS at 5-15. This amounts to about 6.48 million gallons of water per day from the Biscayne Aquifer during radial collector wells operation and about 388,800,000 gallons annually. During the proposed project's lifetime, Miami will likely face dwindling supplies of potable water as well as further difficulties preventing flooding and saltwater intrusion during wet and dry seasons respectively. Considering these challenges, 388,800,000 gallons appears to be a relatively large withdrawal of water from the Biscayne Aquifer. FPL's most recent filings before Florida's Public Service Commission indicate that the new reactors are now planned to enter service closer to 2027. Around that time, Miami-Dade County's Water and Sewer Department projects that demand for water will be much closer to capacity. See SFWMD Individual Use Permit for MDWASD Permit Number 13-00017-W (Exhibits 8A, 9, and 23). Therefore, the increased demand placed on the Biscayne Aquifer reserves by the radial collector wells could adversely impact both supply and management of this scare resource in the coming decades. See DEIS at 2-176. Moreover, withdrawing water from the Biscayne Aquifer is not a necessary consequence of siting the new reactors at Turkey Point. The goal of the final Environmental Impact Statement is to balance the need to implement an action against its impacts on the surrounding environment. In this instance, that need is for additional baseload power, and not for any specific facility contemplated in FPL's application. For example, Work Order #2, Task 1, Initial Water Source Alternative Technical Review Report, Section 5.0 (pages 3-4) indicated that operating the radial collector wells for use as a backup cooling system ranked fourth in FPL's analysis of cooling options. In contrast, drawing cooling water from the "Boulder Zone" (a South Florida injection zone) ranked second in this report. FPL's response to NRC RAI Number EIS 9.4-2 (RAI 5770) indicated that this option was not selected because the Boulder Zone is planned for use as an injection zone for wastewater. However, this does not address why the third ranked option was not selected or vetted further. Likewise, limiting the analysis in the DEIS to only the proposed radial collector wells as a backup cooling system is not the "hard look" required by the National Environmental Policy Act (NEPA). This backup cooling system is easily one of the most concerning parts of the Turkey Point Nuclear Plant Units 6 & 7 application. Since the final Environmental Impact Statement must independently assess the impacts of the Environmental Report submitted by FPL, it should also consider other approaches to providing cooling water to the reactors. The DEIS has already accomplished this task for some of the inland alternative sites by assessing potential cooling systems other than those proposed. The final Environmental Impact Statement must do the same for Turkey Point. (0456-11 [Miami, City])

**Comment: Comment 13: The final Environmental Impact Statement should examine impacts related to the loss of the backup cooling system.** The radial collector well system may be unable to operate for a variety of reasons. The environmental impacts of losing this system should be examined by the final Environmental Impact Statement to meet the "hard look" imposed by NEPA. For example, the radial collector wells are not able to operate with water that is more than 1.5 times the salinity of Biscayne Bay. As has been noted previously, there is already a plume of hypersaline water in the aquifer beneath FPL's industrial wastewater facility. Since, the radial collector wells will be drawing water from this groundwater source, the final Environmental Impact Statement should examine and disclose how entrainment of the hypersaline water by the radial collector wells will impact the surrounding aquifer and operation of the nuclear plant. Likewise, the final Environmental Impact Statement should examine and disclose what outcomes will result if the primary source of cooling water is still unavailable after FPL has exhausted the 60 days during which it is allowed to operate the radial collector well system. (**0456-20** [Miami, City])

**Comment:** FPL has stated that using reclaimed water provided by Miami-Dade County as the primary source of cooling water is a beneficial feature. This may be a compelling reason to place the new reactors in Miami-Dade County; however, if that is the case it should be explained more directly and thoroughly. On this point in particular, it is worth noting that Miami-Dade County has begun efforts to supplement its freshwater supply with desalinated water from the Upper Floridan Aquifer. Additional saltwater intrusion will only force local governments to impose stricter water conservation measures. Hence, the amount of reclaimed water available from Miami-Dade County will decline over time and will not be available for use as cooling water for much of the operating life of Turkey Point Nuclear Plant Units 6 & 7. (0456-8 [Miami, City])

**Comment:** In defense of water, please protect our natural resources. (0483-1 [Morrisse, Christine])

**Comment:** Fresh and clean water is essential to life. The two new reactors at Turkey Point could also have huge impacts on the quantity and quality of the area's limited freshwater supplies. (0495-4 [Mazzarella, Rebecca])

**Comment:** FPL already has problems cooling the existing facilities and is using millions of gallons of fresh water from the aquifer to ameliorate their existing cooling problem. To add more capacity, which will require yet more water to cool the site, is irresponsible. (**0509-2** [Otto, Peter])

**Comment:** Given South Florida's limited sources of freshwater, FPL's project seems to be a shortsighted investment. (0515-5 [Regalado, Tomas])

**Comment:** Building additional reactors so near our own drinking water and natural reserves should NOT be allowed. I don't think I really have to get too deep into this argument, I simply have to link you to a wikipedia page:

<u>https://en.wikipedia.org/wiki/Fukushima\_Daiichi\_nuclear\_disaster</u>. We must not forget the actual costs associated with a natural disaster that literally washes over a nuclear facility. Sure, we may not have tsunamis here, but we do have hurricanes, which bring HUGE storm surges. (0570-3 [Martinez, Orlando A.])</u>

**Comment:** Fresh drinking water is a concern all over the United States, especially out West. We should NOT be blind to this and think we are different. The current FPL nuclear facility at Turkey Point already is begging for MORE fresh water to keep its reactors cool. The cooling canals are not doing their jobs; even with additional water the cooling canals are overheating. This is not being satisfactorily addressed at the moment, nor in the proposal to EXPAND the facility. (0570-4 [Martinez, Orlando A.])

**Comment:** No additional water draws should be allowed. Canal temperatures and salinity should be lowered. This environmental situation is incompatible with current operations much less expanded ones. (**0571-2** [Darden, Colgate])

**Comment:** In addition, the demands on the limited fresh water reserves of south Florida would be highly significant. (0573-3 [Trauner, Keith])

**Comment:** we will have shortage of water, please don't allow this to happen (**0574-2** [Fuentes, Mariana])

**Comment:** There is not enough freshwater in the area and any further demands on available freshwater or loss of it due to plant operation are irresponsible and selfish. (**0598-3** [White, Barry J.])

**Comment:** FPL has stated that using reclaimed water provided by Miami-Dade County as the primary source of cooling water is a beneficial feature. This may be a compelling reason to place the new reactors in Miami-Dade County; however, if that is the case it should be explained more directly and thoroughly. On this point in particular, it is worth noting that Miami-Dade County has begun efforts to supplement its freshwater supply with desalinated water from the Upper Floridan Aquifer. Additional saltwater intrusion will only force local governments to impose stricter water conservation measures. Likely climate change scenarios for the region indicate that reductions in rainfall will further tax the available freshwater supply. See Vasubandhu et al., Climate Scenarios: A Florida-centric View, STATE UNIV. SYSTEM OF FLORIDA (Nov. 2011) (citing Enfield et al., Mid-Century Expectations for Tropical Cyclone Activity and Florida Rainfall); see also Climate Change and Water Management in South Florida: Interdepartmental Climate Change Group, SOUTH FLORIDA WATER MANAGEMENT DISTRICT (Nov. 2009). Hence, the amount of reclaimed water available from Miami-Dade County will decline over time and will not be available for use as cooling water for much of the operating life of Turkey Point Nuclear Plant Units 6 & 7. Accordingly, the final Environmental Impact Statement must directly explain the rationale for approving Turkey Point as the site of the new reactors. (0611-1 [Haber, Matthew S.])

**Comment:** During the proposed project's lifetime, Miami will likely face dwindling supplies of potable water as well as further difficulties preventing flooding and saltwater intrusion. Considering these challenges, 388,800,000 gallons appears to be a relatively large withdrawal of water from the Biscayne Aquifer. FPL's most recent filings before Florida's Public Service Commission indicate that the new reactors are now planned to enter service closer to 2027. Around that time, Miami-Dade County's Water and Sewer Department projects that demand for water will be much closer to capacity. See SFWMD Individual Use Permit for MDWASD Permit Number 1300017-W (Exhibits 8A, 9, and 23). Therefore, the increased demand placed on the Biscayne Aquifer reserves by the radial collector wells could adversely impact both supply and management of this scare resource in the coming decades. See DEIS at 2-176. (0611-2 [Haber, Matthew S.])

Comment: Comment 6: The final Environmental Impact Statement should update its analysis, in groundwater modeling and elsewhere, to include the effects of flooding FPL's industrial wastewater facility/cooling canal system with additional water from the L-31E canal and other sources. After the completion of the DEIS, the South Florida Water Management District ("SFWMD") issued a permit authorizing FPL to divert 100 million gallons of water per day from the L-31E canal to the industrial wastewater facility. SFWMD Consumptive Use Permit No. 13-05856-W; see also SFWMD Order No. 2015-020-DAO-WU; SFWMD Order No. 2015-034DAO-WU. Florida's Department of Environmental Protection ("FDEP") has also begun a process that would entitle FPL to draw an additional 14 million gallons of water per day from the Floridan Aquifer into its industrial wastewater facility. See http://tinyurl.com/TP3-5ConditionsDraftMod. Although both actions have been challenged, the former had been challenged by the City and the latter is currently being challenged by Miami-Dade County, the final Environmental Impact Statement should account for the presence of this additional water flow because its ostensible purpose is to flush hypersaline water out of FPL's facilities. As the SFWMD noted in late 2013, the consequences of flooding the FPL industrial wastewater facility are far from certain. See FPL Turkey Point Cooling Canal System Salinity Reduction Proposal Review, attached to these comments as COM - A. Likewise, the USGS model described by the

DEIS in Appendix G would need to account for this additional water flow. In addition, "[b]ecause the [USGS] model conserves mass, withdrawal of groundwater results in water being drawn from other sources to replace it, and the freshening in this region could be due to predicted inflow from either freshwater or marine waters." DEIS at G-35. Hence, the assumption appears to be that there will be a recharge of freshwater. This assumption is problematic and likely inaccurate. The final Environmental Impact Statement should address this assumption more directly. (0611-6 [Haber, Matthew S.])

**Comment:** In addition to their waste water use, Turkey Point 6 and 7 would use vast quantities of drinking water, making it unavailable for people and agricultural uses. Florida already suffers from a lack of fresh water and the further encroachment upon our supply necessitated by the proposed plants would create a substantial and unjustifiable impingement upon the environment resulting in a hazard to human health. (**0615-3-2** [Bethune, David])

**Comment:** Water is Florida's most important environmental asset. In failing to fully examine the impact of both its proposed use of fresh water and the plant's effluent injection and wastewater aerosols, the draft EIS proves to be fatally incomplete. (**0615-3-6** [Bethune, David])

**Comment:** The estimated average rate of saltwater migration is between 525 feet per year in the northern part of the cooling canals, and 660 feet per year in the southern part, [FDEP AO OGC No. 14-0741.] Many municipal water supply systems to the west of the Turkey Point cooling water canals rely on the Biscayne aguifer, and if the hypersaline plume continues to migrate, these water supply systems could potentially need additional treatment, or alternative sources of water supply. We are concerned about the potential for additional and cumulative impacts to the sole source aguifer, in addition to the existing hypersaline impacts. Protecting the freshwater lens in southeast Miami-Dade County is also a critical priority, since this important resource supports critical marsh wetland communities, as well as irrigation and public water supply needs. This fresh water supply is needed to preserve and restore Biscayne National Park (BNP) and Biscayne Bay, and for supporting the Comprehensive Everglades Restoration Plan (CERP). We appreciate your efforts to minimize impacts from the proposed project by using reclaimed wastewater as cooling water. The DEIS also states that current alternative backup cooling water source plans call for saltwater supplied from horizontal radial collector wells installed in the Biscayne aguifer, between 25 and 40 feet beneath the bed of Biscayne Bay and adjacent to Biscayne National Park. The DEIS notes that the use of these wells as a backup source is limited to 60 days. However, there are concerns that FPL could eventually require more water from the radial collector wells than currently estimated, and that FPL may need to withdraw freshwater to supply the needs of the two new reactors, in the event that adverse circumstances arise and backup water sources fail to supply sufficient quantity. The FEIS should address contingency plans in detail. Concerns exist that future circumstances, such as draughts and/or temperature issues, may require freshwater withdrawals that could potentially impact water quantity and quality, and contribute to the risk of additional saltwater intrusion into groundwater supplies. Furthermore, there are concerns that water withdrawals from the radial collector wells could potentially contribute to increased hypersalinity. (0617-1-18 [Mueller, Heinz J.])

**Comment:** Concerns regarding fresh water needs for Biscayne National Park (BNP), the Everglades National Park (ENP), the Comprehensive Everglades Restoration Plan (CERP), in addition to other fresh water needs in the area, need to be clarified in the Final Environmental Impact Statement (FEIS). The EPA has concerns regarding the project's fresh water supply requirements, cumulatively added to the existing fresh water needed to supply the existing Units 3 and 4, as well as for drinking water, agricultural and ecosystems in the region, in an

environment already experiencing saltwater intrusion. The Biscayne aquifer underlying the area is prone to saltwater intrusion because this area has low land-surface altitude and a low topographic gradient, and is bordered by sources of saltwater in Biscayne Bay, and, further east, by the Atlantic Ocean. Page 2-66 states that the most important factors contributing to the regional intrusion of saltwater from the ocean into the aquifer are rerouting of sheet flow to drainage canals and groundwater pumping. (0617-1-3 [Mueller, Heinz J.])

## Comment: 6) Analysis of Impacts to CERP Projects and the BBCW Project

One of the goals of the CERP is to increase freshwater flow to Biscayne NP to achieve more natural hydrologic conditions within the park that has been negatively impacted by implementation of the regional water supply and flood control project. Given the lack of specific localized information regarding the effect of the RCWs on nearshore salinity levels, the NPS disagrees with NRC's conclusion that the proposed action would have minimal effect on CERP and Phase 1 of the BBCW project. NPS remains concerned that the cumulative impacts resulting from this project could potentially negate current or potentially future efforts to increase freshwater flows to rehydrate wetlands and reduce point source pollution discharge into Biscayne NP and Biscayne Bay. A second phase of the BBCW project remains to be planned and authorized, but is reflected in overall salinity restoration target goals for the park. Detailed review of modeling results from the DEIS analysis show a potential for impacts to groundwater sources for CERP, as well as movement of the groundwater masses related to RCW operations. The BBCW Project Phase 1, which is intended to redistribute existing freshwater flows to Biscayne NP, is now entering the construction phase with operation to shortly follow.

This is an example where a model with finer spatial scale on the operation of the RCWs would provide information to determine whether the effects of the RCW operation negate or diminish efforts to rehydrate near shore coastal wetlands through the implementation of the BBCW Project, phase 1, authorized under the Water Resources Development Act of 2014. Generally the BBCW Project will divert an average of 59 percent of the annual coastal structure discharges from the S-123, S-21, S-21A and S-20F structures into Biscayne Bay. Anticipated environmental benefits include, among other things, improving the probability that the water within 500 meters from the shoreline will meet a desired salinity concentration of less than 20 psu. The NPS recommends development of a model with additional data, better calibration, and a finer scale will better show the likely potential localized impacts.

Although the BBCW Project is in the implementation phase, the CERP assumes a second phase for the project that would provide additional fresh water to Biscayne Bay. We recognize the difficulty in determining the environmental effects of the proposed action on a plan that is not yet planned or implemented with specificity including additional volumes of fresh water to be discharged, however, NPS believes it is important to acknowledge the future potential for this planned additional work to reintroduce more fresh water to the bay to benefit the various wildlife species that depend on the wetlands and on a healthy bay.

Additional information on the progress of the CERP may be obtained in the National Academy of Sciences' report "Progress Toward Restoring the Everglades: The Fifth Biennial Review, 2014." (0622-1-14 [Austin, Stan])

**Comment:** *RCWs located below Biscayne Bay, offshore Turkey Point*[.] Four radial collector well caissons located on the Turkey Point Peninsula would serve as a backup water supply. Each RCW caisson would be approximately 30 feet in diameter and extend beneath the surface of Biscayne Bay to a depth between -35 to -45 feet. The laterals would be extremely close to the

marine boundary of Biscayne NP and be built in limestone terrain. Because FPL owns much of the land within the footprint for BBCW Phases 1 & 2, we once again encourage consideration of having this land transferred to EEL in preparation for the completion of both phases of BBCW project. We also strongly encourage the development of a comprehensive monitoring and adaptive management plan to ensure that any operational problems are judiciously addressed. (0622-2-14 [Austin, Stan])

Comment: Water Quality Impacts and the Industrial Wastewater Facility (IWF)[.] The NPS is concerned that the DEIS does not fully analyze water quality impacts, which are derived from construction activities, associated cooling water drift, and the movement of IWF waters related to RCW operation, to NPS resources, especially cumulative impacts associated with the IWF. Recent developments relating to the operation of the IWF were not analyzed in the DEIS. The hyper-salinity and temperature in the IWF, including the use of regional system water under recent orders, must be evaluated as part of the past, present, and future cumulative impacts. Also, the IWF and its associated plume should be evaluated to better understand cumulative impacts from RCW operation on the hypersaline plume. Fundamentally, the NPS is concerned that the operation of the RCWs has the potential to affect the salinity of Biscayne Bay. The DEIS modeling demonstrated that RWC operations influenced salinity at a broad spatial scale. However, salinity variability at a scale finer than that addressed by modeling would provide more insight into localized potential ecological effects in southern Biscayne Bay. The NPS recommends more extensive analysis of the model output and some model modifications, including the consideration of more recent salinity data, to increase its spatial resolution to determine the extent to which RCW operations will adversely impact resources in Biscayne NP due to salinity changes. (0623-4 [Austin, Stan])

**Comment:** In addition to this problem with surface water two new nuclear reactors will need to increase the amount of ground water required to cool these new reactors. Ground water supplies are already under stress from salt water intrusion and additional development in this area. (**0641-2** [Martin, Drew])

**Comment:** Water reuse may not provide adequate water supplies as a supplement to existing water supplies as we increase the needs of the community for reusable water. Some proponents suggest that water reuse can provide adequate water. This assumes that water reuse will not be needed for other needs. (**0641-4** [Martin, Drew])

**Comment:** This action would reduce the availability of fresh water to our community. In a populous state such as Florida which already experiences a lack of fresh water (in Miami-Dade county we already have water restrictions limiting us to two days a week to water outside) I believe that using 7 billion gallons of water from Biscayne Bay and aquifer for a back up cooling system is totally irresponsible. (**0642-2** [Rawlins, Steve])

**Comment:** In addition, it could harm our clean water supply. (0654-3 [Guy, Sharon])

**Comment:** It would further destroy Florida's wild and poison our water. It is a disaster waiting to happen! (**0661-3** [Segal-Wright, Nicholas])

**Comment:** Nuclear plants consume vast amounts of water to keep reactors cool. FPL currently accounts for less than 1 percent of the water used in Miami-Dade County, but a nuclear expansion would raise that to 10 percent of water usage. In two decades, the demands on our limited water supply are already projected to skyrocket. FPL emphasizes that the primary cooling system will use reclaimed wastewater. But it ignores the inconvenient fact that its

backup cooling system will also draw over 7 billion gallons of water a year from Biscayne Bay and the Biscayne Aquifer, our only source of drinking water, threatening the coastal Everglades, Biscayne National Park, and South Dade well fields. Given the anticipated demands on our shrinking water supply, FPLs water grab is an irresponsible use of resources. In addition, on May 19th, 2015, FPL had to obtain an emergency permit from the South Florida Water Management District to pump more water into the Turkey Point cooling canals as a result of a cooling problem with the existing nuclear reactors that FPL has been dealing with for over a year. (0675-2 [Rodriguez, Jose Javier])

**Comment:** The new reactors will require 90 million gallons a day of Miami-Dades treated wastewater for cooling. (0676-5 [Kassel, Kerul])

**Comment:** If there is insufficient treated wastewater for cooling the reactors, the radial wells used for back-up cooling would become one of the largest well-fields in the Southeast and could lead to further saltwater intrusion into the Biscayne Aquifer, a major problem already impinging on South Floridas limited freshwater supply. (0676-8 [Kassel, Kerul])

**Comment:** Additionally, the nuclear reactors use an enormous amount of fresh water for cooling that makes the Biscayne Aquifer more susceptible to salt water intrusion. According to the Union of Concerned Scientists, nuclear fission is the most water intensive method of the principal thermoelectric generation options in terms of the amount of water withdrawn from sources. In 2008, nuclear power plants withdrew 8 times as much freshwater as natural gas plants per unit of energy produced, and up to 11 percent more than the average coal plant. Our water supply is a finite resource that we need to conserve in order to support our South Florida population. (0677-3 [Chiszar, Benjamin J.] [Jacobs, Lee] [Klopfer, Carol])

**Comment:** The Design and Operating two new reactors at Turkey Point should not have any effect on the quantity and quality of precious freshwater resources. The tech exist today to prevent any effect. (**0694-3** [Carpenter, Rory])

**Comment:** Turkey Point continues to consume large amounts of fresh water needed by the population increases expected in South Florida. Additional reactors will exacerbate the problems. Current cooling ponds for Turkey Point are at excessive temperatures. (0710-2 [Platt, George Seth])

**Comment:** Number two is, some of the questions have alluded to the issues about water. Some of the information that's come to me is that if these new reactors are built, Turkey Point's use of our fresh water will go from 1 percent to 10 percent. Now, even if that's not accurate, somewhere in that range is. (0721-1-5 [Rodriguez, Jose Javier])

**Comment:** So here we are, we're looking at a site. Obviously it's not working, and this EIS, if it's going to consider anything, should consider the fact that the system's broken, it's not working, 3 and 4 is a disaster, the cooling canal system is loading salt into our aquifer, evaporating 40 million gallons a day, and pushing a plume of pollution underneath our national parks toward the Newton Well Fields in Dade County. It is a disaster. And the thing is, it's all underground. And if there's a loophole, FPL has found it, and they are taking advantage of it for corporate gain. And so what we need to do is really consider the issues on the ground, the water consumption. This is all about water. It's a big water grab, in my opinion. And if all of the proposals go forward, FPL will be the single largest user in the State of Florida. And that surpasses Dade County at about 30.5 million gallons a day of water. Think about how big that is. So we're talking about water. We're spending \$20 billion on Everglades restoration to get the

water right, to make sure that 8 million people have enough water to drink, to make sure we restore the Everglades. We have nowhere to store fresh water in South Florida. Yet, we're using an energy source that requires a lot of water. (0721-10-2 [Reynolds, Laura])

Comment: So nuclear, we have water demand, fresh and saline[.] (0721-11-5 [Roff, Rhonda])

**Comment:** It [building 6 and 7] will bring increased salinity and salt water intrusion and possibly over time, fouling the water supply for all of South Florida and the Keys[.] (0721-12-9 [White, Barry J.])

**Comment:** But I do think that if there [are] problems finding water to cool existing reactors, then it indicates that there would be a problem having additional water to cool two new reactors. So it makes sense to me that you would resolve these problems before you would authorize the building of two new reactors. (0721-13-2 [Martin, Drew])

**Comment:** So what have we learned from the President's speech today? We learned we need to save our water. We don't have enough. And this power plant is going to be a major water hog. No question about it. (0721-30-3 [Ullman, John])

**Comment:** Nonetheless these issues are dwarfed, as I've said, by the voracious water consumption of Turkey Point, both presently with the dysfunctional cooling canals and the future needs to two additional reactors, (0721-32-4 [Schlackman, Mara])

**Comment:** For the safety of our communities this plan must not be approved as proposed, and here is why: It will shrink the supply and quality of water and our fresh water sources. (0721-4-2 [Regalado, Tomas])

**Comment:** And, water usage does not take in to account what would happen -- the Draft EIS report does not take account water usage and what would happen if the reclaimed water system fails; where would the water usage go or how would that be addressed. (0721-5-8 [Mendez, Victoria])

**Comment:** The expansion of Turkey Point also has the potential to have huge impacts on our regional water resources. FP&L has proposed using millions of gallons of reclaimed wastewater as the primary source of cooling water for the new reactors. (**0721-9-5** [McLaughlin, Caroline])

**Comment:** [O]ne of the neat things I think that they're doing, they're engineering this project, is they're reclaiming wastewater from Miami Dade County to about 60 million gallons a day which would otherwise go down into Biscayne Bay or the ocean or the deep wells that we have. That this will also be reclaimed and recycled for continuing cooling. (0722-13-7 [Duquette, Bill])

**Comment:** Our planet is bleeding and I think we have to make every effort to protect our planet and Biscayne Bay. We talk about water and how we're going to reuse water sewage. Miami Dade can't even get their pipes right. We're flooding Miami Dade, sewers backing up. They were supposed to replace pipes over the last 30 years, they did not do so and we're going to be counting on those pipes to provide water to this nuclear plant? What about the water that's not going to go to the Florida Keys because Turkey Point needs it? What's our water pressure going to be like in Turkey -- in Florida Keys? (0722-17-3 [Swenson, Cyndee])

**Comment:** The withdrawal of this water would increase salinity levels in Biscayne that have already been drastically and dramatically changed by the draining of the Everglades and this would increase the rate of saltwater intrusion into our limited freshwater supplies. There's also

the potential for the contamination of our freshwater supplies by chemicals related to the nuclear power generation. (0722-7-4 [Silverstein, Rachel])

**Comment:** One thing that we all have in common here is that we all drink water. And access to clean water and clean freshwater is absolutely critical and is something that can be lost here in South Florida and should be really considered very seriously in this project. (0722-7-8 [Silverstein, Rachel])

**Comment:** I'm also impressed by the reuse factor with Miami Dade Water and Sewer Authority. This one project will meet 50 percent of the needs as far as reusing the effluent from the Water and Sewer Authority. That's significant. (0723-1-6 [Wallace, Otis])

**Comment:** And whereas FPL's design of the Turkey Point Units 6 and 7 to make use of reclaimed water for cooling purposes and will assist our county and meet the regulatory requirements for reusing" -- I'm sorry -- "for increasing use of reclaimed water. (0723-2-6 [Trowbridge, Mark])

**Comment:** From the environmental impact of -- I know recently the local papers talk about the wastewater discharge. We're one of the few counties, communities in Florida still discharging to the ocean or bay. So this project to control wastewater, treat wastewater and reuse it is going to happen one way or the other, appropriately. If Turkey Point 6 and 7 can use some of that water and help to use that for our cooling medium, that will help the environmental impact of all of us living in Dade County because we all make wastewater, to minimize that on our great area that we live. (0723-6-3 [Murphy, Mike])

**Comment:** Let's talk about one of the really rough parts of the project, the use of recycled sewage to cool it. What happens when you run recycled sewage through cooling towers? First of all, what do you think that recycle sewage is? Is it pure H2O? No, not at all. Hundreds if not thousands of chemicals are still in there. The drinking water in Homestead has hundreds of chemicals below what they call the safety limit, but this stuff is in there. Lead, cadmium, arsenic, et cetera. The wastewater has even more. Household chemicals, cleaning fluids, viruses, bacteria. (0723-9-14 [Schwartz, Matthew])

**Response:** Turkey Point Units 6 and 7 would rely primarily on treated wastewater for operation. Treated wastewater is not suitable for potable water or most restoration activities because of its water chemistry. NRC staff did not identify other current or likely future demands for treated wastewater that are likely to conflict with the volume of treated wastewater proposed to be used by Units 6 and 7. The treated wastewater, while "fresh" in terms of salinity, is still not suitable for most other uses including municipal, agricultural, and CERP wetland restoration because concentrations of other contaminants and nutrients are too high. If this treated wastewater is not used by the proposed plant it would likely be injected into the Boulder Zone, at which point it would be unavailable for any beneficial use. Accordingly, it would be inaccurate to characterize the treated wastewater as a percentage of fresh water available for drinking, agricultural use, or the like.

The Miami-Dade Water and Sewer Department (MDWASD) SDWTP has a capacity of about 300 MGD. The proposed plant would take about 73 MGD from the South District Plant. Under Florida law, MDC is required to end ocean discharge and, therefore, must substantially increase deep well disposal. Evaporation in the cooling towers of the proposed plant would consume some of the wastewater volume before the remainder is injected into the Boulder Zone.

While the NRC staff determined that the wastewater supply is reliable for power generation operations, FPL proposed a radial collector well (RCW) system as a backup water supply. As discussed in Appendix G, while the water withdrawn from the RCWs would predominately come from the Biscayne Bay, the review team did evaluate the amount of water that may come from the Biscayne Aquifer under various possible current and future conditions. Far smaller amounts of water would enter the RCWs from the hypersaline plume beneath the IWF than from the Bay. The potentiometric depression caused by the operation or the RCWs could cause the limited lens of freshwater in the Biscayne Aquifer northwest of the IWF to move slightly closer to the IWF under certain conditions. However, the staff determined that this change was minor.

In the unlikely situation that the reclaimed water supply would be unavailable and the FDEP restrictions on the duration of the RCWs would be met, and in the absence of the use of some other water source approved by the State of Florida, the plant would cease operation.

Neither the reclaimed water nor the backup RCW water provide a safety function. Plant safety systems do not rely on either water source. These water sources are only necessary for continued electrical power generation. The proposed RCW water supply capability as a backup water source was an FPL decision to ensure generation reliability and is not a requirement for plant safety.

**Comment:** The cooling canals at the current Turkey Point facility do not function properly for the existing site. Scarce water from the South Florida Acquifer must now be drawn to cool the reactors properly. The size of these canals are already a blight on our sensitive Florida landscape and the drawing down of water for cooling purposes endangers our drinking water supply. (**0053-2** [Sasiadek, Alfred])

**Comment:** The integrity of drinking water for the south Florida area is at stake. The water that FP&L would use to cool its power plants would affect the level of saltwater intrusion into the Biscayne Aquifer, the main source of drinking water for this area. FP&L also plans to curtail its current monitoring program for this, which is totally unacceptable. (0073-1 [Commenters, Multiple])

**Comment:** FPL is already operating cooling based upon "emergency" draw down, so is using fresh water never anticipated in the original operating plan and that will only get worse. (**0091-2** [Boyce, Sheila])

**Comment:** Miami-Dade County asserts that the DEIS is inadequate with respect to the proposed radial collector wellfield (RCW) that would be constructed under the tidal waters of Biscayne Bay. The Biscayne Model, discussed in Appendix G, does not accurately represent the current surface water salinity conditions of the CCS. Historic monitoring data indicate that the salinity of the surface waters of the CCS has been steadily increasing since the early 1970s and this modeling does not appear to take this fact into account. Furthermore, data from the more recently implemented Uprate monitoring indicates that the salinity of the CCS has increased even more rapidly after the uprate of the existing nuclear units (Units 3 & 4) was completed and both units returned operating back to full capacity (around May 27, 2013) reaching salinity levels that are nearly three (3) times that of seawater. The increased salinity of the CCS surface water has compromised the system's ability to reduce the water temperature so that it can be used for cooling of Units 3 & 4 and forced FPL to seek an NRC license amendment to increase the ultimate heat sink (UHS) water temperature limit for the plant's cooling canal system in July of 2014. In August of 2014, the NRC Staff approved the proposed license amendments increasing the temperature specification for the UHS from 100°F to 104°F. The increased salinity and temperature of the CCS have also forced FPL to seek alternative

sources of water to discharge to the CCS in order to reduce the salinity and temperature of its surface waters in order to allow for the continued safe operation of the plant. The average post Uprate salinity at CCS surface water monitoring station TPSWCCS-1B between June 1, 2013 to April 30, 2015, is 76.35 PSU. Monitoring station TPSWCCS-1B is located in the vicinity of the NW corner of the CCS along canal 32, the station is equipped with water quality monitoring equipment that measures physical water parameters, including salinity, in one hour intervals. The CCS surface water salinity used for the model discussed in Appendix G was a constant 65 PSU. The use of salinity averages that underestimate the actual salinity of the CCS and that incorrectly assume that the salinity will not continue to increase over time is not appropriate as it does not simulate existing conditions and because it can lead to an underestimation of the impacts associated with CCS related issues including but not limited to salinity of the CCS groundwater plume that is mobilized by the operations of the proposed RCW. (0110-1-7 [Hefty, Lee N.])

**Comment:** The NRC is aware that FPL has been experiencing significant problems related to cooling water and the cooling canal system (CCS) needed for their existing Turkey Point 3 and 4 reactors. Further, on March 23, 2015 an Atomic Safety and Licensing Board panel admitted a modified contention, based on the October 14, 2014 petition of Citizens Allied for Safe Energy, Inc. (CASE) who successfully requested a hearing on license amendments issued to FPL's Turkey Point reactor Units 3 and 4, which increased the ultimate heat sink (UHS) water temperature limit for the plant's cooling canal system (CCS). Contention 1, which is still pending, states: "The NRC's environmental assessment, in support of its finding of no significant impact related to the 2014 Turkey Point Units 3 and 4 license amendments, does not adequately address the impact of increased temperature and salinity in the CCS on saltwater intrusion arising from (1) migration out of the CCS; and (2) the withdrawal of fresh water from surrounding aquifers to mitigate conditions within the CCS."5 [footnote 5: See March 23, 2015 ASLBP Memorandum and Order, http://pbadupws.nrc.gov/docs/ML1508/ML15082A197.pdf.] We believe there is new information regarding reactor Units 3 and 4 that affects the analysis and/or determinations in the DEIS for reactor Units 6 and 7. The NRC has a continuing obligation to update the Turkey Point 6 and 7 EIS with new and significant information and that information must be included and analyzed before an FEIS is issued. For instance, recent reports highlight an ever-worsening situation that could have implications for the proposed Turkey Point 6 and 7 reactors, including the possibility of piping reclaimed water from the Miami Dade County's southern sewer treatment plant which was also proposed to cool the two proposed new reactors:<sup>6</sup> [footnote 6: Jenny Staletovich, Miami Herald, "FPL needs more water to run Turkey Point," May 19, 2015. At

http://www.miamiherald.com/news/local/environment/article21419787.html.] "The utility obtained an emergency permit Tuesday from the South Florida Water Management District to pump more water into the 5,900-acre loop used to cool the plant's two nuclear reactors. But Miami-Dade County Commissioners added a strict caveat: they agreed to provide a permit to pump the water across sensitive wetlands only for a year and only if the utility comes up with a long-term fix. ... The canals first began running hot last summer after the utility completed work to increase power coming from the plant on southern Biscayne Bay. The hotter and increasingly saltier canals triggered persistent algae blooms, threatened to shut down the reactors and forced the utility to scramble to find ways to better control the system. But finding a solution has proved tricky and set off debates over South Florida's fragile water supply, with the county, the city of Miami, Biscayne National Park, environmentalists and even rock miners raising objections. In addition to raising the risk of power outages, the canals have pushed an underground saltwater plume closer to drinking water supplies. Last summer, after the Nuclear Regulatory Commission agreed to allow operating temperatures to rise to 104 degrees, the hottest in the nation, FPL began looking for water to cool and freshen the canals. The company won temporary permission to pull water from the nearby L-31 canal -- between August and October, the utility pumped 1,135 million gallons or about four times what all of Miami-Dade County uses in a day. The utility hoped to find a more permanent solution by drilling six new wells to pump up to 14 million gallons of water a day from the Floridan aquifer, a source deep beneath the shallow Biscayne Aquifer that supplies most of the county's drinking water. But local government officials and environmental groups have fought FPL's plans, filing appeals and arguing that diverting water to the plant could derail Everglades restoration efforts intended to revive Biscayne Bay, where increasing salinity threatens marine life. County staff also said adding freshwater could also worsen the movement of underground saltwater. ... Pulling water from the L-31, he explained, is intended to keep the canals working only until six wells can be drilled to pump water from the Floridan for long-term relief. FPL is also now talking with the county about piping reclaimed water from the county's southern sewer treatment plant -- water it also intends to use to cool two new reactors now being considered by the NRC. However, that water must be cleaned first and Scroggs said the utility has not yet determined the standards for its use." (0112-6 [Barczak, Sara])

**Comment:** The expansion also threatens the goals of CERP through potential negative impacts to the benefits of BBCW. One of the primary objectives of BBCW is to rehydrate coastal wetlands located adjacent to Turkey Point and to restore overland and subsurface water flows. Plans to withdraw water from Biscayne Bay using radial collector wells as a backup cooling water supply for Units 6 & 7 will likely draw freshwater away from what is needed for restoration, as discussed in greater detail in Section II, and operations could detract from benefits realized as a result of restoration efforts. (0113-1-11 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The DEIS does not adequately address the cumulative impacts of constructing and operating Units 6 & 7 on salinity levels in groundwater, surface water, the Biscayne Aquifer, and Biscayne Bay. (0113-1-7 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** According to NEPA, cumulative impacts are those that occur from the "incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." [Footnote 37: 40 C.F.R. § 1508.7] Every year, the SFWMD conducts fall agricultural draw downs in Miami-Dade County in order to manipulate groundwater storage to support agricultural interests at the end of the wet season. The result of these actions include the rapid release of water at the end of the wet season and an artificially early start to the dry season. [Footnote 38: Kearns, E. J., A. Renshaw, and S. Bellmund. Environmental Impacts of the Annual Agricultural Drawdown in Southern Miami Dade County, Abstract, American Geophysical Union, 2008.] The dry season is therefore unnaturally dry, causing habitat loss, salinity issues and other negative ecological consequences. [Footnote 39: Ibid.] The DEIS fails to include a discussion of how these annual draw downs, when coupled with the existing hypersaline plume and proposed operations of Units 6 & 7, will cumulatively impact salinity levels within Biscayne Bay and the Biscayne Aquifer. (0113-2-11 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** We are currently being forced to share our drinking water source with FPL as a result of the failure of their Cooling Canal system to sufficiently cool the canals after the current nuclear plants had an "uprate" in 2014. The predictions that FPL relied on in 2008 when they first applied under the Florida Power Plant Siting Act to "uprate" the allowable amount of electricity generated by the two nuclear facilities at Turkey Point, Units 3 & 4 were wrong. In

their application they represented that the uprate would cause only an insignificant temperature increase. As a result of their failed predictions, they sought emergency relief from the NRC, to increase the temperature cutoff to 104 degrees. Based on their failure to accurately predict or play out the consequences of various scenarios, the predicted increase in water temperature entering the cooling canals, and the predicted salinity were not in fact accurate, and as a result, a management plan was required, to avert a crisis scenario of water heated to over 104 degrees. (0145-4 [Lerner, Cindy])

**Comment:** Further, failure to address the current crisis, the instability of Turkey Point and its entire cooling canal system as it functions today, under emergency permits, is a fatal flaw by ignoring a current crisis that may never be resolved. The Draft EIS report must take into account under what circumstances would FPL manage operations of cooling canals in a manner that does not impact surface waters of our aquifer, and how that would factor into the determination that this site could function with two new plants, if the proposed new Cooling towers failed, or the re use water failed, and its cumulative impact to maintaining both 3 & 4 and a proposed new 6& 7. (0145-7 [Lerner, Cindy])

**Comment:** No less the warmer water from the cooling systems creating an algae bloom and the amount of water it would take to cool (**0147-2** [Jones, Joan and Robert])

**Comment:** The Nuclear Regulatory Commission draft Environmental Impact Statement needs to incorporate recent data showing the negative impact caused by the "uprate" for Turkey Point nuclear power units 3 & 4 into the final analysis. Miami-Dade environmental regulators have opined that the NRC approved increase in energy output and increased temperature for the cooling canals and are causing an acceleration of hypersaline conditions which is accelerating saltwater intrusion into Miami-Dade's drinking water aquifer. (**0172-4** [Cava, Daniella Levine])

**Comment:** Prior environmental impact statements conducted by the NRC indicated that the uprate project would have minimal environmental impact, yet just months after Florida Power and Light initiated the increased power output at the plants, the water temperature in the cooling canal system spiked to unacceptable levels. To mitigate the impact that the NRC had previously determined was not going to happen, FPL petitioned to draw up to 100 million gallons of water per day that would otherwise flow to Biscayne National Park in order to try to cool down the overheated canals. According to the Miami Herald, in just 7 months, over one billion gallons of water had been diverted to the power plant during that emergency period. FPL has requested to continue this emergency draw from the South Florida Water Management District for another two years in an attempt to control the excessive temperature that continues to plague the existing system. (0172-5 [Cava, Daniella Levine])

**Comment:** The DEIS fails to include an adequate analysis of the direct, indirect, and cumulative impacts of the proposed radial collector well system, including its impact on the available regional water supply. (**0208-6** [Ritz, David])

**Comment:** The DEIS does not adequately address the cumulative impacts of constructing and operating Units 6 & 7 on salinity levels in groundwater, surface water, the Biscayne Aquifer, and Biscayne Bay. (0208-8 [Ritz, David])

**Comment:** Hypersaline water is being discharged into the waters and mangrove swamps of Biscayne National Park and and the Biscayne Bay Aquatic Preserve. (**0252-6** [Van Leer, Sam])

**Comment:** This utility is victimizing Miami residents in the following ways:--starting to draw in 2014 more fresh water from our aquifer supply because its cooling canals are no longer cooling discharged water fast enough. This endangers our drinking water supply by increasing salt water intrusion into the aquifer. (0283-4 [Compel, Jr., Joseph])

**Comment:** The issue of super heated water is another insurmountable problem. There is a history of this problem which has been chronicled by The Miami Herald. It is public knowledge that the hot water produced by the nuclear reactors does not cool down as it is expected to, and Turkey Point was threatened with a shutdown for this reason. We are experiencing record heat, and there is no way for the heated water to cool down as temperatures will continue to hit record highs year after year. (**0365-5** [Fischer, Antoinette])

**Comment:** The salinity in the cooling canals is too much and the canals are too hot. You are using our precious water to cool the canals more. Israel uses all of its reuse water. In the future we will have to use all of ours as well. If you legislate the water for this plant we won't have it to use for our precious tropical plant agriculture. Did you know that in the continental US florida is the only place where tropical plants grow. (0373-4 [Lee, Nancy])

**Comment:** I am greatly concerned about the large impacts Turkey Point has already had on the quantity and quality of limited freshwater resources, a situation that will only worsen with more reactors. The withdrawal of massive amounts of water from under Biscayne Bay as back-up cooling water could increase salinity levels within the Bay and hasten saltwater intrusion into limited freshwater supplies--the full impacts of which have not been thoroughly analyzed in the draft Environmental Impact Statement. (**0379-6** [Commenters, Multiple])

**Comment:** Just remember, that the operators of Turkey Point, the way it is already, have so underdesigned the cooling systems that they had to get a waiver to degrade even more of the aquifer and Biscayne Bay by pumping even more water, and now, they want this exception that was granted to be permanent! (0435-1 [West, Eric])

Comment: Comment 6: The final Environmental Impact Statement should update its analysis, in the USGS model and elsewhere, to include the effects of flooding FPL's industrial wastewater facility/cooling canal system with additional water from the L-31E canal and other sources. After the completion of the DEIS, the South Florida Water Management District (SFWMD) issued an order authorizing FPL to divert 100 million gallons of water per day from the L-31E canal to the industrial wastewater facility. SFWMD Order No. 2015-020-DAO-WU. Florida's Department of Environmental Protection (FDEP) has also begun a process that would entitle FPL to draw an additional 14 million gallons of water per day from the Floridan Aquifer into its industrial wastewater facility. See http://tinyurl.com/TP3-5ConditionsDraftMod. Although both actions are being challenged, the former by the City and the latter by Miami-Dade County, the final Environmental Impact Statement should account for the presence of this additional water flow because its ostensible purpose is to flush hypersaline water out of FPL's facilities. As the SFWMD noted in late 2013, the consequences of flooding the FPL industrial wastewater facility are far from certain. See FPL Turkey Point Cooling Canal System Salinity Reduction Proposal Review, attached to these comments as COM - A. Likewise, the USGS model described by the DEIS in Appendix G would need to account for this additional water flow. In addition, "[b]ecause the [USGS] model conserves mass, withdrawal of groundwater results in water being drawn from other sources to replace it, and the freshening in this region could be due to predicted inflow from either freshwater or marine waters." DEIS at G-35. Hence, the assumption appears to be that there will be a recharge of freshwater. The final Environmental Impact Statement should address this assumption more directly. The final

Environmental Impact Statement should also update the USGS model to account for sea-level rise over the radial collector well system's operating life and address: The possibility that flushing the FPL industrial wastewater facility with additional water from the L-31E canal (in a manner that does not prevent evaporation or the resulting salinity increases) will push saltier water underground. The effect on the inland aquifer of seawater releases from the radial collector wells into the FPL industrial wastewater facility, and The potential for increased salinity levels in the inland aquifer resulting from future sea-level rise and storm surge hazards at the Turkey Point site, as well as the effects of this increased salinity on South Florida's freshwater resources. Moreover, the City echoes Miami-Dade County's concerns related to the area across which the USGS model predicts average salinities over Biscayne Bay. The model should include an analysis that more narrowly focuses on southern Biscayne Bay. The broad focus of the USGS model obscures the true potential impacts of operating the radial collector wells in a fragile aquatic ecosystem. The decision of the Nuclear Regulatory Commission, and cooperating agencies, of whether or not to approve the Turkey Point Nuclear Plant Units 6 & 7 application will likely rely on the findings of this model. The final Environmental Impact Statement, or a Supplemental Environment Impact Statement, should address these issues by refining the USGS model. (0456-13 [Miami, City])

**Comment:** In addition: The existing power plant infrastructure has demonstrably impacted the Biscayne Aquifer already, The cooling canals' continuing problems with salinity, temperature increases, and algae blooms reveal the difficulties of operating a power plant at Turkey Point while minimizing environmental damage, and FPL's requests to divert large amounts of freshwater to Turkey Point come within the context of a region that currently lacks sufficient freshwater resources for Everglades restoration and faces a diminishing supply for public consumption. Since FPL has not stated that it intends to replace the existing reactors with the new reactors contemplated in this application, it is likely that placing additional reactors at the site will only constrain efforts to resolve these issues. (0456-6 [Miami, City])

**Comment:** During 2014 the NRC granted a FPL request to continue operating reactor units 3 & 4 when cooling discharge temperatures exceeded 100 degrees Fahrenheit. This was a combination of newly increased up rating of power on reactor units 3 & 4 to 2644MWt each, and high ambient temperatures. Ambient air temperatures is a combination atmospheric conditions and the localized waste heat sources in the vicinity ~6.6GWt range. With the proposed addition of units 6 and 7, thermal waste dissipation on site will increase to ~11 GWt (peak) for a period of at least ten years until reactor units 3 and 4 are finally retired. This extra atmospheric thermal energy will further decrease the evaporation and the cooling ability of the 5,800 miles of cooling canals which support NG/Oil Units 1,2 and Reactor Units 3, 4. (0545-3 [Keating, Tim])

**Comment:** What dangerous pollutants will escape in the cooling water to the bay? (**0550-4** [H., Pat])

**Comment:** Problems with cooling ponds at the existing Turkey Point 3 and 4 reactors have already led to unprecedented use of freshwater by those plants as they attempt to reverse the toxic salinity the plants already introduce into Biscayne Bay. The water cycle in South Florida simply cannot afford the demands of four nuclear plants and the NRC cannot permit their radioactive effluents to be released in such close proximity to local drinking water supplies as the Turkey Point siting would require. (**0615-3-3** [Bethune, David])

**Comment:** The NRC acknowledges the hydraulic connection between the cooling canal system (CCS)/industrial wastewater facility (IWF) and the hydrologic complex, especially during the tidal cycle (page 2-46) and states, *"Recently, the IWF has experienced algal blooms,* 

increased water temperatures, and increases in concentrations in salinity and nutrients. The precise cause of this anomaly is not understood at this time." However, the FEIS should further evaluate whether the overheated water in the canal, with increased nutrients due to concentrations resulting from evaporation, contributed to the formation of the algal blooms. EPA is concerned regarding the interconnection of the IWF, Biscayne Aquifer and Biscayne Bay. NRC acknowledges this connection when it states, "Hydraulic heads in monitoring wells near Biscayne Bay fluctuated in response to tidal cycles indicating a potential for tide-induced flow between the bay, shallow groundwater and the cooling canals in this area of the IWF"." (page 2-68.) On page 2-69, NRC also discusses a FPL study that examines the dynamic processes between the IWF, surface water and groundwater as it is related to water quality, but does not discuss the results of that study. NRC also discusses a required monitoring study of the IWF to evaluate the "horizontal and vertical hydrologic exchanges with the surrounding environment". EPA requests that the NRC better describe the existing condition of the current operations of Units 3 and 4, and related water quality impacts, in the FEIS. EPA also understands that the IWF is used for the existing nuclear reactors (Units 3 and 4), and that cooling water from the new units 6 and 7, will use reclaimed water from MDWSD, and the blowdown from the cooling tower will be discharged into the Boulder Zone via UIC wells. (0617-1-14 [Mueller, Heinz J.])

**Comment:** The DEIS discusses operational surface water quality impacts associated with the IWF {page 5-19, 5.2.1.4). The DEIS individually examines the surface water quality impacts associated with excavation dewatering, stormwater discharge, muck spoil runoff and drift deposition. However, the DEIS does not holistically and additively analyze these additional stresses to the IWF. Also, the NRC does not discuss these additional wastewater stresses to the IWF and potential impacts to the underlying groundwater. (**0617-1-16** [Mueller, Heinz J.])

**Comment:** The DEIS states that FPL intends to place the construction dewatering water into the cooling canals. Other information indicates that dewatering water and other wastewaters generated during construction will be injected via a Class I injection well permitted by FDEP (page 4-30). This needs to be clarified in the FEIS. Estimated discharges from these waste streams would be 1200 gpm, or I.73 mgd, of discharge into the IWF for approximately 1 year (page 3-23). The DEIS does not discuss the composition of the constituents in the wastewater. FPL also intends to drain all of the new facilities' stormwater discharge into the IWF (pages 3-8 and 3-27). On page 4-36 (4.2.3.1), NRC also states, "Because the transport of sediment in the stormwater runoff from the disturbed area would be minimized by the use of the BMPs, and controlled by a stormwater-retention basin, the effects of offsite water quality are expected to be minor." The DEIS discusses volumes and potential pollutants of stormwater and wastewater to be placed in the IWF (page 5-19); however, the document did not discuss the types of stormwater retention basins and other best management practices (BMPs). The FDEP permit does not include information regarding possible BMPs. Additionally, FPL intends to place dewatering wastewater in the IWF as well. The NRC considered impacts of the excavation dewatering activities (4.2.3.2, page 4-37), but in relationship to inflows caused by excavation dewatering, and relationship to outflows due to the cooling canals canal seepage (mass balance). (0617-1-19 [Mueller, Heinz J.])

**Comment:** We appreciate your efforts to minimize project impacts for the proposed Units 6 and 7 by using reclaimed wastewater from the Miami-Dade Water and Sewer Department (MDWSD) treatment system as cooling water, with the alternative source being groundwater supplied from horizontal radial collector wells installed in the Biscayne Aquifer on the Turkey Point peninsula. The lateral collector wells would extend up to 900 feet from the central caisson beneath Biscayne Bay (page 3-25). We appreciate the plans to avoid releasing blowdown to surface water bodies. However, based on the EPA's review of the DEIS, there are a number of serious

concerns regarding the direct, indirect and cumulative impacts of this project, and further information and clarification is needed. (**0617-1-2** [Mueller, Heinz J.])

**Comment:** EPA also recommends that the NRC consider and evaluate the additive impacts of the additional wastewater discharges (excavation dewatering, stormwater runoff activities, muck spoil runoff and drift disposition) into the IWF as a result of constructing the new reactors (Units 6 and 7), specifically as it relates to the hypersalinity plume and Biscayne aquifer and associated drinking water wells. (0617-1-21 [Mueller, Heinz J.])

**Comment:** *Recommendations:* Page 2-45 of the DEIS states that the cooling canal system/industrial wastewater facility " ... *is a closed-cycle cooling system, but is not a closed hydrologic system.*" EPA notes that since this is not a closed cycle hydrologic system, and therefore the FEIS should include a more in-depth discussion relating to the cumulative impacts associated with the hydrologic complex. The FEIS should include a water balance calculation for the site that shows all the potential sources of water supplying the site, and discharges and other releases from the site under normal operating conditions. This balance should include seepages from the canal system and changes in evaporative losses (e.g., changes in thermal load due to projected completion of the conversion to synchronous condenser mode for Units 1 and 2). Additionally, the FEIS should discuss the releases or seepages from the Industrial Waste Facility (IWF). Specifically, the FEIS should document the presence of any direct releases from the IWF to the surrounding surface waters via breaches in the berms. (0617-1-4 [Mueller, Heinz J.])

**Comment:** Indirect and Cumulative Impacts. Several potential cumulative and indirect project impacts are of particular concern at Turkey Point, particularly radionuclides in surface water and groundwater, along with hypersalinity. Also, issues related to all nuclear power plants, including spent nuclear fuel storage, transportation and disposition, and groundwater monitoring for radionuclides, will require continued monitoring as the project progresses. The existing unlined Industrial Waste Facility (IWF)/Cooling Canal System (CCS) for Units 3 and 4 has issues regarding radionuclides and hypersalinity releases to the aquifer complex. Increasing water withdrawals from the canals, combined with additional groundwater withdrawals, could result in changing the level of the groundwater complex in the area surrounding the open interval of the withdrawal wells, eventually resulting in surface water impacts. EPA is concerned regarding the proposed project's potential for cumulative impacts on the migration of the existing hypersaline plume, particularly since the quantity of water in the cooling water canals will increase as a result of this project. EPA is especially concerned with ensuring the protection of public drinking water wells located to the west. Therefore, as a result of the proposed changes, further migration of the hypersaline plume is expected, and there is likely to be an increase in the rate of westward migration, increasing the potential for contact with offsite wells. EPA has concerns regarding the adjacent Biscayne Bay and the surrounding terrestrial environment, particularly that operation of additional units could potentially contribute to existing issues, and thereby increase cumulative impacts and environmental stressors. EPA has concerns that historical operating conditions at the site, combined with future construction and operation of new units. could result in increased saltwater intrusion, increased levels of radionuclides in water, and proximity of a hypersaline plume and sole source aquifer impacts. *Recommendations:* The FEIS should evaluate the environmental stressors, in their entirety, on the ecosystem surrounding Turkey Point. The potential impacts of current operations, combined with future groundwater withdrawals needed for construction and operation of the facility, should be fully evaluated, and impacts should be avoided to the maximum extent feasible. The issue of impacts on water supply wells should be thoroughly evaluated and discussed in the FEIS. The westward movement of the plume as a result of continued use of the cooling water canals should be

projected through predictive modeling extending through the expected operation of the project. The project team should explain what steps will be taken to monitor and protect drinking water supplies in the event that the hypersaline plume encounters a public water supply well. (0617-4-10 [Mueller, Heinz J.])

**Comment: Monitoring and Adaptive Management.** EPA is concerned about the numerous environmental issues and sustainability related to the project, particularly the current operations of the IWF. The development of the hypersalinity plume, the recent uprate waiver for salinity and temperature, and pumping of water from the L31E canal and other sources to the IWF cause concern that the IWF may not be ecologically viable in the long term. EPA is concerned that the need to place additional water into the IWF in order for it to remain functional is not a long term solution, since the IWF is needed for the proposed project. EPA is particularly concerned regarding the drainage of Unit 6 and 7's construction and post-construction stormwater into the existing IWF, especially considering the numerous issues related to the current operations of the IWF. Given these uncertainties, as well as uncertainties related to climate change (especially increases in storms and sea level rise, operations of the RCW, and possible exacerbation of the hypersalinity plume), EPA believes that a monitoring and adaptive management plan is needed to prepare for any future, unforeseen environmental issues related to the construction and operation of Units 6 and 7. Therefore, EPA requests that NRC and USACE (with resource agency collaboration) develop a robust monitoring and adaptive management plan. Recommendations: EPA recommends that NRC and USACE develop a monitoring and adaptive management plan with collaboration from resource agencies, and other stakeholders, for inclusion in the FEIS. Further, EPA recommends NRC and USACE commit to the implementation of the monitoring and adaptive management plan in the Record of Decision (ROD). (0617-4-13 [Mueller, Heinz J.])

## Comment: 2) Evaluation and Analysis of the Extended Operation of the RCW

The NPS is concerned about the potential for adverse impacts to park resources from continued and extended operation of the RCWs, particularly operating scenarios involving either the combination of RCW water with the primary wastewater supply or using RCW water in place of reused wastewater for the primary source of cooling. It is reasonably foreseeable that future wastewater supplied for reuse by Miami-Dade County may have unforeseen limitations. For example, sea-level rise and saltwater intrusion could decrease the availability and raise the cost of this water supply - a risk that was not assessed in the DEIS. As stated in the DEIS (page 3-9, lines 1-9), FPL intends to use RCW water in combination with wastewater or as a replacement for wastewater should it become less available or unavailable in the future. More specifically, the NPS is concerned that the DEIS does not contain information to evaluate whether the operation of the RCW could draw the subterranean hypersaline plume further eastward into Biscayne NP.

Although the model spatial resolution may be too coarse to describe local impacts, results indicate the potential for RCW operation to affect the regional hydrologic system within the boundaries of Biscayne NP and Biscayne Bay Coastal Wetlands (BBCW) restoration project. The model report shows that continuous pumping scenarios yielded year round effects on water stages and salinity, especially to the northwest of the RCW site. In addition, all USGS model scenarios of RCW effects assumed that waters within the IWF, also known as the cooling canal system, had a constant salinity of 65 psu. Recent IWF salinity, following implementation of the uprate of Units 3 and 4, has risen to 90 psu and FDEP recently ordered actions (water additions to the IWF) to decrease salinity to 35 psu. Such action will increase head pressure difference and decrease the salinity and density difference between IWF and Biscayne Bay waters,

possibly increasing RCW operational influence on transporting water from the IWF waters toward the bay which in tum could affect resources of Biscayne Bay NP.

The NPS recommends that additional scenarios that extend the period of RCW operation and that vary IWF stages and salinity should be assessed with an appropriately scaled model to quantify this uncertain risk to Biscayne NP. This analysis should include an adequate assessment of how these operations could affect freshwater availability for current and future BBCW restoration projects. (0622-1-3 [Austin, Stan])

**Comment: Extended Operation of the RCWs[.]** The NPS is concerned about the potential for adverse impacts to park resources from continued and extended operation of the RCWs, particularly operating scenarios involving either the combination of RCW water with the primary wastewater supply or using RCW water in place of reused wastewater for the primary source of cooling. More specifically, the NPS is concerned that the DEIS does not contain information to evaluate whether the operation of the RCW could draw the subterranean hypersaline plume further eastward into Biscayne NP. The NPS recommends that additional scenarios that extend the period of RCW operation and vary IWF stages and salinity should be assessed with an appropriately scaled model to quantify this uncertain risk to Biscayne NP. (0623-3 [Austin, Stan])

**Comment:** We must consider the cumulative impacts of the water use with what's happening on the ground with 3 and 4. And if that's not in an EIS then, unfortunately, you need to do a supplemental EIS. (0721-10-4 [Reynolds, Laura])

**Comment:** I want to talk briefly about fresh water. I think that the radial canals will not work properly. I think we need to look at the salt water plume that's underneath Biscayne Bay and in the area there[.] (0721-13-6 [Martin, Drew])

**Comment:** [We need to look at] the extreme salinity that's been caused, and I think these problems will continue. (0721-13-8 [Martin, Drew])

**Comment:** Already there's a algal bloom that's expanding uncontrolled from the cooling canal that's already existing at the Turkey Point site and the expansion of Turkey Point has the potential to further impact those regional water resources. The proposed radial collector wells which stretch underneath Biscayne Bay and would require as much as 7.4 billion gallons of water a year. To put that into perspective, the entire Florida Keys uses just over 6 billion gallons of water a year. That's over a billion gallons of water more than the entire Florida Keys. (0722-7-3 [Silverstein, Rachel])

**Response:** The IWF (also called the cooling-canal system) is not a feature of the design of proposed Units 6 and 7. The IWF provides cooling for Units 3 and 4. The IWF also previously provided cooling for Units 1 and 2, both of which have been converted to function to stabilize the grid and no longer generate power. To the extent comments relate solely to the current state of the IWF and its operation in connection with the existing Turkey Point units, the comments fall outside the scope of the EIS, which is the environmental impacts of the proposed new units. Nonetheless, the IWF is a feature of the site on which Units 6 and 7 are proposed to be constructed and operated. In describing the environmental setting for the proposed action, the review team disclosed that construction and operation of the IWF has affected the quality of shallow groundwater and the Biscayne Bay. Nothing in recent events has significantly altered the review team's understanding of the IWF. As discussed in the EIS, potential effects on the IWF from building and operating proposed Units 6 and 7 are very limited. These include effects resulting from: 1) discharge of groundwater from excavation dewatering and storm water to the

IWF while building the plants, 2) runoff to the IWF from muck added to the berms, and 3) cooling tower drift deposition landing on the IWF. Analyses presented in the EIS show that these changes are expected to result in minor changes to the water levels or chemistry of the IWF. The EIS acknowledges that operation of the proposed RCWs installed beneath the Biscayne Bay could move hypersaline water from the IWF toward the RCWs. Any increase in volume and concentration of the seepage from the IWF to the underlying portion of the Biscayne aquifer is not expected to have a noticeable impact on the quality of groundwater in the areas of the Biscayne aquifer that meet USDW criteria for TDS. After publication of the draft EIS, because of potential changes in the future environmental baseline, the review team performed additional groundwater modeling of the interaction between the planned RCWs, the existing hypersaline plume, and the IWF using a two-dimensional cross section model and a limitedextent three-dimensional model. These simulations were performed to determine whether the postulated changes in the environmental baseline would alter the review team's findings from the draft EIS regarding the effects of RCW pumping. The effects of climate related sea-level rise were also simulated. Model results were added to the Section 5.2 of EIS and details of the modeling and results are presented in EIS Appendix G.

# Comment: 3) Evaluation of Water Quality Impacts and Associated Cumulative Impacts from the IWF

The NPS is concerned that the DEIS does not fully analyze water quality impacts to NPS resources, especially cumulative impacts associated with the IWF. Recent developments relating to the operation of the IWF and subsequent environmental concerns were not analyzed in the DEIS. The hyper-salinity and temperature in the IWF, including the use of regional system water under recent orders and actions now underway to address this issue, must be evaluated as part of the past, present and future cumulative impacts. These recent actions of increased withdrawals from the regional system have currently decreased the amount of freshwater going to Biscayne NP and Biscayne Bay. This information should be included in a revised DEIS along with appropriate adjustments to impact assessments that include this updated baseline condition. Additionally, the levees surrounding the IWF are relatively low in height. Therefore, the transport of high salinity and high temperature IWF water into Biscayne NP and Biscayne Bay with sea level rise and storm conditions should be considered in an updated analysis related to the effect of anticipated sea level rise.

We are concerned that operation of the RCWs has the potential to affect the salinity of Biscayne Bay. Ecological responses to salinity depend upon both the magnitude and variability of salinity exposure. The CERP is attempting to restore both of these components by decreasing high salinity peaks in the dry season and changing the seasonal timing of low salinity (extending low salinity well into the dry season, and decreasing harmful rapid drops in salinity). For BBCW, there is particular focus on salinity in the near-shore zone within 500 meters of the shoreline, where hypersalinity and high variability occur. The modeling in the DEIS demonstrated that RWC operations influenced salinity at a broad spatial scale. However as described previously, modeling salinity variability at a finer scale would provide more insight into localized potential ecological effects in southern Biscayne Bay. For these reasons, the NPS recommends that additional modeling be conducted to include more recent salinity data, assumptions concerning redistributed freshwater flow into the park as a result of the BBCW Project, and at an appropriate scale to determine the extent to which RCW operations will effect salinity changes and have potential adverse impacts to resources in near-shore coastal waters of Biscayne NP.

The DEIS concludes that changes in the hydrology and chemistry of the IWF caused by construction of Unit 6 and 7 will not impact Biscayne NP and Biscayne Bay. We have concerns

regarding the methodology used to draw this conclusion and how pulses of nutrients and dissolved organic matter from dewatering and stored muck could potentially move toward the bay, thereby increasing the risk of near-shore algal blooms. Our concerns regarding the impact of Units 6 and 7 construction activities are now heightened by changes in IWF hydrologic management. These construction activities, when combined with planned freshwater or brackish water additions from canals and the Florida aquifer, intended to decrease IWF salinity, will raise water levels in the IWF. This will change both head and density differences among water parcels of the IWF, groundwater, and bay water, changing patterns of advection and dispersion and associated water quality risks. This scenario was not evaluated in the DEIS. The NPS is concerned that these changes in water levels, combined with nutrient and other material inputs from construction, will significantly increase the risk of industrial waste water and materials being transported or dispersed into adjacent Biscayne NP and Biscayne Bay, consequently increasing the risk of ecological impacts. (0622-1-4 [Austin, Stan])

**Response:** The review team demonstrated that the impacts of changes in water chemistry from dewatering and leaching of the muck piles is expected to be small and within the normal range of variability in the IWF. The review team also computed the impact of an unrealistically conservative bounding release of the nutrients to Card Sound and Biscayne Bay and also determined they were within the range of typical variability.

Construction activities would require temporary dewatering of areas below the water table. Pumps would remove the water from these holes and discharge it into the IWF. To minimize the amount of water that needs to be pumped, barriers would be used around the holes. Because the IWF and Mud Island are hydraulically connected, there is no net change in water volume. Removal of muck to allow placement of fill material that would raise grade for the plant would result in saturated muck draining. Again this results in no net change in the water volume, but it could make nutrients and other chemicals that would drain into the IWF more available. Once the dewatered muck is piled on the berms, nutrients and chemicals can continue to be leached by rainfall and enter the IWF. Technologies implemented as Best Management Practice (BMPs) for managing dewatering and leaching problems are mature and reliable. FPL also has the unique option of possibly using the UIC system to dispose of nutrientladen dewatering drainage, and leachate at the Turkey Point site. The review team was advised by SFWMD that there was nothing about the Turkey Point site that would suggest that the existing suite of available BMPs would not be sufficient.

The review team acknowledges that operation of the RCWs would decrease the piezometric head in the vicinity of the RCW and cause increased lateral movement to the east of the hypersaline plume underneath the IWF (assuming the remediation of the hypersaline plume under the Consent Agreement is unsuccessful). However, without an upward impelling force, the hypersaline plume would remain well below the bay floor. The review team has not been able to identify any credible upward impelling force that would offset the tendency of the denser hypersaline water to sink.

**Comment:** The Turkey Point units 6 & 7 fails to address the toxicity of the drift from the cooling towers if chemical-laden municipal wastewater is used to cool the reactors. There is no analysis of the chemical reaction products and the chemical decomposition products that would form when the wastewater is heated. These unknown products would then be dispersed over the land and water via the cooling towers. There has been no environmental impact analysis of this random dispersal of completely unknown chemicals. (**0054-1** [Kasenow, Lisa])

Comment: Comment 8. The DEIS is incomplete because it gives no context for evaluating the safety of the chemicals projected to be released. Nor does it show quantitative mapping of aerosol accumulation, though the data are probably available. Specifically, the DEIS does not list safe accumulation levels for the list of chemicals that will be released as aerosols, nor does it compare the projected levels to the safe accumulation levels - Cooling water will be evaporated in cooling towers with blowdown preventing escape of most aerosols. Nonetheless, some aerosols will escape the towers and blow out across Biscayne National Park and the coastal Everglades on the prevailing winds: "Small droplets of water (drift) and salt particles would be emitted from the cooling towers during operation. For the Turkey Point Units 6 and 7 combined drift rate from the circulating-water system and service-water system towers the expected maximum drift rate would be approximately 8 gpm (Table 3-6)." [DEIS p. 5-9] The DEIS projects 4,207,680 gal/year aerosol drift, and a 4 year accumulation cycle. Dispersion models predict a non-uniform distribution of aerosols across the region, with greater accumulation near the plant. Thus, use of reclaimed wastewater will introduce myriad waste chemicals into the nearby reaches of Biscayne Bay and the Southeast Coastal Everglades. The DEIS gives no context for evaluating safety of the chemicals to be released. It lists projected amounts, but does not provide other key information. Absent are diagrams showing how fallout varies over the area. Likewise absent are safety data to evaluate the possible effects of chemicals that accumulate. What are the safe accumulation levels? While soluble chemicals like chloride might reach saturation after 4 years time, the same is not true for hydrocarbons and metals that bioaccumulate. They may continue to concentrate in the ecosystem for longer, reaching greater concentrations over periods longer than four years. The final EIS must better estimate accumulation levels and better detail spatial distribution of listed wastewater chemicals released as aerosols and compare those levels to levels shown safe for aquatic organisms. (0106-11 [Stoddard, Philip K.])

**Comment:** Your choice of locating two nuclear reactors at Biscayne and Everglades National Parks are at risk for using 90 million gallons per day of recycled Miami-Dade County sewage and wastewater which will not be pure H2O and will be released over Biscayne Bay and surrounding wetlands along with steam in the planned cooling towers. (**0153-1** [Goldman, Emanuel])

**Comment:** The EIS also fails to analyze impact of particulate drift from the nuclear cooling towers. The impact cannot be known at this time because the chemical content of the drift is unknown. (**0200-1** [Kasenow, Lisa])

**Comment:** The powerful new reactors (1,117 MW each) are to be cooled primarily by 90 million gallons per day of recycled Miami-Dade County sewage and wastewater. This water will not be pure H2O - and some will be released over Biscayne Bay and surrounding wetlands along with steam in the planned cooling towers. (**0240-3** [Commenters, Multiple])

**Comment:** The draft EIS also omits any analysis of the chemical constituents of the aerosolized effluents as well as any modeling of the synergistic effects of adding two new plants a site which has already reached unacceptable levels of fresh water use. Furthermore, the draft EIS neglects any study of the impact of the radial collector wells on the salinity of the waters of Biscayne Bay National Park, an irreplaceable environmental resource. (**0615-3-5** [Bethune, David])

**Comment:** <u>References to the State of Florida Site Certification Process</u>[.] The NPS recommends that the hydrology and ecology sections in the DEIS be strengthened by including references to important documents from the State of Florida Site Certification Process, especially as it relates to the cooling tower plume issue. We also encourage the NRC to draw

from the extensive technical and scientific literature of the SFWMD who are the local sponsors of the C&SFP with the USACE and are the local experts on hydrology and water operations. They are also the primary water operations regulatory agency of the State of Florida. This extensive collection of materials is both peer reviewed and online and should be included in the DEIS. (**0622-1-28** [Austin, Stan])

## Comment: Release of Chemicals of Emerging Concern CCECs)

The NPS has a number of questions/concerns relating to the release of CECs originating from reclaimed water and released via the operation of Units 6 and 7 onto the Turkey Point facility and into Biscayne NP and how they are analyzed in the DEIS:

### Page 5-10

Lines 19-20: The DEIS states, "This conservative approach assumes no loss of contaminants via removal ..., biodegradation, or volatilization." Since biodegradation of some compounds (e.g., 4-nonylphenol, triclosan) can result in more toxic compounds than the parent compound, we suggest that more information be included along with additional discussion of how biodegradation of contaminants are affected by drift deposition.

Lines 30-31: The DEIS states that "... the review team first performed a screening-level assessment to identify chemicals and constituents likely to occur at ecologically relevant concentrations in both reclaimed water and Biscayne Bay seawater obtained from the RCW system." NPS requests an explanation of how the review team determined which chemicals and constituents were likely to occur at ecologically relevant concentrations; how these concentrations were determined; and how the review team determined which species and which endpoints to use for these ecologically relevant concentrations. Revisions to the DEIS should include an outline of the screening-level assessment process in addition to the information regarding these questions.

Lines 41-44: The DEIS states, "...were compared to existing EPA freshwater and marine waterquality criteria, which are readily available for many compounds and believed to be protective of aquatic life." Were freshwater water-quality criteria applied to marine species if marine waterquality criteria were not available? Lines 22-25 on p.5-53 highlight this possibility. If this was done, the screening-level assessment needs to be conducted again since the toxicity of compounds are greater in seawater and brackish waters than in freshwater.

Page 5-11, Table 5-1 contains footnote (c) that indicates the contaminant with the lowest environmental effect concentration. However, there does not appear to be a contaminant (or concentration) annotated with a (c) in the table. (0622-1-5 [Austin, Stan])

**Comment:** You think they can get them all out? No. That's going through the cooling towers. You think it's pure H2O steam coming out of there? No. Volatile gases mixed in with it plus droplets called drift. That drift contains the wastewater. Those are little tiny droplets of wastewater spreading out over Biscayne Bay, spreading out over your community, your children are going to be breathing that in. (0723-9-15 [Schwartz, Matthew])

**Response:** In Section 5.2.1.1 of the EIS, the review team disclosed that the chemicals in the reclaimed water include contaminants of emerging concern (CECs) and the review team has provided a representative calculation of the amount of the CECs available in the drift. The review team determined that the drift rate would be small (8 gpm); chemicals in the water

treatment process may degrade; there is some potential for volatilization of CECs in the cooling towers, so they would not be deposited locally as drift; mixing and dilution would occur as the chemicals combine with other surface water bodies; and given the ubiquitous presence of chemicals in the environment, the projected alterations to the water quality would likely be undetectable. The review team employed conservative estimates of wet deposition based on air quality models applied consistent with NRC guidance.

The review team disclosed the existence of CECs in the EIS and performed a conservative analysis to demonstrate the small amount of material being released to fully advise the public. NEPA does not require an encyclopedic characterization of all the possible CECs that may be in the reclaimed wastewater and even natural water bodies. As with any other constituent, if EPA changes existing standards or adds new standards such as for CECs, changes may be necessary in the future.

**Comment:** Further, if the expansion of Turkey Point does occur, it could have profound and unacceptable environmental impacts to regional water resources, Biscayne and Everglades National Parks, wildlife, wetlands and threaten public health and safety. There are more affordable, less water-intensive ways for FPL to meet energy demand<sup>1</sup> [Footnote 1: See <u>http://www.cleanenergy.org/wp-</u>

<u>content/uploads/F\_SACE\_CleanenergysolutionstoTurkeyPtreactors\_040915.pdf.</u>] while protecting the environment and addressing climate change. (**0112-2** [Barczak, Sara])

**Comment:** In the description of the affected environment there is an extensive discussion of the locational environment around southeastern edge of Everglades NP, however there is no description of Biscayne NP's watershed which is contiguous to the plant which would include a discussion of the surface and groundwater flow to Biscayne NP as well as the surface water operations contiguous to the plant site that affect the near shore coastal environment. The watershed to the west and northwest of the plant is the Central & Southern Florida Project canals, Miami-Dade County canals and the groundwater made up of the Biscayne Aquifer an unconfined aquifer. Together these components control the water level and water flow of this area and are responsible for the ecological structure of Biscayne NP and its adjacent wetlands. In turn, these systems are operated to accommodate the dense population of Miami-Dade County. (0622-1-29 [Austin, Stan])

**Response:** Section 9.2 of the EIS describes the review team's assessment of water usage by alternative energy systems water. The review team identified some energy alternatives that use less water than the proposed plant (e.g. combined cycle, and solar). However, given that the plant is using treated wastewater that would otherwise be immediately disposed by deep well injection, the review team determined that water use is not relevant as a determinate in this case.

**Comment:** Likewise, limiting the analysis in the DEIS to only the proposed radial collector wells as a backup cooling system is not the "hard look" required by the National Environmental Policy Act ("NEPA"). This backup cooling system is easily one of the most concerning parts of the Turkey Point Nuclear Plant Units 6 & 7 application. Since the final Environmental Impact Statement must independently assess the impacts of the Environmental Report submitted by FPL, it should also consider other approaches to providing cooling water to the reactors. The DEIS has already accomplished this task for some of the inland alternative sites by assessing potential cooling systems other than those proposed. The final Environmental Impact Statement must do the same for Turkey Point. (0611-3 [Haber, Matthew S.])

**Response:** Alternative water sources for Turkey Point are discussed in Section 9.4 of the EIS. Withdrawal of water from marine sources, including Biscayne Bay, Card Sound, and the Atlantic Ocean (including locations such as the barge-turning basin or Card Sound Canal) was considered. Other surface-water sources, including the IWF cooling canals and offsite sources such as a new freshwater reservoir, were also considered. The review team considered several groundwater sources, including the Biscayne aquifer, the Upper Floridan aquifer, and the zone of the Lower Floridan aquifer that is commonly referred to as the Boulder Zone. None of these alternatives were environmentally preferable to the proposed water sources. No changes to the EIS were made based on this comment.

**Comment:** <u>Stormwater Management Design Event</u>: NRC states the stormwater management system for the new plant area will be designed to handle a 25-year, 72-hour design storm event (Section 3.4.2. l, p. 3-30). **Recommendations:** EPA recommends NRC provided some supporting environmental information justifying the sufficiency of a 25-year, 72-hour design storm event for this facility in this area. As noted by NRC, the U.S. Global Change Research Program has determined that extreme heavy precipitation events are expected to increase in frequency and intensity. For example, an event that now occurs once in 20 years is projected to occur 2 to 3 times as often by the end of the century. Heavy precipitation events are expected to have a 20-percent increase in the amount of precipitation falling. While the number of tropical storms occurring around the globe will decrease, those that occur will be stronger in force, yielding more Category 4 and 5 storms. Rainfall rates associated with tropical storms are expected to be greater, "... with projected increases of about 20 percent averaged near the center of hurricanes" (GCRP 2014-TN3472). (Appendix I, p. 1-3) (0617-4-2 [Mueller, Heinz J.])</u>

**Comment:** <u>Stormwater Management Cooling Canals</u>: NRC states the storm water runoff will be directed to the existing cooling canals of the existing industrial wastewater facility. **Recommendations:** EPA recommends NRC discuss the impacts of heavy precipitation events, sea level rise, and storm surge on the existing cooling canals and their stormwater-management effectiveness and associated impacts to the affected environment. For example during the hurricane season of 2004, Hurricanes Frances and Jeanne created high-water surges of over 18 feet (Section 9.3.2.4, p. 9-70). Reportedly, storm surge can range up to 20 feet and last a day in known extreme cases. [Footnote 2: Miami-Dade Sea Level Rise Task Force Report and Recommendations, July 1, 2014, available at

heep://www.miamidade.gov/planning/library/reportsfsea-level-rise-final-report.pdf] Moreover, NRC qualitatively presumes the unlined cooling canals' water-surface elevation will rise in response to sea level rise (Appendix I, p.1-5). EPA recommends that the cooling canals' water elevations be analyzed in context of sea-level rise projections and the resulting impacts assessed. (0617-4-3 [Mueller, Heinz J.])

**Response:** Appendix I includes a discussion of stormwater management as related to climate change. Stormwater management is regulated by the EPA, and while the NRC discloses the impacts of storm water management in NRC EISs, the NRC does not intrude on the EPA's decisions regarding nonradiological pollutant discharges into receiving waters. Additional information is available in Section E.2.32, in which the NRC responds to comments regarding climate change, and Appendix I, which includes the NRC analysis of climate change issues associated with the proposed action. The storm surge of 18 ft that was mentioned in one comment refers to the storm surge on the confined Lake Okeechobee and is not related to coastal storm surge at the proposed site.

**Comment:** The DEIS individually views the surface water quality impacts associated with excavation dewatering, stormwater discharge, muck spoil run off and drift disposition, but does not holistically and additively analyze these additional stresses to the IWF. Also, the DEIS does not discuss these additional wastewater stresses to the IWF, and potential impacts to the underlying groundwater. The DEIS notes that the impacts would be minor; however, it does not discuss possible impacts related to the hypersalinity plume. The EPA is concerned that these additional wastewater activities would further stress the IWF and potentially worsen the hypersalinity plume, cumulatively and adversely impacting the Biscayne Aquifer. We note that additional waters will be added to the IWF to address the heating and hypersalinity levels in the plume is unclear. **Recommendations:** The FEIS should clarify whether remediation measures are planned to remedy the serious issues that exist with hypersalinity migration. Also, the FEIS should provide more detail regarding the dewatering and stormwater activities (including types of pollutants, volumes, types of BMPs and stormwater-retention basins). (0617-1-20 [Mueller, Heinz J.])

**Response:** The review team is aware that regulatory actions by state and county agencies have been undertaken to mitigate the inland migration of the hypersaline plume. The staff has updated the EIS to include a discussion of these in Section 2.3. The review team also included discussion in Sections 5.2, 7.2, and Appendix G to explain modeling performed to confirm that the review team's conclusions in the draft EIS would not be changed as a result of these new actions.

**Comment:** There are instances in the DEIS where the DEIS characterizes the stormwater would be "discharged" into the industrial wastewater facility (IWF). FPL's ER uses the terms "routed" or "released" due to FPL's National Pollutant Discharge Elimination Permit. For example ER Subsection 3.6.3.2 states: "Stormwater would be routed to the industrial wastewater facility." Additionally, ER Subsection 4.2.1.1.3 states, "During construction, surface water runoff would be **released** to the industrial wastewater facility. Instances in the DEIS include (emphasis added): a. Appendix F-2, Section 2.1, Page 2-2, Lines 1-2: Appendix F-2: "Eventually, stormwater would be **discharged** into nearby canals of the existing industrial wastewater facility (IWF)." b. DEIS Appendix F-3, Section 2.0, Page 2-1, Line 23: Appendix F-3 states: "Stormwater would then be collected and **discharged** into nearby cooling canals of the existing industrial wastewater facility (IWF)." c. DEIS Appendix F-3, Subsection 4.1.1.2, Page 4-3, Lines 7-8: Appendix F-3 states "Water or effluent associated with RCW construction would be discharged into the IWF and not directly released into nearshore areas." d. DEIS Appendix F-3, Subsection 4.1.1.2, Page 4-3, Lines 14-15: NFMS BA states, "This water, and other effluents or stormwater associated with construction activities, would be discharged into the IWF." (0619-1-15 [Maher, William])

**Response:** The review team understands that the term "discharge" has a specific meaning under the Federal Water Pollution Control Act, commonly referred to as the Clean Water Act. The review team revised the use of term discharge to avoid confusion with National Pollutant Discharge Elimination System (NPDES) permit process designations under the Clean Water Act.

**Comment:** To enlarge the plant and contaminate the bay waters would be wrong! (0368-1 [Casey, Sr., Robert J.])

**Comment:** Some of the water that cools the reactors could be released over Biscayne Bay and surrounding wetlands along with steam in the planned cooling towers. (**0537-3** [Anonymous, Judi])

**Comment:** [F]ind other ways of recycling sewage and wastewater. Releasing sewage and wastewater over Biscayne Bay will destory the welands and also the reason people come to visit, clean water and beaches. DON'T MAKE THIS AREA A GIANT CESSPOOL! (**0630-2** [Montalvo, Stephanie])

**Comment:** The hot water that will be released as a result of cooling, the nuclear waste that we have no way of safely dealing with, the electrical lines that will kill birds and mar the beauty of the landscape make it an unacceptable plan. (**0635-3** [Seiman, Rhonda])

**Response:** The majority of the treated wastewater would be evaporated in the cooling towers, and the residual (blowdown) would be injected into the deep Boulder Zone, as is common for wastewater in South Florida. The only pathway for wastewater to enter the landscape would be from drift from the cooling towers. The review team assessed this in Section 5.2 of the EIS and determined the changes from the cooling towers would be undetectable. No changes to the EIS were made based on this comment.

**Comment:** According to the Draft Environmental Impact Statement, the cooling towers for proposed Reactors 6 and 7 will deposit an average of 50 million gallons a day of radioactive salt water as aerosol for 60 days a year[.] (0721-12-2 [White, Barry J.])

**Response:** The only radioactive material in the drift would be that already in the treated wastewater. The design of the reactor does not transfer radiation to the water that can become drift. The daily drift rate would be 11,520 gpd not the 50,000,000 gpd the commenter states. No changes were made to the EIS based on this comment.

**Comment:** This [renewable energy] would save the people money on future electric bills and begin to mitigate climate change and the rising sea levels that already are impacting Key West and Miami Beach (both of which flood during King high tide and full moon events). I have been called several times as a Miami Beach firefighter to pump out and squeegee peoples homes during these events. (0718-5 [Buechler, Jerry])

**Response:** Climate change and sea-level rise are discussed in Appendix I and alternative energy systems are discussed in Section 9.2. No changes were made to the EIS based on this comment.

**Comment:** The most dangerous scenario for Turkey Point is also the most likely to occur, an extended station blackout combined with extensive site flooding due to a hurricane. Although extended station blackout and storm surge flooding have taken place at Turkey Point already and are expected to continue or even increase in the future as a result of climate change, the draft EIS fails to examine any aspect of this site-specific scenario. (**0615-2-27** [Bethune, David])

**Comment:** Point is 25 feet above sea level. Access roads are at approximately 14 feet. The rest of Miami-Dade County is at pretty much sea level. Any storm surge of just 2 or 3 feet would not allow access to the plant. No access to the cooling canals or the plants could cause a potential meltdown. (0721-5-4 [Mendez, Victoria])

**Response:** The NRC staff documents their review of the applicant's safety assessment in the Safety Evaluation Report. This review considers discussion of storm surge and sea-level rise in Section 2.4. Also, the proposed units do not rely on the cooling canals for any safety function; rather, in the event normal cooling is lost, the AP1000 design provides safety-related cooling through passive means, including water stored in tanks onsite. These tanks need not be refilled

for 72 hours from the time normal cooling is lost. No changes were made to the EIS based on this comment.

**Comment:** The project components most relevant to FKNMS include the filling of 1,000 acres of wetlands for construction of the Units 6 and 7 and related infrastructure, the location and materials placed in Spoils Area B, and the impacts of building and operating radial collector wells. Impacts from these project components may include sediment and nutrient run-off and hypersaline and hyperthermal water quality conditions. These adverse impacts will most directly affect the aquatic resources and water quality of Biscayne Bay, Card Sound and vicinity; however, there could be downstream impact on FKNMS resources. FKNMS regulations (15 CFR 922.163(a)(4)(ii)) prohibit discharging or depositing, from beyond the boundary of the Sanctuary, any material or other matter that subsequently enters the Sanctuary and injures a Sanctuary resource or quality. Therefore, FKNMS recommends reviewing these project components to ensure that impacts to aquatic resources and water quality are adequately addressed. (0618-1 [Morton, Sean])

**Response:** The topics discussed in this comment regarding the Florida Keys National Marine Sanctuary (FKNMS) were addressed in Sections 4.2 and 5.2 of the EIS. Based on information that became available after publication of the draft EIS, the review team has also updated and expanded the discussions in Sections 2.3, 4.2, 5.2, and Appendix G.

**Comment:** In early 2015, FPL announced the change of the commercial operation dates (CODs) for Units 6 & 7 from 2022 and 2023 to 2027 and 2028, respectively. A new and significant information review was conducted by FPL where it was concluded that there would not be an impact to any significance level or conclusion drawn in the ER with respect to the change in CODs. There are instances in the DEIS, however, where references to CODs differ from the newly announced CODs. Instances in the DEIS include:....DEIS Appendix I, Section I.2, Page I-2, Lines 32-42: In DEIS Appendix I.2, the DEIS states: "Florida Power and Light Company (FPL) has indicated that, if the COLs are granted, it expects to initiate commercial operations in the third quarter of 2022 and third quarter of 2023 for Units 6 and 7, respectively (FPL 2014-TN4058)... The review team considers use of GCRP impacts report projections for the 2071-2099 period under a continued increasing emissions scenario to be a conservative proxy for likely future conditions encompassing the licensing action, and for assessing the effects of climate change on the resource area impact levels presented in this EIS." (0619-1-8 [Maher, William])

**Comment:** There are instances in the DEIS where there are inconsistencies and/or discrepancies relating to authorizations, permitting and certifications. Instances in the DEIS include (emphasis added):...DEIS Subsection 5.2.3.1, Page 5-26, Lines 19-20: The DEIS states: "Wastewater from the sanitary and potable water systems would be **discharged to the municipal sewer system**." However, wastewater from these facilities will be discharged to the Boulder Zone via deep injection wells as described in ER Section 3.3: "This water would also be the source for potable water, the demineralized water system, fire protection, and miscellaneous water users. Effluents would be **discharged to the Boulder Zone via deep injection wells** permitted by the Florida Department of Environmental Protection (FDEP) underground injection control program." (0619-2-12 [Maher, William])

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 2.3.2.1, Page 2-58, Lines 4-8 "For the local area, **32 permitted surface-water users**...include landscaping, agriculture, industrial, and "(a golf course) (FPL 2014-TN4058). Landscape...largest number

(31) of permitted users..." ER Table 2.3-25 ER Table 2.3-25 lists **34 surface water permits** (31 landscape, 1 agriculture, 1 industrial, 1 golf course). (**0619-2-19** [Maher, William])

**Comment:** There are instances in the DEIS where there are inconsistencies and/or discrepancies relating to authorizations, permitting and certifications. Instances in the DEIS include (emphasis added):...DEIS Section 4.2, Page 4-25, Lines 39-40 and DEIS Section 5.2, Page 5-6, Lines 38-39: In both instances, the DEIS states: "Consumptive use of surface water and groundwater would require a permit from the FDEP or the water-management district." The consumptive use authorizations are part of the Conditions of Certification. (**0619-2-9** [Maher, William])

**Response:** The review team has confirmed the information in these comments and corrected the EIS accordingly.

**Comment:** There are instances in the DEIS where there are inconsistencies and/or discrepancies relating to authorizations, permitting and certifications. Instances in the DEIS include (emphasis added):...DEIS Appendix F-2, Section 1.0, Page 1-1, Lines 19-20 and DEIS Appendix F-3, Section 1.0, Page 1-1, Line 27-28: Appendix F-2 states: "The SCA process provides a certification that encompasses all licenses needed for appropriate Florida State, regional, and local agencies." (Nearly identical language is found in Appendix F-3 as cited). ER Section 1.2 states: "\*Pursuant to the Florida Electrical Power Plant Siting Act (PPSA) all state, regional and local permits, except for certain local land use and zoning approvals and certain state issued licenses required under federally delegated or approved permit programs, are covered under a single "Certification"." h. DEIS Appendix F-3, Subsection 3.1.1.1, Page 3-5, Line 24 and DEIS Appendix F-4, Subsection 2.3.4, Page 2-10, Lines 13-14: Appendix F-3 states: "FPL has proposed that RCW use would be limited to 60 days per year (FPL 2012-TN2688)." (Nearly identical language is found in Appendix F-4 as cited). Condition of Certification, Section B. VI. C.2.b.i.(3) states, "Licensee shall be authorized to operate the RCW system up to sixty (60) days and withdraw a maximum volume of 7,465 MG in any consecutive twelve (12) month period [equivalent to sixty (60) days at full capacity of 124.416 MGD]." i. DEIS Appendix H, Table H-1: Appendix H, Table H-1 does not include the USACE Section 408 permit. However, ER Table 1.2-1 lists the USACE Section 408 permit (3rd item in the ER Table 1.2-1). j. DEIS Appendix H, Page H-5 to H-8, Table H-1: Appendix H, Table H-1: Federal, State and Local Environmental Permits and Authorizations, under "Description of Requirement" states the following were issued May 19, 2014 under Final Conditions of Certification: i. NPDES storm water operations permit for industrial activities ii. Exploratory well construction permit iii. UIC well construction permit (allows for the construction and operational testing of additional injection and dual zone monitoring wells). iv. Class I well operation permit v. Prevention of significant deterioration construction permit vi. Modification of Industrial Wastewater Treatment Facility permit vii. NPDES construction stormwater permit viii. Operation of Class V, Group 3 domestic wastewater injection (gravity flow) well ix. Title V Operations Permit - 0250003-010-AV x. Title V Operations Permit - 0250003-21-AV xi. Well Construction Permit ER Table 1.2-1, Authorizations for Turkey Point Units 6 & 7, states: "\*Pursuant to the Florida Electrical Power Plant Siting Act (PPSA) all state, regional and local permits, except for certain local land use and zoning approvals and certain state issued licenses required under federally delegated or approved permit programs, are covered under a single "Certification". Because the Certification is the sole license of the state and any agency required for construction and operation of the proposed electrical power plant, it is not necessary to apply for permits individually." These permits are not issued as part of the Site Certification. (0619-2-14 [Maher, William])

**Response:** Table H-1 in Appendix H has been modified to show the permit status provided by FPL in the ER. The documents in Appendix F are consultation documents submitted to the U.S. Fish and Wildlife Service (FWS) as part of ESA Section 7 consultation between the NRC, the USACE, and the FWS, and were not edited.

**Comment:** DEIS Subsection 9.3.1.7, Pages 9-40 through 9-43, general comment: The DEIS discusses the alternative water supply scenarios analyzed by FPL for the three inland sites. Among the water supply features considered were a 3,000 acre reservoir to retain excess flow from the Kissimmee River/Lake Okeechobee system and a reverse osmosis groundwater treatment system to reduce cooling tower drift salinity to protect sensitive plant and animal communities from salt drift. On page 9-42, the DEIS states that the review team was "unable to confirm" (based solely on drift rates provided for the Units 6 & 7 cooling towers) that salt deposition would be sufficiently adverse to preclude the use of groundwater without reverse osmosis. This is inconsistent with FPL's analysis of salt drift impacts presented in the Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis (DEIS Reference FPL 2011-TN1374 at 63-64), particularly the differences in susceptibility of plant species in coastal compared to inland areas. Additionally, the DEIS review team assumed that increased groundwater use "could reduce or eliminate the requirement for a surface-water reservoir" and thus performed a water supply analysis configured without a surface-water reservoir or a reverse osmosis groundwater treatment system, and concluded the inland sites are not environmentally preferable to Turkey Point. FPL maintains, based on its consultation with the South Florida Water Management District (SFWMD) and its experience with the practicability of siting, permitting, and operating power plants in Florida, that these features would be required for these sites. FPL nonetheless recognizes that the DEIS analysis is conservative for the purpose of NEPA alternative sites analysis because its assumptions tend to underestimate the environmental impacts of the inland alternatives compared to the Turkey Point site. The DEIS also recognizes that the NEPA analysis performed by the NRC is "necessarily imprecise" and that any evaluation of a particular alternative site "must have a wide range of uncertainty" (page 9-243). Therefore, FPL does not object to the DEIS excluding the reverse osmosis groundwater treatment facility and reservoir water supply impact assumptions. However, as the DEIS explains on page 9-43, there is significant uncertainty regarding whether a power plant could be sited at one of these three sites without surface water supply features. In light of other independent regulatory actions, the EIS should clarify that the assumptions regarding reverse osmosis groundwater treatment and onsite reservoirs are based on a reconnaissance-level NEPA review and do not represent a regulatory determination on their practicability. (0619-5-17 [Maher, William])

**Response:** As stated in the EIS, the staff acknowledges that there is considerable uncertainty regarding how the cooling system might actually be implemented if the plant were to be built at one of the inland alternative sites. The staff modified the text in Section 9.3.1.6 to further clarify that were such a plant to be built, State regulatory agencies may require actions to mitigate cooling system impacts, such as building a reservoir to store water or implementing reverse osmosis to reduce the impacts from cooling-tower drift.

## E.2.8 Comments Concerning Hydrology - Groundwater

**Comment:** DEIS Appendix G, Section G.3.1, Page G-22, Paragraph 2: The DEIS states: "FPL completed the pumped well on the Turkey Point peninsula as an open borehole **from 22 to 46 ft** below ground surface and with cemented casing above that depth. They also completed **five observation wells** with the top of the **open interval at a depth of 22 ft in each well**, and the bottom of the open interval at depths varying between 41 and 46 ft." This discussion of the

monitoring wells used in the aquifer pumping test is inconsistent with the description in the ER Subsection 2.3.1.2.2.3, page 2.3-30 and the cited reference (FPL 2009-TN1263). **ER 2.3.1.2.2.3 states 7 observation wells** at distances of **925 ft to 2704 ft away** from the pumped well. (0619-7-17 [Maher, William])

**Response:** Although seven observation wells were completed, these were at five unique locations. Only four wells were used in the FPL analysis because no response was observed at the most distant well. To clarify, the text in Appendix G was reworded.

**Comment:** DEIS Appendix G, Subsection G.3.2.1, Page G-28: Subsection "Model Results-Radial Collector Wells": There are instances in this subsection where the values, which describe the results presented in the FSAR Table 2CC-211, are consistent with an earlier revision of FPL's FSAR Table 2CC-211 but are inconsistent with FPL's FSAR Table 2CC-211 Revision. These instances include (emphasis added): a. The DEIS states: "Only 0.3 percent of the water produced was predicted by the base case model..." The FSAR reports base case percentage as **0.2 percent**. b. The DEIS states: "This "worst-case" analysis predicted that **1.5 percent**...from the Biscayne aquifer." The FSAR reports worst case percentage as **1.4 percent**. c. The DEIS states: "The base case model predicted that **1.9** percent...A "worst" case of **3.3 percent** of the extracted water coming from the industrial wastewater facility..." The FSAR reports base case percentage as **2.0 percent** and the worst percentage is **3.2 percent**. (**0619-7-18** [Maher, William])

**Comment:** Appendix G, Subsection G.3.2.1, Page G-29: Subsection "Assessment - Radial Collector Wells": Page G-29, 2nd to last paragraph, first line: The DEIS states: "FPL's base case model predicted that **1.9 percent** of the water extracted by the RCW would come from the industrial wastewater facility." FSAR Table 2CC-211 reports the percentage as of RCW flow originating from the industrial waste facility as **2.0** percent. (emphasis added) (**0619-7-19** [Maher, William])

**Comment:** Appendix G, Subsection G.3.2.1, Page G-30: Subsection "Model Results-Inflow to Power Block Excavations": The DEIS states: "The FPL model predicted that pumping rates of **140** and **136 gpm** would be necessary for dewatering the excavations at Units 6 and 7, respectively." These values have been updated. Revision 6 of the ER, Subsection 4.2.1.1.1, and FSAR Appendix 2CC Section 9.0, states the excavation dewatering pumping rates as 96 gpm for each of the two units. (emphasis added) (**0619-7-20** [Maher, William])

**Response:** The values in the EIS were updated to be consistent with those presented in Revision 6 of the FSAR.

**Comment:** Appendix G, Subsection G.3.2.2, Page G-33: Subsection "Numerical Modeling": The DEIS states (last paragraph of page G-33): "...the total RCW pumping rate was set to **470,965** cubic meters per day (m3/d) (**86,400 gpm**)..." However, according to cited reference, USGS document "Estimated Effects of Proposed Radial Collector Well Pumpage Near Turkey Point Nuclear Facility, Miami-Dade County, Florida. (NRC 2014-TN3078, page 9): "The total rate of pumping...is **490,536** m<sup>3</sup>/d or approximately **90,000 gallons per minute** (gal/min)." These values should be reconciled for consistency. (emphasis added) (**0619-7-21** [Maher, William])

**Response:** The RCW pumping rate used in the USGS model was corrected in Appendix G to "490,536 m<sup>3</sup>/d or approximately 90,000 gallons per minute (gal/min)" as stated in the USGS report titled "Estimated Effects of Proposed Radial Collector Well Pumpage Near Turkey Point Nuclear Facility, Miami-Dade County, Florida" (NRC 2014-TN3078).

**Comment:** Appendix G, Subsection G.3.3.2, Page G-49, Lines 6-7: The DEIS states: "...using the maximum MCU hydraulic conductivity from the range of values shown in Table G-25..." Table G-25 only shows one value for hydraulic conductivity. Table G-24 contains hydraulic conductivity values for the MCU. (**0619-7-22** [Maher, William])

**Response:** The text was changed to refer to the correct table listing core sample analyses (currently Table G-24).

**Comment:** [T]here's no guarantee that it [the reactor] won't affect the aquifer. (0008-8 [Finver, Jody])

**Comment:** 1. The integrity of the drinking water for South Florida will be affected as FPL would use this same water to cool its power plants thereby affecting the level of salt intrusion into the Biscayne Aquifer, the main source of drinking water for this area. I find it totally unacceptable that FPL also plans to curtail its current monitoring program for this. (**0077-1** [de Armas, Maria Cristina])

**Comment:** If there is insufficient treated wastewater for cooling the reactors, the wells used for back-up cooling would become one of the largest well-fields in the Southeast, and could lead to further saltwater intrusion into the Biscayne Aquifer, a huge problem already impinging on South Florida's limited freshwater resources. (0078-9 [Wilansky, Laura Sue])

**Comment:** The withdrawal of massive amounts of water from under Biscayne Bay as back-up cooling water could increase salinity levels within the Bay and hasten saltwater intrusion into our limited freshwater supplies. (0102-6 [Commenters, Multiple])

**Comment:** The withdrawal of massive amounts of water from under Biscayne National Park as backup cooling water could increase salinity levels within the bay and hasten saltwater intrusion into the aquifer. (0103-6 [Commenters, Multiple])

**Comment:** Furthermore, as noted in the DEIS, removing large volumes of water from the aquifer could impact water-supply levels and ultimately increase saltwater intrusion into the Biscayne Aquifer. [Footnote 18: NRC, DEIS, 5-13.] South Florida's water supply is already extremely vulnerable to the impacts of salt water intrusion and an acceleration of the degradation of our water supply as a result of this project is unacceptable. Such potential impacts must be fully analyzed in the DEIS to comply with NRC regulations that require a complete discussion of the potential negative impacts of a project. [Footnote 19: 10 C.F.R. § 51.45(b).] (0113-1-17 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The existing two 693 MW Westinghouse units (Unite 3 & 4) are already consuming a huge amount of water from the Floridian aquifer 14 MGD, which is already exhibiting signs of being over pumped. Even with the present pumping the cooling water temperature in the canals has increased from 100 to 104 degrees and FPL has received permission to use more water. (0187-3 [Meyer-Steele, Shawn])

**Comment:** We are deeply concerned about our close proximity to the plant and how this EIS has not at all taken into account the current failing operations of the Cooling Canal System (CCS) and the lack of regional water supply in the area. It has come to our attention that FPL has been applying for every available water source in the region. This concerns us not only because it will impact restoration efforts we as taxpayers spend billions on, but because it

threatens our ability to continue using the Floridian Aquifer as our primary water source. (**0208-1** [Ritz, David])

**Comment:** Withdrawing massive amounts of water from under Biscayne Bay as back-up cooling water would increase salinity levels within the Bay and speed-up saltwater intrusion into our limited freshwater supplies. (0228-6 [Yeager, Jerry])

**Comment:** [A] clue would also be the Biscayne Aquifer with its surrounding limestone which is important to our drinking water. (**0250-8** [Fulks, Anna Louise])

**Comment:** The cooling canals have led to salt intrusion into our aquifer - our fresh water supply. (**0252-5** [Van Leer, Sam])

**Comment:** Furthermore, we are concerned that the operation of two new nuclear reactors could have significant impacts on the quantity and quality of our limited freshwater resources. Maintaining South Florida's water supply is critical to ensuring the future of our environment and our communities. We are concerned that withdrawing massive amounts of freshwater from underneath Biscayne Bay could increase salinity levels within Biscayne National Park and hasten saltwater intrusion into freshwater resources. (**0253-3** [Bloom, Justin] [Campbell, Cara] [Causey, Charlie] [Cavros, George] [Chenoweth, Mike] [Daly, Meg] [England, Margaret] [Fuller, Manley] [Jones, George L.] [Keller, Alan] [Martin, Drew] [McLaughlin, Caroline] [Reynolds, Laura] [Silverstein, Rachel] [White, Paton] [Williams, Elinor])

**Comment:** I don't want FPL to build these 2 nuclear reactors because it is not environmentally responsible through the huge amount of fresh water consumption. This is unsustainable and irresponsible. (**0269-1** [Gomez, Christian])

**Comment:** We are also concerned about the new radial wells and their impact on groundwater supplies and salinity levels. (**0288-8** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** Our aquifers and fresh water resources should not be further depleted by water hogging nuclear energy. We need to protect the Bay and the greater drinking water needs of South Florida--not hasten salt water intrusion. (**0323-1** [Jennings, Cara])

**Comment:** Nuclear power is not clean. The reactors threaten to degrade our water quality which is of tremendous concern with a very large increase in thermoelectric power generation, according to the studies done on this project. It is a real potential threat to our aquifers and our public drinking water. (**0340-1** [Tweeton, Tanya])

**Comment:** [T]he increasing salinity of the water in those canals and the in-land advance of salt water intrusion and its effect on our aquifer are already at alarming levels. (**0341-3** [Daniels, Bonnie])

**Comment:** The aquifers that we depend on for drinking water, would be impacted. (0360-3 [Palmer, Majorie])

**Comment:** The amount of water needed to cool these nuclear reactors on a daily basis is simply not available without depleting the Biscayne Bay aquifer so rapidly that salt water intrusion will completely destroy our fresh water supply. The educated community is already aware that there is a certain amount of salt water intrusion due to the current operation of Turkey Point. There should be absolutely no water taken from the aquifer for use by FPL under

any circumstances. This can only mean that there can be no more nuclear reactors. (0365-2 [Fischer, Antoinette])

**Comment:** If FPL sees this as a solution, then why do they also need to draw on the Biscayne Bay aquifer. Apparently, the 90 million gallons of waste water that they would produce would be inadequate since FPL is also asking for an unknown quantity of water from the aquifer. This would guarantee a huge, and unsustainable drain off of the aquifer. (**0365-4** [Fischer, Antoinette])

**Comment:** If there is insufficient treated wastewater for cooling the reactors, the radial wells used for back-up cooling would become one of the largest well-fields in the Southeast and could lead to further saltwater intrusion into the Biscayne Aquifer, a major problem already impinging on South Floridas limited freshwater supply. (0370-11 [Vayu, Satya])

**Comment:** The withdrawal of massive amounts of water from under Biscayne Bay as back-up cooling water will increase salinity levels within the Bay and hasten saltwater intrusion into our limited freshwater supplies. (0413-5 [Cobb, Tanya])

**Comment:** Saltwater intrusion into the areas fresh waters will affect the land, the wildlife, and the company's use of fresh water for backup cooling. This shows a definite lack of foresight in planning. (0437-2 [Livingston, C. J.])

**Comment:** Prioritize Avoiding Potential for Impacts to the Biscayne Aquifer and National Parks. Radial collector wells located on the Turkey Point peninsula are planned to supply backup cooling water for the proposed reactors. The installation of this backup system "would involve drilling of lateral collector wells in the Biscayne aquifer beneath Biscayne Bay." DEIS at 4-28. According to its state license, FPL is authorized to operate the radial collector wells for 60 days each year and withdraw a maximum volume of over 7 billion gallons of water during that time, the equivalent of 124 million gallons per day. If constructed, the radial collector wells would likely become the largest wells in Florida by daily permitted volume when pumping. The majority of pumped water is projected to come from Biscayne Bay rather than the Biscayne Aquifer itself. Even so, the radial collector wells may put the City at risk because the "Biscayne aquifer is the sole source of potable water in Miami-Dade County, Florida." ML14287A481. However, the determination that the backup radial collector well system will have "minor impacts on groundwater users is based on the reliability of the [primary cooling] water supply," and not the prudence of drilling radial collector well laterals into a sole source aquifer. DEIS at 7-12. (0456-10 [Miami, City])

**Comment:** Comment 5: The final Environmental Impact Statement should give greater weight to the potential for adverse impacts to environmentally significant resources in its risk analysis. Operation of the radial collector wells would remove water from Biscayne Bay, the FPL industrial wastewater facility (also referred to as cooling canals), and the Biscayne Aquifer in an area adjacent to Biscayne National Park. DEIS at 2-27. It is also worth noting that there is a plume of hypersaline water in the portion of the Biscayne Aquifer underneath the FPL industrial wastewater facility. The DEIS acknowledges this fact and predicts that some of the hypersaline water would be drawn into the radial collector well system, which "may change the area affected by the hypersaline plume." DEIS at 5-15. Therefore, the most direct risk of operating the radial collector wells would be an increase in the amount of saltwater intrusion caused by removing groundwater from the inland portion of the Biscayne Aquifer. DEIS at 5-27. Similarly, the intermittent usage of the backup cooling system "could result in an increase of hypersaline flow into the aquifer beneath the bay that could migrate into the bay when the [radial collector well system] is not operating." DEIS at G-29. The introduction of this hypersaline water

into Biscayne Bay may irreparably damage or destroy local seagrass beds, a critical habitat for several endangered species. A similar pattern occurred in the fall of 1987, causing an abrupt and widespread mortality event in the Florida Bay seagrass community. *See* <u>http://tinyurl.com/SeagrassHabitatRestoration2013</u> at 11-12, 14-15. Seagrass mortality continued due to hypersaline conditions in Florida Bay through 1995 and had negative consequences for a variety of marine life. *Id.* The DEIS also notes that there is the potential for adverse effects on threatened species, including American crocodile, that inhabit the FPL industrial wastewater facility due salt drift and deposition from cooling-tower operation while the radial collector wells are being used. DEIS at 5-54. Furthermore, there is the potential for the entrainment of microscopic organisms and larvae. Due to the myriad risks presented by the radial collector wells and the vulnerable nature of the surrounding ecosystem, the final Environmental Impact Statement should place additional emphasis on avoiding the potential for adverse impacts to, and place additional weight on protecting, environmentally significant resources. (0456-12 [Miami, City])

**Comment:** Florida's water resources are already under severe strain. The plant will require 90 million gallons a day of Miami-Dade's wastewater for cooling, with wells tapping the aquifer to meet any additional needs. Such withdrawals could increase salinity levels within Biscayne Bay and hasten further saltwater contamination of the aquifer. Additionally, even treated wastewater contains numerous contaminants which may be emitted into the air in vented steam, potentially impacting air and water quality, human health and aquatic and terrestrial wildlife. (0463-1 [Gross, Cheryl A.])

**Comment:** Florida's aquifer is so critical, and so close to the ground it is critical not to do anything to violate its integrity! (**0503-1** [Keaton, Rebecca])

**Comment:** This area is also extremely vulnerable to the withdrawal of massive amounts of water from under Biscayne Bay as back-up cooling water. (**0591-2** [Lange, Barbara])

**Comment:** Therefore, the most direct risk to the surrounding environment of operating the radial collector wells would be an increase in the amount of saltwater intrusion caused by removing groundwater from the inland portion of the Biscayne Aquifer. DEIS at 5-27. (**0611-4** [Haber, Matthew S.])

**Comment:** Due to the myriad risks presented by the radial collector wells and the vulnerable nature of the surrounding ecosystem, the final Environmental Impact Statement should place additional emphasis on avoiding the potential for adverse impacts to, and place additional weight on protecting, environmentally significant resources. As noted in Comment 4, this may come in the form of an alternate backup cooling system proposed by the review team staff. (**0611-5** [Haber, Matthew S.])

**Comment:** The senior NRC staff member presiding over the event demonstrated a total ignorance of hydrological conditions in South Florida and around the Turkey Point site when she announced that staff had determined the impact to local water supplies would be "small." The assembled public spent the rest of the evening learning just how many critical environmental facts draft EIS had failed to uncover. (0615-1-5 [Bethune, David])

**Comment:** The withdrawal of massive amounts of water from under Biscayne National Park as backup cooling water could increase salinity levels within the bay and hasten saltwater intrusion into the aquifer, which is already likely to increase as the sea level rises. (**0693-3** [Dorn, Kathryn])

**Comment:** The first one is, you know, the integrity of the drinking water for the South Florida area is at risk. The water that FP&L would use to cool its power plants would affect the level of salt water intrusion into the Biscayne aquifer, the main source of drinking water for this area. FP&L also plans to curtail its current monitoring program for this, which is totally unacceptable. (0721-31-3 [Almirola, Alejandro])

**Comment:** First of all, this project can cause contamination of our groundwater. The proposed radial collector wells would remove billions of gallons of water each year from the bay which could increase salinity levels and increase the rate also of hot water intrusion into our limited freshwater supply. (0722-14-2 [Kaul, Devika])

**Comment:** There's a lot of issues about nuclear power that we need to worry about with respect to safety. But you know, I think the major point is that the water supply here, (**0723-12-12** [Henry, Jim])

**Comment:** ...we have to look very carefully at the assumptions they've been making about water. (0723-12-9 [Henry, Jim])

**Comment:** Furthermore, the backup cooling system for the new reactors can become one of the largest well fields in terms of water consumption in the entire southeast region of this country. Proposed radial collector wells will stretch out underneath Biscayne Bay removing as much as 7.4 billion gallons of water per year. To put that number into perspective, the entire Florida Keys uses just over 6 billion gallons of water per year. The withdrawal of this water will increase salinity in Biscayne Bay and could increase the rate of saltwater intrusion into our limited freshwater resources. (0723-4-7 [McLaughlin, Caroline])

**Comment:** [I]t needs to be done in a safe and secure manner so that way we don't have any intrusions into the aquifers or into the Biscayne. (**0723-8-8** [McDuffie, Stephen])

**Response:** The comments primarily focus on two issues raised in connection with operation of the RCWs, namely, the possibility for saltwater intrusion into the Biscayne aquifer, and the possibility for increasing the salinity of the water in Biscayne Bay. To the extent the comments also raise other issues, such as the continued availability of reclaimed wastewater for cooling, those issues are addressed in separate responses. Using reclaimed wastewater as the primary source of cooling water for the proposed reactors would not result in removal of water from Biscayne aquifer or Biscayne Bay, and would not increase the salinity of the aquifer or the Bay.

In regard to the Biscayne aquifer, saltwater from the sea has already intruded into the groundwater in the Biscayne aquifer in the vicinity of the Turkey Point site, which has resulted in elevated salinity in that groundwater. This saltwater intrusion from the sea is unrelated to operations at Turkey Point. Because of its elevated salinity, groundwater from the Biscayne aquifer in the vicinity of the Turkey Point site cannot be used as a drinking water source without treatment. Seepage of saline water from the IWF cooling canals associated with the existing Turkey Point Units 3 and 4 has also resulted in locally higher groundwater salinity near the cooling canals. Analyses from the USGS groundwater-surface water model presented in the EIS show that in the absence of remediation of the IWF hypersaline plume, increases in groundwater salinity may occur inland from Turkey Point because of movement of the existing hypersaline plume. This would occur regardless of whether or not the proposed units are built and operated. The model-predicted increase in groundwater salinity is not caused by RCW pumping or other activities related to the proposed units. The model-predicted increase in groundwater salinity also does not reach the location of drinking water wells.

Analyses presented in the EIS predict that the RCW system would draw water primarily from the overlying Biscayne Bay with only a small portion coming from inland portions of the Biscayne aquifer. Nonetheless, the review team revised the text in Sections 2.3, 5.2, and G.3.2 of the EIS to expand and clarify the process and findings of the analysis of the potential alteration of the hypersaline plume caused by the operation of the RCW system. In additional to the review team's conceptual understanding of the processes that would occur with RCW operation, the review team considered three independent modeling studies that are all consistent in projecting that RCW operation would result in only insignificant alterations to both the Biscayne Bay and the surficial aquifer. The review team considered a wide range of baseline environmental conditions to reflect the uncertainty in the baseline environment associated with various proposed actions associated with the IWF, climate change, and geohydrologic parameter uncertainty. While the environmental baseline may change significantly, the incremental alteration to the hypersaline plume associated with operation of the RCWs remains minor.

The review team has responded to similar comments in Section E.2.7, regarding surface water.

**Comment:** The results of the groundwater modeling discussed in Appendix G appear to indicate that the operation of the RCW would impact salinity in Biscayne Bay by capturing freshwater canal discharges to the bay. Specifically the last paragraph of page 35 of Appendix G concludes that "... When the proximal canals are discharging fresh water into the bay and pumping is occurring, the pumping may capture this fresher water, preventing it from contributing to overall dilution of the bay." Regarding water quality impacts of the RCW, It is stated on page 5 to 26, lines 35 to 38 of the DEIS that "Operation of the RCWs, if and when needed during operation of Units 6 and 7 would not result in discharges to Biscayne Bay because they are used only to withdraw saltwater. Therefore, the staff determined that the impact of any potential changes in surface-water chemistry as a result of the use of the RCWs on Biscayne Bay water quality would be minor." Based on this last statement it does not appear that DEIS evaluated the potential adverse impacts of operating the RCW resulting from its consumption of freshwater discharges to the bay on restoration projects aimed at reducing the salinity of Biscayne Bay through the rehydration of coastal wetlands to reestablish fresh water sheet flow patterns to the bay. One such restoration project includes the Comprehensive Everglades Restoration Plan (CERP) Biscayne Bay Coastal Wetlands project (BBCW). (0110-1-10 [Hefty, Lee N.])

**Response:** The EIS discusses USGS conducted modeling of potential impacts of the radial collector wells (RCWs) on surface water and the Biscayne aquifer using a linked surface watergroundwater model. The results showed that some of the water going to the RCWs would come from the regional canals. The model examined interactions near the mouth of the Mowry Canal and found that pumping of the RCWs results in an increase of downward leakage of surface water, including canal water, into the aquifer. However, the modeling showed that the overall effect on groundwater/surface-water fluxes in the Mowry Canal Basin are small; the reduction in base flow to the bay could be less than 10 percent of the base flow with no RCWs pumping. The modeling also showed that capture of canal water by the RCWs occurs primarily during the wet season, when the canals are discharging freshwater to the bay. Additional discussion has been added to the EIS to clarify the use of model results and expected monitoring requirements for Biscayne Bay and the Biscayne aquifer.

**Comment:** The Boulder Zone deep aquifier that is going to be used with an injection system to absorb the treated liquid (which will most likely be radioactive) is literally scary! (**0074-2** [Streit, Didi])

**Comment:** However the discharge of this waste water will have an adverse impact on our ground water, which will contaminate our drinking water source. Turkey Point has now begun to compete with the people of these two counties for consumptive use of our freshwater source, to cool the current canals, and the FPL proposal for the two new plants would also rely on the Biscayne Aquifer by the use of radial collector wells which would also draw water from the same source, the Biscayne Aquifer. (0145-8 [Lerner, Cindy])

**Comment:** The analysis of the impacts of the use and disposal of reclaimed wastewater is inadequate. We are concerned that the proposal to store the waste in the boulder zone will fail and impact the Floridian Aquifer and impact our drinking water. (**0208-7** [Ritz, David])

Comment: Clarify Uncertainties Related to the Deep Injection of Wastewater. The application plans for disposal of waste by use of deep injection wells. The purpose of this system is to diffuse waste water with aquifer water over the long term by sending it beneath the "Boulder Zone" (a South Florida injection zone). At present, the formation of this injection zone is not fully understood by geologists and little data exists on its lateral flow capabilities. Moreover, the proposed discharge method for the disposal of treated liquid radioactive waste is not practiced by any other power plant in the U.S. Comment 14: The final Environmental Impact Statement should disclose uncertainties related to the deep injection of wastewater and the probable final disposition of the waste. The final Environmental Impact Statement should "indicate the extent to which environmental effects are essentially unknown . . . ... " Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n, 481 F.2d 1079, 1092 (D.C. Cir. 1973). Hence, to the extent that such information is known, the final Environmental Impact Statement should disclose where effluent from the nuclear plant might migrate. Similarly, although the east-west tidal forces on groundwater are not well understood, the final Environmental Impact Statement should discuss the probability that the north-south shallower slope of the dolomite in the Boulder Zone will push the wastewater north of the injection site. (0456-21 [Miami, City])

**Comment:** Possible effect of long-term injection of wastewater into Boulder Zone. The maximum injection rate appears to be between 84 and 85 Mgd. Have calculations been made to determine if the Lower Floridan Aquifer can accommodate between 30.066 and 31.205 Ggy for the expected 35 year life of the two proposed nuclear units 6 and 7? (**0612-3** [Teas, James])

**Comment:** Possible upward migration of wastewater due to underestimate in injection rates. At higher injection rates, upward migration of wastewater has previously been seen: "Upward migration of treated municipal wastewater injected into the Boulder Zone has been observed 12 mi north of the proposed Turkey Point site at the Miami-Dade SDWWTP, where injection rates are around 97 Mgd. (2-55). Is it possible that the estimated maximum 84-85 Mgd might be exceeded by 14% and lead to 97 Mgd injection rates, which could migrate upwardly? (**0612-4** [Teas, James])

**Comment:** Possibility of migration of wastewater into Atlantic Ocean over 35 year life of project. "It is thought that the Boulder Zone connects to the Atlantic Ocean at a depth of about 2,500 ft about 25 mi off the coast of Miami." (2-53). Is it possible that wastewater from the deep injection wells could end up in the Atlantic Ocean over the expected life of units 6 and 7? (0612-5 [Teas, James])

**Comment:** The radioactive portion of the waste water is proposed to be diverted to underground wells located near important aquifers and fresh water supplies, exposing the residents, animals, and plants in the surrounding areas to water laced with tritium and other

dangerous radioactive isotopes. Two nearby municipal water supplies have already filed comments with the NRC objecting to the proposed injection of chemically and radioactive contaminated wastewater so near to their communities' drinking water supplies. (0615-3-1 [Bethune, David])

**Comment:** The draft EIS is incomplete because it fails to examine the migration paths of effluent water from the proposed plant's deep injection wells and the resulting threat to the water supply of 4 million people. (**0615-3-4** [Bethune, David])

**Comment:** Underground injection of effluents. The DEIS states that blowdown water from the cooling towers, and other plant discharge effluents from proposed Units 6 and 7, would be collected in a sump and injected into the Boulder Zone, a cavernous, high-permeability South Florida geologic horizon within the Lower Floridan aquifer system. The surrounding surface water bodies would neither be directly used for the primary water supply, nor for the heat sink for the proposed Units 6 and 7. However, we have concerns regarding the potential for vertical migration of the injectate, as no adequate confining zone has been shown to exist between the injection zone and lowermost underground source of drinking water (USDW). Several investigations by the United States Geological Survey (USGS) in southeast Florida (the latest is USGS Scientific Investigations Report 2015-5013) have shown that the limited confinement which may exist between the Lower Floridan and Upper Floridan has been reduced or eliminated by karst features and faulting. FPL has not produced any documentation to delineate karst features or faults in the Floridan which may significantly alter hydraulics of the injectate at this facility. Further, additional data, including conducting more comprehensive aquifer testing and incorporation of karst features and fault delineation, as well as results of aquifer testing into predictive modeling, are needed to assess potential injectate impacts on USDWs. In addition to injection in the Boulder Zone creating upward gradients, the Upper Floridan is proposed to be used as a source of cooling water, also creating upward gradients from the Lower Floridan, with the potential to impact the USDWs in the area. (0617-1-22 [Mueller, Heinz J.])

**Comment:** Let's look at some of the other impacts from this plant. The injectate. Somebody was talking about putting it down earlier during the presentation, 3,000 feet below ground. Out of sight, out of mind; really? That's called the Boulder Zone. Everything goes into the Boulder Zone. When we flush our toilets most of it goes into the Boulder Zone. The drillers out in the western Everglades, I had a discussion with them at the Raccoon Point drilling sites in the Big Cypress National Preserve. They talked about lowering pipes, 50 foot sections of pipes down into their wells, which are about 2 miles below ground. They hit the Boulder Zone and a 50-foot pipe hit the bottom and turned sideways. It's a cavern. It's a deep undersea cavern in this area where they're planning on dumping the injectate from this well. Where does it go? It goes out to the Atlantic. Sewage, wastewater, oil drilling fluids, and now the injectate from this new Turkey Point 6 and 7. What are the consequences of that to the Atlantic Ocean? Doesn't disappear. There's no such thing as a free lunch, there's no way. (0721-22-8 [Schwartz, Matthew])

**Comment:** Deep well injection of either raw sewage or anything I think is problematic and a bad idea in South Florida where that stuff moves around underground. You never know where it's going to pop up, and it does move. So let's not kid ourselves thinking that, you know, hey, let's put it down 3,000 feet, the problem will go away. That's not going to happen. Eventually it's going to resurface somewhere. I would highly recommend we also get on our State Reps about banning all deep well injection, no matter what it is. It's a bad idea. (0721-24-3 [Eastman, John])

**Comment:** [Wastewater will be] injected into the earth. That can't be controlled. We've heard about the problems with the radial wells that would be used for backup cooling, the salt water intrusion into the aquifer, which is already a huge problem. (0721-28-7 [Wilansky, Laura Sue])

**Comment:** FPL has proposed using millions of [gallons of] reclaimed wastewater as the primary source of cooling water for the proposed new reactors and this wastewater would then, after use, to back into our groundwater where it would be adding chemical contaminants to our groundwater supplies. We have very, very vulnerable groundwater to contamination.

A study was done a few years ago where some dyes were put near a wellhead and it was expected that they would take a few days to weeks to be detected by special detectors. And they put in the red dye and within a few hours, people's laundry were turning pink in their washing machines. We have very vulnerable, vulnerable water supply to contamination so it has to be really taken very seriously and considered very carefully which I feel that the EIS has not done adequately. (0722-7-5 [Silverstein, Rachel])

**Comment:** Even this idea of shooting the water deep into the ground, these kinds of concepts may work when you have a different kind of stone or granite to receive them. (**0723-11-2** [Berendsohn, Catherine])

**Comment:** The expansion of Turkey Point also has the potential to have huge impacts on regional water resources. FPL is proposing using millions of gallons of reclaimed wastewater as the primary source of cooling water for the new reactors. After used, some of this wastewater will be discharged directly underground. The possible impacts of adding chemical contaminants into our groundwater supplies have not been adequately analyzed by this EIS. (0723-4-6 [McLaughlin, Caroline])

**Comment:** All of our prescriptions go down, we're using deep well injection -- I've got to mention that, too.

Deep well injection. Out of sight, out of mind? The boulder zone 3,000 feet deep. Run that boulder zone east, what happens? You reach the continental shelf. It can't keep going. The continental shelf is lower. The boulder zone empties out into the Atlantic. So that wastewater, that hot wastewater ends up in the Atlantic. Is that in the DEIS? I know they're not going to answer that. That's where the boulder zone empties out into. (0723-9-18 [Schwartz, Matthew])

**Response:** As described in Section 5.2 of the EIS, cooling tower blowdown water and other liquid waste streams would be injected into the highly permeable Boulder Zone, which is approximately 2,900 to 3,500 ft below ground in the Lower Floridan aquifer. This aquifer contains water that has approximately the same salinity as seawater and is used for injection of treated municipal wastewater throughout South Florida. As discussed in the EIS, there is a 1,465 ft thick sequence of mostly low-permeability rock strata called the MCU (Middle Confining Unit) between the Boulder Zone and the overlying Upper Floridan Aquifer. The Upper Floridan aquifer is classified as an USDW (Underground Source of Drinking Water) where the TDS concentration is 10,000 mg/L or less. The depth of the USDW was confirmed by sampling of the monitoring intervals within the FDEP permitted dual-zone monitoring well that was constructed at the Turkey Point site after the construction of the exploratory/injection well. The monitoring intervals are at 1,450-1,490 ft and 1,860-1,905 ft below ground surface. These comments express concern about the proposed injection of effluent from the Turkey Point site, the nature of the geologic zones that would be used for injection and confinement, and the

impact on water resources, especially the Upper Floridan aquifer and the Biscayne aquifer, if injected fluid were to migrate out of the Boulder Zone.

To evaluate the potential impacts of deep well injection of effluent at the Turkey Point site the review team took a number of steps, which are discussed in greater detail in the revised sections of the final EIS. The staff 1) reviewed regional and site specific studies that evaluated the confining ability of the MCU, the causes and extent of upwelling at other deep well injection sites, the extent of injection plume migration, and risk to human health and the environment of deep well injection; 2) compared hydrogeological conditions and parameters from these sites to conditions and parameters at the proposed site; 3) evaluated numerical modeling of the flow of injected wastewater presented by the applicant and performed confirmatory calculations; and 4) considered the injection well testing and groundwater monitoring requirements of the FDEP UIC program.

Based on this evaluation, the review team concluded that, in general, the matrix of the MCU would confine injected effluent and that incidences of upwelling at other sites have been coincident with features that provide vertical pathways for upward migration. As documented in Sections 2.3.1.2 and 5.2.1.3 of the EIS, the review team is aware of recent research showing that "karst-collapse structures" exist in some places in South Florida and may provide a pathway for injectate to move upward through some thickness of the expected confining layers. At a location beneath Biscayne Bay, deformation associated with collapse structures has been found to extend from the MCU to above the Upper Floridan aquifer (Cunningham 2015-TN4574). A collapse structure was implicated in the observed migration of injected wastewater from the Boulder Zone to the uppermost permeable zone within the Lower Floridan aquifer at an injection of contaminants above the Lower Floridan aquifer was not observed at this site and significant migration to the Upper Floridan aquifer due to natural features has not been definitively identified at any site. Substantial fracturing of the confining layers is not evident at the Turkey Point site.

The EIS discusses several studies that have attributed upwelling at deep well injection sites to vertical pathways created by improper well construction or casing failure. The studies indicated that wells were either drilled through but completed above the most significant confining portions of the MCU or that completed wells deviated from previously drilled pilot holes. These issues are not expected at the Turkey Point site because its hydrogeology is better understood. Also, pilot holes would be cemented and injection wells would have multiple concentric casings that terminate in and seal each confining zone. The FDEP UIC Permit also requires testing of confinement and monitoring for upwelling at each injection well. However, studies of other injection sites indicate that if rapid vertical migration occurs along preferential pathways created by well construction issues or natural features it is not likely to reach the Upper Floridan Aquifer. This is discussed in greater detail in Sections 2.3.1.2, 3.2.2.2, and 5.2.1.3 of the updated EIS. As discussed in Section 5.2.1.3 and Appendix G of the EIS, only a minimal pressure buildup in the injection zone is expected during injection based on calculations that considered the expected rate of injection and buoyancy of the reclaimed makeup water used for cooling. One comment expressed concern that the Turkey Point site might also experience upward migration if injection rates exceeded that of the SDWWTP, where upwelling has occurred. Reclaimed water from the SDWWTP would be the primary source of makeup water at Turkey Point, however injection rates would be significantly less at the Turkey Point site (20 Mgd vs 97 Mgd). Injection rates at Turkey Point may temporarily be as high as 90 Mgd when saltwater from the RCWs is used. Despite higher injection rates, the potential for upward migration of this saltier water would be less than reclaimed water because the saltwater used for cooling would be denser and less buoyant, causing it to sink to the base of the Boulder Zone. In addition, multiple studies have indicated that upwelling at the SDWWTP may be primarily a result of improperly constructed injection wells (Walsh and Price 2010-TN3656; McNeill 2002-TN4571).

Calculations and modeling discussed in EIS Section 5.2.1.3 also indicate that horizontal flow of the plume within the Boulder Zone would be limited and would not extend to beneath the locations of the nearest offsite water-supply well in the overlying Upper Floridan aquifer (7.7 mi) or flow to surface water bodies, such as the Atlantic Ocean. Modeling indicates that dilution would significantly reduce the concentrations of cooling water chemical constituents within the injected plume, which are already very low at the point of injection due to advanced treatment now required at the SDWWTP, where the cooling water would primarily be sourced.

As for potential contamination of the Biscayne aquifer, the Biscayne aquifer is a near-surface aquifer which is separated from the Boulder Zone at the Turkey Point site by about 2800 ft, a large portion of which is confining strata. Therefore, impact to the Biscayne Aquifer is so unlikely as to be speculative.

Additionally, the review team recognize that the UIC permitting process required by the FDEP will address uncertainty through further characterization and testing of the ability of the MCU to confine and the Boulder Zone to receive injected effluent. This additional characterization and testing are required before each of the injection wells are permitted at the Turkey Point site and these wells would be frequently monitored during operation for the evidence of upwelling of injected effluent. Finally, EIS Sections 5.2.1.3 and 5.2.3.2 discuss risk assessments of wastewater disposal methods in southeast Florida, which indicate that risk from deep well injection to human health is low and decreases dramatically as distance from the injection well to potential receptors increases, even when upwelling has reached drinking water aquifers.

As discussed in several comments, the injected water would include radionuclides, however these radiological constituents would be mixed and diluted to concentrations below regulatory limits before being injected. The review team performed a conservative evaluation and determined that radiological dose limits to the public would not be exceeded. This is documented in EIS Sections 5.2.1.3, 5.9, and in Appendix G.

Another comment indicated that the geology and hydrogeology of the Boulder Zone is not well understood. As discussed in Sections 2.3.1.2, 5.2.1.3, and Appendix G of the final EIS, because of the deep and isolated location of the Boulder Zone and its subsequent widespread use as a wastewater injection zone in South Florida, testing and a number of regional and site specific studies have been conducted to characterize this zone. This information addresses flow direction and rates of water within the Boulder Zone, the capacity to receive injected wastewater, and the effect of overlying confining units on flow direction. The review team used this information to evaluate the potential for impacts from deep well injection at the Turkey Point site.

For the reasons discussed above, the review team determined that impacts of deep well injection at the Turkey Point site on water resources would be SMALL. Detailed documentation of these studies and the review team's evaluation is provided in updated sections 2.3, 5.2, 7.2, and Appendix G of the final EIS.

Comment: Comment 1. The DEIS is incomplete in that it makes no analysis of the effects of entrainment of the hypersaline plume, and the likely resulting consequences for

demand on water from other sources, i.e., fresh water from the Coastal Everglades or bay water from Biscayne National Park, if the RCW system is tainted by the hypersaline plume- Radial collector wells (RCWs) under the site will draw water from beneath the plant when water is unavailable from the wastewater treatment plant. The DEIS attempts to model how water will flow underground into the RCWs, yet the DEIS admits that the models used to project underground flow of ground water were insufficient to determine how water of different density (i.e., from salinity differences) will move through the ground: "The steady-state nature of the FPL model and the assumption of constant density fluids make the model inadequate for modeling this potential scenario." [DEIS p. G-29]; How water of differing densities moves is critically important because of the hypersaline plume underneath the existing cooling canals (the so-called "Industrial Waste Facility" or IWF). According to the DEIS [p. 3-30], the cooling system cannot operate if the cooling water becomes more than 1.5x the saline concentration of bay water. However, the hypersaline plume is already approximately twice the salinity of water in Biscayne Bay prior to entering the cooling system, and it could get worse: continued operation of TPN 3 & 4 has the capacity to further expand or relocate the hypersaline plume, either by continued concentration of water through heating and evaporation, or by displacement with water pumped in. Entrainment of the underground hypersaline plume into the RCWs could halt operation of the plant. Specifically, if the water entering the RCWs included 70% or more of water with the salinity of the hypersaline plume, the plant could not operate. Failure of the RCWs to provide water of sufficiently low salinity would place the cooling demand squarely on aboveground sources, either the L31E canal or Biscayne Bay itself. The final EIS must consider possible loss of usable cooling water caused by RCW entrainment of hypersaline plume under the IWF. (0106-4 [Stoddard, Philip K.])

**Comment:** Given the complexity of the current issues associated with the Cooling Canal System (CCS) and the uncertainty about its adverse hydrologic and other impacts, MDC believes that the recommendation for more detailed modeling is more than warranted for the EIS evaluation of the proposed RCW. The RCW in-and-of-themselves can potentially have significant hydrologic and other impacts which can likely exacerbate the existing CCS impacts. Did the NRC EIS reviewers conclude that the aforementioned recommendation for more detailed modeling was not warranted? MDC therefore recommends that a model capable of providing a more detailed understanding of how the proposed RCW can influence the CCS hypersaline plume now and how it will influence it in the future when Units 3 & 4 are decommissioned and the CCS circulating pumps are either not operated at all or operated at a much reduced rate. This model needs a much higher resolution and needs to be able to identify source waters through particle tracking. Most importantly, any analysis that relies primarily on model output that predicts average salinities of Biscayne Bay across large areas as a surrogate for impacts is totally inadequate to examine hydrologic impacts to the aguifer and surface waters. In addition, if the model cannot determine whether water quality standards with Biscayne Bay would be violated by operation of the radial collector well field, then additional study would be warranted prior to approval either as part of this EIS or through a supplemental EIS. (0110-1-12 [Hefty, Lee N.])

**Comment:** The DEIS fails to include an adequate analysis of the direct, indirect, and cumulative impacts of proposed radial collector well system, including cumulative impacts associated with the cooling canal system (CCS) industrial wastewater facility (IWF) and CERP. (**0113-1-4** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The DEIS does not adequately discuss potential cumulative impacts caused by the existing underground hypersaline plume produced by the current operations of the CCS. The

findings of the uprate monitoring program for Units 3 & 4 identified the presence of CCS water in shallow groundwater (approximately 25' to 30') in wetlands adjacent to Biscayne Bay. [Footnote 23: West, B. United States Department of the Interior, National Park Service Letter to A. Williamson, U.S. Nuclear Regulatory Commission, November 25, 2014, SER PC, 6.] Radial wells will be constructed at approximately the same depth. According to FPL's groundwater modeling, the RCWs would draw approximately 2% of its water from the Industrial Wastewater Facility (IWF) cooling canal system. [Footnote 24: NRC, DEIS, 5-14] The DEIS acknowledges that the operations of the radial collector wells could impact the movements of the hypersaline plume, likely increasing the flow velocity of hypersaline water eastward under Biscayne and changing the area impacted by the plume. [Footnote 25: Ibid., 5-16.] The DEIS states that "intermittent operation [of the radial collector wells] could result in an increase of hypersaline flow into the aguifer beneath the bay that could migrate into the bay when the RCW is not operating." [Footnote 26: Ibid., G-29.] Despite admitting the potential for interactions, the DEIS fails to adequately analyze the adverse environmental impacts that could result if CCS water were to appear in the bay due to the operations of the radial collector wells. (0113-2-3 [Lopez. Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** In discussing such interactions, the DEIS admits that, "the steady-state nature of the FPL model and the assumption of constant density fluids make the model inadequate for modeling this potential scenario," [Footnote 28: Ibid., G-29.] in effect admitting uncertainty as to the interactions between the radial collector wells and hypersaline water from the plume. Despite the fact that the proposed system of radial collector wells would be located within or adjacent to the plume and will impact the movement and location of the plume, the DEIS fails to provide an adequate discussion of the ways in which the movement and composition of the plume may be affected by radial collector well withdrawals. There is an insufficient analysis of how the wells may capture or affect water from the plume and inadequate information regarding the possible impacts associated with causing plume water to flow towards the radial wells. (**0113-2-5** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** Our principal concern is the ongoing westward migration of hypersaline groundwater through the aquifer in the vicinity of the Turkey Point facility. FPL should implement a plan to address the saline groundwater contamination emanating from its Cooling Canal System ("CCS") at Turkey Point. Groundwater modelling can be very subjective due to uncertainty caused by limited model assumptions and characterization data. It is very important that the results from both the USGS and the FPL groundwater models be carefully analyzed to address the impacts of migration of hypersaline groundwater from the Turkey Point CCS. 2. There is need for further hydrological studies to show how the increase in temperature from the Turkey Point facility will affect the plant's cooling system, as well as the adjacent surface and groundwater. (**0211-1** [Malefatto, Alfred])

**Comment:** Most of the problems and uncertainties identified concerning cooling water operations. The first of these is the failure to consider loss of useable cooling water caused by the radial collector wells entrainment sucking in the hypersaline plume underneath the cooling canals, which is known as the industrial waste facility. It's what they think of our southeast Everglades. Radial collector wells under the site will draw water from beneath the plant when water is unavailable from the wastewater treatment plant. The Impact Statement attempts to model how water will flow underground to the radial collector wells. But, the Impact Statement admits that the models used to project underground flow of groundwater were not sufficient to determine how water of different densities, such as from differences in salinity, will move through the ground. You have to recognize, there's a hypersaline plume underneath Turkey

Point. And I'll keep referring to it. It's dense water about twice the salinity of the surrounding bay water. And the Draft EIS says, "The steady state nature of the FP&L model and the assumption of constant density fluids makes the model inadequate for modeling this potential scenario." That's from the Impact Statement, page G-29. So this uncertainty is critically important because of the hypersaline plume underneath the existing cooling canals. So according to the Impact Statement the cooling system cannot operate with more than -- at more than one-and-a-half times the salinity of bay water. But the hypersaline plume is twice the salinity of bay water. So if they entrain 70 percent or more of the plume, the radial collector well system cannot work for cooling the plant. (0721-2-2 [Stoddard, Philip K.])

**Response:** In regard to the Biscayne aquifer, saltwater from the sea has already intruded into the groundwater in the Biscayne aquifer in the vicinity of the Turkey Point site, which has resulted in elevated salinity in that groundwater. This saltwater intrusion from the sea is unrelated to operations at Turkey Point. Because of its elevated salinity, groundwater from the Biscayne aquifer in the vicinity of Turkey Point site cannot be used as a drinking water source without treatment. Seepage of saline water from the cooling canals associated with existing Turkey Point Units 3 and 4 has also resulted in locally higher groundwater salinity near the IWF cooling canals. Cumulative impacts of the proposed RCW pumping on the existing hypersaline plume were considered in the EIS.

Analyses from the USGS groundwater-surface water model presented in the EIS show that in the absence of remediation of the IWF hypersaline plume, increases in groundwater salinity may occur inland from Turkey Point because of movement of the existing hypersaline plume, regardless of whether or not the proposed units are built and operated. The model-predicted increase in ground water salinity is not caused by RCW pumping or other activities related to the proposed units. The model-predicted increase in groundwater wells. The NRC review team acknowledges that the distribution of contaminants from the cooling canals in groundwater beneath Biscayne Bay could be affected to by pumping of the planned RCWs beneath Biscayne Bay. Several comments indicate that the FPL groundwater model provides limited insight into groundwater behavior because it does not consider density differences. The review team evaluation documented in the draft EIS made the same point, and this is why the review team commissioned the USGS to perform additional groundwater modeling that is also documented in the EIS and which accounts for density differences.

Nonetheless, after publication of the draft EIS, the review team performed additional groundwater modeling of the interaction between the planned RCWs, the existing hypersaline plume, and the cooling canals using a two-dimensional cross section model and a limited-extent three-dimensional model that accounts for variable fluid density. The review team also evaluated the combined impacts from proposed remediation of the hypersaline groundwater plume and sea level rise. Additional discussion has been added to the EIS to clarify (1) the use of model results, 2) the conceptual understanding of the hydrologic system, and 3) aquifer monitoring requirements. The review team considered this additional information in determining the impact of building and operating the proposed plants on groundwater in the Biscayne aquifer.

In short, results of analyses presented in the EIS show that activities related to building and operating the proposed units would have minor effects on the salinity of the Biscayne aquifer or Biscayne Bay and would also not negatively impact efforts to remediate the existing hypersaline plume associated with Units 3 and 4. Inputs to the IWF related to building the new units would be limited to adding muck to the IWF berms and discharge of water from excavation dewatering

for a limited time at a maximum rate that is approximately 0.06 percent of the recirculating flow rate water of the IWF. The water quality of the dewatering discharge would be similar to the aquifer water quality.

**Comment:** MISSLEADING STATEMENT [terminating the current monitoring program for the Turkey Point power plant cooling canals that may very well affect the level of saltwater intrusion into the Biscayne Aquifer, the main source of drinking water for South Florida]. (**0685-14** [Batista, Carlos])

**Response:** State and local agencies currently require monitoring of the cooling canals and nearby groundwater and Biscayne Bay, and the NRC review team is not aware of any plan or proposal to discontinue that monitoring. No changes were made to the EIS in response to this comment.

**Comment:** MDC strongly emphasizes that the state certification for the Units 6 & 7 project, issued on May 19, 2013, was issued at a time when the impacts of the implementation of the Units 3 & 4 Uprate were not yet evident because some of the water quality monitoring data were either not yet available or had not yet been reviewed and analyzed. The most noteworthy issue to point out as it relates to the evaluation of the Units 6 & 7 project proposed RCW is the significant increase in the tritium concentration at the deep well of monitoring well cluster TPGW10, which is located on Biscayne Bay slightly north and east of the Turkey Point Plant and within the cone of influence of the proposed RCW, see Figure 1. (0110-1-8 [Hefty, Lee N.])

**Response:** The comment correctly states that there has been an increase in the concentration of tritium in groundwater near the Turkey Point site. Information in the EIS shows that this tritium and other constituents originating from the seepage of cooling-canal water have migrated into the groundwater in the vicinity of Turkey Point. The concentrations of tritium found in the aguifer, at less than 25 percent of the drinking water standard, are much lower than concentrations considered a health concern. The distribution of tritium and the other constituents in the aquifer could be affected to some degree by pumping of the planned RCWs beneath Biscayne Bay as a backup supply of cooling water. However, there is a very large volume of treated municipal wastewater available for this purpose, but the treated wastewater is not suitable for normal uses of freshwater, such as for drinking or agriculture. Accordingly, the treated municipal wastewater can be used for cooling proposed Turkey Point Units 6 and 7 without affecting the ability to meet demands for freshwater. MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan, Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444]. Therefore, the NRC staff concluded that the reclaimed-water supply is reliable and the RCWs would likely be used infrequently and for short durations. The review team nonetheless considered the potential impacts from migration of groundwater constituents including tritium in the review team evaluation of potential effects of operating the RCWs, which is set forth in Section 5.2.1.2 of the EIS. After publication of the draft EIS, the review team performed additional groundwater modeling of the interaction between the planned RCWs, the existing hypersaline plume, and the cooling canals using a two-dimensional cross-section model and a limited-extent three-dimensional model that accounted for fluid density effects caused by salinity and temperature. The results showed that changes in the concentration of salinity and other constituents in the aquifer near the site and beneath Biscayne Bay would be minor and would not have significant effects on drinking water wells or the water in Biscayne Bay.

**Comment:** In September of 2012, tritium was identified by DEP, the SFWMD and MDC as the tracer to delineate vertical and horizontal extent of the CCS hypersaline plume. The increase in tritium concentration at TPGW-10D first became evident in the quarterly monitoring results for the June 2012 sampling, which coincides with the time that Unit 3 was being uprated and not all circulating pumps were operating, see Figure 2 attached. MDC believes that this is a significant finding because it appears to suggest that mobilization of the CCS hypersaline plume under the bay towards the area where the RCW are proposed to be installed may have been facilitated by the reduction in operation of the CCS circulating pumps. It is important to note the results of the aquifer performance test that FPL provided in support of the proposed radial collector wells. Although FPL did not provide the types of data that MDC requested, the limited data that was provided should be carefully reviewed. Most noteworthy are the extremely high levels of sulfate detected in the monitoring wells during the test in addition to the elevated sulfate levels in the surface waters of Biscayne Bay. These data suggest that the highly contaminated water beneath the cooling canals was drawn into the surface waters of Biscayne Bay, albeit with a much lower pumping volume during the test than would be realized when the radial collector wells are in operation. Determining whether operation of the radial collector wells, which would be the largest well field in Miami-Dade County in terms of daily pumped volumes, would result in violations of applicable water quality standards in the tidal waters of Biscayne Bay including Biscayne National Park is necessary. (0110-1-9 [Hefty, Lee N.])

**Response:** The NRC review team did review data from the pumping test on the Turkey Point peninsula, including the elevated sulfate concentrations. In addition to the review team's conceptual understanding of the processes that would occur with RCW operation, the review team considered three independent modeling studies that are all consistent in projecting only insignificant alterations to both the Biscayne Bay and the surficial aquifer, even in view of the observed elevated sulfate concentrations. The review team considered a wide range of baseline environmental conditions to reflect the uncertainty in the baseline environment associated with various proposed actions associated with the IWF, climate change, and geohydrologic parameter uncertainty. While the environmental baseline may change significantly, the incremental alteration to the hypersaline plume associated with operation of the RCWs remains minor. In view of the above, the review team revised the text in Sections 2.3, 5.2, and G.3.2 of the EIS to expand and clarify the process and findings of the analysis of the potential alteration of the hypersaline plume caused by the operation of the RCW system.

**Comment:** Section 2.3, Water (pg. 2-26): The DEIS states that the alternate cooling water source supplied by the radial collector wells would be limited to a maximum of 60 days per year by the Florida State Conditions of Certification. The DEIS is not clear regarding what contingency plans will be implemented should the 60 day limitation be exhausted and the reclaim water supply is not available. FPL has stated that the Conditions of Certification addresses the contingency plan for emergency water allocation. Please clarify this issue with a detailed explanation of contingency plans in the FEIS. (0617-1-7 [Mueller, Heinz J.])

**Response:** Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite, and can be replenished from multiple sources. While the EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling water supplies need not be evaluated. Further, the review team also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

**Comment:** However, the IWF will be accepting wastewater from the new reactors (Units 6 and 7), and these additional wastewater streams include excavation dewatering, stormwater run-off, muck spoil run off and drift deposition. There is a potential for these additional wastewater streams to increase nutrient loading, including nitrate, for which EPA has set a drinking water maximum contaminant level (MCL), to the underlying Biscayne Aquifer, (an Underground Source of Drinking Water under the SOWA), given the existing hydrologic connection between the IWF and groundwater. (**0617-1-15** [Mueller, Heinz J.])

**Response:** As discussed in the EIS, the combined impacts of the planned discharge of groundwater from excavation dewatering and stormwater to the CCS while building the plants, and the chemical inputs to the CCS from muck spoils runoff and cooling-tower drift are expected to cause minor changes in the water levels and chemistry of the CCS. Potential changes in nitrate concentration from muck runoff are presented in the EIS. Water from the CCS does currently seep into the Biscayne aquifer below the CCS beneath the site. However, the EIS analysis shows that the effects of the expected volume and concentration of any seepage resulting from discharges to the CCS during plant construction would be minor and temporary. Any increase in volume and concentration of proposed Units 6 and 7 is not expected to have a noticeable impact on the quality of groundwater in the areas of the Biscayne aquifer that meet USDW criteria for TDS. The review team also responded to similar comments in E.2.7, "Comments concerning hydrology - surface water."

**Comment:** The EPA has several serious concerns related to groundwater, with the paramount concern being the condition of the Biscayne Aquifer, an EPA-designated sole source aquifer serving as a drinking water resource in the south Florida area. The Biscayne aquifer has already suffered significant and unacceptable hypersalinity impacts, and the EPA is concerned that the proposed project may result in further migration of the hypersaline plume. (**0617-1-17** [Mueller, Heinz J.])

**Response:** After publication of the draft EIS, the review team used a third model, called the RTF (Review Team Focused) model, to performed additional groundwater modeling of the interaction between the planned RCWs, the existing hypersaline plume, and the cooling canals. This third model included using a two-dimensional cross-section model and a limited-extent three-dimensional model. Simulations were performed to better understand how the existing hypersaline plume may be affected by RCW pumping combined with remediation actions recently stipulated in a consent agreement between FPL and Miami-Dade County.

The RTF model was useful in showing salinity changes that occur in the aquifer near the RCWs when the wells are operated. The results showed that when the wells are not operating, hypersaline water from the cooling canals is present in the high permeability zone where the well laterals are installed. This saline water is drawn into the wells during the first few days of RCW pumping, resulting in increasing, then decreasing salinity at the well. The RTF model predicts that the salinity of the water produced by the operating RCW would eventually drop to about the concentration of the bay water. Water flowing down through the bed of the bay and into the RCWs is therefore expected to have about the salinity as bay water. When RCW pumping ceases, water in the high permeability zone again increases in salinity because of the

migration of water from the hypersaline plume. This migration of hypersaline water into the high permeability zone would occur regardless of the presence of the RCWs.

Predicted future change in sea level and its effect on interactions between the RCWs and the hypersaline plume were also simulated. The additional modeling confirmed that pumping of the RCWs would move hypersaline water toward the RCWs and would remove some groundwater captured by the RCWs from the hypersaline plume region of the Biscayne aquifer. The model also indicated that RCW pumping is not likely to reduce the effectiveness of hypersaline plume remediation actions specified in the consent agreement. Additional discussion of the potential impacts of the proposed new units on groundwater in the Biscayne aquifer has been added to the EIS to reflect these results.

**Comment:** These are just some of the more obvious impacts from this expansion. When the first two nuclear reactors and fossil fuel plants were completed at Turkey Point, regulators failed to consider the impacts of dumping hot water (used for cooling the generators) directly into Biscayne Bay. When the 5,000 acres of cooling canals - likely the largest radiator on the planet (and clearly visible from space) - were carved out of natural mangrove habitat to correct the problem, regulators again failed to consider that the extremely hot salty water would drop through the surrounding limestone and degrade the underlying Biscayne Aquifer. The known risks from this project are bad enough - very hard to plan for the unknown and unconsidered risks as well as inevitable human error. (**0240-12** [Commenters, Multiple])

**Comment:** The EPA has several serious concerns related to groundwater, with the paramount concern being the condition of the Biscayne Aquifer, an EPA-designated sole source aquifer serving as a drinking water resource in the south Florida area. The Biscayne aquifer has already suffered significant and unacceptable hypersalinity impacts, and the EPA is concerned that the proposed project may result in further migration of the hypersaline plume. (**0617-1-17** [Mueller, Heinz J.])

**Response:** The salinity and total dissolved solids TDS in the water in the Biscayne aquifer in the vicinity of Turkey Point exceed USDW standards because of saltwater intrusion from the sea and intrusion of the CCS hypersaline plume. As a result, the Biscayne aquifer near the site cannot be used as a drinking water source without treatment. In south Florida, the amount of saltwater intrusion has increased over the past several decades for reasons unrelated to operations at Turkey Point, including the drainage of wetlands and groundwater pumping in inland areas. Seepage of hypersaline water from the CCS (cooling canal system) associated with the existing Turkey Point Units 3 and 4 has also resulted in areas of groundwater salinity higher than seawater near the CCS.

As discussed in the EIS, only the RCWs (radial collector wells), which are planned as a back-up cooling water source for Units 6 and 7, and limited inputs to the CCS while building the plants are expected to have any potential impact on the salinity of groundwater in the Biscayne aquifer. As discussed in the EIS, the combined impacts of the planned discharge of groundwater from excavation dewatering and stormwater to the CCS while building the plants, and the chemical inputs to the CCS from muck spoils runoff and cooling tower drift during plant operations are expected to cause minor changes in the water levels, salinity, or other chemical concentrations of the CCS. As stated in the EIS, saline water drawn from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year as permitted under the Florida State COCs. The potential effects of operating the RCWs are described in Section 5.2.1.2 of the EIS. During the limited periods of RCW pumping, some water would be removed

from the Biscayne Aquifer, which would potentially cause hypersaline water to move under Biscayne Bay toward the RCWs. The review team evaluated information about the reliability of the components of the reclaimed-water system and determined that the RCW supply system would be likely be called into use infrequently and for durations much shorter than 60 days. The review team determined that proposed use of the RCWs as a backup supply of cooling water for short periods of time is likely to have small impacts on groundwater users or on the extent of saltwater intrusion based on the FPL model analysis, USGS modeling analysis, the NRC review team's modeling of the CCS-RCW interaction, and the knowledge that environmental monitoring and potential mitigation measures are required under the COCs imposed by Florida State. The review team responded to similar comments in Section E.2.7, "Comments concerning hydrology – surface water."

Comment: Comprehensive Everglades Restoration Plan (CERP). The EPA is concerned with the project's potential impacts to CERP. The CERP is a 30 year, \$10-12 billion ecosystem project designed to restore the greater Everglades ecosystem. CERP is the largest ecosystem restoration project in the US, and although the Corps and the South Florida Water Management District (SFWMD) are the primary cost share partners, several other local, state, Federal agencies (including EPA), and NGOs are active partners in CERP. A primary goal of CERP is to restore flows to the greater Everglades and Everglades National Park (ENP). One of the CERP projects is the Biscayne Bay Coastal Wetlands (BBCW) project. EPA is concerned that the proposed project will impact BBCW. In particular, L-31E canal is an important part of BBCW. The DEIS states: "Groundwater flow in the Biscayne aguifer is also affected by an interceptor ditch adjacent to the west side of the cooling canals and east of the L-31E Canal. Water is pumped from the interceptor ditch into the IWF cooling canals when needed to maintain a water level in the ditch that is lower than the water level in the L-31E Canal. This is designed to keep groundwater from moving westward from the interceptor ditch toward the L-31E Canal and keep cooling canal water from affecting groundwater quality to the west (FPL 2014-TN4069). However, because deeper permeable layers within the Biscayne aguifer may be isolated from hydraulic head in the ditch by lower permeability layers, it is possible that some water from the cooling canals could move to the west. As discussed in Section 2.2.3 below, monitoring by FPL indicates that hypersaline water from the cooling canals has moved west of the L31-E Canal in the deeper part of the Biscayne aquifer." Also, when discussing project components of the BBCW, the DEIS states, "L-31 East Flow Way -isolation of the L-31E Canal from the major discharge canals and allowing freshwater flow through the L-31E Levee into saltwater marsh. Pump stations and culverts are to be added to facilitate freshwater discharges." The FEIS should clarify whether the NRC anticipates that the proposed project will continue to use water from L-31E to augment waters for the IWF, and if so, what the impacts would be to the L31N canal. Also, impacts to the Biscayne Aquifer and further movement of the saline water into Biscayne Bay should be further defined and detailed. The SFWMD permitted FPL to continue pumping water from L31E canal into the IWF for 2 years, but there is no discussion regarding this subject in the DEIS. EPA is concerned that continued use of the L31E canal as a source of water for the cooling canal system could impact the success of the BBCW and possibly exacerbate movement of salinity through the Biscayne Aquifer. (0617-1-25 [Mueller, Heinz J.])

**Response:** There is no plan for the proposed Units 6 and 7 to use any water from the L-31E Canal or any other freshwater canals. The addition of water to the IWF from the L-31E Canal and any other sources is unrelated to planned Units 6 and 7, which would not use the IWF for cooling. In addition to the review team's conceptual understanding of the processes that would occur with RCW operation, the review team considered three independent modeling studies that are all consistent in projecting that RCW operation would result in only insignificant alterations to both the Biscayne Bay and the surficial aquifer. The review team considered a wide range of

baseline environmental conditions to reflect the uncertainty in the baseline environment associated with various proposed actions associated with the IWF, climate change and geohydrologic parameter uncertainty. While the environmental baseline may change significantly, the incremental alteration to the hypersaline plume associated with operation of the RCWs remains minor. The review team revised the text in Sections 2.3, 5.2, and G.3.2 of the EIS to expand and clarify the process and findings of the analysis of the potential alteration of the hypersaline plume caused by the operation of the RCW system.

**Comment:** *Recommendations:* The EPA recommends that the FEIS better describe the interaction between the FPL's use of L31E canals for the IWF in the existing facility, and proposed project and potential impacts to the BBCW and Biscayne Aquifer. The EPA also recommends that the FEIS discuss the 2-year SFWMD permit to pump water from the L31E canal into the IWF, and resulting impacts to BBCW and Biscayne Aquifer. EPA also notes that, effective July 14, 2014, SFWMD updated consumptive use permitting (CUP) criteria as part of a statewide effort headed by the FDEP, and joined by all five water management districts. The FEIS should document any changes to existing or future permitting actions relative to this criteria. (0617-1-26 [Mueller, Heinz J.])

**Response:** The building and operation of the proposed plants has no significant nexus with the SFWMD permitting of FPL's request to pump water from the L-31E Canal into the IWF or with the consumptive use permitting criteria mentioned in the comment. In addition to the review team's conceptual understanding of the processes that would occur with RCW operation, the review team considered three independent modeling studies that are all consistent in projecting only insignificant alterations to both the Biscayne Bay and the surficial aquifer. The review team considered a wide range of baseline environmental conditions to reflect the uncertainty in the baseline environment associated with various proposed actions associated with the IWF, climate change, and geohydrologic parameter uncertainty. While the environmental baseline may change significantly, the incremental alteration to the hypersaline plume associated with operation of the RCWs remains minor. The review team revised the text in Sections 2.3, 5.2, and G.3.2 of the EIS to expand and clarify the process and findings of the analysis of the potential alteration of the hypersaline plume caused by the operation of the RCW system.

**Comment:** <u>Radionuclides.</u> Existing and historic operations at Turkey Point have resulted in radionuclides (tritium) migrating into the hydrologic complex. The DEIS discusses deep-well injection scenarios and postulated doses in Section 5.9.3.3. One of these scenarios includes postulated maximum radionuclide concentrations of tritium, strontium and cesium (page 5-108). Although the DEIS states that there would be no observable health impacts on the public from normal operation of the proposed units (page 5-109), EPA has concerns regarding potential environmental pathways and cumulative impacts related to radionuclides. **Recommendations:** The FEIS should provide updated information regarding the progress with defining the extent of the tritium contamination. Updated sampling data should be included or referenced in the FEIS, with modeling information included regarding potential cumulative impacts. (0617-2-1 [Mueller, Heinz J.])

**Response:** Information about the distribution of tritium in the Biscayne aquifer that resulted from the seepage of water from the IWF cooling canals is provided in Chapter 2 of the draft EIS. This information was collected by the Units 3 and 4 Uprate Monitoring Project. FPL is also undertaking a groundwater monitoring program as delineated in the SFWMD's "FPL Turkey Point Power Plant Groundwater, Surface Water, and Ecological Monitoring Plan" (SFWMD 2009-TN149). In this plan, FPL commits to monitoring tritium as a "tracer suite" for tracking the movement of the CCS plume. This plan also states: "The Agencies and FPL recognize that the

concentrations of tritium from the CCS water are expected to fall below the regulatory standard used to identify the potential for human health concerns. Accordingly it is mutually understood tritium is being monitored only as a potential tracer for identifying contributions of CCS water as a source."

**Comment:** ...hot water leaching through porous limestone [is unacceptable]. (**0245-5** [Lindsey, Jerrie])

**Comment:** Possibility of excess thermal discharge into Boulder Zone. In the event that the cooling towers, designed to dissipate a heat load of 22 7.63 x 109 Btu/hr (1.53 x 1010 Btu/hr for both units) (3-25) are unable to discharge this amount of thermal energy, then heated wastewater would likely enter the deep injection well. Has any research been done to calculate the impact of the additional BTUs on the water in the Lower Floridan Aquifer? (**0612-1** [Teas, James])

**Comment:** Possibility of upward migration occurring at lower than 85 Mgd maximum injection rate due to increased wastewater buoyancy. "An EPA study of 93 deep-well injection facilities in South Florida also indicates that fluid movement underground is influenced by buoyancy created by temperature and density differences between native and injected waters." (2-56). Is it possible that heated wastewater, which would affect it temperature and therefore, its buoyancy, could exhibit upward migration at lower injection rates? (0612-2 [Teas, James])

**Comment:** The proposal is to take the waste hot heated water from the nuclear reactors and pump it underground, deep injection. My question is, for the NRC, has this been done, and what -- has anyone done any research? Are there any impacts on pumping heated effluent down into deep well injection, not just injecting effluent? (**0723-5-6** [Teas, Jim])

**Response:** As discussed in the EIS, an overall upward hydraulic gradient is expected to develop in the Boulder Zone because of the warmth and relatively low salinity of the injected reclaimed water after it has gone through the cooling towers.

After passing through the cooling system, the injected effluent would be warmer than the native water in the Boulder Zone. In addition, reclaimed water would be less saline that native water in the Boulder Zone. As a result, the injected effluent from reclaimed water would be more buoyant. The higher buoyancy of the wastewater does increase the upward driving force. In general, salinity differences contribute more to buoyancy than thermal differences. However, both the thermal and salinity components of buoyancy were evaluated as part of the analysis of the impacts of deep well injection in the EIS. Thermal impacts on the fate and transport of injected effluent were evaluated in numerical modeling performed by FPL and described in Section 5.2.1.3 of the EIS. Information provided in the EIS was summarized from an FPL report describing this modeling effort in greater detail (FPL2013-TN3931). While the actual maximum expected temperature differential between injected and native Boulder Zone waters is expected to be 14°F, FPL used an extreme temperature differential of 50°F in modeling to determine the impacts on vertical migration. Based on this, FPL determined that effluent injected into the Boulder Zone at the decreased rate (relative to current SDWWTP injection rates) would migrate approximately 300 ft into the base of the 1.450 ft thick MCU at the end of the 100-year simulation. This estimate of vertical migration was confirmed by the review team through independent calculations, as described in Section 5.2.1.3 and Appendix G of the EIS.

This indicates that upward migration is expected to be limited by low-permeability confining units. Additional information has been added to the EIS to better describe the confining nature

of low-permeability units within the MCU, the causes of vertical migration where it has been observed at other injection sites, and the expected fate and transport of injected effluent at the Turkey Point site. Results from regional and site-specific modeling, studies of deep well injection, and characterization of geology at the site support the review team conclusion that significant upwelling out of the Boulder Zone is not expected to occur and that, if upwelling does occur, it would not likely impact the Upper Floridan aquifer. Additionally, the construction, testing and monitoring requirements of the FDEP UIC program are designed to provide more characterization of the nature of geology at the injection site and detect and mitigate any upwelling that may occur. This is discussed in greater detail in the updated sections of the EIS mentioned above.

**Comment:** In addition, due to substrata, Florida is a well-known hotspot for sinkholes. (0440-6 [Hoyle, Lester and Judy])

**Response:** Extensive geological and geophysical studies were performed by the applicant to make sure that there were no caverns beneath the proposed plant structures that could collapse and create a sinkhole. The potential for sinkholes to affect plant structures is primarily a safety concern and is addressed in the applicant's Final Safety Analysis Report and the NRC's Safety Evaluation Report. An environmental impact might result from contaminated water entering the shallow aquifer by draining into a sinkhole if one were to develop during construction of facilities such as pipelines or power lines. FPL has committed to following BMPs designed to stop such contamination of both surface water and groundwater. Therefore, the staff determined that environmental impacts from potential sinkhole formation associated with building and operating proposed Units 6 and 7 would be negligible. No changes were made to the EIS based on this comment.

**Comment:** I note that tritiated water, due to wastewater passing through the nuclear reactors, cannot be separated out: "Liquid radioactive effluent would be discharged to the deep-injection wells" (3-34). Should there be upward migration of wastewater from the Booulder Zone, it will come with its own built-in tracer. (0612-6 [Teas, James])

**Response:** As described in the EIS, tritium and other radionuclides would be injected to the Boulder Zone and could be used as a tracer of water movement. No changes were made to the EIS in response to this comment.

**Comment:** And the second question is, given the limited capacity of the Biscayne Bay aquifer, has the Draft, the reviewers who drew up the Draft, looked at the whole aquifer and all the various impacts that it suffers now? The draw-downs for example, or the effects, rather, of the proposed enlargement of rock mining in northwest Dade County, which would affect both the Everglades and the aquifer itself. And factor that into a model which projects forward the future of the aquifer. Or has the study been so narrow that it's artificial and has no relationship to the life of the whole aquifer and the needs of the population dependent on it? (0721-17-2 [Breslin, Tom])

**Response:** Chapter 7 of the EIS analyzes the cumulative impacts of the proposed Turkey Point Units 6 and 7, and other past, present, and reasonably foreseeable projects, on water use and water quality. This analysis includes cumulative impacts from the mining of fill needed to build the proposed plants and other rock mining activities. There is also information in the water sections of the EIS, including newly added information to reflect additional review team modeling, concerning the potential effects of the proposed units on the Biscayne aquifer. No changes were made to the EIS in response to this comment. **Comment:** After use some of this wastewater would be discharged underground. The possible impacts of adding chemical contaminants into our groundwater has not been adequately analyzed in this EIS. Furthermore, the backup cooling system for the new reactors could become one of the largest well fields in terms of water consumption in the entire Southeast region of the United States. Proposed radial collector wells would stretch out underneath Biscayne Bay, removing as much as 7.4 billion gallons of water per year. Just in comparison, the entire Florida Keys uses just over 6 billion gallons of water per year. The withdrawal of this water could increase salinity in Biscayne Bay and increase the rate of salt water intrusion into our very limited fresh water resources. (0721-9-6 [McLaughlin, Caroline])

Comment: We risk poisoning our water sources at our grave peril. (0732-1 [Horiwitz, Laura])

**Response:** After cooling the plant, the reclaimed water would be injected into the saline Boulder Zone aquifer. As described in the draft EIS, upward migration from the Boulder zone to shallower aquifers used for drinking water is expected to be limited by low permeability confining units. If upward leakage of wastewater through the confining layers did occur, it would likely be detected in the overlying monitoring wells and mitigated as required by the FDEP UIC program. The potential impact of upward leakage is assessed in Appendix G of the EIS and discussed in EIS Section 5.2.1.3.

In regard to the Biscayne aquifer, saltwater from the sea has already intruded into the groundwater in the Biscayne aquifer in the vicinity of the Turkey Point site, which has resulted in elevated salinity in that groundwater. This saltwater intrusion from the sea is unrelated to operations at Turkey Point. Because of its elevated salinity, groundwater from the Biscayne aquifer in the vicinity of the Turkey Point site cannot be used as a drinking water source without treatment. Seepage of saline water from the cooling canals associated with the existing Turkey Point Units 3 and 4 has also resulted in locally higher groundwater salinity near the IWF cooling canals. Cumulative impacts of the proposed RCW pumping on the existing hypersaline plume were considered in the EIS.

Analyses from the USGS groundwater-surface water model presented in the EIS show that in the absence of remediation of the IWF hypersaline plume, increases in groundwater salinity may occur inland from Turkey Point because of movement of the existing hypersaline plume, regardless of whether or not the proposed units are built and operated. The model-predicted increase in groundwater salinity is not caused by RCW pumping or other activities related to the proposed units. The model-predicted increase in groundwater salinity also does not reach the location of existing drinking water wells.

As stated in the draft EIS, saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs. The potential effects of operating the RCWs are described in Section 5.2.1.2 of the draft EIS. During the limited periods of RCW pumping, some water would be removed from the Biscayne Aquifer, which would potentially cause hypersaline water to move under Biscayne Bay toward the RCWs. The review team evaluated information about the reliability of the components of the reclaimed-water system and determined that the RCW supply system would likely be called into use infrequently and for durations much shorter than 60 days. The review team determined that proposed use of the RCWs as a backup supply of cooling water for short periods of time is likely to have small impacts on groundwater users or on the extent of saltwater intrusion based on the FPL model analysis, modeling analysis performed by the USGS, the NRC staff's modeling of the CCS-RCW interaction, and the knowledge that environmental monitoring and potential mitigation measures are required under the COCs imposed by Florida State imposed.

**Comment:** Although the proposal by FPL for Turkey Point 6 and 7 indicates they will rely on Cooling towers and reclaimed water, as opposed to the current cooling canals system used for TP 3&4, the draft statement fails to account for the several potential scenarios of a failure of, or destruction of the cooling towers, or failure of a sufficient amount of the predicted required reuse water from Miami Dade County water and sewer. If either system fails, the backup plan would have to rely on the upper Floridan aquifer, thereby perpetually competing with the sole source of drinking water for four million plus residents in South Florida. (**0145-3** [Lerner, Cindy])

**Response:** The review team considers the failure or destruction of the cooling towers to be very unlikely. There is no plan to use the Upper Floridan aquifer for cooling water. Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs. There is a very large volume of treated municipal wastewater that can be used without affecting the ability to meet demands for fresh water. MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444].

**Comment:** The first concern is that the Draft EIS fails to adequately account for the significant and substantial cumulative adverse impact that the proposed two new nuclear power plants will have on our water supply, the Biscayne Aquifer fed by the Upper Floridan Aquifer as a result of the current crisis conditions and management plan operating for Turkey Point 3&4. While there was a finding that the Biscayne Aquifer is both vulnerable to the significant water usage needs of the Turkey Point Plant and critical to the continual supply of fresh water to Miami Dade and Broward Counties, the Draft EIS has admittedly not addressed the current crisis conditions under which Turkey Point 3& 4 operate. This is a fatal flaw. (0145-2 [Lerner, Cindy])

**Response:** Chapter 7 of the draft EIS analyzes the cumulative impacts of proposed Turkey Point Units 6 and 7, and other past, present, and reasonably foreseeable projects on water use and water quality. Information in the water sections of the EIS, including newly added information, acknowledges the existing site conditions related to Units 3 and 4. Water in the Biscayne aquifer in the vicinity of Turkey Point has elevated salinity and TDS above USDW standards because of saltwater intrusion from the sea and it cannot be used as a drinking water source without treatment. In South Florida, the amount of saltwater intrusion has increased over the past several decades because of the drainage of wetlands and groundwater pumping in inland areas that is unrelated to operations at Turkey Point. Seepage of hypersaline water from the CCS (cooling canal system) associated with the existing Turkey Point Units 3 and 4 has also resulted in areas of groundwater salinity higher than seawater near the CCS. As discussed in the draft EIS, only the RCWs (radial collector wells), planned as a back-up cooling water source, and limited inputs to the CCS while building the plants are expected to have any potential impact on the salinity of groundwater in the Biscayne aquifer. As discussed in the draft EIS, the combined impacts of the planned discharge of groundwater from excavation dewatering and storm water to the CCS while building the plants, and the chemical inputs to the CCS from muck spoils runoff and cooling tower drift are expected to cause minor changes in the water levels, salinity, or other chemical concentrations of the CCS. As stated in the draft EIS, saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated

wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State Conditions of Certification (COCs). The potential effects of operating the RCWs are described in Section 5.2.1.2 of the draft EIS. During the limited periods of RCW pumping, some water would be removed from the Biscayne Aquifer, which would potentially cause hypersaline water to move under Biscayne Bay toward the RCWs. The review team evaluated information about the reliability of the components of the reclaimed-water system and determined that the RCW supply system would likely be called into use infrequently and for durations much shorter than 60 days. The review team determined that proposed use of the RCWs as a backup supply of cooling water for short periods of time is likely to have small impacts on groundwater users or on the extent of saltwater intrusion based on the FPL model analysis, modeling analysis performed by the USGS, the NRC review team's modeling of the CCS-RCW interaction, and the knowledge that environmental monitoring and potential mitigation measures are required under the COCs imposed by Florida State.

**Comment:** FPL now consumes vast amounts of our precious water and continues to plan for future use, by drilling six Upper Floridan production wells, and the pumping of 14 million gallons per day from those wells into the Cooling canal system. The permitted temperature of 100 degrees can not be sustained, in fact it had heated to as high as 104 degrees, without the additional draw of waters from the canal and or the aquifer, This necessitated that FPL seek a permit to utilize up to 100 million gallons a day of water from the L-31 canal, a canal which is a critical component of the health of Biscayne Bay. FPL has also sought permission from the State of. Florida to pump 14 million gallons per day of water from the Upper Floridan Aquifer into the Cooling Canal system and they have received approval to draw 1 million gallons a day for a temporary period of time. However, FPL is now seeking a permit to extend access to these water resources for the next two years, hoping that they will solve the problem in that time period. At present time FPL does not have a long term solution. (0145-5 [Lerner, Cindy])

**Response:** There is no plan for the proposed units 6 and 7 to use any water from the L-31E Canal or any other freshwater canals. The addition of water to the IWF from the L-31E Canal, the upper Floridan aquifer, or other sources is unrelated to building or operating planned Units 6 and 7, which would not use the IWF (industrial wastewater facility) for cooling. Water in the Biscayne aquifer in the vicinity of Turkey Point has elevated salinity because of saltwater intrusion from the sea and cannot be used as a drinking water source without treatment. In South Florida, the amount of saltwater intrusion has increased over the past several decades because of the drainage of wetlands and groundwater pumping in inland areas that is unrelated to operations at Turkey Point. However, seepage of saline water from the cooling canals associated with the existing Turkey Point Units 3 and 4 has also resulted in locally higher groundwater salinity near the cooling canals. Water in the cooling canals has a higher salinity than seawater. Although the water in the cooling canals is not directly connected to Biscayne Bay or Card Sound, there is groundwater flow back and forth between the cooling canals and the Biscayne Aquifer beneath Biscayne Bay. This exchange of water would occur regardless of whether proposed Units 6 and 7 are built or operated.

However, the construction and operation of Units 6 and 7 would affect the Biscayne aquifer in some ways that are described in the draft EIS. Some groundwater would be removed from the aquifer during plant construction by dewatering of the proposed plant excavations. Some groundwater would also be removed during plant operation by pumping from the proposed RCWs (radial collector wells) as a backup source of makeup water for reactor cooling. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs (Conditions of Certification). These limited

periods of pumping of the RCWs would reduce the hydraulic head in the aquifer beneath Biscayne Bay near the wells and, therefore, would remove some water from the aquifer. However, the proportion of water flowing into the RCWs from the aquifer is expected to be small, and more than 95 percent of the water would flow into the RCWs from the overlying Biscayne Bay. This estimate is supported by separate groundwater modeling efforts performed by FPL and by the USGS. The models indicated that pumping the RCWs for less than 60 days per year is unlikely to cause a noticeable change in the existing extent of salt water intrusion or to noticeably lower groundwater levels so as to affect other users of the Biscayne aquifer.

The review team recognizes that complete knowledge of the hydrologic system associated with the RCWs is not now available, and that uncertainties therefore remain in the impact analysis. Further, future operational and environmental conditions are not known with certainty. A vast number of future scenarios are plausible. The sources of uncertainty in the RCW analysis include: heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the potential need for using the backup water supply. Uncertainties in the future site environment include: freshening of the IWF cooling canals, remediation of the subsurface hypersaline plume, and the magnitude and rate of future sea-level rise.

Determinations in this EIS related to groundwater are based on the FPL numerical model analysis, the USGS model analysis, the review team's independent numerical modeling analysis, and the review team's knowledge and expertise. The conceptual models that served as the basis for the numerical models are based on available characterization information for the Turkey Point site and surrounding region. Uncertainties in the information and conceptual model were addressed in some cases by performing multiple model runs while varying key parameters in the model and in other cases by using conservative parameter values. However, uncertainties remain that do not allow the review team to assert that no other conceptual models that may result in more adverse impacts from RCW operation are plausible. Heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the future site environment (e.g., freshening of IWF, remediation of subsurface hypersaline plume, sea-level rise) all warrant the review team to exercise care to avoid relying on numerical models alone. Because of this, the review team does not rely solely on the output of any numerical model.

Numerical models are numerical representations of complex processes occurring in three dimensions over time. The appropriate role of a numerical model is to test assumptions of the behavior of complex systems. While running a numerical model numerous times with different parameters cannot compensate for all uncertainties, the models employed here have been tested and benchmarked within the conditions that limit their application. In this assessment the review team used models to test possible consequences of changes in the affected environment and uncertainty in some subsurface parameters within the capability of the models employed. This information was combined with the geography of the RCW field (such as the relatively short distance from the laterals to the bottom of Biscayne Bay relative to the distance from the laterals to the Homestead well fields) and the COC requirement of a monitoring program with mitigation options. The review team determined that the proposed monitoring of RCW construction and operation that is included is sufficient to detect unexpected behavior in a timely manner. While all possible mitigation measures have not yet been spelled out, in accordance with the COCs, the review team considers the ultimate mitigation of ceasing operation of the RCWs as ensuring prevention of any impacts in a timely manner. "When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the harm" (FDEP 2014-TN4371).

Comment: II. The Analysis of Direct, Indirect, and Cumulative Impacts of Proposed Radial Collector Wells is Inadequate. Some of our principal concerns regarding the potential adverse environmental impacts of this project are centered on the operation of the radial collector wells and their impacts on surrounding ecological areas. In order to dissipate waste heat generated by Units 6 & 7, two sources of water are identified for use in the DEIS. Up to 90 million gallons of water per day (MGD) of reclaimed wastewater from Miami Dade County will be used as the primary source of cooling water. However, when this water source is unavailable or insufficient in supply, radial collector wells will draw water from under Biscayne Bay as a backup water supply. The DEIS proposes the construction of four radial collector wells, which according to FPL, will withdraw saltwater from the Biscayne Aquifer. Radial wells would extend 900 feet horizontally beneath Biscayne Bay and would be installed approximately 25 to 40 feet below sediment surface. [Footnote 9: United States Nuclear Regulatory Commission, Environmental Impact Statement for Combined Licenses (COLs) for Turkey Point Nuclear Plant Units 6 and 7, February 2015, NUREG-2176, 3-9.] Operation of the radial collector wells is to be limited to 60 days per year, with a maximum of volume of 7.5 billion gallons of water that may be pumped during that period. [Footnote 10: NRC, DEIS, 5-13.] It is important to note that radial collector well structures would be located under navigable Waters of the United States, as regulated under the Clean Water Act. [Footnote 11: 40 C.F.R. § 230.3.] Radial collector wells such as those described in the DEIS have never before been constructed in an estuarine environment anywhere else in the world. [Footnote 12: West, B. United States Department of the Interior, National Park Service Letter to A. Williamson, U.S. Nuclear Regulatory Commission, November 25, 2014, SER PC, 6.] A huge degree of uncertainty comes into play when predicting the impacts of the construction and operations of these wells on the surrounding environment, including the resources of Biscayne National Park, which are within the cone of influence of the radial collector wells. Despite the fact that radial wells will be located in the underlying aguifer, the primary source of intake water will be water from Biscayne Bay. According to the DEIS, "if the radial collector wells are used, the water would be pumped directly from the Biscayne aquifer beneath the bay and most of this water would be drawn downward from Biscavne Bay in an area adjacent to Biscayne National Park." [Footnote 13: NRC, DEIS, 2-27.] The DEIS fails to include an adequate analysis of these potential adverse impacts that could be caused by the installation and operation of radial collector wells. The DEIS does not adequately analyze the potential for radial collector wells to impact salinity levels in Biscayne Bay and associated potential impacts on benthic flora and fauna. The DEIS acknowledges that 98% of water draw via the radial collector wells would come from Biscayne Bay, noting the hydrological connections between the aquifer and the bay. [Footnote 14: Ibid., 498.] However, it is possible that, due to these connections, pumping operations will draw down the freshwater lens found in the bay, impacting the flora, fauna and salinity of Biscayne Bay. According to the Florida Department of Environmental Protection (FDEP), radial wells located at a depth of 40 feet may ultimately withdraw freshwater from the aquifer, resulting in potential impacts to the seabed and salinity within the Bay. [Footnote 15: Florida Department of Environmental Protection, Determination of Completeness, FPL Turkey Point Units 6 & 7, August 10, 2009, 2.] Neither Biscayne Bay nor Biscayne Aquifer is characterized by a constant salinity. Rather, both the bay and the aquifer are subject to spatial and temporal variations in salinity. [Footnote 16: Miami-Dade County, Third Completeness Comments for Plant and Non-Transmission Line Portions of the FPL Site Certification Application - Turkey Point Units 6 & 7, May 28, 2010, 25.] The salinity model upon which the impacts analysis is based is inadequate and was not developed for the true scale at which the wells will operate. The DEIS admits that models used to predict the underground flow of water into the radial collector wells are insufficient to identify how water of different density (caused by differences in salinity) will move through the ground. [Footnote 17: NRC, DEIS, G-29.] (0113-1-15 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs (radial collector wells) beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs (Conditions of Certification). The NRC review team used modeling performed by the USGS and documented in Appendix G of the draft EIS to evaluate potential adverse impacts to Biscayne Bay that could be caused by operation of RCWs. This included predictions of salinity time series based on continuous year-round pumping of the RCWs at locations in Biscayne Bay, including locations that were close to and north of the Turkey Point site. As stated in the draft EIS, the review team selected two difference, or a relatively large negative salinity difference between the continuous pumping scenario and the base case (60 day per year pumping). The model results indicated that the salinity difference between the continuous pumping scenario and the base case (60 day per year pumping). The model results indicated that the salinity difference between the continuous pumping scenario and the base case (60 day per year pumping). The model results indicated that the salinity difference between the continuous pumping scenario and the base case (no pumping) was mostly within  $\pm 1$  psu, with only transient increases to near 2 psu.

The review team examined the spatial distribution results on the dates when simulated salinity differences were relatively large and found that the largest increases were less than about +2.3 psu. Also, the salinity increases greater than +1 psu occurred in a relatively small area (14.4 km<sup>2</sup> [5.57 m<sup>2</sup>]) located north of the Turkey Point site (Appendix G, Figure G-8); the maximum salinity within this area was about 30.8 psu. The review team examined the spatial distribution results on a date when large salinity decreases of less than 1 psu occurred in an area that was 24.2 km<sup>2</sup> (9.33 m<sup>2</sup>) in size located north of Turkey Point (Appendix G, Figure G-10); the maximum salinity within this area was about 31.8 psu. Overall, these simulation results show that the temporal and spatial variation of salinity with continuous RCW pumping are expected to be minimal. The review team notes that the actual duration of pumping would not be continuous. As required by the FDEP COCs, operation of the RCWs is limited to 60 days per year. This short duration of pumping would reduce alterations of salinity within Biscayne Bay. Therefore, the effect on Biscayne Bay salinity of any permitted pumping would be much reduced from the already minimal salinity change calculated by the USGS modeling of a continuous pumping scenario. Sections 4.3.2 and 5.3.2 of the EIS have been revised to include experimental results to support assessment of RCW effects on seagrass and other aquatic resources. State of Florida required monitoring and surveys for seagrass and marine organisms are also included in Sections 4.3.2 and 5.3.2. The additional information does not change the impact determination that the effects to aquatic resources in these locations from dredging and RCW installation and operation are minor.

The review team recognizes that complete knowledge of the hydrologic system associated with the RCWs is not now available, and that uncertainties therefore remain in the impact analysis. A vast number of future scenarios are plausible. The sources of uncertainty in the RCW analysis include heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the potential need for using the backup water supply. Uncertainties in the future site environment include: freshening of IWF cooling canals, remediation of the subsurface hypersaline plume, and the magnitude and rate of future sealevel rise.

Determinations in this EIS related to groundwater are based on the FPL numerical model analysis, the USGS model analysis, the review team's independent numerical modeling analysis, and the review team's knowledge and expertise. The conceptual models that served as the basis for the numerical models are based on available characterization information for the Turkey Point site and surrounding region. Uncertainties in the information and conceptual model were addressed in some cases by performing multiple model runs while varying key parameters in the model and in other cases by using conservative parameter values. However, uncertainties remain that do not allow the review team to assert that no other conceptual models that may result in more adverse impacts from RCW operation are plausible. Heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the future site environment (e.g., freshening of IWF, remediation of subsurface hypersaline plume, sea-level rise) all warrant the review team to exercise care to avoid relying on numerical models alone. Because of this, the review team does not rely solely on the output of any numerical model.

Numerical models are numerical representations of complex processes occurring in three dimensions over time. The appropriate role of a numerical model is to test assumptions of the behavior of complex systems. While even running a numerical model numerous times with different parameters cannot compensate for all uncertainties, the models employed here have been tested and benchmarked within the conditions that limit their application. In this assessment the review team used models to test possible consequences of changes in the affected environment and uncertainty in some subsurface parameters within the capability of the models employed. This information was combined with the geography of the RCW field (such as the relatively short distance from the laterals to the bottom of Biscayne Bay relative to the distance from the laterals to the Homestead well fields) and the COC requirement of a monitoring program with mitigation options. The review team determined that the proposed monitoring of RCW construction and operation that is included is sufficient to detect unexpected behavior in a timely manner. While all possible mitigation measures have not yet been spelled out, in accordance with the COC, the review team considers the ultimate mitigation of ceasing operation of the RCWs as ensuring prevention of any impacts in a timely manner. "When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the harm" (FDEP 2014-TN4371).

Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply for emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the NRC staff also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

**Comment:** There are already a host of serious groundwater concerns given the complicated hydrology and hydrogeology in the surrounding area, which will be further exacerbated by increased demand for freshwater resources and the effects of climate change, particularly sea level rise. However, we would like to bring attention to the August 17, 2010 contention that SACE and other joint intervenors submitted, which was accepted in part by the Atomic Safety and Licensing Board Panel on February 28, 2011<sup>7</sup> [Footnote 7: See <u>http://pbadupws.nrc.gov/docs/ML1105/ML110591003.pdf</u>.] and is still pending today.<sup>8</sup> [Footnote 8: See a discussion of the 2.1 contention in the Joint Intervenors' Request for Leave to Respond to NRC Staff's Answers to FPL's Motion for Summary Disposition and Alternatively, Joint

Intervenors' Conditional Motion to Admit Second Amended Contention NEPA 2.1, August 20, 2012. At <a href="http://pbadupws.nrc.gov/docs/ML1223/ML12233A743.pdf">http://pbadupws.nrc.gov/docs/ML1223/ML12233A743.pdf</a>.] Contention 2.1 as modified states, "The ER is deficient in concluding that the environmental impacts from FPL's proposed deep injection wells will be "small" because the chemical concentrations in ER Rev. 3 Table 3.6-2 for ethylbenzene, heptachlor, tetrachloroethylene, and toluene may be inaccurate and unreliable. Accurate and reliable calculations of the concentrations of those chemicals in the wastewater are necessary so it might reasonably be concluded that those chemicals will not adversely impact the groundwater should they migrate from the Boulder Zone to the Upper Floridan Aquifer." (0112-7 [Barczak, Sara])

**Comment:** The primary source of cooling water for the operations of Unit 6 & 7 would be reclaimed water from the Miami-Dade Water and Sewer Department (MDWSD). This water would be discharged into the Boulder Zone of the Lower Floridan Aquifer using twelve underground injection wells. The DEIS does not include an adequate analysis of the impacts that may arise from the disposal of this, wastewater -which contains ethylbenzene, heltachlor, tetrachloroethylene, and toluene- into the Boulder Zone using these wells. Moreover, the impacts of these contaminants migrating upward and into the Upper Floridan Aquifer are not adequately addressed. The DEIS also does not include an adequate discussion and evaluation of the impacts associated with the construction of pipelines needed to convey reclaimed wastewater to the plant's wastewater treatment facility. (0113-2-7 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** When the NRC issued the draft EIS in February 2015, a contention regarding the environmental impact of four chemical constituents in the wastewater—ethylbenzene, heptachlor, tetrachloroethylene, and toluene—was pending in litigation before an Atomic Safety and Licensing Board (Board). See Florida Power & Light Co. (Turkey Point Units 6 and 7), LBP-16-3, 83 NRC 169, 172 (2016) (LBP-16-3). In December 2015, FPL filed a Motion for Summary Disposition (Motion) of the pending contention, relying, in part on additional measurements of the concentrations of the four chemical constituents, which the Board granted, in part (LBP-16-3, 83 NRC at 177-79). The Board did not dismiss the contention, but reformulated it to read: "The DEIS is deficient in concluding that the environmental impacts from FPL's proposed deep injection wells will be 'small.' The chemicals ethylbenzene, heptachlor, tetrachloroethylene, and toluene in the wastewater injections at concentrations listed in DEIS Table 3-5 may adversely impact the groundwater should they migrate from the Boulder Zone to the Upper Floridan Aquifer." LBP-16-3, 83 NRC at 186.

The concentrations of constituents present in reclaimed water listed in Table 3-5 are calculated to represent the water quality expected at the point of injection at the Turkey Point site. The concentrations of the four constituents included in the contention and listed in EIS Table 3-5 are all below the EPA maximum contaminant levels (or MCLs) allowed for drinking water. As mentioned above, eight additional samples were collected at the SDWWTP from 2013 to 2014 to better understand seasonal variation of the concentrations of the four constituents listed in the contention. Concentrations for these constituents collected through this additional sampling were below both EPA MCLs and laboratory method detection limits, as indicated in the footnotes to Table 3-5. These results also could illustrate the effect of advanced treatment which had recently been implemented at SDWWTP in order to provide additional protection to USDWs (NRC 2015-TN4773). This additional treatment was required by FDEP and has been described as being, "as effective as confinement of fluids in protecting USDWs from contaminants in wastewater" (EPA 2005-TN4766). The more recent results represent the future reclaimed water that would be received by Turkey Point and do not reflect the additional

reduction that would occur due to treatment, volatilization, and dilution at the Turkey Point site before injection.

The review team has revised Sections 2.3 and 5.2 of the final EIS regarding the evaluation of the impact of deep well injection of effluent at the Turkey Point site. The final EIS includes more recent studies related to regional and site geology, causes and extent of upwelling where it has occurred, modeling of fate and transport of injected wastewater, risk assessments of the impacts of deep well injection in South Florida, and a more complete discussion of the review team evaluation.

As described in the EIS, the review team took a number of steps to evaluate the potential impacts of deep well injection of effluent at the Turkey Point site. The staff 1) reviewed regional and site specific studies that evaluated the confining ability of the MCU, the causes and extent of upwelling at other deep well injection sites, the extent of injection plume migration, and risk to human health and the environment of deep well injection; 2) compared hydrogeological conditions and parameters from these sites to conditions and parameters at the proposed site; 3) evaluated numerical modeling of the flow of injected wastewater presented by the applicant and performed confirmatory calculations; and 4) considered the injection well testing and groundwater monitoring requirements of the FDEP UIC program.

Based on this evaluation, the review team concluded that, in general, the matrix of the MCU would confine injected effluent and that incidences of upwelling at other sites have been coincident with features that provide vertical pathways for upward migration such as fractures or improperly completed wells. Site data indicate that substantial fracturing of the confining layers is not evident at the Turkey Point site and well construction-related issues are not expected to create potential for upwelling at the Turkey Point site because of improved understanding of the confining zones within the MCU and improved construction techniques. However, studies of other injection sites indicate that if rapid vertical migration occurs, it is not likely to reach the Upper Floridan aquifer. This is discussed in greater detail in Sections 2.3.1.2, 3.2.2.2, and 5.2.1.3 of the updated EIS.

Calculations and modeling discussed in EIS Section 5.2.1.3 also indicate that horizontal flow of the plume within the Boulder Zone would be limited and is not expected to extend to beneath the locations of the nearest offsite water-supply well in the overlying Upper Floridan aquifer (7.7 mi) or flow to surface water bodies, such as the Atlantic Ocean. Modeling indicates that dilution along the flowpath could significantly reduce (by as much as 95 percent) the already low or undetectable concentrations of constituents within the injected effluent. As a result, it is not reasonable that concentrations would be detectable in offsite areas.

The review team also recognizes that the UIC permitting process required by the FDEP would require further characterization and testing of the ability of the MCU to confine and the Boulder Zone to receive injected effluent. The additional characterization and testing are required before each of the additional injection wells are permitted at the Turkey Point site. In addition, these wells would be frequently monitored during operation for the evidence of upwelling of injected effluent.

Finally, EIS Sections 5.2.1.3 and 5.2.3.2 discuss risk assessments of wastewater disposal methods in southeast Florida. The risk assessments included modeling of conservative transport scenarios that evaluated expected concentrations of a number of representative constituents in injected wastewater at locations that included the USDW, the Upper Floridan aquifer, and the Biscayne aquifer. One risk analysis specifically evaluated the expected

concentration of tetrachloroethylene at the USDW and a well within the Upper Floridan aguifer in Dade County resulting from both matrix flow and rapid preferential flow through the MCU (EPA 2003-TN4759). In these scenarios, the initial injected concentration of tetrachloroethylene was slightly lower than the MCL and higher than the concentration expected for injected effluent at Turkey Point (Table 3-5). The initial concentrations were calculated to be reduced by 95 percent to 100 percent when they reached the USDW and the well within the Upper Floridan aquifer. The studies indicate that human health risk decreases as distance from the injection well to potential receptors increases. As a result, the assessments conclude that risk from deep well injection to human health is low even when upwelling has reached drinking water aquifers. If the concentrations expected for Turkey Point effluent were used as the initial concentration in this analysis, the expected final concentrations expected at the USDW or Upper Floridan aguifer well would also be so low as to be undetectable. However, the Boulder Zone is not used as a groundwater source, wastewater is not expected to migrate upward into the Upper Floridan aquifer, and the Upper Floridan aquifer, which is brackish, is not used as a source of groundwater within the expected migration extent of the injected cooling water from the Turkey Point site.

For the reasons discussed above, the review team determined that impacts of deep well injection at the Turkey Point site on water resources would be SMALL. Detailed documentation of these studies and the review team's updated evaluation is provided in updated Sections 2.3, 5.2, 7.2, and Appendix G of the final EIS.

**Comment:** The impacts analysis included in the DEIS regarding the impacts of the radial collector wells, already inadequate, is premised on the assumption that sufficient water supply will be available from reclaimed wastewater throughout the lifespan of this project. The determination that the operations of the radial collector wells would have minor impacts on groundwater is dependent on the reliability of reclaimed water. [Footnote 21: NRC, DEIS, 7-12.] Due to inherent uncertainties and risk regarding the continued future availability and supply of treated wastewater as cooling water, the impacts from the potential increased usage of radial collector wells beyond the 60 days identified in the DEIS must be analyzed. Such discussion should include possible adverse impacts to Biscayne National Park, benthic habitats and organisms, saltwater intrusion, migration of the hypersaline plume, and water levels at freshwater supply wells. (0113-2-1 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The reactor cooling water that does not evaporate from the cooling towers will be injected 3,000 feet into the lower Florida aquifer, called the Boulder Zone. Because, according to the DEIS, it will stay there forever; out of sight, out of mind. But most of those billions of gallons of water will actually be fresh water. Only 3 percent of the water on the planet is fresh water and only 1 percent of that is available. So to produce electricity for Florida, Georgia, and the rest of the nation, FPL will take reclaimed fresh water out of the South Florida water system, now laden with residual chemicals and reactor descaling agents, and send it into the earth never to be seen again. (0721-12-6 [White, Barry J.])

**Response:** Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs. A very large volume of treated municipal wastewater is available for this purpose, but the treated wastewater is not suitable for normal uses of fresh water, such as for drinking or agriculture. Accordingly, the treated municipal wastewater can be used for cooling proposed Turkey Point Units 6 and 7

without affecting the ability to meet demands for fresh water. MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444]. Therefore, the NRC staff concluded that the reclaimed water supply is reliable. The review team determined that proposed use of the RCWs as a backup supply of cooling water for short periods of time is likely to have small impacts on groundwater users or on the extent of saltwater intrusion based on the FPL model analysis, USGS modeling analysis, the NRC review team's modeling of the CCS-RCW interaction, and the knowledge that environmental monitoring and potential mitigation measures are required under the COCs imposed by Florida State imposed.

Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply for emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite, and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the NRC staff also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

Comment: Comment 7: The final Environmental Impact Statement must not rely on the FPL or USGS groundwater models. The City echoes Miami-Dade County's concerns related to the area across which the USGS model predicts average salinities over Biscayne Bay. The model should include an analysis that more narrowly focuses on southern Biscayne Bay. The USGS model is too coarse: The broad focus of the USGS model obscures the true potential impacts of operating the radial collector wells in a fragile aguatic ecosystem. The USGS model has inadequate spatial resolution and is inadequately formulated to predict the salinity redistribution at the Turkey Point site that will result from the operation of the radial collector wells. The USGS model is not a new model that was developed to address the response of the Turkey Point site to the operation of the radial collector wells. Rather, the USGS model is a minimally modified previous model (Lohmann et al., 2012) that was originally developed to predict regional groundwater conditions at the county scale and associated Biscayne Bay salinity during 1996-2004. The individual cell sizes in the USGS model are too coarse to adequately resolve the groundwater response to the operation of the radial collector wells on the Turkey Point site. The horizontal dimensions of each cell are 500 m x 500 m (about 0.3 mi x 0.3 mi). Any changes in groundwater conditions on these scales are simply averaged out. Groundwater and salinity variations over these scales cannot be resolved at all, drawdowns near the radial collector wells (expected to be on the order of meters) cannot be determined accurately, the distribution of flow along the radial collector wells cannot be modeled at all, and individual cooling canals cannot be separated. The USGS model does not properly represent the cooling canals: Further, the USGS model does not adequately represent the presence of the cooling canals, which are major hydrologic features at the Turkey Point site. In reality, the water surface elevations in the cooling canals will fluctuate in tandem with the groundwater elevations at the site, and the groundwater elevations will respond to the operation of the radial collector wells. In contrast to this reality, the USGS model represents the water surface

elevations in the cooling canals as having a pre-specified elevation regardless of pumping from the radial collector wells. This approach precludes the model from determining actual water surface elevations in the cooling canals and actual groundwater elevations that will occur on the site in response to operation of the radial collector wells. A review of the USGS model results for the baseline conditions shows that the volume of water withdrawn from the cooling canals is approximately 28% of the volume pumped from the radial collector wells. Although not all of the water leaking from the cooling canals ends up being pumped by the radial collector wells, the upper limit of 28% of the pumpage volume gives further support to the significant influence that the cooling canals have on the geohydrology and underline the need to accurately represent both the cooling canals and the radial collector wells in the model. (**0611-7** [Haber, Matthew S.])

**Response:** The USGS modeled potential impacts of the RCWs on surface water and the Biscayne aquifer using a linked surface water-groundwater model. The key issues related to the grid size employed in the USGS model are whether (1) Biscayne Bay can be treated as well-mixed, (2) the effects of fresh water capture by the RCWs are adequately modeled, and (3) the RCW and IWF are adequately modeled. As described in Appendix G of the draft EIS, the USGS analysis had relatively large grid cells and assumed the surface water (notably Biscayne Bay) to be vertically mixed. The review team determined that because of the shallow depths of Biscayne Bay, particularly near Turkey Point, the vertical mixing assumption was not unreasonable for the examination of potential RCW impacts on salinity in Biscayne Bay. While localized areas of salinity stratification may develop, wind mixing is expected to keep Biscayne Bay well mixed. The analysis used two-dimensional circulation, which is driven in response to wind forcing and tidal elevation boundary conditions. Because of the relatively rapid mixing of Biscayne Bay, the 500 m cell size is also not expected to have a significant effect on the bay salinities predicted by the model.

In regard to freshwater discharge to the Biscayne Bay, the USGS model was applied to assess the potential capture of relatively fresh water from the inland aquifer and the regional canals. The large cell size of the model would tend to conservatively overestimate these effects. As for the RCWs and IWF, the RCWs were represented by four cells in the model, which is adequate to calculate drawdown at the wells and provide volumetric estimates of the sources of water captured by the RCWs. The existing cooling canals associated with Units 3 and 4 were represented as a head boundary in the USGS model with 70 individual cells for the entire extent of the cooling canals. Grid resolution of the USGS model is also adequate to represent the IWF as such a boundary condition. As described in the USGS model report referenced in the draft EIS, the cooling canal head boundary varied over time and was estimated using water-level data collected in the cooling canals and the interceptor ditch during 2008–2009.

The NRC staff determined that the impact of the limited RCW operations on Biscayne Bay salinity would be minor because the effect on salinity of water in the bay would likely be less than the natural observed variation in salinity of the bay. However, uncertainties in the model parameters and configuration, as well as uncertainty in future conditions, such as RCW usage and the magnitude and rate of future sea-level rise, lead to uncertainty in the determination of potential impacts on the salinity of Biscayne Bay. Because of this, the review team did not rely solely on the output of the FPL or USGS models. The review team determined that the proposed monitoring of RCW operations that is included in the COCs is sufficient to detect unexpected impacts on the bay in a timely manner. While all possible mitigation measures are not detailed at this time, in accordance with the COCs, the review team considers the ultimate mitigation of ceasing operation of the RCWs as ensuring prevention of any impacts in a timely

manner. "When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the harm" (FDEP 2014-TN4371).

Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite, and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate for more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the review team also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

Comment: The USGS model baseline is not representative: The USGS model uses as baseline conditions those that occurred in the period 1996-2004, and assesses the impact of the operation of the radial collector wells relative to conditions that existed in this 9-year time period. However, the USGS model report does not demonstrate that the 9-year time period used in the model is representative of more recent hydrologic conditions. Such an analysis is essential to validate applying the model results to the future hydrologic environment in which the radial collectors will likely be operating. This validation could have been done by showing that groundwater levels in a more recent 9-year time period is statistically indistinguishable from the 1996-2004 period. Statistical analyses performed on groundwater elevations near the site, at wells G-1183 and G-3356 using the t-test for population differences, show that wet-season and annual groundwater fluctuations in the 9-year period of 2005-2013 are statistically different at the 90% confidence level from the fluctuations in the 1996-2004 baseline period. Chin, D.A., 2013, Water Quality Engineering in Natural Systems, Second Edition, Wiley, Hoboken, New Jersey. Hence, the validity of using 1996-2004 conditions as a baseline for assessing the impact of the radial collector wells at the Turkey Point site is questionable. In addition, the USGS report does not compare the more recent salinity fluctuations (e.g., 2005-2013) to the 1996-2004 salinity fluctuations to establish that the assumed baseline salinities are representative of current or future baseline conditions. Further, the USGS model shows that the 19962004 discharges from the Mowry Canal can significantly affect the salinities in the area of Biscayne Bay that recharges the radial collector wells, yet there is no demonstration that the quantity and timing of the Mowry Canal discharges used in the model are representative of later (e.g., 2005-2013) or even future conditions. This particular issue is important because, as reported by USGS, the radial collector wells could withdraw sufficient fresh canal-discharge water so as to lead to significantly increased salinities in Biscayne Bay, which would otherwise be the recipient of this fresh water. (0611-8 [Haber, Matthew S.])

**Comment:** Limitations of the USGS model: Aside from the aforementioned flaws with the USGS model, there are several other model limitations each of which could negatively impact the accuracy of the model. These limitations include: (1) The use of the 1-year (20082009) correlation between water levels in the L-31E canal and the cooling canals to establish the elevations in the cooling canals without demonstrating that this correlation does not vary temporally or even recognizing that this correlation will almost certainly be different when the radial collector wells are in operation; (2) artificially limiting the leakage rates from the cooling canals; (3) assigning the same salinity to all cooling canals and setting the salinity based on

data available before 2011; and (4) adding cooling canals to the model without recalibrating the model, especially at the Turkey Point site, to account for the presence of the cooling canals. Given the strong influence of the cooling canals on the salinity of the underlying groundwater the Turkey Point site, it is particularly important that the cooling canals be modeled accurately. Key model limitations explicitly self-reported by USGS (Lohmann, 2014) are: (1) the discretization of the model may be too coarse to accurately represent characteristics of interest for potential groundwater pumping in the Turkey Point area; (2) the model simulates the surface water as a single layer with a single salinity value, effectively representing it as completely mixed column water, which is not realistic in the coastal zone, (3) the size of the model cells, 500 m by 500 m, is too large to accurately represent the individual cooling canals (4) spatial averaging may result in more subdued effects than would be simulated at a finer scale, (5) to estimate and evaluate the water sources for the radial collector wells more fully, finer spatial discretization and additional evaluation tools, such as particle tracking, are needed, (6) the model period represents a recent 9-yr period with limited variability of hydrologic conditions, and (7) in order to fully represent the effects of the radial collector wells on the system, additional simulations of extreme dry periods, wet periods, sea-level rises, and effects from regional restoration efforts would need to be evaluated. Given all of the aforementioned limitations of the USGS model, it is apparent that the salinity of the cooling canals at the FPL industrial wastewater facility will exert a significant influence on the salinity distribution and groundwater flow that will occur in response to the operation of the radial collector wells. Further, since the USGS model is not able to accurately resolve the spatial variations in salinity and groundwater flows at the Turkey Point site, and the USGS model does not demonstrate that 1996-2004 baseline conditions adequately represents the conditions under which the radial collector wells are likely to operate (and noting that groundwater levels in 2005-2013 were significantly different than in 1996-2004) it must be concluded that the salinity effects of the cooling canals in the Turkey Point site are not adequately represented in the USGS model. (0611-9 [Haber, Matthew S.])

**Response:** The purpose of the USGS model calculations was to predict the approximate magnitude of changes in hydraulic head and salinity in the shallow aquifer, and predict changes in the distribution of bay salinity that are likely to be caused by building and operating the proposed plants. The baseline of the USGS model based on conditions from 1996 to 2004 has changed, and the baseline would also change in the several years between 2015 and the time plant operation could begin. However, the purpose of the USGS model analyses is to understand changes that would occur because of building and operation the proposed plants. These changes from the baseline caused by the proposed units are not expected to be significantly altered because of different baselines that are caused by external factors such as weather or ongoing seepage from the IWF. Discharges from the Mowry Canal also change based on weather patterns and canal management practices and these variations could affect the salinity distributions in Biscayne Bay. However, these potential changes in baseline are not expected to result in significant changes in the impacts from excavation dewatering during plant construction or from limited operation of the RCWs (radial collector wells) as a backup water supply.

Based on the expected reliability of the primary reclaimed water source, the RCWs would likely operate less than the 60 days per year permitted under the Florida State COCs (Conditions of Certification). The NRC staff determined that the impact of the limited RCW operations on the Biscayne Bay salinity would be minor because the effect on the salinity of water in the bay would likely be less than the natural observed variation in the salinity of the bay. However, uncertainties in the model parameters and configuration, as well as uncertainty in future conditions, such as RCW usage and the magnitude and rate of future sea level rise, lead to

uncertainty in the determination of potential impacts on the salinity of Biscayne Bay. Because of these uncertainties, the review team did not rely solely on the output of the FPL or USGS models. The review team determined that the proposed monitoring of RCW operations that is included in the COCs is sufficient to detect unexpected impacts on the bay in a timely manner. While all possible mitigation measures are not detailed at this time, in accordance with the COCs, the review team considers the ultimate mitigation of ceasing operation of the RCWs as ensuring prevention of any impacts in a timely manner. "When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the harm" (FDEP 2014-TN4371).

Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the review team also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

Comment: The USGS model inaccurately represents the water pumped by the radial collector wells: Ultimately, the USGS model is not capable of determining what percentage of the water pumped from the radial collector wells is derived from the FPL industrial wastewater facility. This percentage is relevant because the industrial wastewater facility is the primary source of hypersaline water to the Biscayne Aquifer. Therefore, it has the potential to significantly affect the distribution of salinity in the groundwater that will result from the operation of the radial collector wells. The final Environmental Impact Statement should include an updated groundwater model to account for sea-level rise over the radial collector well system's operating life and address: •The possibility that flushing the FPL industrial wastewater facility with additional water from the L-31E canal (in a manner that does not prevent evaporation or the resulting salinity increases) will push saltier water underground, •The effect on the inland aquifer of seawater releases from the radial collector wells into the FPL industrial wastewater facility, and •The potential for increased salinity levels in the inland aquifer resulting from future sealevel rise and storm surge hazards at the Turkey Point site, as well as the effects of this increased salinity on South Florida's freshwater resources. The decision of the Nuclear Regulatory Commission, and cooperating agencies, of whether or not to approve the Turkey Point Nuclear Plant Units 6 & 7 application will likely rely on the findings of the USGS groundwater model. Due to the limitations of this model and the availability of more accurate data, NEPA requires that the final Environmental Impact Statement, or a Supplemental Environment Impact Statement, provide a more careful representation of the effects of the radial collector well system on the surrounding environment. (0611-10 [Haber, Matthew S.])

**Response:** The purpose of modeling presented in the draft EIS is to understand changes in the environment that would occur because of construction and operation of the proposed plants. The cooling canals and associated hypersaline plume are part of the expected background environment of the proposed plants. There is no plan for "releases from the radial collector wells into the FPL industrial wastewater facility" that is mentioned in the

comment. Rather, the water from the RCWs would be used to cool the plant only when the primary reclaimed water source is not available, and the water remaining after that function is accomplished would be injected into the Boulder Zone.

After publication of the draft EIS, the review team performed additional groundwater modeling of the interaction between the planned RCWs, the existing hypersaline plume, and the cooling canals using a two-dimensional cross section model and a limited-extent three-dimensional model that accounted for variable density fluids. These simulations were performed to better understand the effects of RCW pumping on the existing hypersaline plume from the Units 3 and 4 cooling canals and resulting impacts to the salinity of the Biscayne aquifer. Planned remediation of the hypersaline and predicted sea level rise were also simulated. The results of this additional modeling have been added to the EIS. The addition of "freshening water" to the IWF from L-31E Canal or other sources is not related to the building or operation of the proposed plants, but is a potential change in the environmental baseline conditions. However, the review team determined that the very small head increases in the IWF would result in minor changes in the amount of salt or other constituents seeping into the aquifer from the IWF.

## Comment: 1) Water Modeling

Numerous DEIS assessments rely upon coarse-scale hydrologic models, whose scale and extent were too large to adequately determine localized environmental effects of the proposed action on NPS resources. Although the models utilized by the NRC answered some questions related to the effect of the proposed action on the regional hydro logic system, the scale of the model used by the NRC in conducting its impact assessment is not fine enough to effectively evaluate impacts to NPS resources located with portions of Biscayne NP from the removal or moderation of freshwater along the shoreline of the park, the removal of water within the park through groundwater withdrawal at the RCWs, and the potential for direct adverse impacts at the site of withdrawal on seagrass beds and seagrass faunal and benthic communities. The DEIS recognizes that each of the models used to evaluate the effects of the Unit 6 and 7 construction and operation (especially RCW operation) has shortcomings that result in significant uncertainty in the modeling results. In part, this limitation stems from model calibration, with crucial data being derived from a single, seven-day Aquifer Performance Test. During this non-replicated, short-term test, pumping rates were less than 10% of that proposed for the RCW and some monitoring equipment failures occurred. Given the variability of watershed and marine hydrologic conditions, additional tests were needed in order to better calibrate models and produce sufficiently accurate simulations.

The DEIS was informed by two hydrologic models developed by Florida Power and Light (FPL) and the U.S. Geological Survey (USGS):

## FPL Model

The FPL model is a local (fine) scale, constant density groundwater model. Given the wide range of water body densities in the region (including low density freshwater, mesohaline-marine bay water, and hypersaline Industrial Wastewater Facility (IWF) water), this model could not simulate the effect of proposed Unit 6 and 7 construction and operations on saltwater movement in the Biscayne Aquifer, salinity in Biscayne Bay, and regional surface-water and groundwater levels. Consequently, the NRC commissioned additional modeling by the USGS.

## USGS Model

The USGS model is a regional model, with a model grid too coarse to accurately simulate conditions within and under the IWF or adjacent to the RCWs. The model's accompanying report identified limitations that included: 1) the sizing of the model cells in 500 x 500 grids; 2) simulating surface water as a single layer with a single salinity value; and 3) an inability of the model to track the ultimate sources of water that flow to the RCWs. The report recommended that finer spatial discretization and additional evaluation tools, such as particle tracking, were needed to estimate and evaluate RCW water sources, and that additional simulations of extreme dry periods, wet periods, and effects from regional restoration efforts were needed in order to fully represent RCW effects on the system.

This model utilized calibration data from 1997-2004; however, newer groundwater data is available that would improve model calibration and validation. This data includes: - Salinity, temperature, and depth data collected at 15-minute intervals as part of the NPS salinity monitoring network. - Data from South Florida Water Management District (SFWMD) Comprehensive Everglades Restoration Plan (CERP) wells in the area. - Conductivity, temperature, and depth data collected hourly as part of the Turkey Point Units 3 and 4 Uprate Monitoring efforts.

These data show that average values do not represent the conditions that most affect biota in Biscayne Bay, which is better represented by finer scale hourly to daily salinity and temperature values. The modeling used to evaluate impacts from the RCWs would be improved to the appropriate scale for the necessary applications by calibrating with the available 15 minute salinity data from the Bay. The groundwater model would be improved if it used data for calibration and validation from groundwater wells installed as part of the Turkey Point Units 3 & 4 Uprate Monitoring which would improve the ability of the model to more accurately predict the effects of the proposed action on adjacent natural resources. These wells are located at shallow medium and deep locations in the Biscayne Aquifer. They are numbered 1-15 and are located through the model domain from just west of US highway 1 to three clusters located in Biscayne Bay (10, 14, 15). They provide hourly data for conductivity temperature and depth. Empirical findings from past work, such as the distribution and trends of tritium concentrations, have established that IWF waters are found in near-surface shallow groundwater (25 to 30 ft. deep) in wetlands adjacent to Biscavne Bay (Figure 1 [Tritium concentration time series in IWF well monitoring clusters showing increasing trends]). The NPS is concerned that since this is the same depth at which RCW intake pipes are expected to be located, that it is possible for IWF water to impact resources within Biscayne National Park (NP).

The NPS recommends that the NRC utilize improved model extent, model scale, and model calibration to accurately evaluate the appropriate spatial extent of these potential impacts to better characterize operations of the RCWs and the relative localized impacts of resulting movement of the hypersaline plume on surface waters and ground waters in the park and under the IWF, as well as the relative effects of sea-level rise on operations of the RCW system. This improved analysis will provide better information as to the effect of the proposed action in terms of changes in salinity and other impacts to near shore resources that occur within Biscayne NP in the vicinity of the RCWs. (0622-1-2 [Austin, Stan])

**Comment:** Hydrologic Modeling[.] The NPS is concerned that numerous assessments in the DEIS rely upon hydrologic models, whose scale and extent were too large to adequately determine localized environmental effects of the proposed action on NPS resources. Although the model utilized by the NRC answered some questions related to the effect of the proposed action on the regional hydrologic system, the scale of the model used by the NRC in conducting its impact assessment is not fine enough to effectively evaluate impacts to NPS resources

located with portions of Biscayne NP from the removal or moderation of freshwater along the shoreline of the park, the removal of water within the park through groundwater withdrawal at the RCW s, and the potential for direct adverse impacts at the site of withdrawal on seagrass beds and seagrass faunal and benthic communities. The NRC should utilize newer data available from NPS and the South Florida Water Management District to improve the extent, scale, and calibration of the models to accurately evaluate the appropriate spatial extent of these potential impacts on park resources. Furthermore, the model should better characterize operations of the RCWs and the relative localized impacts of the resulting movement of the hypersaline plume that presently exists from the operation of the Industrial Wastewater Facility (IWF or cooling canals) used to cool the existing facility on surface and ground waters, as well as the relative effects of sea-level rise on operations of the RCW system. (0623-2 [Austin, Stan])

**Comment:** The NPS asserts that the DEIS impact analysis associated with construction and operation of proposed Units 6 and 7 does not sufficiently address issues related to the environmental impacts of the proposed action on resources managed by the NPS. Based on our review of the DEIS, we have strong concerns that impact analysis described in the DEIS does not:...acknowledge scientific uncertainty associated with the effects of certain elements of the proposed action, including the use of groundwater collected from the RCWs on the resources of Biscayne NP[.] (0623-8 [Austin, Stan])

**Response:** The purpose of the modeling presented in the draft EIS is to understand potential changes in the environment that could occur because of construction and operation of proposed Units 6 and 7. The cooling canals and associated hypersaline plume are part of the background environment of the proposed plants. Three different groundwater models were used to evaluate different aspects of the RCW (radial collector well) pumping effects. FPL's groundwater model, documented in the Final Safety Analysis Report (FSAR), had a sufficiently small cell size to simulate the local effects of the RCW pumping on the aquifer and identify the likely sources of water that would be captured by the RCWs. This model provided valuable information about the sources of water captured by the RCWs and about the hydraulic head changes (drawdown) that could be expected. However, the FPL model did not account for the effects of variable density fluids that are caused by salinity and temperature differences.

The USGS modeling was performed to evaluate the effects of variable density fluids on the model results. Although the USGS model cells were too large to simulate conditions at a small scale, this model provided valuable information about larger-scale groundwater salinity changes expected in areas affected by the hypersaline plume and areas farther inland. It also was useful in predicting the potential for RCW capture of water from the drainage canals, which reduces the amount of fresh water entering the bay from the canals. The review team is aware of Biscayne Bay salinity and temperature data available from the NPS salinity monitoring network and data available from the SFWMD and the Turkey Point Units 3 and 4 Uprate Monitoring. These data sets were used in the draft EIS descriptions of the site surface water and groundwater.

After publication of the draft EIS, the review team used a third model—the RTF (Review Team Focused model)—to perform additional groundwater modeling of the interaction between the planned RCWs, the existing hypersaline plume, and the cooling canals. This third model included a two-dimensional cross-section model and a limited-extent three-dimensional model. The review team used the RTF model to perform simulations to better understand how the existing hypersaline plume may be affected by RCW pumping combined with remediation actions recently stipulated in a consent agreement between FPL and Miami Dade County. The RTF model was useful in showing salinity changes that occur in the aquifer near the RCWs

when the wells are operated. The results showed that when the wells are not operating, hypersaline water from the cooling canals is present in the high-permeability zone where the well laterals are installed. This saline water is drawn into the wells during the first few days of RCW pumping, resulting in increasing, then decreasing salinity at the well. The RTF model predicts that the salinity of the water produced by the operating RCW eventually drops to about the concentration of the bay water. Water flowing down through the bed of the bay and into the RCWs is therefore expected to have about the same salinity as bay water. When RCW pumping ceases, water in the high-permeability zone again increases in salinity because of the migration of water from the hypersaline plume. This migration of hypersaline water into the high-permeability zone would occur regardless of the presence of the RCWs.

Predicted future change is sea level and its effect on interactions between the RCWs and the hypersaline plume were also simulated. The additional modeling confirmed that pumping of the RCWs would move hypersaline water toward the RCWs and would remove some groundwater captured by the RCWs from the hypersaline plume region of the Biscayne aquifer. The model also indicated that RCWs pumping is not likely to reduce the effectiveness of hypersaline plume remediation actions specified in the consent agreement.

Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs. A very large volume of treated municipal wastewater is available for this purpose, but the treated wastewater is not suitable for normal uses of freshwater, such as for drinking or agriculture. Accordingly, the treated municipal wastewater can be used for cooling proposed Turkey Point Units 6 and 7 without affecting the ability to meet demands for fresh water. Miami Dade Water and Sewer Department is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444]. Therefore, it is likely that the RCWs would be used less than the 60 days per year permitted under the COCs. Based on the modeling efforts described in the draft EIS, more than 90 percent of the water pumped when the RCWs are operating is expected to come from Biscayne Bay, and small amounts would come from the hypersaline plume beneath the cooling canals, the inland part of the Biscayne aquifer, and the drainage canals. The models described above predicted that limited pumping of the RCWs as a backup water supply for less than 60 days per year would not result in a significant change in the extent of salt water intrusion or to reduce the flow of relatively fresh water into Biscayne Bay compared to the variability that occurs under current conditions.

The review team recognizes that complete knowledge of the hydrologic system associated with the RCWs is not now available, and that uncertainties therefore remain in the impact analysis. A vast number of future scenarios are plausible. The sources of uncertainty in the RCW analysis include: heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the potential need for using the backup water supply. The aquifer performance test used a pumping rate designed to create enough stress in the aquifer for measurable drawdown at the observation wells and estimate aquifer flow parameters. Repeating the test would not have produced significantly different results. Uncertainties in the future site environment include: freshening of IWF cooling canals, remediation of the subsurface hypersaline plume, and the magnitude and rate of future sealevel rise. The determinations in this EIS related to groundwater are based on the FPL numerical model analysis, the USGS model analysis, the review team's independent numerical modeling analysis, and the review team's knowledge and expertise. The conceptual models that served as the basis for the numerical models are based on available characterization information for the Turkey Point site and surrounding region. Uncertainties in the information and conceptual model were addressed in some cases by performing multiple model runs while varying key parameters in the model and in other cases by using conservative parameter values. However, uncertainties remain that do not allow the review team to assert that no other conceptual models that may result in more adverse impacts from RCW operation are plausible. Heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the future site environment (e.g., freshening of IWF, remediation of subsurface hypersaline plume, sea-level rise) all warrant the review team to exercise care to avoid relying on numerical models alone. Because of this, the review team does not rely solely on the output of any numerical model.

Numerical models are numerical representations of complex processes occurring in three dimensions over time. The appropriate role of a numerical model is to test assumptions of the behavior of complex systems. While even running a numerical model numerous times with different parameters cannot compensate for all uncertainties, the models employed here have been tested and benchmarked within the conditions that limit their application. In this assessment, the review team used models to test possible consequences of changes in the affected environment and uncertainty in some subsurface parameters within the capability of the models employed. This information was combined with the geography of the RCW field (such as the relatively short distance from the laterals to the bottom of Biscayne Bay relative to the distance from the laterals to the Homestead well fields) and the COC requirement of a monitoring program with mitigation options. The review team determined that the proposed monitoring of RCW construction and operation that is included is sufficient to detect unexpected behavior in a timely manner. While all possible mitigation measures have not yet been spelled out, in accordance with the COC, the review team considers the ultimate mitigation of ceasing operation of the RCWs as ensuring prevention of any impacts in a timely manner. "When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the harm" (FDEP 2014-TN4371).

Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the review team also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

**Comment:** Analysis of Impacts to Comprehensive Everglades Restoration Plan (CERP) **Projects and the Biscayne Bay Coastal Wetlands (BBCW) Project[.]** One of the goals of the CERP is to increase freshwater flow to Biscayne NP to achieve more natural hydrologic conditions within the park that has been negatively impacted by implementation of the regional water supply and flood control project. Given the lack of specific localized information regarding the effect of the RCW s on nearshore salinity levels, the NPS disagrees with NRC's conclusion that the proposed action would have minimal effect on CERP and Phase 1 of the BBCW project. NPS remains concerned that the cumulative impacts resulting from this project could potentially negate current or potentially future efforts to increase freshwater flows to rehydrate wetlands and reduce point source pollution discharge into Biscayne NP and Biscayne Bay. A second phase of the BBCW project remains to be planned and authorized, but is reflected in overall salinity restoration target goals for the park. Detailed review of modeling results from the DEIS analysis show a potential for impacts to groundwater sources for CERP, as well as movement of the groundwater masses related to RCW operations. The BBCW Project Phase 1, which is intended to redistribute existing freshwater flows to Biscayne NP, is now entering the construction phase with operation to shortly follow. (0623-6 [Austin, Stan])

Response: In Section 7.1, the draft EIS states "The primary surface-water use plan that could potentially be affected by Turkey Point Units 6 and 7 is the CERP (Comprehensive Everglades Restoration Program) (USACE 2010-TN113) and its component Biscayne Bay Wetlands Restoration Project (USACE/SFWMD 2011-TN1038)." The review team acknowledges that some freshwater entering Biscayne Bay, including additional water inputs facilitated by CERP projects could be captured by the RCWs when they are operating. However, a very large volume of treated municipal wastewater is available for this purpose, but the treated wastewater is not suitable for normal uses of freshwater, such as for drinking or agriculture. Accordingly, the treated municipal wastewater can be used for cooling proposed Turkey Point Units 6 and 7 without affecting the ability to meet demands for freshwater. MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444]. The RCWs are likely to be used less than the 60 days per year permitted under the Florida State COCs. The review team also relies on the COC requirement for a monitoring program with mitigation options. The review team determined that the proposed monitoring of RCW construction and operation that is included is sufficient to detect unexpected behavior in a timely manner. While all possible mitigation measures are not detailed at this time, in accordance with the COC, the review team considers the ultimate mitigation of ceasing operation of the RCWs as ensuring prevention of any impacts in a timely manner. "When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the harm" (FDEP 2014-TN4371)

Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the review team also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water. **Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 2.3.4.2, Page 2-71, Lines 10-12 "Each pair included a well completed in the Miami Limestone/Key Largo Limestone at depths...from **14 to 28 ft** and a well completed in the Fort Thompson Formation at depths...from **85 to 110 ft**..." ER Subsection 2.3.1.2.1.4 "Ten observation well pairs...completed to depths...from **24 to 110 feet bgs**...installed in the Miami Limestone/Key Largo Limestone and the Fort Thompson Formation." (**0619-2-20** [Maher, William])

**Response:** According to ER Table 2.3-14 the open interval range for the shallow wells is 14–28 ft bgs and the open interval range for the lower wells is 85–110 ft bgs. Accordingly, the draft EIS and ER appear consistent, and the review team made no changes to the EIS.

**Comment:** So the continued operation of Turkey Point 3 and 4 has the capacity to further relocate the hypersaline plume. So I think the Impact Statement is incomplete in that it makes no analyses of the effects of possible entrainment of the hypersaline plume and the likely resulting consequence for the demand on water from other sources --such as fresh water from the L-31-E canal -- if the radial collector well system is tainted with hypersaline plume. (0721-2-3 [Stoddard, Philip K.])

**Response:** As described in the draft EIS, seepage of hypersaline water from the CCS (coolingcanal system) associated with the existing Turkey Point Units 3 and 4 has resulted in areas of groundwater salinity higher than seawater near the CCS. This is part of the existing environment for the proposed Units 6 and 7. After publication of the draft EIS, the review team performed additional groundwater modeling of the interaction between the planned RCWs (radial collector wells), the existing hypersaline plume, and the cooling canals using a twodimensional cross section model and a limited-extent three-dimensional model called the Review Team Focused (RTF) model.

These simulations were performed to better understand the effects of RCW pumping on salinity in the aquifer beneath the bay combined with the existing hypersaline plume from the Unit 3 and 4 cooling canals and planned remediation actions. This model was useful in showing salinity changes that occur in the aquifer near the RCWs when the wells are operated. The results showed that when the wells are not operating, hypersaline water from the cooling canals is present in the high permeability zone where the well laterals are installed. This saline water is drawn into the wells during the first few days of RCW pumping, resulting in increasing, then decreasing salinity at the well. The RTF model predicts that the salinity of the water produced by the operating RCW eventually drops to about the concentration of the bay water. Water flowing down through the bed of the bay and into the RCWs is therefore expected to have about the same salinity as bay water. When RCW pumping ceases, water in the high permeability zone again increases in salinity because of the migration of water from the hypersaline plume. This migration of hypersaline water into the high-permeability zone would occur regardless of the presence of the RCWs.

Predicted future change in sea level and its effect on interactions between the RCWs and the hypersaline plume were also simulated. The additional modeling confirmed that pumping of the RCWs would move hypersaline water toward the RCWs and would remove some groundwater captured by the RCWs from the hypersaline plume region of the Biscayne aquifer. The model also indicated that RCWs pumping is not likely to reduce the effectiveness of hypersaline plume remediation actions specified in the consent order between FPL and Miami Dade County. Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum

of 60 days per year that is permitted under the Florida State COCs. There is a very large volume of treated municipal wastewater available for this purpose, but the treated wastewater is not suitable for normal uses of fresh water, such as for drinking or agriculture. Accordingly, the treated municipal wastewater can be used for cooling for proposed Turkey Point Units 6 and 7 without affecting the ability to meet demands for fresh water. MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan, Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444]. Therefore, the NRC staff concluded that the reclaimed water supply is reliable and use of the RCWs for short periods of time is likely to have small impacts on groundwater users or on the extent of saltwater intrusion based on the FPL model analysis. USGS modeling analysis, the NRC review team's modeling of the CCS-RCW interaction, and the knowledge that environmental monitoring and potential mitigation measures are required under the COCs imposed by Florida State. Therefore, it is likely that the RCWs would be used less than the 60 days per year permitted under the COCs. Based on the review teams analysis, there is no reason to expect that building and operating the proposed plants would increase the impacts of the existing hypersaline plume or lead to additional demand for water from the L-31E Canal.

**Comment:** The current determination that there would not be an environmental problem with the proposed radial collector wells as long as they were not used more than 60 days per year. The current emergency use of Aquifer water has certainly gone far beyond any length of time imagined, and in fact is proposed to be used for at another two year, drawing 100 million gallons of water every single day. Thus the draft statement fails to comprehensively address the long term viability of providing fresh water to the plant as a backup to the reuse water. The potable drinking water resource for 2.5 million residents of Miami Dade County will be in competition for water drawn from the aquifer for the voraciously thirsty nuclear plants. (0145-10 [Lerner, Cindy])

Response: Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs. A very large volume of treated municipal wastewater is available for this purpose, but the treated wastewater is not suitable for normal uses of freshwater, such as for drinking or agriculture. Accordingly, the treated municipal wastewater can be used for cooling proposed Turkey Point Units 6 and 7 without affecting the ability to meet demands for freshwater. The MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan, Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444]. Therefore, the NRC staff concluded that the reclaimed-water supply is reliable and use of the RCWs for short periods of time is likely to have small impacts on groundwater users or on the extent of saltwater intrusion based on the FPL model analysis. USGS modeling analysis, the NRC review team's modeling of the CCS-RCW interaction, and the knowledge that environmental monitoring and potential mitigation measures are required under the COCs imposed by Florida State

Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the NRC staff also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

**Comment:** The potential for interactions between the operations of the radial collector wells and the hypersaline plume leads to inherent risks and potential environmental impacts that are not adequately addressed in the DEIS. The construction and operation of Units 6 & 7 will likely increase the input of materials into the CCS, altering the concentrations of dissolved contaminants. Interactions between radial collector wells and CCS waters could result in the transport of contaminants and nutrients into underground waters that are connected with the waters of Biscayne Bay, potentially causing algal blooms and indirect threats to its ecological health and sustainability. [Footnote 27: West, B. United States Department of the Interior, National Park Service Letter to A. Williamson, U.S. Nuclear Regulatory Commission, November 25, 2014, SER PC, 6-8. ]The DEIS must analyze and review monitoring information regarding contaminants of environmental concern, such as salinity, nutrients, metals, and sulfate. (**0113-2-4** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** As discussed in the draft EIS, the combined impacts of the planned discharge of groundwater from excavation dewatering and stormwater to the CCS while building the plants, and the chemical inputs to the Units 3 and 4 cooling canal system (CCS) from muck spoils runoff and cooling-tower drift are expected to cause minor changes in the water levels or chemistry of the CCS. Potential changes in nitrate concentration from muck runoff are presented in the draft EIS. Water from the CCS does seep into the Biscayne aquifer below the CCS beneath the site, as it has for decades. However, this seepage is not a result of planned Units 6 and 7, and the draft EIS analysis shows that the effects of the expected volume and concentration of the seepage from the CCS to the underlying portion of the Biscayne aquifer is not expected to have a noticeable impact on the quality of groundwater in the areas of the Biscayne aquifer that meet USDW criteria for TDS.

After publication of the draft EIS, the review team performed additional groundwater modeling of the interaction between the planned RCWs, the existing hypersaline plume, and the cooling canals using a two-dimensional cross-section model and a limited-extent three-dimensional model. The review team used the RTF (Review Team Focused) model, to perform simulations to better understand the effects of RCW pumping on salinity in the aquifer beneath the bay combined with the existing hypersaline plume from the Units 3 and 4 cooling canals and planned remediation actions.

The RTF model was useful in showing salinity changes that occur in the aquifer near the RCWs when the wells are operated. The results showed that when the wells are not operating hypersaline water from the cooling canals is present in the high-permeability zone where the well laterals are installed. This saline water is drawn into the wells during the first few days of RCW pumping, resulting in increasing, then decreasing, salinity at the well. The RTF model predicts that the salinity of the water produced by the operating RCW eventually drops to about the concentration of the bay water. Water flowing down through the bed of the bay and into the

RCWs is therefore expected to have about the same salinity as bay water. When RCW pumping ceases, water in the high-permeability zone again increases in salinity because of the migration of water from the hypersaline plume. This migration of hypersaline water into the high-permeability zone would occur regardless of the presence of the RCWs. Predicted future change is sea level and its effect on interactions between the RCWs and the hypersaline plume were also simulated. The additional modeling confirmed that pumping of the RCWs would move hypersaline water toward the RCWs and would remove some groundwater captured by the RCWs from the hypersaline plume region of the Biscayne aquifer. The model also indicated that RCWs pumping is not likely to reduce the effectiveness of hypersaline plume remediation actions specified in the consent order between FPL and Miami Dade County. Migration of metals and of nutrients from the cooling canals toward Biscayne Bay could occur when the RCWs are operated and then turned off. The constituents would tend to be removed from the aquifer and captured by the RCWs while they are operating. The concentration change of these constituents in the aguifer beneath the bay are expected to be proportional to salinity changes that were simulated in the additional limited 3D modeling. As described in the EIS, the salinity changes are small and would be further diluted and dispersed by water in the bay. It is unlikely that the very small mass of nutrients moving into the bay by this mechanism would contribute to algal blooms or increase concentration of metals by a noticeable degree.

Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs. A very large volume of treated municipal wastewater is available for this purpose, but the treated wastewater is not suitable for normal uses of freshwater, such as for drinking or agriculture. Accordingly, the treated municipal wastewater can be used as cooling water for proposed Turkey Point Units 6 and 7 without affecting the ability to meet demands for freshwater. MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan, Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444]. Therefore, the NRC staff concluded that the reclaimed-water supply is reliable and use of the RCWs for short periods of time would be likely to have small impacts on groundwater users or on the extent of saltwater intrusion based on the FPL model analysis, USGS modeling analysis, the NRC review team's modeling of the CCS-RCW interaction, and the knowledge that environmental monitoring and potential mitigation measures are required under the COCs imposed by Florida State. Therefore, it is likely that the RCWs would be used less than the 60 days per year permitted under the COCs.

Based on the modeling efforts described in the draft EIS, more than 90 percent of the water pumped when the RCWs are operating is expected to come from Biscayne Bay and small amounts would come from the hypersaline plume beneath the cooling canals, the inland part of the Biscayne aquifer, and the drainage canals. The models described above provided evidence that limited pumping of the RCWs as a backup water supply (less than 60 days per year) is unlikely to cause a noticeable change in the existing extent of saltwater intrusion or to reduce the flow of relatively freshwater into Biscayne Bay compared to the variability that occurs under current conditions. Dissolved nutrients and metals that may migrate from the CCS to the Biscayne aquifer would be approximately proportional to the modeled salinity movement and would not result in significant changes in the bay.

The review team recognizes that complete knowledge of the hydrologic system associated with the RCWs is not now available, and that uncertainties therefore remain in the impact

analysis. A vast number of future scenarios are plausible. The sources of uncertainty in the RCW analysis include heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the potential need for using the backup water supply. Uncertainties in the future site environment include freshening of IWF cooling canals, remediation of the subsurface hypersaline plume, and the magnitude and rate of future sea-level rise.

The determinations in this EIS related to groundwater are based on the FPL numerical model analysis, the USGS model analysis, the review team's independent numerical modeling analysis, and the review team's knowledge and expertise. The conceptual models that served as the basis for the numerical models are based on available characterization information for the Turkey Point site and surrounding region. Uncertainties in the information and conceptual model were addressed in some cases by performing multiple model runs while varying key parameters in the model and in other cases by using conservative parameter values. However, uncertainties remain that do not allow the review team to assert that no other conceptual models that may result in more adverse impacts from RCW operation are plausible. Heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the future site environment (e.g., freshening of IWF, remediation of subsurface hypersaline plume, sea-level rise) all warrant the review team to exercise care to avoid relying on numerical models alone. Because of this, the review team does not rely solely on the output of any numerical model.

Numerical models are numerical representations of complex processes occurring in three dimensions over time. The appropriate role of a numerical model is to test the assumptions of the behavior of complex systems. While even running a numerical model numerous times with different parameters cannot compensate for all uncertainties, the models employed here have been tested and benchmarked within the conditions that limit their application. In this assessment the review team analysts used models to test possible consequences of changes in the affected environment and uncertainty in some subsurface parameters within the capability of the models employed. This information was combined with the geography of the RCW field (such as the relatively short distance from the laterals to the bottom of Biscayne Bay relative to the distance from the laterals to the Homestead well fields) and the COC requirement of a monitoring program with mitigation options. The review team determined that the proposed monitoring of RCW construction and operation that is included is sufficient to detect unexpected behavior in a timely manner. While all possible mitigation measures have not yet been spelled out at this time, in accordance with the COC, the review team considers the ultimate mitigation of ceasing operation of the RCWs as ensuring prevention of any impacts in a timely manner. "When harm occurs, or is imminent, SFWMD would require Licensee to modify withdrawal rates or mitigate the harm" (FDEP 2014-TN4371).

Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply for emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the review team also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

**Comment:** As the NRC awaits the NEPA required studies, including this Draft EIS Statement and the final safety analysis, we have found that there are still significant environmental impacts that must be addressed. In reviewing the EIS on behalf of our residents --not only our residents but all of Southeast Florida we have several major concerns. The first of which is the major impact these plants will have on our water supply in the Biscayne aquifer. FPL's proposing using millions of gallons of reclaimed wastewater as the primary source of cooling for the two nuclear reactors. However, the discharge of the wastewater will still have an adverse impact on our groundwater. We've seen that the theory that went into the use of the cooling canals has fallen to pieces because it is completely dysfunctional. They are now requesting up to 100 million gallons a day for the next two years. When we guestioned this morning, at the Government to Government session with the individuals conducting the study, whether they were incorporating the current crisis we see we are facing because we are now in competition with a very voraciously thirsty nuclear power plant for our source of drinking water. That issue is not being considered in the current EIS because these problems came to the forefront as they were concluding this EIS. So when we asked, will there be a supplemental Environmental Impact Statement where you do address what we are currently experiencing and have no way of knowing how long this could go on, it could go on indefinitely? We didn't get a clear answer, that there will be a supplement Environmental Impact Statement. And when we asked, how do you make a cumulative and thorough analysis without relying on the current crisis, we did not get a sufficient answer. (0721-3-2 [Lerner, Cindy])

**Response:** Water in the Biscayne aquifer in the vicinity of Turkey Point has elevated salinity and TDS above USDW standards because of saltwater intrusion from the sea and cannot be used as a drinking water source without treatment. In South Florida, the amount of saltwater intrusion has increased over the past several decades because of the drainage of wetlands and groundwater pumping in inland areas, which is unrelated to operations at Turkey Point. Seepage of hypersaline water from the CCS (cooling-canal system) associated with existing Turkey Point Units 3 and 4 has also resulted in areas of groundwater salinity higher than seawater near the CCS.

As discussed in the draft EIS, only the RCWs (radial collector wells), planned as a backup cooling-water source, and limited inputs to the CCS while building the plants are expected to have any potential impact on the salinity of groundwater in the Biscayne aquifer. As discussed in the draft EIS, the combined impacts of the planned discharge of groundwater from excavation dewatering and stormwater to the CCS while building the plants, and the chemical inputs to the CCS from muck spoils runoff and cooling-tower drift, are expected to cause minor changes in the water levels, salinity, or other chemical concentrations of the CCS. As stated in the draft EIS, saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs.

A very large volume of treated municipal wastewater is available for this purpose, but the treated wastewater is not suitable for normal uses of freshwater, such as for drinking or agriculture. Accordingly, the treated municipal wastewater can be used for cooling proposed Turkey Point Units 6 and 7 without affecting the ability to meet demands for freshwater. MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan, Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls

[Section 403.086 (9), Florida Statutes and Amendment CS/SB 444]. Therefore, the NRC staff concluded that the reclaimed-water supply is reliable and use of the RCWs for short periods of time is likely to have small impacts on groundwater users or on the extent of saltwater intrusion based on the FPL model analysis, USGS modeling analysis, the NRC review team's modeling of the CCS-RCW interaction, and the knowledge that environmental monitoring and potential mitigation measures are required under the COCs imposed by Florida State. If reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted, the plant can be safely shut down.

Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the review team also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

**Comment:** The second omission is a failure to note a possible harm to Biscayne Bay National Park's eco system if the hypersaline plume is relocated into Biscayne Bay. The Draft Impact Statement indicates that intermittent pumping, which is what's proposed, could displace the hypersaline plume into the path of fresh water flowing eastward. Here's a quote: "Intermittent operation could result in an increase of hypersaline flow into the aquifer beneath the bay that could migrate into the bay when the radial collector wells are not operating." G-29. So emergence of the hypersaline water into Biscayne Bay could result in a localized hypersalinity that would kill sea grass beds in Biscayne National Park, which is what happened during a period of hypersalinity in Florida Bay in Everglades National Park in the early 1990's, and those areas of Everglades National Park remain dead zones to this day. So the Draft Impact Statement is incomplete because it doesn't evaluate the possible harm to the ecosystem of Biscayne Bay, Biscayne National Park if the hypersaline plume under the cooling canals is forced in to the Bay by pumping from the radial collector wells. (**0721-2-4** [Stoddard, Philip K.])

**Response:** The review team acknowledges that the distribution of contaminants from the cooling canals in groundwater beneath Biscayne Bay could be affected to some degree by pumping of the planned RCWs beneath Biscayne Bay. After publication of the draft EIS, the NRC staff performed additional groundwater modeling of the interaction between the planned RCWs, the existing hypersaline plume, and the cooling canals using a two-dimensional cross-section model and a limited-extent three-dimensional model. The review team used the RTF (Review Team Focused) model, to perform simulations to better understand how the existing hypersaline plume may be affected by RCW pumping combined with remediation actions recently stipulated in the recent consent order between FPL and Miami-Dade County.

This model was useful in showing salinity changes that occur in the aquifer near the RCWs when the wells are operated. The results showed that when the wells are not operating hypersaline water from the cooling canals is present in the high-permeability zone where the well laterals are installed. This saline water is drawn into the wells during the first few days of

RCW pumping, resulting in increasing, then decreasing, salinity at the well. The RTF model predicts that the salinity of the water produced by the operating RCW eventually drops to about the concentration of the bay water. Water flowing down through the bed of the bay and into the RCWs is therefore expected to have about the same salinity as bay water. When RCW pumping ceases, water in the high-permeability zone again increases in salinity because of the migration of water from the hypersaline plume. This migration of hypersaline water into the high-permeability zone would occur regardless of the presence of the RCWs.

Predicted future change in sea level and its effect on interactions between the RCWs and the hypersaline plume were also simulated. The additional modeling confirmed that pumping of the RCWs would move hypersaline water toward the RCWs and would remove some groundwater captured by the RCWs from the hypersaline plume region of the Biscayne aquifer. The model also indicated that RCWs pumping is not likely to reduce the effectiveness of hypersaline plume remediation actions specified in the consent order.

Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs. A very large volume of treated municipal wastewater is available for this purpose, but the treated wastewater is not suitable for normal uses of fresh water, such as for drinking or agriculture. Accordingly, the treated municipal wastewater can be used for cooling proposed Turkey Point Units 6 and 7 without affecting the ability to meet demands for fresh water. MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan, Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444]. Therefore, the NRC staff concluded that the reclaimed water supply is reliable, and it is likely that the RCWs would be used less than the 60 days per year permitted under the COCs. The modeling described above provided evidence that limited pumping of the RCWs as a backup water supply less than 60 days per year is unlikely to cause a significant increase in salinity within the bed of Biscayne Bay or within the bay itself compared to the variability that occurs under current conditions.

The review team recognizes that complete knowledge of the hydrologic system associated with the RCWs is not now available, and that uncertainties therefore remain in the impact analysis. A vast number of future scenarios are plausible. The sources of uncertainty in the RCW analysis include: heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the potential need for using the backup water supply. Uncertainties in the future site environment include: freshening of IWF cooling canals, remediation of the subsurface hypersaline plume, and the magnitude and rate of future sealevel rise.

The determinations in this EIS related to groundwater are based on the FPL numerical model analysis, the USGS model analysis, the review team's independent numerical modeling analysis, and the review team's knowledge and expertise. The conceptual models that served as the basis for the numerical models are based on available characterization information for the Turkey Point site and surrounding region. Uncertainties in the information and conceptual model were addressed in some cases by performing multiple model runs while varying key parameters in the model and in other cases by using conservative parameter values. However, uncertainties remain that do not allow the review team to assert that no other conceptual models that may result in more adverse impacts from RCW operation are plausible. Heterogeneity in subsurface parameters, lack of experience with RCW systems in carbonate strata, and uncertainty in the future site environment (e.g., freshening of IWF, remediation of subsurface hypersaline plume, sea-level rise) all warrant the review team to exercise care to avoid relying on numerical models alone. Because of this, the review team does not rely solely on the output of any numerical model.

Numerical models are numerical representations of complex processes occurring in three dimensions over time. The appropriate role of a numerical model is to test the assumptions of the behavior of complex systems. While even running a numerical model numerous times with different parameters cannot compensate for all uncertainties, the models employed here have been tested and benchmarked within the conditions that limit their application. In this assessment the review team analysts used models to test possible consequences of changes in the affected environment and uncertainty in some subsurface parameters within the capability of the models employed. This information was combined with the geography of the RCW field (such as the relatively short distance from the laterals to the bottom of Biscayne Bay relative to the distance from the laterals to the Homestead well fields) and the COC requirement of a monitoring program with mitigation options. The review team determined that the proposed monitoring of RCW construction and operation that is included is sufficient to detect unexpected behavior in a timely manner. While all possible mitigation measures have not yet been spelled out, in accordance with the COC, the review team considers the ultimate mitigation of ceasing operation of the RCWs as ensuring prevention of any impacts in a timely manner. "When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the harm" (FDEP 2014-TN4371).

If reclaimed water is not available and the 60 day limitation on RCW pumping is exhausted, the plant can be safely shut down. Cooling the main condenser is not a safety function in the AP1000 design. Accordingly, there is no NRC requirement for a contingency plan to supply for emergency backup cooling water to the main condenser if reclaimed water is not available and the 60-day limitation on RCW pumping is exhausted. The plant can be safely shut down if water is not available from either source. Safety-related cooling water is stored onsite and can be replenished from multiple sources. The EIS analysis assumes that the RCWs would not operate more than 60 days per year, the primary source of cooling water—reclaimed wastewater from the MDWASD—should be highly reliable, and therefore the availability of backup cooling-water supplies need not be evaluated. Further, the NRC staff also considered alternative sources of cooling water in EIS Section 9.4.2, none of which are environmentally preferable to the proposed sources of cooling water. In view of the high reliability of the reclaimed wastewater source and the availability of the RCW system as a backup, there is no need to consider additional backup sources of cooling water.

# Comment: Failure to Adequately Address the Cumulative Impacts of Constructing and Operating Units 6 & 7 on Salinity Levels in Groundwater, Surface Water, the Biscayne Aquifer, and Biscayne Bay

The DEIS fails to adequately address the cumulative impacts of constructing and operating Units 6 & 7 on salinity levels in groundwater, surface water, the Biscayne Aquifer, and Biscayne Bay. One of the most significant environmental impacts of the proposed action is the potential for greatly increased salinity levels in an ecosystem that is already stressed by high salinity. The construction and operation of Units 6 & 7 could lead to the expansion and continued migration of the underground hypersaline plume that is currently threatening groundwater supplies. Construction activities would likely add an increased amount of nutrients and dissolved organic materials into the CCS. Adverse environmental impacts could occur if these contaminants reach the waters of Biscayne Bay. Increased salinities in the project area could result as cumulative impacts when combined with the use of radial wells that withdraw freshwater from Biscayne Bay and the Biscayne Aquifer (increasing salinity levels in the Bay); the reservation of municipal wastewater that might otherwise be used to provide freshwater to Biscayne Bay's littoral zone through BBCW; the failure of FPL to elevate the entire project area and its facilities to protect against saltwater intrusion from sea level rise and storm surge; and the use of injection wells that could increase salinities in the Floridan Aquifer. (0113-2-10 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** In addition to the review team's conceptual understanding of the processes that would occur with RCW operation, the review team considered three independent modeling studies that are all consistent in projecting only insignificant alterations to both the Biscayne Bay and the surficial aquifer. The review team considered a wide range of baseline environmental conditions to reflect the uncertainty in the baseline environment associated with various proposed actions associated with the industrial wastewater facility (IWF), climate change, and geohydrologic parameter uncertainty. While the environmental baseline may change significantly, the incremental alteration to the hypersaline plume associated with operation of the RCWs remains minor. All of these modeling studies are cumulative analyses. The review team considered both the impact of the proposed plant and a range of other future activities that may also change the environment at the same time. Regarding the potential use of reclaimed wastewater that could be used to "refresh" the Bay under the BBCW, or CERP based on the limited need for freshening water with impaired water quality, the range of available water sources, and the limitations on the timing of water withdrawals, NRC staff have not identified any noticeable effect on the surface water resources used to support CERP. Therefore, the NRC staff considered this practice to have minimal impacts. Moreover, reclaimed wastewater could not be used to "refresh" the Bay without additional treatment. The NRC staff revised the text in Sections 2.3, 5.2, and G.3.2 of the EIS to expand and clarify the process and findings of the analysis of the potential alteration of the hypersaline plume caused by the operation of the radial collector well (RCW) system.

Comment: What are the impacts of this [drift] on the aquifer? (0721-22-14 [Schwartz, Matthew])

**Response:** As discussed in Section 5.3.1 of the EIS, cooling-tower drift would be deposited on the ground surface in the vicinity of the proposed Turkey Point Unit 6 and 7 mechanical draft cooling towers and the surface of the existing Units 3 and 4 cooling canals and the Biscayne Bay. Most of this drift would fall on Biscayne Bay and the existing cooling canals. As described in Chapter 3 of the EIS, drift of cooling water from the proposed plants cooling canals would be small because the amount of salt and other chemical constituents in the drift is negligible compared to the volume of the Bay and the cooling canals. In regard to the underlying Biscayne aquifer, the impact of salt and other chemical constituents in the drift would be saltwater intrusion from the bay and by the hypersaline groundwater plume from the cooling canals.

**Comment:** That's what the EIS is supposed to look at, what exactly is in that wastewater going in? (0723-9-16 [Schwartz, Matthew])

**Response:** Table 3-5 lists the constituents of the reclaimed wastewater and their concentrations at the point of injection. Table 5-2 lists those that would be released in cooling tower drift (water droplets emitted from the cooling towers). Some of these constituents are volatile and would evaporate in the cooling towers, and some would be injected by deep wells

into the Boulder Zone along with the remaining used cooling water. Sections 5.2 and 5.3 of the EIS include detailed descriptions of the constituents predicted to be present in cooling-tower drift, the rates and patterns of drift deposition, and the potential environmental impacts of the drift. No changes were made to the EIS in response to this comment.

**Comment:** Neither the draft EIS nor the EFH assessment describe another type of frac-out associated with horizontal directional drilling (HDD), the construction method for the RCWs. During HDD, drilling mud can escape into the environment through fractures in the rock potentially degrading EFH. The Southeast Florida Coral Reef Initiative's *Best Management Practices (BMPs) for Construction, Dredge and Fill and Other Activities Adjacent to Coral Reefs*<sup>1</sup> [footnote 1: 1 Available at:

www.floridadep.org/coastal/programs/coral/reports/MICCI/MICCI 6 BMP Manual.pdf] notes the risk of frac-outs occurring can be reduced through proper geotechnical assessment practices and prudent drill planning and execution. The BMPs also describe how the extent of damage from a frac-out can be limited by carefully monitoring the hydraulic pressure and having the appropriate response equipment and contingency plans ready in the event that a frac-out occurs. While these measures and BMPs are useful in reducing and limiting the occurrence of frac-outs, direct measures of borehole pressure may be necessary for the agencies to have reasonable assurance that damage from frac-outs would be minimal. Stauber et al. (2003) presents a method for predicting borehole pressure by means of a demand-capacity analysis. With a calculated maximum allowable borehole pressure curve for a given HDD bore profile, specifications could require borehole pressure be maintained below the maximum allowable value or to maintain rheological properties within specified limits. (0724-6 [Fay, Virginia M.])

**Response:** The Florida State Conditions of Certification require following submission and approval of a drilling plan for construction of the radial collector wells and contingency plans for natural or man-made uncontrolled release of excavated material (State of Florida 2014-TN3637). These plans will include "Best Management Practices" such as those mentioned in the comment. FPL has also provided a plan stating that the laterals would be drilled using a reverse circulation method with water from the formation as the drilling fluid and cuttings being circulated from the drill bit back to the central radial caisson, where the fluid and cuttings would be collected. No drilling mud would be used. Accordingly, a "frac-out" that would result in flow of any material into the bay, is not a possibility.

**Comment:** The NMFS requests the NRC update final EIS and EFH assessment to describe plans to perform close monitoring along the RCW lateral pipelines during construction to ensure frac-outs are identified and remediated immediately and, if necessary, compensatory mitigation implemented. To assist with developing this monitoring plan for the Turkey Point RCWs, the NMFS will send separate from this letter monitoring plans used by the NMFS, USACE, and Florida Department of Environmental Protection (FDEP) for similar projects. (0724-7 [Fay, Virginia M.])

**Response:** Best Management Practices (BMPs) would be used during the construction of the RCW caissons and laterals. These BMPs would involve monitoring along the laterals, as mentioned in the comment. Monitoring and contingency plans would also be required by the Florida State COCs and would limit the potential impacts on Biscayne Bay that might result from the release of material such as drill cuttings through natural or induced fractures. The review team understands further that the RCW laterals would be drilled using a reverse circulation method with water from the formation serving as the drilling fluid and cuttings being circulated from the drill bit back to the central radial caisson, where the fluid and cuttings would be

collected. No drilling mud would be used. No changes were made to the EIS in response to this comment.

**Comment:** DEIS Subsection 4.2.1: There are inconsistencies in the DEIS regarding the duration of dewatering activities: a. DEIS Subsection 4.2.1.1, Page 4-27, Lines 37-41: The DEIS states: "...the expected dewatering flow rate into the IWF would be 1,000 gpm for 13 weeks, followed by 1,200 gpm for 13 weeks, followed by an extended period at 200 gpm. However, taking a conservative approach, FPL assumed that the maximum dewatering flows would be 1,200 gpm for 1 year followed by 200 gpm for a period of about 24 months." b. DEIS Subsection 4.2.1.2, Page 4-29, Lines 26-29: The DEIS states: "FPL (2014-TN4058) estimated that a maximum of 1,000 gpm of groundwater would be pumped for up to 13 weeks at each of the two deep excavation pits during the initial excavation and grouting phase, followed by a 24month period of pumping at up to 200 gpm."; c. DEIS Subsection 4.2.1.4, Page 4-33, Lines 17-19: The DEIS states: "The 1,200 gpm (1.7 Mgd) discharge that could occur over the course of a year..." The following explanation can be used to reconcile each of these inconsistencies: Because the start of the plant excavation would be staggered, the expected total maximum dewatering flow rate into the IWF would be 1,000 gpm for 6 months, followed by 1,200 gpm for 6 months, followed by 400 gpm for 18 months and then 200 gpm for 6 months. However, taking a conservative approach, FPL assumed that the maximum dewatering flows would be 1,200 gpm for 1 year followed by 400 gpm for a period of about 24 months. (0619-4-2 [Maher, William])

**Response:** The EIS was modified to clarify the expected flow rates from the excavations and the more conservative flow rates applied in the FPL analysis.

**Comment:** DEIS Subsection 7.2.2.2, Page 7-15, Lines 17-19: The DEIS states: "FPL determined that adding the requested **2,000 gpm** of brackish water would increase the water level of the canals by 0.25 ft (Tetra Tech 2014-TN4126) and eventually reduce salinity to approximately that of Biscayne Bay." The reference states: "The first model configuration, called the unconstrained model, predicted water levels in the CCS considering the addition of **14 mgd** of Floridan water. This model was used to determine the increase in canal stage that would likely result from the added inflow: an average of 0.25 ft due to the Floridan-based inflow". The 14 mgd stated in the reference is equivalent to 9722 gpm, which is inconsistent with the 2000 gpm stated in the DEIS. (emphasis added) (**0619-5-8** [Maher, William])

#### **Response:** The expected flow of water for IWF freshening was corrected to 14 Mgd.

**Comment:** The other point that I heard brought up is the water re-injection into the wells. Currently that is the process that Miami-Dade uses with their wastewater, they re-inject into the wells -- into the groundwater. The only difference we're doing is we're taking that water, treating it, using it to cool our reactor and then re-injecting it. So the process is actually cleaner than the current process that Miami-Dade has for disposing of wastewater. (**0721-15-10** [Kuraza, Devon])

**Response:** The EIS discusses changes to the reclaimed water, including higher water temperature, increase salinity, and the addition of other waste streams that include radionuclides, caused by its use in cooling the proposed reactors. However, the review team agrees that there is a benefit in using reclaimed water. MDWASD is required to direct 60 percent of its wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan (Miami-Dade County 2013-TN4786).

**Comment:** We also have to look at the assumptions that you're making about the water supply, the radial well collectors and how well they'll operate under super-salinity conditions. And the wastewater supply which is drying up in South Florida. This plant is going to assume that you're going to consumer 50 million gallons a day of water, and that's huge. This is just for 6 and 7, incremental demand. (0723-12-14 [Henry, Jim])

**Response:** Higher salinity of cooling water resulting from capture of some hypersaline plume water by the RCWs would not have a significant effect on the plant cooling system. The NRC review team determined that the RCWs are likely to be used infrequently and for short durations. There is a very large volume of treated municipal wastewater that can be used for cooling the proposed plants without affecting the ability to meet demands for freshwater. MDWASD is required to direct 60 percent of the wastewater flows to reuse by 2025 and to cease using ocean outfalls by 2025 under the Florida State Ocean Outfall Legislation Compliance Plan Chapter 2008-232 Laws of Florida Wastewater Disposal/Ocean Outfalls [Section 403.086 (9), Florida Statutes and Amendment CS/SB 444].

### E.2.9 Comments Concerning Ecology - Terrestrial

Comment: It's [the reactor] going to destroy wetlands[.] (0008-7 [Finver, Jody])

**Response:** The EIS acknowledges that building the new reactors and associated facilities would unavoidably result in the loss of wetland acreage and functions. Impacts on wetlands are described in Sections 4.3.1 and 5.3.1 of the EIS. Section 4.3.1.6 outlines the applicant's proposed wetland mitigation measures and how those mitigation measures would offset wetland functions lost. No changes were made to the EIS as a result of this comment.

**Comment:** Potential mitigation measures are speculative, inadequate, and based on incomplete information. (**0113-1-9** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The DEIS fails to comply with NEPA because its determinations of the project's environmental impacts, dismissal of other alternatives, and recommendation to issue the COL are based on speculative mitigation measures that have not been adequately analyzed. NEPA requires an analysis and discussion of the extent to which adverse effects can be avoided. [Footnote 53: Roberston v. Methow Valley Citizens Council, 490 U.S. 332, 315-352, 1989, 352.] Therefore, the DEIS is insufficient in satisfying the requirements of NEPA because it merely lists "possible" and "potential" mitigation measures for terrestrial impacts of the project. [Footnote 54: Neighbors of Cuddy Mountain v. U.S. Forest Service, 137F.3d 1372, 1380, 9th Cir.1, 1998.] It fails to adequately analyze the effectiveness of the proposed measures in mitigating project impacts, [Footnote 55: NRC, DEIS, 4-3, 4-69, 4-72.] despite the fact that an "essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective." [Footnote 56: S. Fork Band Council of W. Shoshone of Nevada v. U.S. Department of Interior, 588F.3d 718, 727, 9th Cir., 2009.] Notwithstanding the failure of the DEIS to adequately analyze the efficacy of "proposed" or "possible" mitigation activities, the DEIS gives an impact category to wetland and terrestrial impacts and recommends that the COL be issued based on potential mitigation measures described in the Environmental Report and DEIS. [Footnote 57: NRC, DEIS, 10-28.] The determination of an impact level category for each resource area is based on the assumption the mitigation activities are implemented. "Proposed mitigation efforts" are listed and include an in-lieu fee program, mitigation banks, or permittee responsible mitigation. [Footnote 58: Ibid., 106.] It is unclear as to which combination of mitigation measures will actually be implemented,

considering that some possible mitigation options, including the NPS Hole-in-the Donut Mitigation Bank, are not federally approved and that some programs are not approved by the U.S. Army Corps of Engineers. [Footnote 59: Ibid., 4-71.] Furthermore, the DEIS does not describe why and how mitigation measures will sufficiently offset the loss of wetlands anticipated as a result of this project. In order to comply with NEPA, a more thorough analysis of concrete and actionable mitigation measures must be included in an EIS. The NRC repeatedly states that the U.S. Army Corps of Engineers has not evaluated the proposed mitigation measures because the applicant has not demonstrated that wetland impacts have been avoided or minimized according to Clean Water Act section 404(b)(1) guidelines. [Footnote 60: Ibid., 4-69, 4-70, 4-73.] An evaluation of proposed mitigation measures by the Corps is expected as part of the Corps' Record of Decision, which will not be made until after the Final EIS is issued. Furthermore, the DEIS indicates that further mitigation for wetland and listed species impacts may be required. [Footnote 61: Ibid., 4-72.] It is premature for the NRC to issue a DEIS, assign impact analyses to affected resources, dismiss other alternatives, and issue a preliminary recommendation to issue a COL prior to any substantive analysis of the effectiveness of mitigation measures. The information requirement to make such a determination must be included in the DEIS, rather than any future decision-making process. After reviewing the proposed mitigation for the project, the EPA determined that a permit for the project should not be issued because of "substantial and unacceptable impacts to mangrove wetlands, sawgrass marshes, and submerged aquatic vegetation." [Footnote 62: Gattiana, J. L., United States Environmental Protection Agency Letter to Colonel Alan M. Dodd, U.S. Army Corps of Engineers, April 9, 2015, 4.] Pursuant to the Clean Water Act 404(b)(1) Guidelines [Footnote 63: 40 C.F.R. § 230.91(c).] and a February 6, 1990 Memorandum of Agreement between the Corps and the EPA regarding the Determination of Mitigation under the Clean Water Act 404(b)(1), "an applicant must demonstrate avoidance and minimization of wetland impacts before compensatory mitigation can be considered." [Footnote 64: Gattiana, J. L., United States Environmental Protection Agency Letter to Colonel Alan M. Dodd, U.S. Army Corps of Engineers, April 9, 2015, 3.] The DEIS must therefore include a more substantial discussion and analysis of mitigation measures, rather than a mere identification of "possible" or "potential" mitigation activities, and a sufficient discussion of how mitigation activities would effectively offset the impacts of the proposed projects. In consideration of the fact that the proposed project will have significant negative impacts to the ecology and health of Biscayne Bay, Biscayne National Park, and adjacent sensitive ecological areas, any consideration of adequate mitigation must include mitigation activities that offset these negative impacts by improving the health of these important ecological areas. The BBCW project aims to improve the health of nearshore and wetland areas of Biscayne Bay and Biscayne National Park by rehydrating coastal wetlands. In order to achieve the goals of this project, significant water storage and delivery must be developed in the area adjacent to Turkey Point Power Plant. Much of the lands needed for public ownership to proceed with the project are currently owned and managed by FPL. Transferring such land into public ownership for the purposes of BBCW as originally envisioned by CERP would go a long way towards achieving Everglades restoration goals and the restoration of critical wetland habitat and function in Biscayne Bay. Thus, mitigation measures should include the transfer of FPL land within the footprint of the original and complete BBCW project to public ownership. (0113-2-14 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** The EIS discusses the applicant's conceptual approach for mitigating impacts on wetlands and other terrestrial ecology resources in Section 4.3.1.6 of the EIS. Although the EIS discussed mitigation at a conceptual level, the discussion is not speculative. The applicant has indicated that each of the mitigation measures discussed in the EIS would be implemented once the project proceeds. Most would be required under one or more Federal or State regulation(s)

protecting wetlands or other sensitive ecological resources, such as Section 404 of the Clean Water Act, the ESA (Endangered Species Act), or the Florida Power Plant Siting Act. The discussions are based on recommendations and requirements from the local, State, and Federal regulatory agencies that regulate impacts on wetlands and habitat. No changes were made to the EIS specifically as a result of this comment, although the mitigation discussions, primarily addressed in Section 4.3.1.6, have been updated to reflect the latest information available from the applicant.

**Comment:** The loss of valuable habitat to expand is also unacceptable. We need to protect what is left. (**0066-3** [Wong, Christina])

**Comment:** Access Roads[.] According to the DEIS, "approximately 3 .3 miles of existing paved roads would be improved, and approximately 7 miles of unpaved roads would be paved to provide access to the site." Additionally, "a heavy-haul road would be created between the barge-unloading facility and the building site, which would disturb approximately 5 acres. The heavy-haul road would be 2 miles long and 24 ft. wide, and would include new heavy-haul bridges across the existing discharge and return cooling canals." A patchwork of new roads would further fragment important habitat for Florida Panthers and other wildlife, and create impediments for restoring hydrological flows. The NPS encourages land protection and restoration efforts, such as those under EEL, to offset these impacts. (0622-2-13 [Austin, Stan])

**Response:** Section 4.3.1 of the EIS acknowledges habitat losses and fragmentation caused by building the proposed facilities. Mitigation proposed by the applicant to address terrestrial ecology impacts from building the proposed new facilities in compliance with local and State regulatory requirements is presented in Section 4.3.1.6. No changes were made to the EIS as a result of these comments.

**Comment:** The DEIS fails to provide an adequate analysis of the direct, indirect, and cumulative impacts of the construction and operation of transmission lines and access roads on sensitive wetlands, wildlife, and CERP activities. (**0113-1-6** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** The NRC staff discusses in detail impacts of the construction and operation of transmission lines and access roads on sensitive wetlands and wildlife in Sections 4.3.1 and 5.3.1 of the EIS. Cumulative impacts on wetlands, wildlife, and CERP activities are addressed in Section 7.3. The review team has added additional detail to the impact discussions based on new information available subsequent to publication of the draft EIS, but made no changes to the EIS specifically as a result of this comment.

**Comment:** *Pipelines (potable and reclaimed water)[.]* Pipelines would be installed between the MDWASD South District Wastewater Treatment Plant and the reclaimed water-treatment facility at the Turkey Point site. The potable water line would include approximately 10 miles of new pipeline, most of it along existing roads or corridors. Approximately 2.5 miles of pipeline construction would involve new land disturbance, and the pipeline would affect 326 acres, including 184 acres of wetlands. The reclaimed water pipeline would include approximately 9 miles of new pipeline, approximately 2.5 miles of which would be in a new pipeline corridor. According to the DEIS, approximately 1,886 ac of upland, forested, and wetland habitats would be affected as well as mangrove swamp, mixed wetland hardwoods, shrub and brushland, wetland shrubs, freshwater marsh, mixed rangeland, and herbaceous prairie. The NPS encourages land protection and restoration efforts, such as those under EEL (described above), to offset the pipeline-related impacts. (0622-2-10 [Austin, Stan])

**Comment:** *Transmission line crossing under the Miami River[.]* According to USACE's public notice, "A short section of the proposed Davis-Miami 230-kV transmission line, at the crossing of the Miami River adjacent to the existing FPL Miami substation, is proposed to be constructed as an underground extruded dielectric cable system using cross-linked polyethylene insulating cables." The NPS encourages that consideration be given to restoring the Key Hole and Elliot Key Spoils area within Biscayne NP. The area has high natural value but needs to be cut and filled for restoration. (0622-2-12 [Austin, Stan])

**Response:** The comment provides recommendations for specific mitigation measures addressing impacts on sensitive natural habitats. The review team appreciates suggestions regarding possible mitigation measures but only considers mitigation proposed by the applicant or required by agencies specifically authorized to enforce the mitigation. No change was made to the EIS as a result of this comment.

**Comment:** As detailed throughout our comments, the proposed project could have numerous adverse environmental impacts to our national parks and the treasured natural resources they were designated to protect. Specifically, threatened wildlife and wetland habitat in Everglades National Park could be harmed by the construction and operation of transmission line corridors in and adjacent to the park. (0113-1-10 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** Potential impacts on threatened and endangered species as well as wetlands as a result of transmission line construction are discussed in Sections 4.3.1.2 and 5.3.1.2 of the EIS. Although the analyses contained in both sections consider the unique setting of the proposed site and offsite rights-of-way in close proximity to Everglades National Park and Biscayne National Park, additional discussion was added to Section 4.3.1.3 about wildlife expected to regularly enter and leave National Park boundaries that could be affected by the proposed actions. Mitigation for impacts on wetlands and other terrestrial ecological resources from building the proposed facilities, including the transmission lines, is discussed in Section 4.3.1.6.

**Comment:** In order to connect Units 6 & 7 to the power grid, FPL seeks to construct two new transmission line corridors. The proposed transmission line sites for the Western corridor are of primary concern due to their potential impacts on areas in and around Everglades National Park. The DEIS fails to adequately analyze the direct, indirect, and cumulative impacts of the construction and operation of transmission lines on wetlands, wildlife, and CERP. In its discussion of potential Western transmission line corridors, the DEIS limits its discussion to West Preferred and West Consensus corridors. The construction and operation of transmission lines and access roads in either of these corridors could cause an array of adverse environmental impacts, including impacts to wildlife, habitat, and wetland resources, such as freshwater marshes, wetland hardwoods, and wet prairies; the disruption of hydrologic flows; air and water pollution; viewshed impacts; and impacts to national park visitor experiences. [Footnote 32: Florida Department of Environmental Protection, Second Determination of Completeness, Transmission Lines, September 17, 2009, 1.] The project could harm waterdependent birds, such as migratory birds and federally listed wood storks and snail kites. Woods storks are listed as a federally threatened species due to habitat loss, fragmentation, and degradation. Wading birds such as the wood stork are at risk of collision with powerlines because of their large size and inability to navigate obstacles while flying. In a scientific evaluation of wood stork mortality, collisions with powerlines were listed as the most significant cause of death. [Footnote 33: Forrester, D.J. and Spalding, M.G., "Ibises, Spoonbills, Flamingos, and Storks: Trauma," Parasites and Diseases of Wild Birds in Florida, 2003,

University Press of Florida, Gainesville, 227-228.] It is reasonable to anticipate that, given the high collision risk of wood storks and wading birds, the construction of powerlines in critical wood stork habitat will lead to a sustained level of mortality for these threatened species throughout the life of the project. The construction and operation of transmission lines could also lead to the degradation and fragmentation of critical wetland areas, disturbing birds during the construction process and creating a permanent risk of bird collisions and injuries from transmission lines and associated structures. (**0113-2-8** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** Impacts on terrestrial resources from the proposed transmission lines are described in Sections 4.3.1.2 and 5.3.1.2 of the EIS and include consideration of direct, indirect, and cumulative impacts from building and operating those lines on wetlands and wildlife. Mitigation of the impacts on wetlands and other terrestrial ecological resources from building the proposed facilities, including the transmission lines, is discussed in Section 4.3.1.6. No changes to the EIS were made as a result of this comment.

**Comment:** Impacts associated with the construction and operation of access roads associated with Units 6 & 7 on wetlands and wildlife are not adequately discussed and analyzed within the DEIS. Access roads will be constructed in and adjacent to wetlands and conservation lands, including on lands that are part of the Miami-Dade County Environmentally Endangered Lands Program. [Footnote 34: Miami-Dade County, Third Completeness Comments for Plant and Non-Transmission Line Portions of the FPL Site Certification Application- Turkey Point Units 6 & 7, May 28, 2010, 39.] The construction and operation of such roads could have a number of negative impacts, such as the disruption of ecological corridors and sheet flow and the degradation of conservation lands. [Footnote 35: Ibid., 39.] The DEIS lacks sufficient information regarding the possible overlap of access roads and wildlife corridors. The discussion of such impacts is cursory and as such fails to comply with the requirements of section 102(2) of NEPA. [Footnote 36: National Environmental Policy Act of 1969 §102(2) 42 U.S.C. § 4332.] (0113-2-9 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** Impacts on terrestrial resources from building and using the proposed temporary construction access roads are included in the scope of analysis of proposed onsite activities in Section 4.3.1.1. However, to provide increased clarity regarding the effects of the access roads, a separate header was added to Section 4.3.1.3 of the EIS to address the access road impact on Miami-Dade County Environmentally Endangered Lands.

**Comment:** I am worried for animals that have been labeled "units of economy"instead of beings with active consciousnesses. (0127-3 [Cusidor, Teresa])

**Response:** Impacts on wildlife have been described in Sections 4.3.1, 5.3.1, and 7.3.1 of EIS using standardized and accepted ecological terminology, methodologies, and criteria as prescribed by State and Federal regulatory agencies. No changes were made to the EIS as a result of this comment.

**Comment:** There will be negative impacts on the environment for both humans and other animals. (**0159-3** [Bazzone, Barbara])

**Response:** Impacts on wildlife and their habitats are described in Sections 4.3.1, 4.3.2, 5.3.1, 5.3.2, 7.3.1, and 7.3.2 of the EIS. Impacts on and potential conflicts with human land uses are addressed in Sections 4.1, 5.1, and 7.1. Various other issues related to the quality of the

environment on humans, e.g., aesthetics and air quality, are addressed in various other sections. No changes were made to the EIS as a result of this comment.

Comment: Please do not expand into this valuable habitat. (0202-1 [Casper, Laurel])

**Response:** Impacts on wildlife and their habitats are described in Sections 4.3.1, 4.3.2, 5.3.1, and 5.3.2 of the EIS. As is evident from the information contained in Section 4.3.1.1, much of the habitat encompassed by the proposed expansion has a history of previous disturbance or is in close proximity to existing disturbed areas. As is evident from the information contained in Section 4.3.1.2, much of the habitat encompassed by the expanded offsite facilities involved areas within or adjacent to existing utility corridors. No changes were made to the EIS as a result of this comment.

**Comment:** Furthermore, nuclear reactors are known to impact wildlife in the region. (0214-4 [Zerulla, Tanja])

**Response:** Impacts on wildlife and their habitats are described in Sections 4.3.1, 4.3.2, 5.3.1, and 5.3.2 of the EIS. The discussion in these sections includes consideration of mitigation. The cumulative effects of the existing and new reactors on wildlife are addressed in Sections 7.3.1 and 7.3.2. No changes were made to the EIS as a result of this comment.

**Comment:** Metals leach from the reactors into the environment, contaminating air, water, ground, plants, and other wildlife. (0214-6 [Zerulla, Tanja])

**Response:** All pathways for potential environmental impacts were considered in the EIS. Potential releases of pollutants to the air during operation of the reactors is addressed in Section 5.7. Potential release of pollutants to water during operation of the reactors is addressed in Section 5.2. The effects of potential releases of radiological pollutants on plants, wildlife, and other non-human biota are addressed as part of Section 5.9. Text has been added to Sections 5.3.1 and 5.3.2 specifically to address the potential for adverse effects on terrestrial and aquatic biota from releases of nonradiological pollutants.

**Comment:** Everglade snail kite - If the Preferred corridor segment of the west transmission line in chosen as the preferred alternative, it will result in habitat loss for the snail kite and significantly increase the likelihood that snail kites are injured and killed due to collisions with transmission lines. Please indicate how FPL intends to minimize the adverse effects of the preferred segment of the west transmission line corridor to the snail kite. The Department notes that we have had discussions with FPL regarding moving the northern segment of west transmission line [*i.e.*, the currently proposed Preferred and Consensus corridors) much farther to the east, away from the Everglades National Park (ENP) and adjacent to existing development]. We believe that movement of this segment of the west transmission corridor as described will reduce potential adverse effects to the snail kite. We urge FPL to adopt this new corridor. If adoption of the new corridor does not occur, we recommend that FPL consider protecting currently unprotected wetlands habitat for the snail kite to minimize the adverse effects from the project. (0227-1 [Stanley, Joyce])

**Response:** Section 2.4.1.3 of the EIS describes the overlap of snail kite management areas and range with proposed facility construction locations. Sections 4.3.1.3 and 5.3.1.3 discuss potential impacts on the snail kite during installation and operation of transmission lines, and includes an evaluation of displacement, permanent habitat loss, and transmission line collision risks. Although not specific for snail kites, perch discouragers and flight diverters installed near

stork colonies should reduce operational impacts on snail kites because their occurrence generally coincides with proximity to stork colonies. The review team concluded that the potential impact on the Everglade snail kite from the proposed actions could be noticeable at a population level. The FFWCC requires snail kite surveys in all suitable habitat as defined in the State of Florida COCs. If snail kites are observed, FPL is required to meet with the FFWCC and develop a detailed mitigation plan containing corrective action alternatives to be approved by the FFWCC. Additional mitigation may be required by the FWS as part of their ESA consultation process. No changes were made to the EIS as a result of this comment.

**Comment:** <u>Florida bonneted bat -</u> The project will result in the loss of potential suitable roosting habitat for the FBB within the Department's focus area for the species. To better ascertain the status of the FBB on the project site, we request that a pedestrian survey of all suitable roosting habitat for the FBB be conducted within the entire project footprint, including the footprint of the proposed transmission lines. The results of the survey should be provided to the Department for our review. We also recommend that FPL include a survey of potential roosting habitat prior (no earlier than a month prior) to any clearing activities to ensure no FBB have recently begun roosting in the clearance areas. (0227-2 [Stanley, Joyce])

**Response:** Although the Florida Fish and Wildlife Conservation Commission (FFWCC) did not require any species specific measures for the Florida bonneted bat within the State of Florida COCs issued on 5/19/14, they included this species with other Federally and State-listed species likely to occur within the area of the transmission line corridor and associated facilities. As such, FFWCC requires coordination for an assessment of all listed species including the Florida bonneted bat prior to clearing or preconstruction activities within the transmission line corridors. Additional surveys and assessments could be required by the FWS as part of their ESA consultation process. Section 2.4.1.3 of the EIS was expanded to include a discussion of the overlap of the proposed project sites with the FWS Florida Bonneted Bat Focus Area.

**Comment:** <u>Florida panther -</u> The Biological Assessment states that the project will result in the loss of 69 acres of panther habitat located within the project footprint. This habitat is located in the Department's primary and secondary zones for the panther. FPL's consultant has applied the Department's panther habitat methodology (PHM) to the habitat types affected by the project and calculated that the 69 acres of panther habitat lost due to the project provide 412 Panther Habitat Units (PHUs). Based on the PHM, a total of 1,030 PHUs of panther habitat will need to be provided to offset the loss of panther habitat due to the project. We request a detailed habitat compensation plan indicating how FPL intends to provide 1,030 PHUs of panther habitat to offset the loss of panther habitat due to the project. (0227-3 [Stanley, Joyce])

**Response:** The State of Florida COCs issued by the Siting Board on 5/19/14 state that development of roads and pipeline corridors would affect 69 ac of Florida panther habitat within the FWS Panther Focus Area, with a value of 297 Panther Habitat Units. Although FPL's ER (Rev 6) states "Construction of new corridors, modification of existing corridors, and construction/modification of access roads will result in the alteration of panther habitat within the primary and secondary Panther Focus Area zones rather than a loss of habitat," the EIS states that the review team disagrees with this statement because habitat fragmentation has been identified in the FWS Florida Panther Recovery Plan (3rd revision dated 1 November, 2008) as a threat to panther survival. FPL-proposed mitigation activities for the Florida panther, addressed in Section 4.3.1.6, are designed to minimize threats of increased traffic and do not address habitat. Additional habitat mitigation could be required by the FWS as part of their EIS consultation. The discussion of potential impacts on the Florida panther in Section 4.3.1.3 of

## the EIS has been expanded to include more quantitative detail about panther habitat mitigation from the COCs and to present more detail drawn from the FWS Florida Panther Recovery Plan.

**Comment:** <u>Wood Stork</u>. The proposed west transmission line corridor for the project occurs within the core foraging areas (*i.e.*, all lands within 18.6 miles) of five active nesting colonies of the wood stork. As currently proposed the Preferred Corridor segment of west corridor transmission line occurs within about 1 mile or less of an active wood stork nest colony. Consequently, if this alternative is selected, it will likely result in injuries and deaths of wood storks and other bird species due to collisions with the transmission wires or towers during flight. If the transmission line cannot be re-sighted, we recommend considering additional compensation for impacts to wood stork above those currently being considered for wetland impacts. In addition, a wetlands mitigation plan that adequately compensates for the loss of wood stork foraging habitat due to the project should be developed. This should include a functional analysis of the loss of wood stork foraging habitat within the project footprint (including the transmission lines) through the application of the Fish and Wildlife Service's (FWS) Wood Stork Foraging Habitat Methodology (FWS, 2012). Please be aware that we consider all wetland types as suitable for wood stork foraging, and all wetland types lost due to the project should be included in the analysis. (**0227-6** [Stanley, Joyce])

**Response:** Although impacts on the wood stork would be decreased if the West Consensus corridor were developed rather than the West Preferred corridor, impacts would still not be eliminated. Section 4.3.1.3 includes an assessment of potential impacts from both corridor options on the wood stork and acknowledges their proximity to wood stork nesting colonies. That discussion has been expanded to provide more detail about wood stork impacts and how the proposed wetland mitigation and other mitigation proposed by the applicant would help reduce adverse impacts on the wood stork.

**Comment:** <u>Additional Species</u>. The Department requests species surveys be conducted (in appropriate habitat) for the Bartram's scrub-hairstreak butterfly and Florida leafwing butterfly. Botanical surveys should be conducted for crenulate lead-plant, deltoid spurge, Florida brickell-bush, Small's milkpea, tiny polygala, and Garber's spurge. (**0227-7** [Stanley, Joyce])

**Response:** Sections 4.3.1.4 and 5.3.1.3 of the EIS discuss potential impacts on each of these species and acknowledges the possible adverse impacts on each. Coordination with FFWCC for an assessment of all Federally and State-listed species likely to occur within the transmission line corridor and associated facilities prior to clearing or preconstruction activities is required by the State of Florida COCs issued on 5/19/14. Additional surveys and assessment could be required by the FWS as part of their ESA consultation process. No changes were made to the EIS as a result of this comment.

**Comment:** Endangering delicate, one-of-a-kind species is not a good idea. (**0363-4** [Peters, Emily])

**Response:** This comment pertains to species rare enough to be Federally and/or State-listed as threatened or endangered. The EIS includes a thorough assessment of potential impacts from the project on Federal and State-threatened and endangered species and habitats in Sections 4.3.1 and 5.3.1 (for terrestrial species) and Sections 4.3.2.3 and 5.3.2.3 (for aquatic species). These sections also address mitigation proposed regarding impacts on threatened or endangered species. No changes were made to the EIS specifically as a result of this comment, although expanded information about threatened and endangered species has been added to the sections noted above in response to other comments.

**Comment:** Section 4.3.1.6, Wetland Mitigation Plan (pg.4-70): The DEIS states that FPL instituted measures during project planning to avoid and minimize impacts on wetlands to the greatest extent practicable. Proposed avoidance and minimization measures include maximizing the previously disturbed areas, while minimizing use of areas with high-quality intact wetlands. The corridor selection for the reclaimed water pipeline, portable water pipeline, and transmission facilities maximized co-location with other existing or proposed infrastructure, to limit land disturbance. The Public Notice published by the USACE on March 13, 2015 stated that the project proposes impacts to 1000 acres of tidal and freshwater wetlands. FPL stated in their letter of May 14, 2015, addressed to USACE, that the correct number for the direct wetland impacts for the project is 710 acres, with temporary impacts to 50 acres. These include impacts to high quality, tidal mangrove wetlands. Mangrove wetlands located within south Florida form a vital component of the estuarine and marine environment, providing a major organic detrital base to the aquatic food chains, significant habitat for arboreal, intertidal and subtidal organisms, nesting sites, cover and foraging grounds for birds, and habitat for reptiles and mammals. Mangroves also provide protected nursery area for fishes, crustaceans, and shellfish. Mangroves are one of the most biologically productive ecosystems in the world, also serving as storm buffers by functioning as wind breaks, and through prop root baffling of wave action. Mangrove roots stabilize shorelines and fine substrates, reducing turbidity, and enhancing water clarity. Mangroves improve water quality and clarity by filtering upland runoff, and trapping waterborne sediments and debris. The cumulative loss of this habitat has reduced overall water auality and fisheries production within the south Florida ecosystem. For these reasons, the EPA considers these mangrove wetlands to be aquatic resources of national importance (ARNI). In addition, the proposed project would impact sawgrass marshes, which provide principal environmental values related to water quality and quantity. They serve as filter systems for water, and protect natural bodies of water from eutrophication. Numerous birds can be found in this community year-round, or for over-wintering. They also provide habitat for frogs, snails, and crayfish, which serve as food sources for larger protected animals that are found in this region. Protected animals that can be found in and around sawgrass marsh systems include the Everglades mink (Mustela vison evergladensis), Florida panther (Felis concolor coryi), snail kite (Rostrizamus sociabilis), wood stork (Mycteria americana), and American alligator (Alligator mississippiensis). Therefore, the EPA considers sawgrass marshes to be ARNI. (0617-1-28 [Mueller, Heinz J.])

**Response:** The description of affected wetlands in Section 2.4.1.3 of the EIS has been expanded to indicate the status of mangrove wetlands and sawgrass marshes as aquatic resources of national importance ARNI (Aquatic Resources of National Importance), and the assessments of impacts on those wetlands have been expanded in Section 4.3.1.1 of the EIS to account for the ARNI status. The wetland mitigation measures discussed in Section 4.3.1.6 have been developed based on quantification of estimated losses and offsetting gains of wetland functions and values, including those provided by the presence of mangroves.

**Comment:** Pipelines to transport reclaimed wastewater from the South Dade Water Treatment Plant to Turkey Point will be constructed in an area currently home to expansive wetlands using a corridor approximately nine miles long. [Footnote 30: NRC, DEIS, 3-20.]The DEIS must discuss how the construction and operation of these pipelines will impact wetlands, how FPL will properly avoid or mitigate impacts to wetlands, and whether reasonable alternatives exist to constructing pipelines in sensitive wetland areas. (**0113-2-16** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** The DEIS on Pages 1-2 and 10-2 states that the "applicant proposes to discharge fill material into approximately 1,000 acres of jurisdictional wetlands to construct the proposed

*project."* The correct number for the direct wetland impacts for the project is 710 acres. This corrected information was supplied to the Corps in FPL's May 7, 2010 letter to Paul Kruger modifying the federal dredge and fill permit application (FPLNNP-10-0151), as well as the July 2011 Turkey Point Units 6 & 7 Mitigation Plan Rev.2 and August 2012 Mitigation Plan Rev. 2 (USACE Supplement). As specified in the Table 1-1 of the Mitigation Plan Rev. 2 (USACE Supplement), the generating units and non-transmission facilities impact 402 wetland acres, while either of the transmission corridors is estimated to have no more than 308 acres of potential wetland impact thus totaling 710 acres of direct wetland impact. (**0619-1-2** [Maher, William])

**Response:** The acreages of affected wetlands presented in the EIS have been updated to reflect the most recent information provided. Most notably, the wetland acreage noted in Section 4.3.1 as being permanently altered by development of the offsite transmission lines and pipelines has been substantially reduced to reflect more precise disturbance widths provided for the corridors by the applicant subsequent to publication of the draft EIS. Text in Chapters 1 and 10 was also modified to reflect the revised acreage of wetland impact.

Comment: On December 11, 2014, the U.S. Fish and Wildlife Service published a final rule classifying the rufa subspecies of the red knot as threatened. A new and significant information review was conducted by FPL where it was concluded that there would not be an impact to any significance level or conclusion drawn in the ER with respect to the change in status of the rufa subspecies of the red knot. With respect to this change of designation, there remain instances in the DEIS where it states that the red knot is proposed as a Federally threatened/ endangered species (emphasis added): a. DEIS Subsection 2.4.1.3, Page 2-89, Lines 3-4: The DEIS states: "Red Knot (Calidris canutus rufa). The red knot is proposed as a Federally threatened species (78 FR 60024) (TN3199)." b. DEIS Subsection 2.4.1.3, Page 2-80, Table 2-13: DEIS Table 2-13 lists the "Rufa red knot" as "PT" (Federally proposed threatened). c. DEIS Subsection 9.3.2.3, Page 9-60, Table 9-8: DEIS Table 9-8 lists the "Federal Status" for the "Red knot" as "Proposed Threatened". d. DEIS Subsection 9.3.3.3, Page 9-115, Table 9-13: DEIS Table 9-13 lists the "Federal Status" for the "Red knot" as "Proposed Threatened". e. DEIS Subsection 9.3.4.3, Page 9-165, Table 9-18: DEIS Table 9-18 lists the "Federal Status" for the "Red knot" as "Proposed Threatened". f. DEIS Subsection 9.3.5.3, Page 9-211, Table 9-23: DEIS Table 9-23 lists the "Federal Status" for the "Red knot" as "Proposed Endangered". There are, however, two instances in the DEIS that list the rufa red knot as threatened (emphasis added): a. DEIS Subsection 4.3.1.3, Page 4-55, Line 19: The DEIS states: "Red Knot (Calidris canutus rufa) - Threatened." b. DEIS Subsection 7.3.1.1, Page 7-20, Lines 10-13: The DEIS states: "Listed wildlife that could likely be affected by building proposed Units 6 and 7 facilities include the eastern indigo snake (threatened; Drymarchon corais couperi),...red knot (threatened; Calidris canutus),..." Additionally, in two instances of the DEIS, the red knot is characterized as "not known to occur on the Turkey Point Property (emphasis added): a. DEIS Subsection 2.4.1.3, Page 2-89, Lines 4-18: The DEIS states: "As of 2008, the rufa subspecies is thought to have three biogeographically distinct populations, one of which winters in the Southeast United States including Georgia, South Carolina, and Florida (FWS 2013-TN3202)" red knots have not been observed and are not known to occur on the Turkey Point property or along the Atlantic Coast of Miami-Dade County."b. DEIS Subsection 4.3.1.3, Page 4-55, Lines 21-23: The DEIS states: "... No record of red knots occurring on the Turkey Point site has been found. However, suitable habitat exists on the site that would be affected by the proposed action..." However, ER Table 2.4-1 lists the "Red knot" as being observed during the late winter 2009 avian surveys-one Red knot was observed. The DEIS supports FPL's conclusion that there would not be an impact to any significance level or conclusion drawn in the ER. Specifically, in DEIS Subsection 4.3.1.3, pages 4-55 (lines 30-31),

and 4-65 (lines 18-19), and in DEIS Subsection 5.3.1.3, page 5-41 (lines 16-20), the NRC discusses its impact evaluation—in each instance the review team "expects that impacts would be minimal" in relation to the potential that the Red knot "could be expected to occasionally occur in small numbers at the Turkey Point site". (**0619-1-9** [Maher, William])

# **Response:** The comment identifies updated information about the status and occurrence of a listed species. Discussion of the rufa red knot in Sections 2.4.1.3, 4.3.1.3, and 5.3.1.3 has been updated based on information in this comment as well as updated information provided by the applicant regarding mitigation for impacts on habitat for migratory birds.

**Comment:** There are instances in the DEIS where the impacts are characterized as affecting an entire transmission or pipeline corridor, when in reality, only a small percentage of the corridor will be impacted. Instances in the DEIS include (emphasis added): ...DEIS Subsection 7.3.1.1, Page 7-19, Lines 31-33: The DEIS states: "An additional 2,203 ac of terrestrial habitats would be affected by the installation of potable and reclaimed water-supply systems..." FPL's response to NRC RAI Letter No. 1103093 (eRAI 5561), ML11192A042, dated July 7, 2011 states: "The land disturbance for each type of vicinity and region linear feature -transmission, pipeline, road -represents a corridor in which each feature will be located. The actual land disturbance for each feature are expected to be less, based on the requirements of that feature... Additionally, the pipeline disturbances are considered temporary. That is, the land disturbance will be restored to its original land use upon completion of construction/installation activities." h. DEIS Appendix F-2, Subsection 3.1.2, Page 3-6, Lines 3-4 and DEIS Appendix F-2, Subsection 3.1.2, Page 3-6, Lines 11-12: Appendix F-2 (lines 3-4) states: "Development of the East corridor would disturb approximately 1,635 ac of land." Appendix F-2 (lines 11-12) also states: "The route referred to as the "West Preferred corridor" occupies approximately 3,280 ac of land." This information does not take into account that the acreage listed is for a corridor, not the final right of way. The corridor will not be developed; the ROW within the corridor will be developed (ER Subsection 4.3.2.4). In addition in some locations the new facilities will be colocated with existing facilities (ER Subsection 2.2.2.2). ER Subsection 4.3.2.4 states: "The western and eastern transmission corridors represent the maximum extent of land presented for certification as part of the Site Certification Application (SCA) state process. The actual required right-of-ways will be determined post-certification, as will the location and amount of actual land requirements/disturbances necessary for transmission line construction. Therefore, the end-use land cover for these transmission corridors cannot be determined at this time." ER Subsection 2.2.2.2 states: "The Clear Sky-Davis portion of the East Preferred Corridor would use an existing, 19-mile-long, multicircuit FPL transmission line right-of-way. This right-of-way has the ability to accommodate the proposed single-circuit 230 kV line without the need for additional right-of-way. However, for a portion of the Davis to Miami corridor, new rights-of-way would be required, but much of the proposed corridor includes existing transportation rights-of-way (e.g., U.S. Route 1, Metrorail)" and "In some portions of the proposed Davis-Miami transmission line section, it would be collocated with other transmission lines on the existing right-of-way." i. DEIS Appendix F-2, Subsection 3.1.4, Page 3-6/3-7, Lines 40/2: Appendix F-2 states, with regard to the potable pipeline corridor: "...for the purposes of this BA, it is assumed the entire corridor would be disturbed. More than 184 ac of wetlands would be disturbed." The DEIS is presenting all acreage within the corridor as impact area, when only a small percentage of the corridor would be affected. COLA Rev 6 section 4.1.2.4 states, "Because of the commonality of the (potable) pipeline route with previous disturbance and/or new disturbance already expected to occur resulting from construction of other Units 6 & 7 project facilities (e.g., roadway improvements), construction of the underground pipelines would have minimal additional environmental impacts." In addition, the language does not state that these are temporary impacts. ER Subsection 4.1.2.4 states: "As described in Section 4.3,...and, upon completion,

the disturbed portions of the corridor would be graded to the contours of the surrounding landscape and revegetated or returned to previous land uses." j. DEIS Appendix F-2, Section 5.1, Page 5-1, Lines 5-8: Appendix F-2 states: "Development of lands within the Turkey Point site, including...would result in the removal of more than 1,300 trees, including almost 550 trees of various palm species (FPL 2011-TN1471)." Condition of Certification, Section B "Specific Conditions - Power Plant and Associated Facilities (Excluding Transmission Lines)", Subsection VII "Miami-Dade County", Item O. 13, page 89 states: "Prior to commencement of work within each segment of linear facilities (roads or pipelines), FPL shall revise the tree survey previously submitted in response to MDC completeness question 5-MDC-D-11 (July 2011). The revised tree survey will show all upland trees proposed to be removed, as well as a tree planting plan to mitigate for the tree canopy to be removed as required by Section 24-49 of Miami-Dade County Code." The tree survey was a baseline conducted to identify existing trees per MDC requirements. It does not indicate what trees would be removed. (0619-1-20 [Maher, William])

**Response:** This comment provides updated information about the quantification of impacts to terrestrial ecology resources. Using information available to the review team prior to preparing the draft EIS, the draft EIS conservatively bounded its assessment of terrestrial habitat impacts from building the proposed transmission lines and pipelines by assuming that all habitat within the designated corridors would be permanently altered. The review team subsequently sought and received from the applicant more precise information about the projected footprint of disturbance within the corridors. In general, the applicant was able to narrow the width of projected facility disturbance footprints, thereby allowing the review team to present a more precise and less broadly conservative assessment. The review team independently reviewed the updated information and following its verification used the information to reduce the projected extent of terrestrial habitat impacts accordingly in Section 4.3 of the EIS.

**Comment:** There are instances in the DEIS with respect to the presented land use values in their respective tables, which are inconsistent with the cited source or not current with the most recent documentation/reference. Instances in the DEIS include (emphasis added):...DEIS Subsection 2.4.1.2, Page 2-78, Table 2-12: DEIS Table 2-12 contains the land use coverage acreages for the pipeline corridors by classification. The following inconsistencies are noted with the source cited for DEIS Table 2-12, (FPL 2014-TN4058, Table 2.2-6) (areas where the data is inconsistent with the most current reference are also indicated): i. The "Potable Water Pipeline Corridor" acreages for the "Forest (ac)", "Open Water (ac)", "Wetlands (ac)", and "Infrastructure (ac)" classifications are consistent with an earlier revision of FPL's ER but are inconsistent with FPL's ER Revision 6. The acreages listed in DEIS Table 2-12 for the "Forest (ac)", "Open Water (ac)", "Wetlands (ac)", and "Infrastructure (ac)" classifications are 7.69, 24.75, 159.95, and 39.21, respectively. In contrast, the summation of the acreages in ER Table 2.2-6, Revision 6, for the same major classifications are 7.65, 24.72, 158.95, and 39.19, respectively. ii. The "Reclaimed Water Pipeline Corridor" acreages for the "Uplands (ac)" and "Wetlands (ac)" classifications are inconsistent with ER Revision 6. The acreages listed in DEIS Table 2-12 for the "Uplands (ac)" and "Wetlands (ac)" classifications are 101.34 and 457.8, respectively. In contrast, the summation of the acreages in ER Table 2.2-6, Revision 6, for the same major classifications are 99.28 and 457.75, respectively. iii. For both the "Potable Water Pipeline Corridor" and "Reclaimed Water Pipeline Corridor" the acreage for the "Developed (ac)" classification is not consistent with ER Revision 6. The acreages listed in DEIS Table 2-12 for the "Developed (ac)" classification are 58.9 and 720.7 for the "Potable Water Pipeline Corridor" and "Reclaimed Water Pipeline Corridor", respectively. In contrast, the summation of the acreages in ER Table 2.2-6, Revision 6, for the "Developed (ac)" classification are 51.36 and 19.67 for the "Potable Water Pipeline Corridor" and "Reclaimed Water Pipeline Corridor",

respectively. iv. For both the "Potable Water Pipeline Corridor" and "Reclaimed Water Pipeline Corridor" the summation of the acreages do not equate to the values listed under the "Total Acres" in DEIS Table 2-12. Additionally, for the "Potable Water Pipeline Corridor", the value listed for the "Total Acres" is not consistent with ER Revision 6. (**0619-2-2** [Maher, William])

**Comment:** Numerical value inconsistencies within the draft EIS: Subsection 2.4.1.1, Page 2-74, Lines 28-31 "Terrestrial land cover on the Turkey Point site is presented in Table 2-2. Land on the Turkey Point site is used primarily for electric power facilities, and facilities for existing Turkey Point Units 1-5 occupy approximately **5,672 ac**, composing almost half of the Turkey Point site" DEIS Table 2-2 ER Table 2.2-1 The referenced table, DEIS Table 2-2, indicates that land use characterized as electric power, FLUCFCS code 831, totals **5,682.84 ac**. ER Table 2.2-1 also indicates land use characterized as electric power, FLUCFCS code 831, as **5,682.84 ac**. (0619-2-31 [Maher, William])

**Comment:** Numerical value inconsistencies within the draft EIS: DEIS Subsection 4.3.1.3, Page 4-58, Lines 38-39 "Limpkin. More than **100 ac of mangrove habitat** would be permanently lost, although only 28 ac of the affected areas are high-quality mangrove habitat." DEIS Table 4-7 DEIS Table 4-9 ER Table 4.3-1 DEIS Table 4-7 presents this acreage as **77.4** ac, and DEIS Table 4-9 presents this acreage as **80.8 ac**. ER Table 4.3-1 presents this acreage as **77.39 ac**[.] (**0619-2-35** [Maher, William])

**Comment:** There are instances in the DEIS with respect to the presented land use values in their respective tables, which are inconsistent with the cited source or not current with the most recent documentation/reference. Instances in the DEIS include (emphasis added):...DEIS Subsection 4.3.1.1, Page 4-43: DEIS Table 4-8, "Permanent Habitat Loss on the FPL Turkey Point Property Attributed to Building Units 6 and 7 Facilities", contains total acreage and wetland acreage values attributed to constructing Units 6 & 7. The following inconsistencies with the source (adapted) cited for DEIS Table 4-8, (FPL 2014-TN4058, Table 4.3-1 of Revision 6) are noted: i. The following acreage values do not reflect the values in ER Table 4.3-1, Revision 6, but rather reflects those of ER Table 4.3-1, Revision 4, prior to the relocation of the FPL Reclaimed Wastewater-Treatment Facility: the acreages for the "FPL Reclaimed Water-Treatment Facility (alternate location)", "Spoils Area B", and "Spoils Area C". ii. The wetland acreage value for the "FPL Reclaimed Water-Treatment Facility (alternate location)" include FLUCFCS code 437 Australian Pine; however, footnote b for DEIS Table 4-8 indicates that "all 500 and 600 series FLUCFCS codes and 743W are considered in this analysis to be wetlands". iii. Acreages are included for the "Treated Reclaimed Water Delivery Pipelines"; however, as noted in the table note for ER Table 4.3-1, Revision 6, "The treated reclaimed water supply pipeline is now fully within the heavy haul road disturbed area and is not separately considered". iv. the "Nuclear Administration Parking" should be titled "Nuclear Administration Building" as described in ER Table 4.3-1, Revision 6. v. DEIS Table 4-8 reports the total wetland acreage as 328.12 ac. A summation of reconciled acreage values indicates that this number should be **316.16** ac. Also note, there are locations in the DEIS text that will require reconciliation. For example, DEIS Subsection 7.3.1.1, page 7-19, Lines 28-31. (0619-2-6 [Maher, William])

**Comment:** DEIS Appendix F-2, Subsection 3.1.3, Page 3-6, Lines 35-37: USFWS BA states, "Although the exact location of the pipeline has not been determined within the corridor, burying the reclaimed water pipeline is expected to temporarily disturb approximately **327 ac** of the **1,876 ac** corridor." The area of temporary disturbance associated with installation of the reclaimed water pipeline is approximately 75 feet wide by 9 miles long (see comment 89, above), equaling approximately **82 acres**. ER Subsection 4.1.2.4 states: "The current land use of the **1886 acres** within this corridor, some smaller portion of which could be impacted with the

construction of the pipelines and right-of-way." DEIS Subsection 4.3.1.2, page 4-45, line 15 states: "Approximately **1,886 ac** of upland, forested, and wetland habitats as well as previously developed or disturbed lands would be affected by installation of the reclaimed water pipeline (Table 4-3)." (emphasis added) (**0619-6-10** [Maher, William])

**Response:** The review team has reviewed all acreage figure information and updated acreage figures as appropriate in the Sections 2.4, 4.3, and 5.3 of the EIS. The updated acreage figures did not substantially alter the conclusions presented in the EIS.

**Comment:** The NPS continues to be concerned that the construction of new powerlines, roads, and other infrastructure relating to the licensing of Turkey Point Units 6 and 7 would impact a great many federally threatened and endangered species. (**0622-2-1** [Austin, Stan])

**Response:** The review team has met with representatives of the FWS on multiple occasions to discuss possible impacts on Federally listed species, including but not limited to, the American crocodile, Florida panther, wood stork, Everglade snail kite, manatee, and various species endemic to South Florida. The review team prepared a BA (Biological Assessment) evaluating each Federally listed species and included it in Appendix F of the draft EIS. The BA included the review team's professional opinion regarding the severity of possible effects on each Federally listed species as of its preparation in 2015. The team continued to work closely with the applicant and FWS to obtain and review updated information about possible effects on these species and the applicant's proposed mitigation. The proposed mitigation was developed by the applicant. Following continued coordination with the FWS, the review team prepared an updated table presenting updated effects conclusions about each listed species, including species newly listed or proposed for listing subsequent to publication of the draft EIS and initial BA (e.g., Miami tiger beetle). The review team provided that table to the FWS in August 2016. The final EIS discusses the review team's continued coordination with the FWS since the initial BA and updates the status of the review team's formal consultation efforts with FWS under ESA Section 7.

**Comment:** The wood stork was originally listed as endangered, primarily due to loss, fragmentation, and degradation of the wetland habitats on which they depend. Since listing, the wood stork population has shown signs of improvement, and the range has been expanding northward. In June 2014, the U.S. Fish and Wildlife Service downlisted the wood stork from endangered to threatened in recognition of the expansion of the stork's population. Range-wide, the stork population reached the recovery criterion for downlisting of a 3-year running average of more than 6,000 nesting pairs. However, wood stork nesting falls well below the recovery criterion of more than 10,000 nesting pairs. In addition, the 5-year average stork nesting in the Everglades and Big Cypress Systems remains below the 2,500 nesting pairs that is another benchmark for delisting, as nesting in south Florida remains variable. While there have been improvements in wood stork nesting in the Everglades region, the majority of increases in wood stork nesting have occurred further north, outside of the species' historic range in the southeastern U.S. In the Everglades, nesting success tends to be irregular, with occasional "big" nesting years interspersed with several poor years, and in the big years, the success of the South Florida colonies is significant. In 2001, the Tamiami West colony supported approximately 25 percent of all wood stork nesting in the U.S. [Footnote 2: NPS. 2011. Everglades National Park Colonial Wading Bird Nesting Monitoring Data. 2011. South Florida Natural Resources Center at Everglades National Park. Footnote 3: U.S. Fish and Wildlife Service. 2012. Endangered and Threatened Wildlife and Plants; Reclassification of the Continental U.S. Breeding Population of the Wood Stork From Endangered to Threatened. Federal Register 77(247): 75947-75966.] As a result, increases in risk, particularly to adult storks, may

substantially reduce the productivity and nesting that currently occurs. Because of the reproductive strategy of wood storks, in which adults do not fledge young in every year, losses of breeding adults may have population-level consequences. Thus, we encourage the NRC to reconsider language in DEIS section 5.3.1 relating to the impact of FPL's proposed powerlines on wood storks and the role of FWS. While Section 7 consultation addresses projects that have the potential to "jeopardize" the existence of a species, this project could change the trajectory of the stork population and still not rise to a level of jeopardy. In the DEIS for the Acquisition of FPL Land in the East Everglades Expansion Area, the NPS concluded that impacts could be major for some species such as the threatened wood stork. This conclusion was reached due to the close proximity of the proposed powerlines to Everglades NP. For instance, the proposed powerlines pass within five miles of several wading bird colonies (species highly susceptible to collision) in an area where there are no existing powerlines. The proposed route travels within one mile of one of the largest and most consistent wading bird colonies in South Florida, which can support around ten thousand pairs of wading birds of several species. Taking into account site-specific detail, "minimal" may not adequately describe impacts to avian resources. The NPS maintains that since wetlands are recognized as areas where birds congregate - the large amount of wetlands in the corridor (and proximity to the Everglades) makes risk much higher than "normal." Some species, such as wood stork, may be more susceptible to collisions, especially with guy wires, leading to potentially high mortality and population-level changes. (0622-1-20 [Austin, Stan])

**Response:** Sections 4.3.1.3 and 5.3.1.3 include discussions of potential impacts of building and operating the project on the wood stork. These discussions are in addition to and consistent with the review team's evaluation of impacts on the wood stork in the BA developed for formal consultation under ESA Section 7. The wetland mitigation discussed in Section 4.3.1.6 of the EIS specifically accounts for impacts on wetlands in designated "core foraging areas" for the wood stork and calls for establishing offsetting wood stork habitat in areas used for the proposed wetland mitigation. The indicated EIS sections have been updated to address the latest information available on wood stork impacts and associated mitigation proposed by the applicant.

**Comment:** The NPS recommends that NRC provide additional information and data related to species and habitat use, especially for habitats that will be used for construction such as the mudflat. (**0622-1-19** [Austin, Stan])

**Response:** Section 4.3.1.1 of the EIS discusses in detail the impacts on wetlands and other terrestrial habitats from building the proposed facilities in the 218 ac plant area that includes the mudflat, and the remainder of Section 4.3.1.1 and Section 4.3.1.2 address impacts from building project facilities on other onsite and offsite terrestrial habitat. Regarding the mudflat, Section 4.3.1 has been updated where appropriate to discuss input from FWS about the loss of shorebird habitat provided by the mudflat and the establishment of compensatory shorebird habitat in the applicant's proposed wetland mitigation.

**Comment:** Additionally, the DEIS did not analyze the effects of the proposed action upon the federally listed Red Knot. (**0622-1-18** [Austin, Stan])

**Response:** Section 4.3.1.3 of the EIS contains analyses of the effects of the proposed preconstruction and construction activities on the rufa subspecies of red knot onsite and offsite. Section 5.3.1.3 considered operational impacts on the red knot. Without specific fauna surveys, the EIS conservatively assumes that all wildlife known to occur in the region would occur within all reasonably suitable habitats. Because the red knot is known to use mud flat and

mangrove habitats, the loss of mudflat and mangrove habitat was assumed to affect this species. However, the review team concluded habitat loss due to building the new facilities was not substantial and operations would have minimal impact on this species. No changes were made to the EIS specifically in response to this comment.

**Comment:** DEIS Subsection 4.3.1.1, Page 4-42, Lines 11-16: The DEIS states "Loss of mangrove stands...This extent of permanent mangrove cover loss...is a noticeable impact. However, **some of the lost mangrove cover** is from remnant stands in tidal creeks that **have been isolated from Biscayne Bay by cooling canals**." ER Subsection 2.2.1.1.2, states: "Mangrove heads, remnants of the original tidal creeks, contain...**The connection between these creeks and Biscayne Bay were severed during construction** of the industrial wastewater facility." **All of the mangrove areas** proposed for permanent impact **are isolated** from Biscayne Bay by cooling canals, and other existing plant-related development. (emphasis added) (**0619-4-3** [Maher, William])

**Response:** The review team agrees that certain mangrove forest areas that would be lost to build the new facilities are spatially separated from Biscayne Bay by berms or other surface features. However, the review team disagrees that these areas are fully separated hydrologically or ecologically from Biscayne Bay. Additionally, approximately 3.98 ac of mangrove swamp lies within the path of the RCW delivery pipelines. This mangrove acreage is not separated in any way from Biscayne Bay. Section 4.3 of the EIS has been edited to discuss the degree of separation between the affected mangrove cover and Biscayne Bay. The edits did not substantially alter the overall conclusions presented in the EIS regarding impacts on wetlands and other terrestrial ecosystems.

**Comment:** DEIS Subsection 2.4.1.4, Page 2-108, Lines 36-40: The DEIS states: "The **eastern indigo snake** is a...threatened species (FWS 2012-TN117; FNAI 2014-TN3668)... None were **observed** during recent surveys of the **transmission line corridors** (FPL 2014-TN4058)." The cited reference in the DEIS text, (FPL 2014-TN4058), is FPL's ER Revision 6. ER Subsection 2.4.1.2 states: "Indigo snakes have been observed...and at two locations in the Eastern Preferred transmission line corridor (in 2011)." (emphasis added) (**0619-3-11** [Maher, William])

**Response:** Section 2.4.1 of the EIS was revised to indicate that the eastern indigo snake was observed at two locations in the proposed corridor for the eastern transmission line. This change did not substantially alter the conclusions regarding the eastern indigo snake in the EIS or BA.

**Comment:** DEIS Subsection 2.4.1.1, Page 2-76, Lines 8-12: The DEIS states: "The raised fill areas contain maintained grasses as well as...and melaleuca (*Melaleuca quinquinervia*) (FPL 2014-TN4058)." The cited reference in the DEIS text, (FPL 2014-TN4058), is FPL's ER Revision 6. ER Section 2.4 includes a similar discussion of vegetation in these areas but does not include melaleuca (*Melaleuca quinquinervia*) (emphasis added) (0619-3-9 [Maher, William])

## **Response:** Section 2.4 of the EIS has been revised to remove the mention of melaleuca in the subject area. This change did not substantially alter the conclusions presented in the EIS.

**Comment:** DEIS Subsection 2.4.1.1, Page 2-76, Lines 3-6: DEIS Section 2.4.1.1 states: **"Wetland spoil areas** totaling about **9 ac** occur adjacent to remnant canals...(FPL 2014-TN4058)." The cited reference in the DEIS text, (FPL 2014-TN4058) is FPL's ER Revision 6. ER Section 2.4 states: "Wetland habitats within the Units 6 & 7 plant area and adjacent laydown area include...and **wetland spoil areas (10 acres)**. (emphasis added) (**0619-3-8** [Maher, William]) **Response:** Table 4.3-1 of the Turkey Point Units 6 & 7 COL Application Part 3 – Environmental Report Revision 6 indicates 9.05 ac of wetland spoils (FLUCFCS [Florida Land Use, Cover, and Forms Classification System] class 743-WET) are present within the Turkey Point Units 6 and 7 plant area. No changes were made to the EIS as a result of this comment.

**Comment:** DEIS Subsection 2.4.1.1, Page 2-74, Line 35-38: The DEIS states: "Most of the plant area comprises mudflats that are inundated annually for **3 to 4 months** and are sparsely vegetated with saltwort (*Batis maritime*)...(FPL 2014-TN4058)." The cited reference in the DEIS text, (FPL 2014-TN4058), is FPL's ER Revision 6. The timeframe, 3 to 4 months, is consistent with an earlier revision of FPL's ER but does not reflect the timeframe given in FPL's ER Revision 6. ER, Revision 6, Section 2.4 states: "...the sparsely vegetated mudflats are typically inundated by water **7 to 8 months** out of the year and a few hardy plant species that can tolerate these conditions persist, including saltwort (*Batis maritima*)..." (emphasis added) (**0619-3-7** [Maher, William])

**Response:** The commenter provides incorrect information. Page 2.2-4 in Section 2.4 of Revision 6 of the Turkey Point Units 6 and 7 COL Application Part 3 – Environmental Report actually states "...the sparsely vegetated mudflats are typically inundated by water **3 to 4 months** out of the year and a few hardy plant species that can tolerate these conditions persist, including saltwort...". (emphasis added) No changes were made to the EIS as a result of this comment.

**Comment:** There are instances in the DEIS with respect to the presented land use values in their respective tables, which are inconsistent with the cited source or not current with the most recent documentation/reference. Instances in the DEIS include (emphasis added):...DEIS Subsection 4.3.1, Page 4-44, Table 4-9: DEIS Table 4-9 contains acreage values for the Turkey Point Site by wetland FLUCFCS code. The following inconsistencies with the source (adapted) cited for DEIS Table 4-9, (FPL 2014-TN4058, Table 4.3-1 of Revision 6) are noted: i. The acreage listed under code 612-B is 40.4 ac. The summation provided in ER Table 4.3-1 for code 612-B is **36.98 ac**. ii. The acreage listed under code 510 is **12.9 ac**. The summation provided in ER Table 4.3-1 for code 510 is 12.45 ac. Additionally, in DEIS Table 4-7, the acreage listed under code 510 is 12.5 ac. iii. DEIS Table 4-9 lists FLUCFCS code 617 "Mixed Wetland Hardwoods" with a permanent impact acreage value of 0.4. However, ER Table 4.3-1, does not list FLUCFCS code 617 or a corresponding acreage. iv. There are no numerical FLUCFCS codes listed for the corresponding FLUCFCS code descriptions: "Sawgrass Marsh", "Australian Pine", "Exotic Wetland Hardwoods", "Exotic Wetland Hardwoods-Australian Pine", and "Disturbed Land". v. The acreage in this table is characterized as permanent acreage but the table includes areas of temporary wetland impact. (0619-2-7 [Maher, William])

## **Response:** The review team has reviewed and updated as appropriate the acreage data provided in the EIS. The updated acreage data did not substantially alter the conclusions presented in the EIS.

**Comment:** The construction footprint for the Unit 6 and 7 reactors and associated infrastructure (*i.e.*, cooling towers, make-up water reservoir, ancillary buildings *etc.*) is currently comprised largely of occasionally flooded mudflats that provide important habitat for shorebirds and wading birds. These trust resources are protected under the Migratory Bird Treaty Act (MBTA), 16 U.S.C. 703. According to the DEIS, the project will result in the loss of 182.05 acres of mud flats (listed as non-vegetated in Table 4-1) that provide habitat for shore birds and wading birds. To minimize the impacts of the project to migratory birds, the Department has requested that FPL compensate for the loss of mud flats (migratory bird habitat) that will be lost

from project construction. In past discussions with the Department, FPL has indicated that they may be able to create and maintain the same acreage of mud flat habitat in perpetuity on FPLowned lands north of the project site. These lands are currently being leased for agricultural purposes. We request that FPL provide the Department with a detailed plan on how they intend to minimize and compensate for the loss of the migratory bird habitat. We further request that the NRC and U.S. Army Corps of Engineers include this plan, once approved by the Department, as a condition of any permit or authorization to offset the loss of habitat for shorebirds and wading birds. (0227-8 [Stanley, Joyce])

**Response:** The State of Florida COCs issued on 5/19/14 state that FPL must mitigate for loss of shorebird habitat in consultation with the FFWCC (Florida Fish and Wildlife Conservation Commission). FPL is also required to restore or preserve 170 ac of mudflat habitat within the Everglades Mitigation Bank as part of their wetlands mitigation plan, of which 5 credits shall be applied to offset loss of shorebird habitat instead of wetlands. Additional mitigation may be negotiated with FPL by the FWS as part of the ESA consultation process. Section 4.3.1.6 of the EIS has been updated to describe this required mitigation.

**Comment:** Included in the project application are three new sets of powerlines (two of them will be 15 stories tall) to be run across and through the eastern section of what is currently Everglades National Park. Expected impacts include: increased electrocutions and collisions for birds (three federally threatened wood stork colonies are known to roost in the vicinity of the proposed lines); the spread of invasive plant species along a new, drivable access corridor[.] (**0240-9** [Commenters, Multiple])

**Response:** Sections 5.3.1.2 and 5.3.1.3 of the EIS discuss avian mortality caused by the proposed new transmission lines, including electrocutions and collisions by wood storks, Everglade snail kites, and other large birds. FPL is required to install flight diverters on those wires identified by the FFWCC as being the most likely to cause avian collision mortality. FPL is also required to fund a mitigation effectiveness study that includes mortality monitoring and observations of flight behavior of any birds crossing transmission lines. Study results are to be provided to the FFWCC for discussion and evaluation, which could include additional mitigation or monitoring. Sections 4.3.1.3 and 5.3.1.2 of the EIS provide discussion of potential introduction of invasive plants both onsite and offsite as an environmental impact of the proposed actions. No changes were made to the EIS as a result of this comment.

**Comment:** Constructing high tension power lines in the migratory pathways of birds is just one more unconscionable negative impact. (**0245-3** [Lindsey, Jerrie])

**Response:** As stated in Section 4.3.1.3 of the EIS, migratory bird habitat would be altered and lost during installation of the proposed transmission lines. Section 5.3.1.3 of the EIS describes impacts of transmission operation on migratory birds, including collision and electrocution risk and measures required by the State of Florida to reduce and assess these risks. Additional mitigation may also be required by the FWS. No changes were made to the EIS as a result of this comment.

**Comment:** A more immediate impact on wildlife that will result from construction of Units 6 and 7 arises from the powerlines that will be built through Everglades National Park to transmit the power from the reactors. I have observed one of the wood stork colonies in Everglades National Park that is in close proximity to the location where the powerlines and their supporting towers will be installed-there are three federally threatened wood stork colonies known to roost in the vicinity. The powerlines will increase electrocutions and collisions for wood storks and other

birds. It is well known that the wading bird population in the Everglades has already declined 90% over several decades; this loss should not be compounded with powerline infrastructure. (**0246-5** [Shlackman, Mara])

**Response:** Section 2.4.1.3 and 2.4.1.4 of the EIS discuss known wood stork colony locations, management zones, and core foraging areas near the proposed transmission corridors. The discussion of wading bird population trends in the Biological Indicators portion of Section 2.4.1.3 of the EIS indicates that populations are significantly lower than historical levels, consistent with the comment. However, the subject EIS text also states that almost all wading bird species have recently increased in number and their populations are significantly greater than 10 percent of historical levels, and the wood stork population is also recovering as evidenced by the June, 2014 reclassification from endangered to threatened. Nonetheless, collision and electrocution mortality of wood storks and other wading birds were identified as a potential impact of the proposed actions in Sections 4.3.1.3 and 5.3.1.3 of the EIS. Mitigation of these risks to wood storks and monitoring to assess mitigation effectiveness as required by the State of Florida COCs were also discussed in Section 5.3.1.3 of the EIS. Information about recent wood stork population trends was added to the EIS as a result of this comment. The added information did not alter the review team's conclusions regarding impacts on the wood stork or on terrestrial ecology in general.

**Comment:** Since other animals do not belong to humans at all, the least we can do is assiduously try to protect them as much as possible, after all the harm people have inflicted on them. (**0285-2** [Miller, Melissa])

**Response:** Wildlife mitigation and protection measures are discussed in Sections 4.3.1.3 and 5.3.1.3 of the EIS. No changes were made to the EIS as a result of this comment.

**Comment:** The planned expansion of Turkey Point is environmentally dangerous and unacceptable at a time when we are aware of the hazards of intruding on sensitive habitats. (0307-1 [Rose, Aaron])

**Response:** A description of sensitive habitats potentially affected by the proposed action was included in Section 2.4.1.3 of the EIS. Impacts on those habitats caused by project encroachment are provided in Sections 4.3.1.1 and 5.3.1.1 of the EIS. No changes were made to the EIS as a result of this comment.

**Comment:** I worked at the Turkey Point Plant some years ago and witnessed the changes made in the surrounding ecosystems. (**0308-1** [Wallington, Victoria])

**Response:** Changes in the South Florida terrestrial ecosystem, including ecological impacts from past actions, are described in Section 7.3.1.1 of the EIS and changes in the aquatic ecosystem are described in Section 7.3.2.1. The assessments of cumulative terrestrial and aquatic ecological impacts in Chapter 7 of the EIS were considered in the context of this history of rapid and substantial change from past actions. No changes were made to the EIS as a result of this comment.

**Comment:** We are having salt water intrusion into the everglades. Salt Water plants are growing there. If there, then everywhere. (**0373-2** [Lee, Nancy])

**Response:** Intrusion of saltwater into surface water and wetlands was not an issue of concern identified during consultation with Federal, State, and local environmental agencies. Therefore,

this issue was not considered by the review team. Potential ecological effects of sea-level rise caused by global climate change are discussed in Appendix I of the EIS. No changes were made to the EIS as a result of this comment.

**Comment:** IN FOLLOWING THE NRC'S OWN GUIDELINES, THE EXPANSION OF TURKEY POINT COULD HAVE UNACCEPTABLE AND IRREVERSIBLE IMPACTS ON THESE TREASURED SITES. (0449-2 [Benton-Janetta, Lori])

**Response:** Impacts on terrestrial resources, including the wetlands and wildlife habitat referred to in the comment as "treasured sites", are discussed in Sections 4.3.1.1 and 5.3.1.1 of the EIS. No changes were made to the EIS as a result of this comment.

**Comment:** That fragile piece of land has already been pushed beyond its limits endangering and destroying rare wetlands and wildlife. (**0598-2** [White, Barry J.])

**Response:** The fragile piece of land referred to by the commenter is assumed to be the Turkey Point Site. Past development of the Turkey Point site is discussed in Sections 2.2.1.6 and 2.4.1.1 of the EIS. Ecological effects from past actions are discussed in Sections 7.3.1.1 of the EIS. Impacts from the proposed development of Units 6 and 7 to terrestrial resources, including wetlands and wildlife habitat, are described in Sections 4.3.1.1 and 5.3.1.1 of the EIS. No changes were made to the EIS as a result of this comment.

**Comment:** Section 2.2.2.3, Makeup and Potable Water Systems (pg. 2-20): Table 2-6 lists 447.80 acres of wetlands within the reclaimed water pipeline corridor, and 159.95 acres within the potable water pipeline corridor. It also states (pg.4-9) that FPL proposes to grade the disturbed portions of the corridor to the contours of the surrounding landscape and re-vegetate or return these areas to previous land uses. The EPA appreciates the effort to minimize wetland impacts by this action. The EPA is still unclear on the total extent and type of permanent impacts which will occur due to this activity. Please clarify. (**0617-1-6** [Mueller, Heinz J.])

**Response:** The EPA's appreciation of the applicant's effort to minimize wetland impacts is noted. In response to various comments on the EIS by the applicant (FPL), the review team has provided more precise details regarding the anticipated extent and permanence of impact from pipeline installation on the overlying terrestrial and wetland habitats in Section 4.3 of the EIS. This updated information has not changed the conclusions drawn in the EIS concerning potential impacts on wetlands and terrestrial habitats.

**Comment:** Section 3.2.3.4, Support and Laydown Areas (pg. 3-20): The EPA requests that the FEIS provide additional avoidance and minimization efforts by restoring wetlands associated with support and laydown areas after construction is completed. Section 4.1.1.2, Pipelines (pg. 4-9) Table 4-3: Outlines major land use acreages for the pipelines but is not clear on the specific acres of wetlands to be impacted. Please provide more detail about wetland impacts for this activity, to be consistent with the format illustrated in Table 4-1 of the DEIS for the Turkey Point site. Section 4.1.1.3, Access Roadways (pg. 4-9) Table 4-4: Outlines major land use acreages for access road improvement but is not clear on the specific acres of wetlands to be impacted. Please provide more detail about wetlands to be impacted. Please provide for access for access road improvement but is not clear on the specific acres of wetlands to be impacted. Please provide more detail about wetland to be impacted. Please provide more detail about wetlands to be impacted. Please provide more detail about wetland to be impacted. Please provide more detail about wetland to be impacted. Please provide more detail about wetland impacts for this activity, to be consistent with the format illustrated in Table 4-1 of the DEIS for the Turkey Point site. (0617-1-9 [Mueller, Heinz J.])

**Response:** In response to these comments and to various other comments received from the applicant (FPL), the review team has provided more precise details in the text and tables regarding the anticipated extent of impacts on terrestrial and wetland habitats from various

project elements. Table 4-8 of the EIS states that 32.17 ac of wetlands lie within the Western Laydown Areas. FPL has stated that laydown areas would become permanent above-grade facilities and would not be restored as wetlands. This information was added to Section 4.3.1 of the EIS. The review team has also expanded the discussion in Section 4.3.1.6 of FPL's proposed Wetland Mitigation Plan, which does not include laydown areas within the Turkey Point site because these areas would be permanently filled. This updated information has not changed the conclusions drawn in the EIS concerning potential impacts on wetlands and terrestrial habitats.

**Comment:** Section 4.1.2, Transmission-Line Corridors and Associated Areas (pg. 4-15) Tables 4-5 and 4-6: Outlines major land use acreages for transmission-line corridors and associated areas, but is not clear on the specific acres of wetlands to be impacted. Please provide more detail regarding wetland impacts for this activity, to be consistent with the format illustrated in Table 4-1 of the DEIS for the Turkey Point site. (**0617-1-10** [Mueller, Heinz J.])

**Response:** In response to this comment and to various other comments received from the applicant (FPL), the review team has provided more precise details regarding the anticipated extent of impacts on terrestrial and wetland habitats from each proposed offsite transmission line. Tables 4-5 and 4-6 have been updated accordingly. However, specific acreages for various land cover classifications are not available for proposed offsite corridors because the siting of transmission infrastructure has not been finalized. Although all lands within the corridors would not be developed, the review team conservatively concluded that all land area within proposed corridors could be developed and based conclusions on this approach. This updated information has not changed the conclusions drawn in the EIS concerning potential impacts on wetlands and terrestrial habitats. Wetland acreage figures within proposed transmission corridors are summarized in Table 4-10 of the EIS. The review team believes the format of the various tables of terrestrial habitat impact are sufficiently consistent and therefore has not altered the format of any of the subject tables.

**Comment:** The EPA requests that the FEIS address additional measures that can be taken to avoid and minimize onsite tidal and freshwater wetland impacts. As stated previously, the Public Notice published by the USACE stated that the project proposes impacts to 1000 acres of tidal and freshwater wetlands, and FPL stated in their response to USACE that the correct number for the direct wetland impacts for the project is 710 acres, with temporary impacts to 50 acres. Project impacts will include impacts to ARNI. The FEIS should clarify the acreage that would be impacted. (0617-1-29 [Mueller, Heinz J.])

**Response:** In response to this comment and to comments from the applicant (FPL), the review team has provided more precise details in Section 4.3.1 of the EIS regarding the anticipated extent of impacts on terrestrial and wetland habitats from various project elements. Sections 2.4.1.1 and 4.3.1.1 of the EIS also now provide information about which of the affected wetlands are Aquatic Resources of National Importance (ARNI). This updated information, while providing a clearer picture of the total extent of anticipated impacts, has not changed the conclusions drawn in the EIS concerning potential impacts on wetlands and terrestrial habitats.

**Comment:** There are instances in the DEIS where the impacts are characterized as affecting an entire transmission or pipeline corridor, when in reality, only a small percentage of the corridor will be impacted. Instances in the DEIS include (emphasis added): a. DEIS Subsection 2.4.1.2, Page 2-79, Lines 10-13: The DEIS states: "Access near the L-31 Canal **would occur** over or through dikes, levees, and canals as **well as 5 ac of wetlands**. An access road near NW 88th Street **would occupy**...." Acreages presented in the ER, along with the corresponding

documents, are on a corridor basis; the actual area disturbed will be less than the total within the corridor. b. DEIS Subsection 4.3.1.2, Page 4-45, Lines 3-4: The DEIS states: "Land cover that would be affected by installation of the pipeline totals approximately 326 ac (Table 4-3)..." All acreage within potable water pipeline corridor is identified as "affected area", when actually only a small percentage of the corridor will be used to install the pipeline. c. DEIS Subsection 4.3.1.2, Page 4-45, Lines 15-17: The DEIS states: "Approximately **1,886 ac** of upland, forested, and wetland habitats... would be affected by installation of the reclaimed water pipeline (Table 4-3)." Only a small percentage of total will actually be temporarily impacted during pipeline installation. d. DEIS Subsection 4.3.1.2, Page 4-50, Lines 7-16: The DEIS states: "Combined, the two new access roads for the West Preferred corridor would affect 365 ac (Table 4-6). The Krome Avenue access road would result in habitat loss or alteration...The four access roads necessary for the West Consensus corridor would affect a combined 110 ac...A variety of wetlands would be lost..." Corridors are wider than necessary to allow for impact avoidance during final roadway alignment design. Only a small percentage of habitats within the corridor would be affected. e. DEIS Subsection 4.3.1.3, Page 4-68, Lines 21-23: The DEIS states: "The proposed reclaimed water pipeline would affect almost 450 ac of wetlands, including..." The DEIS is presenting all acreage within a corridor (from DEIS Table 4-3) as impact area, when only a small percentage of the corridor would be affected. For comparison, from DEIS reference (FPL2011-TN1012)—Turkey Point Units 6 & 7 Mitigation Plan, the total acreage of temporary wetland impact associated with reclaimed water pipeline is **43.6 ac.** f. DEIS Subsection 4.3.1.7, Page 4-72, Lines 29-31: The DEIS states: "Pipelines that would be built...would affect an additional area of approximately 2,211 ac..." Corridors are wider than necessary to allow for impact avoidance during final design. Only a small percentage of habitats within the corridor would be affected. (0619-1-19 [Maher, William])

**Response:** The review team understands corridors were designated to be wider than what would be necessary to contain a linear feature (road, pipeline, transmission line) for planning purposes. Lacking more precise design data, the review team had originally conservatively assumed that all acreage contained within a corridor could be affected by the proposed action. Use of newer more precise data allows the review team to present a less conservative, more realistic evaluation in the final EIS. The review team has verified the information contained in the comment and expanded Section 4.3.1 of the EIS accordingly. This updated information has not changed the conclusions drawn in the EIS concerning potential impacts on wetlands and terrestrial habitats.

**Comment:** There are instances in the DEIS with respect to the presented land use values in their respective tables, which are inconsistent with the cited source or not current with the most recent documentation/reference. Instances in the DEIS include (emphasis added):...DEIS Subsection 4.3.1.1, Page 4-40, Table 4-7: DEIS Table 4-7 contains acreage values for the Turkey Point Site by cover types and FLUCFCS code. The following inconsistencies with the source cited for DEIS Table 4-7, (FPL 2014-TN4058) are noted: i. DEIS Table 4-7 lists FLUCFCS code 617 "Mixed Wetland Hardwoods" with a permanent impact acreage of 1.2. However, ER Table 4.3-1 does not list FLUCFCS code 617 or a corresponding acreage and percent total but rather list FLUCFCS code 619 "Exotic Hardwoods" with a corresponding disturbed acreage of 0.61. ii. DEIS Table 4-7 characterizes all of the disturbed acreage as "permanent". (0619-2-5 [Maher, William])

**Response:** The review team used the most current design data available to them. The review team has revised EIS Sections 4.1 and 4.3.1 so that the analyses in the final EIS account for design information received subsequent to publication of the draft EIS. The review team has independently verified the information contained in the comment and expanded the EIS

accordingly. This updated information has not changed the conclusions drawn in the EIS concerning potential impacts on wetlands and terrestrial habitats.

**Comment:** DEIS Subsection 4.3.1.1, Page 4-43/4-44, Lines 21/5: The DEIS states: "FPL has accounted for **secondary impacts on wetlands** at all proposed wetland fill locations associated with temporary road improvement for construction access as well as other non-linear facilities by calculating the acreage of a 25 ft buffer of those proposed fill locations. Secondary impacts on wetlands would also be mitigated per State of Florida regulations (State of Florida 2014-TN3637), but FPL has proposed to do so **at a reduced level equal to 60 percent of direct impacts** (FPL 2011-TN1012)." There is no specific FDEP guidance on mitigation for secondary impacts, which are potential impacts to wetlands adjacent to where the facilities will be located (direct impacts). FPL has proposed a very conservative mitigation approach by providing 60 percent of the mitigation required had the wetlands impacts been direct impacts. This is consistent with the mitigation approach approved by FDEP for previous FPL projects. (emphasis added) (**0619-4-4** [Maher, William])

**Response:** The statement "Secondary impacts on wetlands would also be mitigated per State of Florida regulations (State of Florida 2014-TN3637)" has been removed from the EIS. Removal of this statement does not alter the overall assessment of wetland impacts in the EIS.

**Comment:** DEIS Subsection 4.3.1.1, Page 4-44, Lines 21-23: The DEIS states: "Spoils would be deposited mostly on previously filled areas but would also fill in additional canal acreage classed as streams and waterways." ER Section 2.4 states: "Spoils from the Units 6 & 7 plant area, FPL reclaimed water treatment facility, and other construction locations would be deposited on three areas (total approximately 211 acres) within the industrial wastewater facility. Two of these areas would be located on wide berms on either side of Grand Canal, the primary north-south canal in the center of the facility. The third would be along a strip of land below the southern end of the industrial wastewater facility. All three areas have been used historically for spoil deposition and contain scattered patches of early succession vegetation (grasses, low shrubs, etc.)." (emphasis added) (0619-4-5 [Maher, William])

**Response:** Table 4.3-1 in FPL's ER entitled Turkey Point Property Disturbed Area FLUCFCS Summary states that Spoils Area A contains 1.06 ac of land classified as FLUCFCS Level 3 code 510 – Streams and Waterways/Canals, Spoils Area B has less than 0.01 ac of FLUCFCS Level 3 code 510 – Streams and Waterways/Canals, and Spoils Area C has 4.39 ac of FLUCFCS Level 3 code 510 Streams and Waterways/Canals. ER Section 4.3.1.1 states the three spoils areas would lie along designated sections of banks within the IWF. Therefore, the review team concluded that approximately 5.45 ac of streams and waterways along banks of the IWF would be filled during spoil deposition. No changes were made to the EIS as a result of this comment.

**Comment:** DEIS Subsection 4.3.1.2, Page 4-49, Lines 14-15: The DEIS states: "Adjacent wetlands **would also be affected** by siltation and runoff." FPL has committed to utilizing BMPs to prevent erosion/sedimentation impacts. (emphasis added) (**0619-4-6** [Maher, William])

**Response:** FPL's ER Revision 6 (on pg 4.2-2) states that BMPs would be employed "to minimize" discharge of pollutants during storm events during construction as part of an NPDES (National Pollutant Discharge Elimination System) permit. The ER also states that the NPDES permit (and its protections) is subject to a Notice of Termination following construction and stabilization of disturbed areas. The review team therefore concluded that minimization of

runoff as part of an NPDES permit does not equate to complete prevention of erosion or sedimentation along transmission line access roads for the life of the project. No changes were made to the EIS as a result of this comment.

**Comment:** DEIS Subsection 4.3.1.6, Page 4-70, Lines 17-21: The DEIS states: "FPL proposes to remove or control exotic vegetation...FPL also proposes to maintain and monitor vegetation **for 3 years after mitigation activities**..." The DEIS reference, (FPL 2011-TN1012), "Turkey Point Units 6 & 7 Mitigation Plan", states: "Success criteria, to be negotiated in consultation with the FDEP, USACE, and DERM, will likely...include 5% or less cover by exotic species...**for a period of at least 3 years following** initiation of mitigation activities." (emphasis added) (**0619-4-7** [Maher, William])

### **Response:** Section 4.3.1.6 of the EIS has been expanded to provide more detail on proposed mitigation for terrestrial ecology impacts, including clarifying mitigation success criteria.

**Comment:** DEIS Subsection 4.3.1.6, Page 4-71, Table 4-11: DEIS Table 4-11 contains the following inconsistencies with DEIS reference, (FPL 2011-TN1012), "Turkey Point Units 6 & 7 Mitigation Plan": a. In the "W.A.T.E.R. Debits" category, the "Reclaimed Water-Treatment Facility (W.A.T.E.R.)" site should list the currently proposed values rather than the originally proposed. The current proposed values are as follows: "Impact (ac)" = 39.5, and "Wetland Functional Change (Mitigation Units)" = -33 b. The "West Preferred Transmission Line" site should be included under "UMAM Debits", not "W.A.T.E.R. Debits". c. In the "UMAM Debits" category, the "Reclaimed Water Pipeline (UMAM)" site is referencing values associated with the Treated Reclaimed Water Pipeline from the originally-proposed location. The revised values for the "Reclaimed Water Pipeline (UMAM)" are as follows: "Impact (ac)" = 43.6 ac, and "Wetland Functional Change (Mitigation Units)" = -4.8 Mitigation Units. d. In the "UMAM Debits" category, the "Construction Access Road (UMAM)" "Impact (ac)" should be 81.6 ac., not 45.0 ac. e. After reconciliation, the "Subtotals" should be revised as follows: "W.A.T.E.R. Debits"; "Impact (ac)" = 315.86, "Wetland Functional Change (Mitigation Units)" = 201.35; "UMAM Debits"; "Impact (ac)" = 433.4, "Wetland Functional Change (Mitigation Units)" = 326.24; and "UMAM Credits"; "Wetland Functional Change (Mitigation Units)" = 333.5. f. After reconciliation, the "Net difference in Wetland Function (Credits)" = 7.21. g. The "Overall Net Mitigation Ratio (credit basis)" should be presented on an acreage basis rather than credit basis. h. Temporary wetland impacts (pipelines) should be separated from permanent wetland impacts. (0619-4-8 [Maher, William])

**Response:** This comment provides edits to update design information used in the wetland mitigation discussion in Section 4.3.1.6 of the EIS. The review team has independently verified the supplied information and updated Section 4.3.1.6 where appropriate. The updated information about that facility's proposed location has not changed the conclusions drawn in the EIS concerning potential impacts on wetlands and terrestrial habitats.

**Comment:** DEIS Subsection 5.3.1.1, Page 5-36, Lines 38-39: The DEIS states: "The extent of the effects of road improvement on wildlife **is contingent upon the decision to restore roads to the preexisting condition** and traffic levels." FPL has **committed to remove construction access roads within 2 years following construction of Units 6 & 7** as documented in the Conditions of Certification issued by the State of Florida Department of Environmental Protection, Section B, Subsection VII-B-2-a and condition number 4 of the "Standard Amendments to the Comprehensive Development Master Plan for Miami-Dade County" issued by the Board of County Commissioners on April 28, 2010, which states "Within 2 years following the construction of Turkey Point Units 6 & 7 (a) all temporary roadway improvements on publicly

owned rights-of-way will be returned to the status of the roadway(s) prior to the commencement of construction of the temporary roadways and roadway improvements, and, (b) any privately owned roadway will be returned to the minimum roadway width required to provide maintenance to FPL facilities and shall not be more than two lanes;" (emphasis added) (**0619-4-17** [Maher, William])

**Response:** This comment contains suggested edits provided by the applicant to update text in Section 5.3.1 of the EIS regarding their commitment to remove access roads once they are no longer needed. The review team used the most current design data available to them, including the data for the access roads. The review team has revised the EIS so that the analyses in the final EIS account for design information received subsequent to publication of the draft EIS. The review team has independently verified the information contained in the comment and expanded the EIS accordingly. This updated information has not changed the conclusions drawn in the EIS concerning potential impacts on wetlands and terrestrial habitats.

**Comment:** DEIS Subsection 5.3.1.4, Page 5-50, Lines 17-20: The DEIS states: "FPL would monitor for the possible loss of wood stork foraging habitat within the designated wood stork core foraging areas in accordance with a methodology approved by the FWS (FPL 2011-TN1283)." **No monitoring** of wood stork foraging habitat is proposed in the cited reference (FPL 2011-TN1283), but the possible loss **will be quantified and mitigated in accordance with USFWS guidelines**. (emphasis added) (0619-4-18 [Maher, William])

**Response:** The statement about monitoring for lost wood stork foraging habitat was removed from the EIS. The review team did however add more information to Sections 4.3 and 5.3 of the EIS discussing mitigation of impacts on the wood stork.

**Comment:** DEIS Appendix F-2, Section 2.2, Page 2-7, Lines 6-9: USFWS BA states: "Field reconnaissance surveys for threatened or endangered wildlife within existing and proposed new transmission-line corridors as well as a proposed reclaimed water pipeline corridor **consisted of a single vehicular driving survey during 2008 along the corridors** (FPL 2011-TN94)." ER Table 2.4-1 lists results of wildlife surveys and observations along the proposed transmission corridors from **1972 to 2011**. (emphasis added) (**0619-6-4** [Maher, William])

**Response:** This comment consists of the applicant's suggested text edits to the BA. The indicated edits are too minor to influence the accuracy of the BA. The edits will not be made to the BA, because they are minor edits that would not affect the accuracy of the information provided in the BA and would have no material effect on the findings FWS must make.

**Comment:** DEIS Appendix F-2, Subsection 3.1.3, Pages 3-6, Line 30: USFWS BA states, "The reclaimed water pipeline **corridor would be 75 ft wide** by 9 mi long." DEIS reference (FPL2012-TN1618), "Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species", Section 2.3 states, "Pipeline installation will require **temporary disturbance of an approximately 75-ft-wide** right-of-way within of the pipeline corridor to facilitate trench excavation. Areas of temporary impact will be restored following pipeline construction." (0619-6-9 [Maher, William])

**Response:** This comment provides edits reflecting the design of pipeline elements under the project. Data on acreages of terrestrial habitat affected by pipeline installation have been updated throughout the EIS, except in distributed correspondence to FWS in Appendix F-2. Additionally, the review team has added information about in situ restoration activities planned for the reclaimed-water pipeline to Section 4.3 of the EIS to describe why some impacts

from this pipeline can be considered temporary. However, the review team expects forested wetlands (i.e., mangroves) to be converted to herbaceous wetlands and remain so for the operational life of the pipelines because standard practice dictates exclusion of woody vegetation from pipeline corridors due to root intrusion and subsequent maintenance issues. Although no net loss of wetlands would occur within the reclaimed-water pipeline corridors must be regarded as a permanent impact (at least for the operational life of the pipelines). The updated data do not alter any conclusions presented in the EIS.

### Comment: Page 5-51, Section 5.3.1.6, Summary of Impacts to Terrestrial Resources

Lines 2-5: The DEIS states, "Salinity within the IWF or other area wetlands would not change enough to alter prey populations consumed by wading birds. Deposition of emerging pollutants ... would also be below levels expected to affect the terrestrial ecosystem." There is insufficient information provided in the DEIS to be able to make such a conclusion. While salinity may not have an effect on prey populations consumed by wading birds such as the Wood Stork, reclaimed water put back into the IWF, as well as the addition from the drift, may have an effect. Some of these contaminants are endocrine disruptors, which cause effects such as immune suppression and developmental and reproductive effects at very low concentrations. The DEIS should include additional discussion about contaminants in the reclaimed water that not only exceed toxicological benchmarks and EPA water quality criteria, but also those that bioaccumulate. These contaminants have the potential to not only impact the wood stork and crocodile, but other species foraging in the project area as well. (**0622-1-6** [Austin, Stan])

**Response:** The commenter is concerned about the potential for adverse effects on terrestrial and aquatic resources from the presence of CECs (chemicals of emerging concern) that may be present in the cooling-tower drift. Sections 5.2.1 and 5.3.2 of the EIS provide an assessment of the region of potential effect for CECs, and Section 5.3.1 provides an overview pertaining to the terrestrial ecosystem. Section 5.3.2 of the EIS has an extensive discussion of the EPA criteria used to assess the potential toxicity or adverse effects of CECs on aquatic species known to be sensitive to chemical compounds and at critical life stages. Because it is not possible to assess every potential chemical or chemical byproduct that may be present in the reclaimed-water source, the representative and most abundant chemical compounds were provided for different functional chemical classes, including endocrine disrupting compounds. The use of no observed effects concentrations (NOECs) for assessing toxicity thresholds is a widely used criterion in aquatic toxicology, and represents the highest concentration threshold acceptable in these toxicity tests for the correlated exposures. Section 5.3.1 of the EIS has been expanded to include discussion of recent environmental conditions within the IWF and actions taken and proposed to address these conditions that would also affect the transport of CECs from coolingtower drift through the food chain to terrestrial organisms.

**Comment:** Page 5-136, Table 5-23 (under the Terrestrial Ecosystems) states, "Herbicide use would be in accordance with manufacturer specifications and carried out by licensed applicators." Additionally under the Aquatic Ecosystems heading, the DEIS states "... procedures would include adherence to strict guidelines established by Federal, State, and local resource agencies regarding the use of herbicides." However, the document does not identify which herbicides would be used, when would they be used, how often would they be used, how they would be applied, if more than one herbicides proposed for use have aquatic labels and will be applied over water, including any wetland. Revisions to the DEIS should address these

questions and discuss known potential interactive effects of these chemicals. (0622-1-8 [Austin, Stan])

**Response:** Sections 5.3.1 and 5.3.2 of the EIS address possible ecological impacts resulting from herbicide use. Because herbicide use would adhere to manufacturer specifications and Federal/State/local guidelines, for appropriate use, the review team concludes that the risk to terrestrial and aquatic ecosystems would be minimized to the extent practicable. As long as the herbicides are used in accordance with their labels and Federal and State regulations, the impacts of herbicide use on terrestrial ecology would be minimal. No changes were made to the EIS as a result of this comment.

**Comment:** The DEIS provides only limited information related to potential impacts of construction of Units 6 and 7, associated power lines, and other related infrastructure on avian populations and other fauna. (**0622-1-17** [Austin, Stan])

**Response:** Possible impacts on birds and other wildlife from all elements of the Units 6 and 7 project, including building and operating transmission lines, have been analyzed in detail and included in Sections 4.3.1 and 5.3.1 of the EIS. No change was made to the EIS as a result of this comment.

**Comment:** The NPS recommends that the EIS also consider impacts on the piping plover and red knot. Both species would be expected to use the project site and vicinity for migratory habitat. (0622-1-22 [Austin, Stan])

**Response:** Potential impacts on the piping plover and rufa red knot have been considered and are individually discussed in Sections 4.3.1.3 and 5.3.1.3 of the EIS. Mitigation measures addressing shorebirds such as the rufa red knot are provided in Section 4.3.1.6. Cumulative impacts on wildlife habitats, including those used by the piping plover and rufa red knot, are discussed in Section 7.3.1.1. No change was made to the EIS as a result of this comment.

**Comment:** Although birds from a wide range of taxa and feeding guilds are exposed to these direct risks, wading birds (such as herons, egrets, storks, and cranes) are of particular concern because they make up such a large and important component of the birds found in Everglades region of South Florida. Wading birds are behaviorally predisposed to collision due to their large size, which makes it difficult for them to take evasive action when confronted with flight obstacles. Collision with powerlines was identified as the most significant source of wood stork mortality in an evaluation of causes of death. [Footnote 4: Forrester, D.J. and Spalding, M.G. 2003. Ibises, Spoonbills, Flamingos, and Storks: Trauma. Pp. 227-228 In: Parasites and diseases of wild birds in Florida. Univ. Press of Florida, Gainesville. 1132 pp.] During nesting season when foraging conditions are good east of Everglades NP, the thousands of pairs of these nesting wading birds will fly past the powerlines, often two or more times daily, for periods of weeks to months. Use of flight diverters and line markers may reduce, but not eliminate, collision mortality for wading birds. The resulting expectation is that considering the elevated collision risk of wood storks and wading birds, the fact that thousands of these species are nesting within the normal foraging distances of these wading birds, the presence of powerlines will cause a sustained level of mortality for these species for the life of the powerlines. This sustained mortality may be punctuated by more significant mortality events when weather conditions or other factors cause increased risk of collision. Over time, this mortality may result in measurable population declines. (0622-1-23 [Austin, Stan])

**Response:** The review team has identified wading birds as a biological indicator of the South Florida ecosystem in Section 2.4.1.3 of the EIS, and many wading bird species are noted in Table 2-15, State-Listed Wildlife in the Turkey Point Vicinity. Impacts on wading birds, including the wood stork, are discussed in Section 4.3.1.3. Avian Mortality Impacts from Power Transmission is a subheading within Section 5.3.1.3 that contains a discussion of strike and electrocution mortality of wood storks and other wading birds. Mitigation measures addressing wood storks are discussed in Sections 4.3.1.6 and 5.3.1.5. Cumulative impacts on wildlife habitats, including those used by the wood stork and wading birds, are discussed in Section 7.3.1.1. The State of Florida COCs require pre- and post-construction ground surveys of all wading bird colonies that occur within a half mile of any new transmission line. No change was made to the EIS as a result of this comment.

**Comment:** In the NPS DEIS regarding land exchange and the subsequent construction of powerlines within the west preferred corridor, the impacts of powerlines on wildlife and wood storks was determined to be moderate to major. (**0622-1-24** [Austin, Stan])

**Response:** Consistent with the referenced NPS conclusion regarding impacts to wood storks from transmission lines in this area, the EIS acknowledges the potential for adverse impacts on wood storks and other wildlife from transmission lines built in the Western Preferred and Western Consensus transmission corridors. However, the review team also acknowledges that differences are possible among subjectively determined impact levels such as those used in its EIS and the referenced NPS EIS. No change was made to the EIS as a result of this comment.

**Comment:** The NPS is also concerned that bird surveys conducted at the mud flats where Units 6 and 7 would be built are inadequate. Avian surveys referenced in the DEIS were conducted over a two-day span during June 2009. The use of this limited period of time for avian surveys is wholly inadequate to analyze annual or migratory use and the potential for avian impacts due to the plant construction or operations. This limited review did not include spring migration, fall migration, or wintering use birds. June is traditionally the least likely month to observe the diversity of birds in south Florida, and a mere two days could have been heavily impacted by weather and light conditions. Spring, fall, and winter surveys should be performed, not just on the proposed site for Units 6 and 7 itself, but also in the pipeline corridors, the transmission line corridors, the road areas, the fill source location, as well as other impacted sites. In an analysis of the potential for avian impacts, the more broadly available data for migration and winter or summer habitat use is available from the NPS, Tropical Audubon Society, or university researchers and should be consulted. (0622-1-25 [Austin, Stan])

**Response:** The review team acknowledges that comprehensive bird surveys were not conducted in all seasons at all proposed project locations. However, the baseline data underlying the wildlife impact analyses and subsequent conclusions within the EIS did not depend solely on the results of faunal surveys specifically conducted on the project site. Potentially affected fauna lists were generated using information from Federal, State, and local agencies, published literature, and online sources in addition to the limited onsite field survey data. To be conservative, the review team assumed that any bird or wildlife species potentially occurring in South Florida was present in all potentially suitable habitats. The discussion of baseline wildlife conditions on the Turkey Point site in Section 2.4.1.1 of the EIS was expanded to provide increased specificity and to more clearly identify the data sources used.

**Comment:** The Florida panther utilizes habitat in the project area, illustrated by sightings, mortality, and behavior of radio-collared animals. Although there may be no confirmed

observations on FPL land, the panthers have been seen on nearby lands and FPL lands can reasonably be considered natural and active range for panthers. Lack of sightings does not necessarily indicate a lack of use of habitat. Increased road traffic and construction activity can reasonably be considered to affect current use of the area by this highly endangered species. Furthermore, access can increase threats to the endangered cats from poachers. For instance, a 5-year-old male panther was shot to death and found discovered alongside Immokalee Road in the Naples area on March 22, 2015. Lastly, new research relating to how wildlife see and are impacted by ultra-violet flashes emitted from powerlines should be analyzed as it is pertinent to the discussion on the Florida panther, as well as other wildlife and avian species. (0622-2-2 [Austin, Stan])

**Response:** Florida panthers were observed near the Turkey Point site within the west transmission corridors (SFWMD 2013-TN2917), and the review team assumes that Florida panthers are present throughout the region. Impacts on the Florida panther are addressed in Sections 4.3.1.3, 5.3.1.3, and 7.3.1.1 of the EIS. These discussions have been expanded to consider in greater detail how increased human access could affect the movement and behavior of Florida panthers in the region. The expanded discussions include consideration of the possible effects from ultraviolet flash. They do not alter the review team's general conclusions regarding impacts on the Florida panther.

**Comment:** The NPS continues to be concerned with potential impacts to the Eastern indigo snake. Increased traffic during construction and operation of Units 6 and 7 would almost certainly impact Eastern indigo snake vehicle-related mortality near and on the site. Furthermore, power block construction and muck disposal, which could bury snakes, could affect eastern indigo snake populations as well. Short hydration periods for wetlands on site could also play an important role. Out of concern that increased traffic would lead to more vehicle-related wildlife mortality, the NPS has previously recommended to the State of Florida that herpetological surveys be conducted along the public roads leading to the site for at least a year prior to and during construction activities. These surveys would inform the placement of snake and reptile underpasses, as appropriate. (**0622-2-4** [Austin, Stan])

**Response:** Impacts on the eastern indigo snake are discussed in Sections 4.3.1.3 and 5.3.1.3 of the EIS. Increased vehicle strike mortality is identified as a potential impact. The discussion addressing the potential for live burial during earth-moving activities has been expanded. FPL is required by the State of Florida to conduct pre-clearing surveys for listed species, including the eastern indigo snake in accordance with the State of Florida COCs issued by the Siting Board on 5/19/14. The expanded discussion includes information about this requirement and how the data ultimately collected could be used to reduce impacts. The expanded discussion does not alter the review team's general conclusions regarding impacts on the eastern indigo snake.

**Comment:** *Pre-treatment building - associated with the reclaimed and potable water pipelines[.]* Location of the reclaimed water treatment facility is on 43 acres of wetlands. The DEIS states that there would be 328.12 acres of wetlands (not verified by the USACE as jurisdictional wetlands) that would be filled to prepare the site. A proposed restoration project would be to scrape down the Florida City Canal. Eradicating invasive species and restoring mangrove would benefit the ecological value of the area. (**0622-2-15** [Austin, Stan])

**Response:** FPL's wetlands mitigation plan included in the State of Florida COCs issued on 5/19/14 would mitigate for all functional loss of wetlands through regional wetland restoration, enhancement, and preservation combined with purchase of credits from regional mitigation

banks. The discussion of the Wetland Mitigation Plan in Section 4.3.1.6 of the EIS has been expanded to better explain how the proposed mitigation would offset the unavoidable losses and degradation of specific wetland habitats, including the coastal mangrove forests. Although the review team considers the possible benefits of the applicant's proposed wetland mitigation in its assessment of terrestrial and wetland impacts in the EIS, the details of the plan are developed by the applicant and approved by the Federal and State agencies that have regulatory oversight.

**Comment:** The NPS asserts that the DEIS impact analysis associated with construction and operation of proposed Units 6 and 7 does not sufficiently address issues related to the environmental impacts of the proposed action on resources managed by the NPS. Based on our review of the DEIS, we have strong concerns that impact analysis described in the DEIS does not:...describe the importance of the fragile and threatened nature of Biscayne and Everglades NPs, Biscayne Bay, and the broader Everglades ecosystem in the context of ongoing federal and state efforts to restore the Everglades; and, as a result[.] (0623-9 [Austin, Stan])

**Comment:** Included in the project application are three new sets of power lines, some 15 stories tall, that will cut across the Everglades National Park. Expected impacts include: increased electrocutions and collisions for birds; the spread of invasive plant species along a new, drivable access corridor; changes to the hydrology of the Shark River Slough due to tower pads and road construction; and a new, unsightly, industrial landscape, visible for miles, in the heart of the Everglades, one of Floridas most profitable and popular wilderness areas. (0674-6 [Dwyer, Karen])

**Comment:** I believe it will bring some benefits but we also have to make sure that we have the -- have a greater discussion about how it will impact the national parks because it's right there on the bay and it's right there near the Everglades. (0723-8-4 [McDuffie, Stephen])

**Response:** The review team has added an expanded discussion to Sections 4.3.1 and 5.3.1 of the potential effects of the project on the terrestrial and wetland resources of the South Florida ecosystem as they pertain to both Biscayne and Everglades National Parks and the experience of visiting these parks. This expanded discussion integrates the direct and indirect effects on specific resources in the parks and addresses how those effects could influence the resource management objectives for each park and the broader Everglades ecosystem, including the objectives of the CERP. The assessment of potential cumulative impacts on the unique terrestrial and wetland resources of both parks and the Everglades ecosystem has likewise been expanded. The expanded discussion does not alter the NRC staff's general conclusions regarding impacts on terrestrial ecology resources.

**Comment:** We have to start to look more completely at possible long term consequences involving the expansion of Power plants. There are so many creatures and plants that call this area home. (**0689-1** [Miller, Nena])

**Response:** Cumulative impacts on terrestrial plants and animals, discussed in Section 7.3.1 of the draft EIS, are considered for the proposed life of the project and include the actions that would occur in the reasonably foreseeable future. No changes were made to the EIS as a result of this comment.

**Comment:** You've got the spread of invasive plant species into the area[.] (**0721-22-4** [Schwartz, Matthew])

**Comment:** It's going to spread invasive plant species throughout the east Everglades expansion area. (**0723-9-10** [Schwartz, Matthew])

**Comment:** Invasive plant species throughout the access road, the pads, changes in the hydrology. (0723-9-12 [Schwartz, Matthew])

**Response:** The possible inadvertent introduction of terrestrial plant and animal invasive species is discussed under the Disease Vector and Pest Species heading of Sections 2.4.1.2 and 2.4.1.3 of the EIS. Non-indigenous fish are discussed in Section 2.4.2.3 and listed in Table 2.26. The impacts of additional inadvertent introduction of non-native species by the proposed actions are included in appropriate sections of Chapters 4, 5, and 7.

**Comment:** The National Parks Service did an avian and bird study. Lots of impacts, lots of collisions, lots of electrocutions. Three colonies have now threatened Wood Storks in the area. They're going to be impacted. We need to look at those. (0721-22-7 [Schwartz, Matthew])

**Comment:** Electrocutions, National Park Service already evaluated it. Electrocutions and collisions with birds. Three colonies of threatened wood storks in the area. (**0723-9-13** [Schwartz, Matthew])

**Response:** Collision and electrocution mortality as well as other impacts on wading birds, including the wood stork, are discussed in Sections 4.3.1.3 and 5.3.1.3 of the EIS, and associated mitigation measures are discussed in Sections 4.3.1.6 and 5.3.1.5. No changes were made to the EIS as a result of this comment.

**Comment:** And what will happen then to the wildlife that remains? They can't leave. (0721-32-9 [Schlackman, Mara])

**Response:** Impacts on wildlife are discussed in Sections 4.3.1.1 and 5.3.1.1. The assessment of possible impacts on wildlife considers the relative mobility of various species.

**Comment:** I also have read your impact, your ecological impact that clearly says, when required, permanent disturbance to approximately 573 acres of habitat. It would affect wetlands, it would create mud. It will create a lot of killing of lifestyle, of life, of wildlife in our areas. You clearly say some habitat will be permanently lost, some wildlife will be killed and other wildlife will be temporarily displaced. And you consider this small to moderate?

We talked about the butterflies, we talk about the bobcats, we talk about the marsh rabbits. We talk about the tarpin, we talk about the porpoises. We're talking about -- I'm looking at my notes because I really haven't prepared anything. We're talking about the voice of the water, the voice of the environment, the voice of the wildlife. (0722-17-1 [Swenson, Cyndee])

**Response:** The terrestrial and aquatic ecology sections of Chapters 4 and 5 of the EIS (Sections 4.3.1 and 5.3.1 for terrestrial and Sections 4.3.2 and 5.3.2 for aquatic) acknowledge that impacts from the proposed units on terrestrial ecological resources, including wetlands, would be MODERATE. MODERATE impact is defined by the NRC as being sufficient to noticeably alter, but not destabilize important attributes of the resource. The EIS provides specific details about the acreage of specific terrestrial habitats affected by the project and an in-depth evaluation of the adverse effects on wildlife using those habitats and adjoining areas. The review team used a conservative approach when analyzing impacts, leaning on the side of caution when considering terrestrial resources and wetlands resources.

**Comment:** ...the significance of these rare and disappearing birds and animals. (0723-11-3 [Berendsohn, Catherine])

**Response:** Impacts on birds and other terrestrial wildlife are discussed in Sections 4.3.1.1 and 5.3.1.1. Impacts on specific rare species that are Federally or State-listed as threatened or endangered are presented individually in Sections 4.3.1.3 and 5.3.1.3.

**Comment:** The FEIS should include a wetland jurisdictional determination, so that a complete review of wetland impacts can be determined. During the wetland jurisdictional determination review, the EPA is willing to participate with that review, prior to publishing in the FEIS. Also, the FEIS should include Uniform Mitigation Assessment Method scores (Parts 1 and 2), for the proposed impact and mitigation sites. Technical rationale for each score should also be included.

Overall, the FEIS should include updated information regarding the CWA Section 404 permitting process, and include information responsive to the concerns stated in EPA's letters to the USACE, as well as the specific concerns listed here. Impacts should be avoided to the maximum extent feasible, and unavoidable impacts should be effectively mitigated. (0617-1-30 [Mueller, Heinz J.])

**Comment: Sequential Mitigation of Impacts to Essential Fish Habitat[.]** Under the Clean Water Act, its implementing regulations, and EPA guidelines, wetland impact avoidance and minimization are the first two steps in sequential mitigation, and the third step is compensatory mitigation for unavoidable impacts. The public notice does not describe any measures to avoid or minimize impacts to mangroves or seagrass from the project. Based on the drawings provided with the notice, it appears 100 percent of the wetlands on the site are proposed for impact. The public notice states the applicant submitted a mitigation plan that includes debiting of mitigation credits from the FPL Everglades Mitigation Bank, purchasing of mitigation credits from the FPL epiperent, and constructing permittee-responsible mitigation, how well the credits from these mitigation banks match the impacts, nor the number of credits required. In letters to the USACE dated April 9, 2015, and May 4, 2015, the EPA provides additional detail on concerns about how the sequential mitigation process has been implemented for this project. (0724-15 [Fay, Virginia M.])

**Comment:** <u>Wetland Fill[.]</u> In order to construct Units 6 and 7 and related infrastructure, including pipelines and the RCWs, the NRC and FPL propose to fill approximately 1,000 acres of wetlands. The public notice does not identify the impacts to mangroves from this work; however, the draft EIS indicates approximately 105 acres of mangroves would be filled, permanently or temporarily to facilitate construction (Table 2). The NRC expects about half of the mangrove impacts to be construction related and temporary. Project plans in the final EIS and EFH assessment should reflect all practicable avoidance and minimization of impacts to mangroves. In addition, a compensatory mitigation plan should be provided demonstrating, through a functional assessment comparing impact and mitigation areas, that sufficient mitigation is proposed. The mitigation plan should describe how mangrove temporary impact areas would be re-graded to appropriate elevations and monitored to ensure mangrove vegetation returns to the impacted sites at locally appropriate densities. Performance measures, monitoring criteria, schedule, and frequency should also be identified in the plan (see the Federal Compensatory Mitigation Rule dated April 2008).

[Table 2 included in original correspondence]

Table 2: FPL proposed land disturbance on the Turkey Point site and Florida land use, cover, and forms classification system (FLUCFCS) summary for the different categories of mangrove impacts (modified from Table 4-1 in the draft EIS) (**0724-4** [Fay, Virginia M.])

**Response:** Section 4.3.1.6 of the EIS discusses FPL's proposed Wetland Mitigation Plan that was adopted within the State of Florida COCs. Regarding the wetland jurisdictional determination, FPL would have to obtain a jurisdictional determination from the USACE prior to receiving its Section 404 permit authorizing impacts on wetlands and other waters of the United States. The mitigation discussion addresses opportunities for avoidance or minimization of wetland impacts, and it outlines concepts for compensatory mitigation. Table 4-10 of the EIS summarizes wetland functional loss debits and mitigation credits, using the Uniform Mitigation Assessment Method. As required by the USACE Mitigation Rule dated April 2008, the Wetland Mitigation Plan is based on estimating the functional credits that must be provided in the compensatory wetland mitigation needed to offset the losses of functional values in wetlands affected by the project. The review team has updated the text of Section 4.3.1.6 to reflect new information about wetland mitigation available since the draft EIS. The review team has also updated Table 4-10 to reflect the latest mitigation information available from the applicant and interactions between the applicant and the USACE and FWS subsequent to the draft EIS. The expanded text in Section 4.3.1.6 provides more information about specific elements of the applicant's proposed wetland mitigation and how each element of that mitigation addresses wetland impacts from individual parts of the Units 6 and 7 project.

**Comment:** DEIS Subsection 7.3.1.1, Page 7-19, Lines 10-12: The DEIS states: "The **West Preferred Corridor within the eastern boundary of Everglades National Park** could be counterproductive to future CERP goals..." ER Subsection 2.2.2.2 states that the **West Preferred Corridor (preferred option) "runs along" the eastern boundary of Everglades National Park**, while the West Secondary Corridor (secondary option) runs through the Park. Further, ER Figure 2.2-5 shows both routes in relation to the Park boundary. Therefore, the West Preferred Corridor/preferred option does not present a barrier to surficial flow to eastern Everglades National Park as it is associated with the eastern boundary of the Park. (emphasis added) (**0619-5-9** [Maher, William])

**Response:** The location of the West Preferred transmission corridor was corrected in Section 7.3.1.1 of the EIS, and its potential effects on the CERP was also edited accordingly. These changes did not alter the conclusions presented in the EIS.

**Comment:** DEIS Appendix F-2, Section 2.1, Page 2-4, Lines 3-4: USFWS BA states: "**Each unit** would have **a mechanical draft cooling tower** for the circulating-water system..." ER Subsection 3.1.2 states: "**For each unit**, the closed-cycle circulating water system (CWS) would consist of **three mechanical draft cooling towers**..." (emphasis added) (**0619-6-1** [Maher, William])

**Comment:** DEIS Appendix F-2, Subsection 3.2.1, Page 3-8, Lines 5-6: USFWS BA states: "The circulating-water system flow and heat rejection rates compared to the service-water system would be about **44 times larger** respectively." ER Table 3.4-1 lists the service water flow rate for normal operation as 10,500 gpm and the heat transferred as 103 x 10<sup>6</sup> Btu/hr. ER Subsection 3.4.1.1.1 lists the circulating water pumps flow rate at 660,100 gpm and the heat load as 7628 x 10<sup>6</sup> BTU/hr. Using these values, the circulating-water system flow and heat rejection rates compared to the service-water system are **62.9 and 74.1, respectively**. (Note all the values listed are on a per unit basis.) (**0619-6-11** [Maher, William]) **Comment:** DEIS Appendix F-2, Section 4.18, Page 4-15, Lines 27-29: USFWS BA states: "Pineland habitat a the **Gold Coast Railroad Museum Park that borders the proposed East transmission-line corridor** for approximately 700 m is also designated critical habitat for the Florida brickell-bush." The **East Corridor does not border the Gold Coast Railroad Museum Park**. The location of the Gulf Coast railroad Museum is adjacent to Zoo Miami on the north side. The address is 12450 SW 152nd St, Miami, FL 33177, http://www.gcrm.org/ (emphasis added) (**0619-6-15** [Maher, William])

**Comment:** DEIS Appendix F-2, Section 5.2, Page 5-2, Lines 10-12: USFWS BA states: "Mitigation has also been **proposed** for 1,030 habitat units after applying the FWS mitigation ratio of 2.5:1 for panther habitat." The reference provided in the USFWS BA is (FPL 2011-TN1283). However, Attachment D of this document "Estimated Impacts to Florida Panther Habitats (BDA, 2009)", Page 3 states: "The number of PHUs that the USFWS may require for mitigation for the direct and temporary losses of panther habitat due to improvements to roads accessing the Site was **estimated**. FPL will work with the USFWS, ACOE, and other appropriate agencies to determine mitigation recommendations for the loss of panther habitats after a final design for project features has been achieved consistent with the conditions of site certification." (0619-6-16 [Maher, William])

**Comment:** DEIS Appendix F-2, Section 5.7, Page 5-5: This section refers to FPL 2011-TN1283 "FPL Turkey Point Units 6 & 7 Threatened and Endangered Species Evaluation and Management Plan, Rev 1" when describing several wood stork requirements imposed by FFWCC on FPL. The correct reference is (FPL2014-TN3637), "Final Order on Certification, In Re: Florida Power and Light Company Turkey Point Units 6 & 7 Power Plant Siting Application No. PA 03-45A3," which contains the FFWCC Conditions of Certification. The Threatened and Endangered Species Plan does not include Conditions of Certification. (**0619-6-17** [Maher, William])

Comment: DEIS Appendix F-2, Section 5.7, Page 5-5, Lines 8-11: USFWS BA states: "Offsite activities would also affect storks, because the installation of a portion of the proposed transmission lines would occur within 1 mi of two active wood stork colonies and within 3 mi of two other colonies. The transmission lines would also bisect the 18.6 mi CFA of nine wood stork colonies." The language is correct for the West Preferred Corridor; however, it **does not** reflect the location of the West Consensus Corridor (MDLPA 2 Corridor) which is located outside the recommended management zones. DEIS reference, (FPL2013-TN2941), Section "Threatened and Endangered Species", page 9 states: "However, use of the MDLPA 2 Corridor reduces the probability of potential impacts to the federally endangered wood stork (Mycteria americana) and Everglade snail kite (Rostrhamus sociabilis plumbeus). The wood stork is known to nest in four colonies both south and north of Tamiami Trail and west of the West Preferred Corridor. These colonies have been well documented for years and are known as the Tamiami East 1 and 2, Tamiami West, and 3B Mud East colonies [South Florida Water Management District (SFWMD), 2013]. The MDLPA 2 Corridor is located east of all these known colonies, and the closest colony (Tamiami East 1) is 0.86 mile away. This distance falls outside the recommended primary (500-1500') and secondary (2500') management zones..." (emphasis added) (0619-6-18 [Maher, William])

**Comment:** DEIS Appendix F-2, Section 5.7, Page 5-5, Lines 14-16: USFWS BA states: "The FFWCC requires FPL to conduct flight surveys of the two known wood stork nesting colonies to determine the flight corridors of fledging wood storks before and after transmission-line installation (**FPL 2011-TN1283**)." The reference is incorrect in this section. FPL 2011-TN1283 references the "FPL Turkey Point Units 6 & 7 Threatened and Endangered Species Evaluation

and Management Plan". The correct reference is the Conditions of Certification (**State of Florida 2014-TN3637**). (emphasis added) (**0619-6-19** [Maher, William])

**Comment:** DEIS Appendix F-2, Section 2.2, Page 2-6, Lines 21-24: USFWS BA states: "Freshwater marsh is the predominant natural land cover on the site; it occupies almost 18 percent of the entire property and almost 40 percent of the undeveloped land area. **An additional 9 percent is mixed wetland hardwoods**." The following language can be used for clarification: "**An additional 9 percent of the undeveloped land** is mixed wetland hardwoods." (emphasis added) (0619-6-3 [Maher, William])

**Comment:** DEIS Appendix F-2, Section 2.2, Page 2-7, Lines 12-13: USFWS BA states, "Avian surveys were also conducted at selected locations on the Turkey Point site over a 2-day span during **June 2009**." In addition to the survey conducted on **June 23-24, 2009**, another survey was conducted on **March 24-25, 2009**. The survey report is included in the DEIS reference (FPL2009-TN1334), however, it is not referred to in the USFWS BA. (emphasis added) (**0619-6-5** [Maher, William])

**Comment:** DEIS Appendix F-2, Subsection 3.1.1, Page 3-3, Lines 5-10: USFWS BA states: "Land clearing, grubbing, grading, and placement of fill would occur on approximately 591 ac of the Turkey Point site (FPL 2014-TN4058). Excluding cover classes supporting existing development, approximately 577 ac of intact terrestrial habitat would be lost. Approximately 328 ac of wetlands on the Turkey Point site would be permanently altered by filling and grading, clearing of vegetation, dewatering, erosion, sedimentation, and other alterations of the existing hydrology such as road construction and culvert installation." The cited source in the text is FPL's ER Revision 6. ER Table 4.3-1, Revision 6, includes revised acreage values that will result in different acreage values—this includes the removal of the treated reclaimed water supply line as this line is now fully within the heavy haul road disturbed area and is no longer separately considered. Additionally, the 577 ac value number includes the spoils area and, as described in ER Section 2.4, the spoils area is not "intact terrestrial habitat." ER Section 2.4 states: "**All three areas have been used historically for spoil deposition** and contain scattered patches of early succession vegetation (grasses, low shrubs, etc.)." (emphasis added) (**0619-6-6** [Maher, William])

**Comment:** DEIS Appendix F-2, Subsection 3.1.1, Page 3-3, Lines 23-25: USFWS BA states: "Almost **40 percent** of the affected land area has been filled during previous land-development activities. Another **30 percent** of the affected land, including the entire Units 6 and 7 plant area, is classified as non-vegetated wetland (FPL 2014-TN4058)." ER Section 2.4: Total property acreage is approximately 9400 ac; cooling canals acreage = 5900 ac (open water = 4400 ac); and Units 1-5 = 340 ac. Total filled areas is [(5900 ac-4400 ac) + 340 ac] =1840 ac or 20%. (emphasis added) (**0619-6-7** [Maher, William])

**Comment:** DEIS Appendix F-2, Section 5.7, Page 5-5, Lines 14 -25: USFWS BA states, "The FFWCC requires FPL to conduct flight surveys of the two known wood stork nesting colonies to determine the flight corridors of fledging wood storks before and after transmission-line installation (FPL 2011-TN1283)." Line 23 states: "FPL would also have to conduct post-building monitoring during the breeding season after transmission-line installation near wood stork colonies." FFWCC Conditions of Certification states: "The FFWCC requires FPL to conduct flight surveys of the two known wood stork nesting colonies to determine the flight corridors of fledging wood storks before transmission-line installation. For the West Preferred Corridor, FFWCC also requires FPL to conduct flight surveys of the two known wood stork nesting colonies **after** transmission-line installation." In addition, "FPL would also have to conduct post-

building monitoring during the breeding season after transmission-line installation **within 0.5 mi of wood stork colonies**. (FPL 2011-TN1283)." (emphasis added) (**0619-7-1** [Maher, William])

**Comment:** DEIS Appendix F-2, Section 5.14, Page 5-13, Lines 23-25: USFWS BA states: "Almost 62 ac of land were classified as Brazilian pepper within the second leg of the preferred route of the West transmission-line corridor that would span between the Clear Sky and Levee substations." For consistency in this section, also include the **Brazilian pepper acreage** in the 2nd leg of Clear Sky to levee for the West Consensus Corridor. From the Proposed Turkey Point, Units 6 & 7 "Supplemental Transmission Corridor Information for the Combined License Application Part 3 - Environmental Report", DEIS reference (FPL2013-TN2941), Section "Land Use", Table 2 "Major Land Use Acreages Along the Entire West Consensus Corridor", page 6 shows: **44.82 acres (approximately 45 acres)**. (emphasis added) (**0619-7-2** [Maher, William])

**Comment:** DEIS Appendix F-2, Section 6.1, Page 6-2, Lines 40-41: USFWS BA states: "Unit 5 also uses **freshwater** mechanical draft cooling towers to dissipate heat." ER Rev. 6, Subsection 2.3.1.2.2.4 "Hydrogeochemical Characteristics", page 2.3-35 states: "Although the Upper Floridan aquifer is a major source of potable groundwater in much of Florida, water withdrawn from the unit in southeastern Florida, including Miami-Dade County, **is brackish and variable with chloride and dissolved solid concentrations greater than 1000 mg/L**. Groundwater samples from the Upper Floridan aquifer production wells at Unit 5 (Table 2.3-22) show an average chloride concentration of **2900 mg/L**." (emphasis added) (**0619-7-5** [Maher, William])

**Response:** These comments offer specific suggested edits based on new information available since publication of the draft EIS. They are specifically directed to the BA submitted to the FWS as part of ESA Section 7 consultation between the NRC, the USACE, and the FWS. Since the draft EIS, the review team has held multiple discussions with the FWS, resulting in a table of updated analysis of project effects on Federally listed species. The review team has not, however, updated the text of the BA. The FWS did not request the review team to update the BA text beyond simply providing the updated table. EIS Sections 4.3.1 and 5.3.1 were revised to reflect the updated consultation status.

**Comment:** DEIS Subsection 2.4.1.1, Page 2-77, Lines 6-14: The DEIS states: "During April 2009, surveys were also conducted to determine...reptile presence and relative abundance...(FPL 2009-TN1444)...**Reptiles were observed, including the American alligator** *(Alligator mississippiensis)*..." The cited DEIS reference, (FPL 2009-TN1444), is the "Mammal Trapping and Herpetology Report Turkey Point Property Associated with Units 6 & 7, April 13-16, 2009". The referenced report does not indicate that the American alligator was observed during April 2009 surveys. Nor is this species listed in ER Table 2.4-2 which presents results of April 2009 (and earlier) surveys. (emphasis added) (0619-3-10 [Maher, William])

**Response:** The American alligator was removed from the list of reptiles noted as having been observed during the April, 2009 surveys in Section 2.4.1.1 of the EIS.

**Comment:** <u>Reclaimed water treatment facility</u>. The project will require the construction of a facility to treat reclaimed water used in cooling of Units 6 and 7. The proposed site for the facility is located immediately north of the northern border of the cooling canal system and west of the test canal system. The proposed treatment facility will result in the loss of 42.82 acres of dwarf mangroves and 0.78 acres of mixed wetland hardwoods. Wetlands provide important habitat for fish and wildlife, aid in flood control, and perform a number of other vital ecosystem functions.</u> Consequently, the location of the water treatment facility, as proposed, will result in a significant loss of valuable wetland resources. To minimize the loss of wetlands resulting from the project,

we recommend that FPL relocate the reclaimed water treatment facility to a site with minimal or no impacts to wetlands or to a disturbed uplands closer to the Miami-Dade Water and Sewer Department's South District Wastewater Treatment Plant. We understand that FPL has stated security concerns as a reason to site this facility in its current location. However, the Department asserts that those concerns can be addressed with adequate fencing and other safeguards, and that these concerns do not warrant the destruction of wetlands within the current preferred site. We recommend that the NRC require the reclaimed water treatment facility to be moved from the currently proposed location. (0227-12 [Stanley, Joyce])

**Response:** This comment relates to how the site layout and design for Units 6 and 7 developed by FPL would result in impacts on terrestrial ecology. The site layout and design proposed by FPL is discussed in Chapter 3 of the EIS. It is outside of the review team's regulatory authority to require FPL to change the planned layout of the site. The impact on terrestrial ecology resulting from construction of the proposed units is described in Section 4.3.1. No changes were made to the EIS in response to this comment.

**Comment: Transmission lines.** Moreover, active nesting colonies of the wood stork are located near both the Preferred Corridor and the Consensus Corridor. Locating new transmission lines near these colonies will increase the potential for injuries and deaths of wood storks from collisions with power lines and transmission towers. The Department has had discussions with FPL about moving this segment of the west corridor eastward in order to abut existing development to the greatest extent practicable. FPL may be amenable to this approach. We recommend that the NRC require the location of the west corridor to be relocated eastward along existing developed areas. Information provided in the Biological Assessment and DEIS indicate that parcels of the rare pine-rockland habitat type are located within or near the west corridor. Pine rocklands are a globally imperiled ecosystem, which has been reduced by 95 percent of its historical range in Miami-Dade County, and is home to sixteen candidate and listed species. We recommend that these habitat parcels be avoided when siting the west corridor transmission line. The transmission towers and wires of the proposed transmission lines will be greatly elevated above the ground (80 to 150 feet). Consequently, they represent a hazard to migratory birds flying through the area, especially at night. Migratory birds may have difficulty avoiding these structures, and may be injured or killed due to collisions with these structures. These trust resources are protected under the MBTA. Therefore, FPL should develop a Department approved avian protection plan to avoid, minimize impacts to bird species and compensate for the loss of their habitat. (0227-13 [Stanley, Joyce])

**Response:** Transmission corridors and specific routes evaluated in the EIS include those proposed by FPL. Expected impacts are discussed in numerous subsections in Sections 4.3.1 and 5.3.1 of the EIS. FPL's Avian Protection Plan is briefly discussed and referenced in Section 4.3.1.6 of the EIS. Requiring FPL to use any particular transmission corridor or route or to obtain approval from the FWS of its Avian Protection Plan is outside the scope of the review team's authority. No changes were made to the EIS in response to this comment.

**Comment:** <u>Western laydown area</u>. A storage or laydown area for the stockpiling of construction materials and equipment will be established just east of the northeast portion of the cooling canal system and immediately east of the footprint for Units 6 and 7. This area is largely disturbed but is located immediately east of canal and berm habitat inhabited by the crocodile in the cooling canal system. To reduce the likelihood that crocodiles and other wildlife are hit by motor vehicles or crushed during movement and storage of materials, we recommend FPL install continuous barrier fencing along both sides of SW 359 Street where it borders the reclaimed water treatment facility, cooling canal system, and test canal system. The continuous

fencing should also extend southward along the western edge of the heavy haul road and along the western boundary of the laydown area to a point about 500 feet south of the land utilization building. The fence should be constructed of at least 6-foot tall galvanized chain-link type material (or a similar material that will exclude crocodiles). If needed, a barrier material of some type should be installed along the bottom two to three feet of the fence to prevent small crocodiles and other small species of wildlife from passing through the fence. The proposed fence will connect with the barrier fencing the FPL has agreed to install along both sides of SW 359th Street from SW 137th Avenue/Tallahassee Road to the L-31E Canal, SW 137th Avenue from SW 344th Street/Palm Drive to SW 359th Street, and SW 117th Avenue from SW 344th Street/Palm Drive to SW 359th Street to protect wildlife in the area. (0227-14 [Stanley, Joyce])

**Response:** Impacts on the American crocodile are discussed as part of Sections 4.3.2.3 and 5.3.2.3. A Biological Assessment (BA) was submitted to the FWS to address effects on protected species, such as the American crocodile, through consultation under ESA Section 7. The FWS may determine, as part of their ongoing formal consultation with the review team under ESA Section 7, that additional fencing requirements are necessary for crocodile protection. No changes were made to the BA as a result of this comment. Updates to ESA Section 7 consultation were made to Sections 4.3.1, 4.3.2, 5.3.1, and 5.3.2 of the EIS.

**Comment:** The new reactors are planned to be built on nearby mined limestone further destroying the critical wetlands surrounding them, not only important for the health of Biscayne National Park, but crucial to the community's first line of defense against hurricane impacts. Mined pits also increase the likelihood of contamination of the Biscayne aquifer. (**0288-7** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Response:** Although FPL had discussed acquiring fill material from an FPL-owned fill source for the construction of Turkey Point Units 6 and 7 in their ER, FPL subsequently stated in a letter to the NRC that they removed the FPL-owned fill source from the application. As noted in Section 4.3.1.4 of the EIS, FPL would acquire all of the fill from regional commercial mines. None of the available commercial mines are located near Biscayne National Park or directly on the coast, and all of them are permitted by the USACE to operate as such. Impacts on wetlands from the operation of commercial mines is regulated as a separate action under the existing permits held by the mine owners. No changes were made to the EIS as a result of this comment.

**Comment:** According to the CWA Section 404(b)(I) Guidelines, 40 CFR § 230.91(c), and the February 6, 1990, Memorandum of Agreement between the U.S. Anny Corps of Engineers and the EPA regarding the Determination of Mitigation under the Clean Water Act Section 404{b)(I) Guidelines, an applicant must demonstrate avoidance and minimization of wetland impacts before compensatory mitigation can be considered. Subpart H of the CWA Section 404(b)(1) Guidelines describes several (but not all) means of minimizing impacts of an activity. Section 4.3.1.6, Wetland Mitigation Plan (pg.70): The DEIS states that, as part of the compensatory mitigation offset projects impacts, FPL proposes to restore two parcels totaling 812 acres. (0617-1-13 [Mueller, Heinz J.])

**Response:** The commenter identified an issue related to the Clean Water Act Section 404 permitting process. This comment is acknowledged. The USACE has not concluded its review and permitting process for wetlands impacts. Mitigation that would address impact avoidance and minimization is discussed in Section 4.3.1.6. Section 4.3.1.6 has been updated to reflect progress in the Section 404 permit review process and the development of wetland mitigation.

**Comment:** The proposed powerlines could also harm snail kites, which forage by flying over suitable marsh habitat at an elevation of 10-16 feet above vegetation. Like wood storks, they may be vulnerable to collisions with guy wires. Forage flights at this elevation would occur well below the expected transmission-line heights of 80-90 feet (230 kV) and 140-160 feet (500 kV). Because the snail kite population is severely depressed, even the loss of a few individuals may have population-level impacts. We suggest the NRC include a discussion in section 5.3.1 regarding the value of not using guy wires for portions of the western corridor near sensitive bird habitat, which could significantly limit collision risks for wood storks and snail kites. (0622-1-21 [Austin, Stan])

**Response:** The comment suggests that the use of non-guyed transmission poles near sensitive areas could decrease environmental impacts from the proposed action. The discussion in Section 5.3.1 of the EIS identifies collision with guy wires as a risk to snail kites. Although no information exists that would quantify this risk, the review team acknowledges that use of non-guyed transmission poles near snail kite nests and foraging areas would likely reduce risk to snail kites. Although the review team added a discussion to Section 5.3.1 about the possible benefits of reducing the number of transmission line guy wires, the review team cannot require the applicant to change its design unless it falls within its regulatory jurisdiction.

**Comment:** Biscayne Bay Coastal Wetlands Projects -Phase 1 and Phase 2[.] As set forth above, implementation of the BBCW Project is crucial to realizing the suite of direct restoration benefits provided by the project. Although Phase 1 of this project has been previously described, Phase 2 includes the critical component of locating and providing a source of much needed additional freshwater to Biscayne NP and Biscayne Bay. To implement BBCW Phase 2, additional lands will be needed, as well as planning, design, and construction funding. Some project lands needed to complete Phase 2 are in FPL ownership. The NPS urges the action agencies to consider requiring mitigation that would move Phase 2 of this crucial project forward. Mitigation could be donation of project lands or funding components of the project. The NPS wishes to begin a dialogue with the action agencies regarding these mitigation possibilities. (0622-2-7 [Austin, Stan])

**Response:** This comment contains a specific suggestion regarding possible mitigation for wetland impacts resulting from the project. The review team appreciates suggestions regarding possible mitigation measures but can only consider mitigation proposed by the applicant or required by agencies specifically authorized to enforce the mitigation. No changes were made to the EIS as a result of this comment.

**Comment:** Numerical value inconsistencies within the draft EIS: Appendix F-2, Section 2.1, Page 2-4, Lines 40-43 "Two potential routes were proposed for the West corridor--the preferred and consensus routes. Each route would eventually be about **89 mi** long..." (Reference for statement was corrupt.) DEIS Table 2-4 ER Subsection 3.7.2 DEIS Table 2-4 indicates that this length is **52 miles**. In the first paragraph of ER Subsection 3.7.2, the length of the West corridor "Clear Sky -- Pennsuco (230 kV)" is characterized as **52 miles**. (**0619-2-37** [Maher, William])

**Comment:** Numerical value inconsistencies within the draft EIS: Appendix F-2, Section 2.3.2, Page 2-9, Lines 16-18 "Approximately 89 mi of corridors are being proposed; approximately 52 mi of the corridor would be associated with either of the two West corridor routes, and approximately **36 mi** would be associated with the East corridor." DEIS Table 2-4 ER Subsection 3.7.2 DEIS Table 2-4 indicates that this length is **37 miles**. In the first paragraph of

ER Subsection 3.7.2, the length of the East Corridor comprised of Clear Sky to Davis (19 miles) plus Davis to Miami (18 miles) results in a total of **37 miles**. (**0619-2-38** [Maher, William])

**Comment:** Numerical value inconsistencies within the draft EIS: Appendix F-2, Section 5.6, Page 5-4, Lines 35-36 "The construction of Units 6 and 7 could permanently eliminate **182 ac** of mudflat suitable as piping plover (Charadrius melodus) wintering habitat." DEIS Subsection 4.3.2.1, Page 4-77, Lines 33-35 DEIS Appendix F-2, Subsection 3.1.1, Page 3-3, Lines 14-17 ER Section 2.4 "As described in ER Revision 6 (FPL 2014-TN4058) wetland and aquatic habitats within the proposed Units 6 and 7 plant area and adjacent laydown areas include the following: \*187.5 ac of mudflats..." Similarly, Appendix F-2: "Wetland and aquatic habitats within the proposed Units 6 and 7 plant area and adjacent laydown areas total approximately 270 ac and include the following land-cover classes: \* 187.5 ac of mudflats..." ER Section 2.4: "Wetland habitats within the Units 6 & 7 plant area and the adjacent laydown area include mudflats (**187.5 acres**)..." (**0619-2-39** [Maher, William])

**Comment:** DEIS Appendix F-2, Subsection 3.2.1.1, Pages 3-13/3-14, Lines 18-26/1-2: USFWS BA states: "NRC EIS, NUREG-2176 Section 3.2.2.1 discusses stormwater drainage for the plant area...According to Table 2-10 of the NRC EIS, NUREG-2176, the average annual runoff for the plant area prior to building for the period from 2000 to 2010 is...annual average precipitation depth of 56.10 in...The annual average runoff after building decreases largely due to the removal of the makeup-water reservoir as a contributing area. The maximum annual precipitation during the period was 71.53 in. during 2005, which produces 1,428 ac-ft of runoff after building compared to 1,646 ac-ft (NRC EIS, NUREG-2176 Table 2-10) prior to building." There are some inconsistencies with the DEIS (emphasis added): a. DEIS Subsection 2.3.1.1 states "The review team estimated an average annual precipitation of **57.10** in. and maximum annual precipitation of 71.53 in. during the period from 2001 through 2010." b. DEIS Table 2-10 reports the maximum total annual runoff for the plant area prior to building for the period from 2001 through 2010." b. DEIS Table 2-10 reports the maximum total annual runoff for the plant area prior to building for the period from 2000 to 2010 (2001 to 2010) as **1,715 ac-ft**. (**0619-6-13** [Maher, William])

**Comment:** DEIS Appendix F-2, Section 2.1, Page 2-4, Lines 34-36 and DEIS Appendix F-2 Subsection 3.1.1, Page 3-4, Lines 6-8: USFWS BA (Section 2.1) states: "The review staff assumes water contained in the muck would drain primarily into the IWF; **the spoil pile at the southern end of the site may dewater into Card Sound**." Similarly the USFWS BA (Subsection 3.1.1) states: "There is also concern that the disturbance and relocation of the muck from the plant site to the cooling-canal berms **may adversely affect the water quality of the IWF and possibly Card Sound as the muck dewaters**." Condition of Certification, Section B "Specific Conditions - Power Plant and Associated Facilities (Excluding Transmission Lines)", Subsection VII "Miami-Dade County", Item C.2, page 78 states: "To the greatest extent practicable FPL shall use proposed Spoil Areas A and C, located along the east and west berms of the Grand Canal. If spoils are placed on Area B, FPL shall implement Best Management Practices to limit **to the extent practicable, runoff from the spoils entering the wetlands areas to the south of the Industrial Wastewater Facility**." (emphasis added) (**0619-6-2** [Maher, William])

**Response:** These comments contain specific suggested edits to the text of the BA that the review team submitted to FWS as part of its consultation under ESA Section 7. The BA was a final product of the FWS formal consultation process and hence has not been edited. The information is acknowledged. The information does not alter the conclusions in the BA or substantially alter the presentation of information in the BA. If the information did substantially alter the content of the BA, the NRC would have notified the FWS.

**Comment:** Synergistic effects of aerosols. I'm a bee farmer. You combine certain pesticides you have bee colony collapse. If we're killing bees, humans are not going to be around much longer either. So these things need to be looked at. (0721-24-4 [Eastman, John])

**Response:** Colony Collapse Disorder (CCD) is a recognized phenomenon affecting honey bees worldwide. Extensive research indicates no single causative agent. Although pesticides have not been ruled out as a contributing factor, insecticides and possibly fungicides currently appear to be the group of pesticides that may contribute to CCD. Pesticides likely used by FPL related to the construction and operation of Units 6 and 7 would be herbicides to control invasive plant species (discussed in Section 5.3.1.2). Herbicides have not been implicated as a causative agent of CCD. Specific herbicides used to control vegetation have not been identified by FPL, but as noted in Section 5.3.1.2, any herbicide or pesticide use would be conducted in compliance with applicable Federal, state, and local laws, regulations, and permit requirements. No changes were made to the EIS as a result of this comment.

**Comment:** The NMFS believes the proposed mangrove fill is not consistent with EPA's Guidelines for Specification of Disposal Sites for Dredged or Fill Material. The fundamental precept stated in 40 CFR 230.1(c) that \*dredged or fill material should not be discharged into the aquatic ecosystem unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern" would not be met by this project. The basic purpose of the project, as stated in the public notice is to meet the public's need for electric energy. Based on guidance provided by 40 CFR 230.10(a)(3), energy development does not require access or proximity to or siting within wetlands to achieve the basic purpose (i.e., energy production is not water dependent). In discussing the water dependency requirement, the guidelines state that for non-water dependent projects, practicable alternatives that do not involve special aquatic sites (e.g., wetlands adjacent to and within the Biscayne Bay Aquatic Preserve) are presumed to be available. (**0724-16** [Fay, Virginia M.])

**Response:** Placement of fill material within waterways of the U.S. would be regulated by the USACE under a Department of the Army permit. As part of its review of FPL's application for a Department of the Army permit to perform work in waters of the United States, the USACE would determine whether the proposed action was the LEDPA (least environmentally damaging practicable alternative) in accordance with the Section 404(b)(1) guidelines (40 CFR 230). No changes were made to the EIS as a result of this comment.

**Comment:** [W]e also handle and capture and monitor the indigo snakes where their habitat is threatened. And we monitor their population and their growth. We also monitor terns, the nesting terns. They love our berms to nest on, and the wading birds that are populating our canals. But not just the native species but also there are a mix of exotics. We now have permits to eradicate the pythons. So we're giving back to the community in so many different ways and these are small examples of our environmental stewardship. (0723-15-3 [Bertelson, Bob])

**Response:** The comment expresses support for environmental stewardship at the Turkey Point site. The comment does not provide specific information related to the environmental effects of the proposed action, and no changes were made to the EIS.

**Comment:** Finally, the South Florida Water Management District plans to construct culverts on the east side of the L-31 E right-of-way for the BBCW project. FPL is also considering using the same right-of-way to accommodate the reclaimed water pipeline. The DEIS does not adequately discuss this potential conflict and how plans for reclaimed wastewater pipelines may negatively

impact plans to proceed with Everglades restoration. [Footnote 31: South Florida Water Management District, Third Completeness Comments, FPL Turkey Point Units 6 & 7, Site Certification Application Power Plant & Associated Facilities, June 4, 2010, 14.] Considering the extensive loss of ecologically valuable wetlands in and around Turkey Point and Biscayne Bay that has already occurred and the commitment of the federal government and the state of Florida to restore and replenish wetland resources in these areas, the DEIS must include an adequate discussion of how the construction and operation of around nine miles of pipeline will further impact wetland resources and if reasonable alternatives exist. (0113-2-17 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Response:** Impacts on terrestrial resources from the proposed reclaimed-water pipeline are described in Sections 4.3.1 and 5.3.1 of the EIS and include consideration of direct, indirect, and cumulative impacts from building and operating those pipelines on wetlands and wildlife. No changes to the EIS were made as a result of this comment.

**Comment:** New paved roads. The project will result in the construction of new paved roadways to provide the main construction access to the project site and allow the delivery of fill, equipment, and construction materials. New paved roadways will be constructed within the footprint of existing dirt roadway at: SW 137th Avenue from SW 344th Street/Palm Drive to SW 359th Street (three lanes); SW 117th Avenue from SW 344th Street/Palm Drive to SW 359th Street (three lanes); and SW 359th Street from SW 137th Avenue/Tallahassee Road to the Turkey Point Power Plant site (three lanes from SW 137th Avenue to SW 117th Avenue and four lanes from SW 117th Avenue to the Turkey Point Power Point site, including a new bridge over the L-31E Canal). Consequently, the project will introduce significant motor vehicle traffic (consisting largely of trucks) within an area that seldom experiences motor vehicle traffic and increase the likelihood of injuries and deaths to the panther and other wildlife resulting from collisions with vehicles. We note the proposed paved roadways described above will result in a significant loss of wetlands and fish and wildlife habitat and the impacts to the environment will be great. We recommend that the NRC require FPL to use a less environmentally damaging route to access the project site, such as the use of Palm Drive. We understand that this will increase motor vehicle traffic on this roadway but we believe that this problem could be overcome through road widening, the use of a shuttle bus system for FPL employees, and the judicious construction of new access roads near the project site. In the event that the proposed new paved roadways are implemented. FPL has agreed to several protective measures to reduce the potential for vehicle collisions, including installing continuous barrier fencing on both sides of the new roadways (i.e., SW 137th Avenue from SW 344th Street/Palm Drive to SW 359th Street, SW 117th Avenue from SW 344th Street/Palm Drive to SW 359th Street, and SW 359th Street from SW 137th Avenue/Tallahassee Road to the Turkey Point Power Plant site), and installation of a large underpass structure and several smaller culvert structures along SW 359th Street that will allow Florida panthers and other wildlife to pass safely under the roadway. In addition, FPL has agreed to remove these paved roadways following construction and return the area to its original condition (*i.e.*, lime dirt road and wetlands). (0227-10 [Stanley, Joyce])

**Response:** The review team appreciates suggestions such as this that could reduce impacts to terrestrial ecology resources, but the NRC does not have the regulatory authority to require FPL build its roads or other project facilities in specific locations. No changes were made to the EIS specifically as a result of this comment.

## E.2.10 Comments Concerning Ecology - Aquatic

**Comment:** The algae bloom was never controlled. (0008-5 [Finver, Jody])

**Comment:** When power output was increased, algae bloom followed. Now FPL is pumping toxins in to control it. (**0252-4** [Van Leer, Sam])

**Comment:** Environmental and technical problems have taken its toll on the machines built more than 40 years ago. The most recent problems threaten the continued viability of the reactors as well as the prospects for more. Rising temperatures and a boost of power have caused algae to fill the canals, and threaten to clog the system unless even more water can be brought in from the Everglades. In 2014, summer temperatures routinely climbed above 100 degrees Fahrenheit. (**0288-2** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Response:** The commenters are concerned about the algae bloom in the IWF cooling canals. These cooling canals are used for the operation of Turkey Point Units 3 and 4, and would not be used for cooling Units 6 and 7. These comments offer no new information relative to the construction and operation of Units 6 and 7. However, a more detailed description of the changes in the cooling canals since 2013 has been added to Sections 2.3.1 and 2.4.2.

**Comment:** Please do NOT approve additional Nuclear reactors at Turkey Point in South Florida. There are already problems with the water surrounding the current reactor, too warm for the sea life and causing unnecessary algae to bloom. More reactors will mean more warm water flowing into the canals that feed into Biscayne Bay. This is disastrous for the sea life of all types. (**0048-1** [Wegner, Geri])

**Comment:** Regarding the FPL request to enlarge Turkey Point, I am sure you are aware that it is located on the border of Biscayne National Park. The existing cooling canals drain into the Card Sound National Lobster Sanctuary. Our marine life has been severely compromised over the last few decades with the population explosion that has happened in and around the Miami area. I have been here since 1966 and have personally experienced the decline of our natural habitat and marine life. The heated water that already runs into this precious area along with sewage infiltration from Miami Dade County has resulted in a marked decline of our local wildlife since my arrival. The stress that this project will have on what natural splendor we still have left will be devastating. As you know, even a slight increase in water temperature can be fatal to living corals and sea grass. (**0081-3** [Benson, Mary] [Skove, Ellen H.] [Tompkins, Constance])

**Comment:** It is a serious matter to chance raising the water temperature and negatively affecting the wildlife of the Florida Keys. (**0084-1** [Phillips, Monica D.])

**Comment:** Discharged hot water from cooling systems is known to affect fish reproduction and development. (0214-5 [Zerulla, Tanja])

**Comment:** The water is not deep enough in the area and it would cause it to heat up, thus killing all the fish etc. (**0368-2** [Casey, Sr., Robert J.])

**Comment:** Please consider the impacts of dumping additional hot water directly into Biscayne Bay. (**0537-5** [Anonymous, Judi])

**Comment:** Once those towers are built we can't go back. If the temperature in our water in Biscayne Bay rises and we continue to get algae blooms and we continue to get fish killing because of the rise in salt, salinity and we have rise in temperatures we are doomed. We need to also represent the voice of the ocean, the water and the wildlife. (0722-17-4 [Swenson, Cyndee])

**Response:** The commenters are concerned about the potential for warm water discharge from proposed Units 6 and 7 to the IWF cooling canals and Biscayne Bay, and the potential for algae blooms and adverse effects on marine organisms. As described in Section 5.3.2, the operation of two new reactors would result in discharge of station blowdown from Units 6 and 7 to deep injection wells. There would be no thermally enriched water discharges to surface waters, including Biscayne Bay or the IWF, from operation of units 6 and 7. There would be no surface water discharge of treated or untreated reclaimed water to any surface waters. No changes were made to the EIS as a result of these comments.

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...If the additional reactors generate more water water then more Manatees can benefit from that further increasing their numbers. The addition of the 2 reactors thus can point to positive environmental benefits to a threatened species. (0015-13 [Goldmeier, Barry])

**Response:** The commenter supports the construction and operation of two new nuclear units for the possible benefit additional warm water might provide to endangered manatees. The effects of operation on protected aquatic species is described in Section 5.3.2, and in the staff's BA for the FWS mentioned in Appendix F2 of this final EIS. Due to the proposed deep-well injection of blowdown water, no warm water would be discharged to the nearshore waters of Biscayne Bay. No changes were made to the EIS as a result of this comment.

**Comment:** [The vented hot steam will likely contain household chemicals, pharmaceuticals, bacteria and viruses that end up in the county's wastewater. Even in small amounts, these can affect] terrestrial and marine environments like mangroves, seagrass beds and coral reefs. The aerosol mist can be dispersed widely by wind and water. (**0078-7** [Wilansky, Laura Sue])

**Comment:** The vented hot steam will likely contain household chemicals, pharmaceuticals, bacterial and viruses that end up in the countys wastewater. Even in small amounts these can effect] terrestrial and marine environments like mangroves, seagrass beds and coral reefs. The aerosol mist can be dispersed widely by wind and water currents. Did I mention this is a hurricane prone state? (0353-5 [Royce, M.])

**Comment:** [The vented hot steam will likely contain household chemicals, pharmaceuticals, bacteria and viruses that end up in the county's wastewater. Even in small amounts, these can affect] terrestrial and marine environments like mangroves, seagrass beds and coral reefs. The aerosol mist can be dispersed widely by wind and water currents. (**0356-11** [Shlackman, Jed])

**Comment:** [The vented hot steam will likely contain household chemicals, pharmaceuticals, bacterial and viruses that end up in the countys wastewater. Even in small amounts these can effect] terrestrial and marine environments like mangroves, seagrass beds and coral reefs. I do NOT want to CHANCE that the aerosol mist may be (likely) dispersed widely by wind and water currents. (**0362-3** [Hurley, Paula])

**Comment:** [The vented hot steam will likely contain household chemicals, pharmaceuticals, bacterial and viruses that end up in the county's wastewater. Even in small amounts these can effect] terrestrial and marine environments like mangroves, seagrass beds and coral reefs. The aerosol mist can be dispersed widely by wind and water currents. (**0366-5** [Griffith, Ed and Harriet])

**Comment:** Even in small amounts, these can affect human health and terrestrial and marine environments like mangroves, seagrass beds and coral reefs. The aerosol mist can be dispersed widely by wind and water currents. (**0370-10** [Vayu, Satya])

**Comment:** [The vented hot steam will likely contain household chemicals, pharmaceuticals, bacteria and viruses that end up in the county's wastewater. Even in small amounts, these can affect] terrestrial and marine environments like mangroves, seagrass beds and coral reefs. The aerosol mist can be dispersed widely by wind and water currents. (0676-7 [Kassel, Kerul])

**Comment:** When it comes out as gaseous H2O, as water vapor, there's gases mixed in with it that contain some of these chemicals. When the water droplets, where people call "drift," come out, those little tiny particles, they contain the exact same constituents of the wastewater, drifting over Biscayne Bay, over the terrestrial ecosystem. (0721-22-13 [Schwartz, Matthew])

**Comment:** [What are the impacts of drift] on the terrestrial landscape, on Biscayne Bay, on mangroves, on sea grass beds, on coral reefs? (**0721-22-15** [Schwartz, Matthew])

**Comment:** How many places in the United States, Continental United States have a coral reef? We're blessed with a coral reef in South Florida. We're going to build a nuclear power plant right next to them, throw the wastewater up into the air as vapor and droplets and disburse it over this entire area. (0721-22-16 [Schwartz, Matthew])

**Response:** The commenters are concerned that aerosolized components from the cooling towers would be harmful to human and ecological resources. Sections 5.3.1 and 5.3.2 discuss the relative deposition of a number of contaminants of concern that may be present in reclaimed wastewater and concluded that the expected trace amounts would have negligible effects due to the extremely low concentration and dilution in receiving water bodies. No changes were made to the EIS as a result of these comments.

**Comment:** The expansion of Turkey Point could have serious environmental impacts on sensitive ecological habitat and the health and sustainability of limited freshwater resources. (0102-3 [Commenters, Multiple])

**Comment:** And an expansion of Turkey Point could jeopardize the area's limited freshwater resources as well as sensitive habitat for a wide range of federally protected endangered species. (0103-3 [Commenters, Multiple])

**Comment:** Furthermore, changes to the salinity, quality and temperature of water in Biscayne may result in impacts to the seasonal behaviors of threatened and endangered species, such as the West Indian manatee and American crocodile. [Footnote 7: Lewis, M. and D. B. Kimball, United States Department of Interior, National Park Service Letter to U. S. Nuclear Regulatory Commission, April 16, 2010, L 67, 16.] (**0113-1-13** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** As fresh water is withdrawn from either the aquifer and/or the bay, there may be less freshwater to replenish the system, affecting salinity levels within Biscayne Bay. The withdrawal of freshwater from either of these sources has the potential to permanently disrupt the system's saltwater regime and could have substantial impacts to local ecosystems, which are extremely sensitive to changes in salinity. Disruption in nearshore habitats and overall ecological stability may occur as a result of hydrologic impacts that change water quality and

volume with the bay. (**0113-1-16** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** Given the sensitivity of our coastal waters, including the only living coral reef in the US, I am shocked that we are considering the addition to the environmental burden. (**0130-2** [Jones, Diane])

**Comment:** So many of our waters have already been ruined by development, drilling, pollution, and humans. Enough is enough! Our waters are supposed to be a place of peace and quiet for us, and the fish and wildlife which live in them! The animals are running out of places to live and be safe. Our fish and wildlife are under threat from so many angles. They desperately need to be protected, mainly from humans. Life is hard enough for people, let alone the animals. Can't we please offer them some much needed help?! PLEASE save the waters Biscayne National Park for all future generations before they are permanently ruined. Some damage cannot be undone! (0191-1 [Hodie, Jake])

**Comment:** Expanding this nuclear plant would endanger the precious coral reefs. (0193-2 [Shipe, Kathleen])

**Comment:** We are concerned that withdrawing massive amounts of freshwater from underneath Biscayne Bay could increase salinity levels within Biscayne National Park and hasten saltwater intrusion into freshwater resources. (**0210-4** [Sharp, Andrea Heuson])

**Comment:** Expanding Turkey Point would have serious environmental impacts on sensitive ecological habitat and the health and sustainability of limited freshwater resources. (**0228-3** [Yeager, Jerry])

**Comment:** The waters of Biscayne Bay are also home to incredible coral reef habitat and numerous threatened and endangered animals, including the West Indian manatee, American crocodile, and five species of sea turtles. (**0258-3** [Field, Fran])

**Comment:** The waters of Biscayne Bay are also home to incredible coral reef habitat and numerous threatened and endangered animals, including the West Indian manatee, American crocodile, and five species of sea turtles. (**0284-3** [Lopez, Josie])

**Comment:** The expansion of the power plant would only intensify and expand these negative impacts, posing significant threats to sensitive ecological areas and critical freshwater supplies. (0284-5 [Lopez, Josie])

**Comment:** In addition, the expansion could have serious environmental impacts on sensitive ecological habitat and the health and sustainability of limited freshwater resources. (**0295-4** [Dietrich, Chris OMeara])

**Comment:** The expansion of Turkey Point could have serious environmental impacts on sensitive ecological habitat and the health and sustainability of limited freshwater resources. (0299-2 [Salatino, Freda])

**Comment:** It would threaten other sensitive marine resources, including dozens of federally protected species such as the American crocodile, Florida manatee and five species of sea turtle. (0356-2 [Shlackman, Jed])

**Comment:** These two new nuclear plants would also threaten other sensitive marine resources such as dozens of federally protected species to include the American crocodile, Florida manatee and five species of sea turtle. (**0366-7** [Griffith, Ed and Harriet])

**Comment:** It would threaten other sensitive marine resources, including dozens of federally protected species such as the American crocodile, Florida manatee and five species of sea turtle. (0370-3 [Vayu, Satya])

Comment: Important natural resources would be in serious jeopardy. (0370-7 [Vayu, Satya])

**Comment:** The expansion of Turkey Point will have serious environmental impacts on sensitive ecological habitat and the health and sustainability of limited freshwater resources. (0413-2 [Cobb, Tanya])

**Comment:** Expansion of Turkey Point could have serious environmental impacts on sensitive ecological habitat and the health and sustainability of limited freshwater resources. (**0415-1** [Hazard, Evan])

**Comment:** If approved, the project will also destroy mangrove and seagrass populations that perform vital ecosystem services, including maintaining our water quality and protecting our shoreline. (**0515-3** [Regalado, Tomas])

**Comment:** The expansion of Turkey Point could have serious environmental impacts on sensitive ecological habitat and the health and sustainability of limited freshwater resources. "Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose and method." --Theodore Roosevelt (0555-1 [Lish, Christopher])

**Comment:** Other than the disposition of nuclear waste, the use of water by the plant that is located in a fragile ecological area, is something that should take priority in considering the licensing of the plant. (**0613-1** [Icaza, Alejo])

**Comment:** FP&L has stated that their two proposed nuclear reactors will use 90 million gallons of water daily for cooling. This will naturally have a negative impact on the plants, animals, birds, and marine life in the Everglades, Biscayne National Park, and the Atlantic Ocean which border the nuclear facility. (**0671-1-1** [Post, Patrick])

**Comment:** It would threaten other sensitive marine resources, including dozens of federally protected species such as the American crocodile, Florida manatee and five species of sea turtle. (0676-2 [Kassel, Kerul])

**Comment:** The design (engineering tech exist today) must not effect/should not have any serious environmental impacts on sensitive ecological habitat and the health and sustainability of limited freshwater resources. (**0694-6** [Carpenter, Rory])

**Comment:** [Building 6 and 7 will foul the water supply], threatening the sea life and aquatic sanctuaries in the area. (0721-12-10 [White, Barry J.])

**Comment:** Increased salinity will reduce fresh water which hatchling and juvenile sea life in Biscayne National Park and Biscayne Bay Aquatic Preserve, next door to Turkey Point, need to survive. (0721-12-4 [White, Barry J.])

**Comment:** Also Biscayne National Park is the country's largest marine park and is home to incredible life diversity, important habitats, watersheds and ecosystems. The expansion of Turkey Point puts these natural resources at risk. (0722-14-4 [Kaul, Devika])

**Response:** The commenters express general concern about the potential for adverse effects on ecological resources, protected species, and freshwater supplies as a result of the construction and operation of Units 6 and 7. The effects of construction and site preparation on the water use and quality of surface water and groundwater resources are described in Section 4.2, and the effects of operation in Section 5.2, and were determined to be SMALL. The effects of construction and site preparation on terrestrial and aquatic ecological resources and protected species are described in Sections 4.3.1 and 4.3.2, respectively, and were found to be MODERATE for Terrestrial resources and SMALL for Aquatic resources except to the American crocodile, which would sustain a MODERATE impact. Operational effects on terrestrial ecological resources (including wetlands and listed species) and aquatic resources and protected species were found to be MODERATE and are described in Section 5.3.1. Operational effects on Aquatic resources were found to be SMALL and are described in Section 5.3.2. Because the new units would use reclaimed water as a source of cooling water with RCWs as a backup water source, employ closed-cycle cooling, and dispose of station blowdown through deep-well injection, adverse effects on aquatic resources would be avoided. No changes were made to the EIS as a result of these comments.

**Comment:** Our residents enjoy recreating in this very area and have already seen a decrease in fish and bird populations that local experts tell us is related to the hypersalinity in the area. (**0208-3** [Ritz, David])

**Comment:** Stop disrupting already traumatized bio-systems, National Parks, endangered species by disregarding what The People want. (**0532-2** [Raab, Frances])

**Comment:** This power plant has been sited in the past for environmental damages such as pumping too WARM of water out in to the Gulf thereby destroying coral and changing the entire marine life in that area. (**0604-1** [Courliss, William])

**Comment:** Costs to the ecosystem, which I think was the last question that came up. (0721-1-8 [Rodriguez, Jose Javier])

**Comment:** [We need to look at the salt water plume], the impact it's had on crocodiles[.] (0721-13-7 [Martin, Drew])

**Comment:** Biscayne National Park is one of our country's largest marine national parks and it's home to important marine biodiversity and wetland and marine habitats and countless opportunity for education and recreation. (0723-4-3 [McLaughlin, Caroline])

**Comment:** The waters of Biscayne Bay are also home to incredible coral reef habitat and numerous threatened and endangered animals, including the West Indian manatee, American crocodile, and five species of sea turtles. Turkey Point's operations are already impacting Biscayne Bay's habitat, water quality, and salinity, which are vital for the health and productivity of the bay. The expansion of the power plant would only intensify and expand these negative

impacts, posing significant threats to sensitive ecological areas and critical freshwater supplies. (0728-2 [Gregory, Gregory B.])

**Response:** The commenters express general concern about the current status of ecological resources in the area. The staff agree that Biscayne National Park is an important resource for marine biodiversity. However, the staff is unaware of any studies showing destruction of corals or significant changes to marine life in Biscayne Bay as a result of current Turkey Point operations. Except for site runoff, there would be no discharges to surface waters from operation of Units 6 and 7. No new information is provided, therefore, no changes were made to the EIS as a result of these comments.

**Comment:** When nuclear plants draw water from natural water sources, fish and other wildlife get caught in the cooling system water intake structures. A study done in California investigated impacts from 11 coastal power plants and estimated that a single nuclear plant can kill millions of fish! (0340-2 [Tweeton, Tanya])

**Comment:** The proposed new nuclear reactors would also imperil fish larvae and other forms of aquatic life, which are strained from the water as it travels through thousands of metal tubes to become steam that turns the turbines to make electricity. A 2005 study found that one coastal power plant in Southern California destroyed nearly 3-and-a-half million fish in just one year. (0592-9 [Brexel, Sr., Charles])

**Response:** The commenters express general concern about the current status of ecological resources in the area as well as the current water quality of Biscayne Bay. The staff agree that Biscayne National Park is an important resource for marine biodiversity. However, the staff is unaware of any studies showing destruction of corals or significant changes to marine life in Biscayne Bay as a result of current Turkey Point operations. Except for site runoff, there would be no discharges to surface waters from operation of Units 6 and 7. There would be no heated discharge to Biscayne Bay from the construction and operation of Units 6 and 7 and no degradation of water quality. No new information is provided; therefore, no changes were made to the EIS as a result of these comments.

**Comment:** DEIS Subsection 2.4.2.1, Page 2-119, Lines 2-4 and DEIS Subsection 2.4.2.1, Page 2-121, Table 2-18: The DEIS (Page 2-119) states: "onsite surface-water habitats **exclusive of the IWF** include hypersaline mudflats, remnant canals...and areas of open water". The onsite surface-water habitats listed are **inclusive of the IWF**. Further, the sentences that follow describe data taken from sampling locations that are located **within the permitted IWF**. Similarly, DEIS Table 2-18, "Fish Species Present in Surface-Water Habitats Exclusive of the IWF on Turkey Point Site in Summer 2009", includes observations from locations **within the permitted IWF**; all listed observation points in this table are located within the IWF as described in DEIS reference FPL 2009-TN201. The statement and Title of Table 2-18 should reflect that the onsite surface-water habitats and surface water sampling are "inclusive of the IWF". (emphasis added) (**0619-3-12** [Maher, William])

**Comment:** DEIS Subsection 2.4.2.4, Page 2-154, Lines 38-40: The DEIS states: "Because modifications to the existing equipment barge-unloading area were expected...a survey of seagrass presence in that area was conducted during the summer of 2008 (**EAI 2009-TN153**)." The correct reference for the seagrass survey of the equipment barge unloading area is: (**FPL 2010-TN272**).) (emphasis added) (**0619-3-13** [Maher, William])

**Comment:** DEIS Subsection 4.3.2.1, Page 4-78, Lines 31-32: The DEIS states: "The RWTF would be built on approximately 44 ac of land immediately north and **east** of the IWF near SW 360th Streets (Figure 3-1)." The RWTF is located north and **west**, as illustrated on DEIS Figure 3-1. (emphasis added) (**0619-4-9** [Maher, William])

**Response:** The commenter is correct. Text and references in Sections 2.4.2 and 4.3.2 were revised to reflect these clarifying comments describing the location of the reclaimed water treatment facility.

**Comment:** Their construction will improve the environment and ensure the future of the manatee habitat, this helping preserve the manatees. (**0707-2** [Pheil, Edward])

**Comment:** They reduce C02 emmissions reducing ocean acidification damage to the ocean environment. (0707-4 [Pheil, Edward])

**Response:** These comments express general support for the construction and operation of Units 6 and 7 at the Turkey Point site. No changes were made to the EIS as a result of these comments.

**Comment:** Climate Change and Drought impacts: As noted by NRC, climate-related changes include increased frequency and intensity of extreme weather, e.g., heavy downpours, floods, and droughts (Section 2.9.2, p. 2-208). For example, the drought of 2006 lowered the level of Lake Okeechobee to an all-time record of 8.82 foot mean sea level (Section 9.3.2.4, p. 9-70). Droughts and water shortages have the potential to increase in severity and frequency as the water demand increases in south Florida, independent of climate change effects. A minimum of one severe drought every decade can be expected. [Footnote 6: Droughts and Water Shortages in Central and South Florida (September 2001) SFWMD Technical Paper EMA #396 available at http://www.sfwmd.gov/portal/page/portal/pg grp tech pubs/portlet tech pubs/ema-396.pdf]. Ninety percent of South Florida has been designated as a water resource caution area. [Footnote 7: Florida Water Management and Adaptation in the Face of Climate Change: A White Paper On Climate Change And Florida's Water Resources November 2011, available at http://floridaclimate.org/docslwater managment.pdf] These are areas that have critical water supply problems, or are projected to have these problems in the next 20 years. Chapter 62-40, F.A.C. requires reuse within these designated areas. Florida currently uses more reclaimed water (43 percent of wastewater) than any other state. *Recommendations:* EPA has concerns regarding estuary and habitat impacts related to lengthy periods of droughts. In particular, the potential for increased salinity in existing brackish water habitats should be evaluated. Due to the proximity of saline, hypersaline and seawater in the area, measures to prevent increasing salinity should be addressed; in particular, brackish water species and habitat protection measures should be fully evaluated with regard to the project's impacts and potential future climate conditions. (0617-4-7 [Mueller, Heinz J.])

**Response:** The commenter expresses concern regarding the effects of climate change and the potential for subsequent effects on aquatic species and habitats in the context of these changes during operation of Units 6 and 7. Appendix I of the EIS describes the potential for climate changes, to include drought, sea-level rise, temperature increases, and changes in precipitation intensity and frequency. Section I.3.2 in Appendix I assesses the potential for adverse effects to water quality and on other water uses in the area during operation from climate changes. Section I.3.4 in Appendix I assesses the potential for adverse effects to aquatic species and habitats during operation from climate change. The staff found that operation of

Units 6 and 7 would have a minimal influence on the effects of climate change on Biscayne Bay. No changes were made to the EIS as a result of this comment.

**Comment:** Threatened and Endangered Species. The DEIS summarizes the NRC's coordination with the U.S. Fish and Wildlife Service (FWS) and state wildlife agencies in Florida. Mitigation measures include protocols and requirements for protecting the American crocodile, Smalltooth Sawfish, Nassau Grouper, manatees and sea turtles. However, unavoidable adverse impacts would include permanent loss of some onsite aquatic environments, and some disturbance of aquatic environments and potential disturbance of species. Also, there would be habitat loss and land adversely affected for resident American crocodiles (page 2-122 and Table 4-10). *Recommendations:* The EPA defers to the FWS and the State wildlife agencies on these issues and agrees that the FEIS should provide updated information. Impacts should be avoided to the maximum extent feasible, and unavoidable impacts should be mitigated. (0617-1-27 [Mueller, Heinz J.])

**Comment:** This plant will have negative impacts on endangered species. A number of endangered species live near the Turkey Point Nuclear Power Plant. These include a number of endangered wading birds, the American Alligator and the American Crocodile. The surrounding canals have been found to be overheated and on one occasion an American Crocodile was found dead. (0641-7 [Martin, Drew])

**Response:** The staff agree that impacts on threatened and endangered species should be avoided or minimized to the maximum extent feasible, and unavoidable impacts should be mitigated. Evaluation of effects on protected species such as the Smalltooth Sawfish, Nassau Grouper, and sea turtles are presented in a BA as part of ESA Section 7 consultation with the NMFS, and with the FWS for the American crocodile, birds, and manatees. Updated information about the status of the consultations, anticipated impacts, and mitigation related to the results of consultation is presented in Sections 4.3.2 and 5.3.2 of the EIS.

**Comment:** Risks to Threatened and Endangered Species in Biscayne Bay[.] An additional area of concern is how project-related changes to water quality might affect threatened and endangered species that are found within Biscayne NP. Because there is much uncertainty about exactly what environmental changes could occur as a result of the proposed project, further investigation is needed to better elucidate potential negative impacts to imperiled species. For example, it is currently unknown if the proposed expansion will result in substantial changes to the water quality and/or temperature of water in Biscayne Bay in the vicinity of the cooling canals. It is possible that alterations to water quality and/or temperature could affect the relative incident and prevalence of Fibropapillomatosis (FP), a tumor-forming disease linked to a herpesvirus that is often lethal for juvenile sea turtles, particularly green sea turtles (Chelonia *mydas*). Eutrophication and increased temperatures have been implicated in triggering the emergence of FP tumors. Similarly, the endangered smalltooth sawfish (Pristis pecinata) is a benthic-dwelling species that could feasibly be affected by groundwater seepage from the plant. Comparable concerns also exist for manatees (Trichechus manatus), which are known to populate the southwest part of the bay (southeast cooling canals and associated external canals) during the winter. The potential impacts of activities at the plant need to be considered as part of a bigger picture, as there is concern that project-related effects could exacerbate the effects of other stressors present in the system and not related to Turkey Point. (0622-1-26 [Austin, Stan])

**Response:** Water quality effects on protected sea turtles, Smalltooth Sawfish, and manatees, including known diseases such as fibropapillomatosis, from construction and operation were

assessed in a BA as part of ESA Section 7 consultation with the NMFS and FWS. Updated information about the result of consultation is presented in Sections 4.3.2 and 5.3.2 of the EIS. Section 7.3.2 of the EIS describes the cumulative effects of stressors on aquatic resources within the described region. In Sections 4.2 and 5.2, the staff has determined that construction and operation of Units 6 and 7 at Turkey Point would not noticeably alter water quality or temperature in Biscayne Bay, and therefore the staff determined that no adverse effects on protected aquatic species would occur due to changes in water quality and temperature. No changes were made to the EIS with regard to cumulative effects as a result of this comment.

**Comment:** Draft EIS also does not take in to account the Miami-Dade County Manatee Protection Plan and it could very well be in conflict. (**0721-5-7** [Mendez, Victoria])

**Response:** Sections 4.3.2 and 5.3.2 of the EIS describe the applicant's manatee protection plan, which is consistent with FFWCC requirements. The effects of construction and operation on the Florida manatee were assessed in a BA as part of ESA Section 7 consultation with the FWS. Updated information about the result of consultation is presented in Sections 4.3.3 and 5.3.2 of the EIS, which includes conditions for monitoring manatees under FDEP manatee conditions for in-water work.

**Comment:** In Revision 1 of the "FPL Turkey Point Units 6 & 7 Threatened and Endangered Species Evaluation and Management Plan", DEIS reference, (FPL 2011-TN1283), FPL updated the plan to incorporate the final location of the Reclaimed Wastewater-Treatment Facility (RWTF), revising the number of wildlife underpasses from 4 to 3. There remain instances in the DEIS where the wildlife underpasses were not updated. Instances in the DEIS include (emphasis added): a. DEIS Subsection 4.3.2.1, Page 4-82, Lines 17-22: The DEIS states: "To mitigate the hazards associated with the increased traffic...FPL is proposing to install a system of wildlife underpasses to allow crocodiles to move safely under the primary access road...and associated freshwater ponds on the berms to the north, including the area known as the moat." As illustrated in DEIS Section 3.1, page 3-3, Figure 3-1, the moat is the location of the RWTF, underpasses are no longer proposed at that location. b. DEIS Subsection 4.3.2.3, Page 4-94, Lines 13-16 and DEIS Subsection 4.3.2.5, Page 4-98, Lines 23-26: The DEIS (Subsection 4.3.2.3) states: "As described in its 2009 Threatened and Endangered Species Evaluation and Management Plan, FPL has proposed to install three wildlife underpasses on the road between the northern end of the IWF and test canals to the west of the IWF to mitigate collision hazards (FPL 2010-TN170)." Similarly, the DEIS states (4.3.2.5): "To mitigate hazards related to vehicle collision, FPL...proposed a series of wildlife underpasses on the road between the northern end of the IWF and test canals to the west of the IWF (FPL 2014-TN4058; FPL 2010-TN170)." Additionally, with respect to the location of the test canals, ER Subsection 4.3.1.1.4 states: "The FPL reclaimed water treatment facility would be built on a parcel by the test canals...(immediately north of the industrial wastewater facility)." (0619-1-16 [Maher, William])

**Comment:** DEIS Subsection 4.3.2.3, Page 4-93, Lines 39-41: The DEIS states: "The **American crocodile** is currently **listed as Federally endangered** and **State threatened**..." As of 2007, the **American crocodile is Federally threatened**. As of 2010, all Federally listed species that occur in Florida are now included on Florida's list as Federally-designated Endangered or Federally-designated Threatened species. (emphasis added) (0619-4-10 [Maher, William])

**Comment:** DEIS Subsection 4.3.2.3, Page 4-95, Lines 5-7 and DEIS Subsection 4.3.2.5, Page 4-98, Lines 16-17: The DEIS (Subsection 4.3.2.3) states: "As shown in **Figures 2-30 and 2-31**,

surveys conducted by FPL from 1978 to 2013 have shown that only **a few nests have been** observed in areas where muck disposal would occur." Additionally, the DEIS (Subsection 4.3.2.5) states: "Nests have also been documented **along the IWF Grand Canal where muck** disposal is planned." Reference should be to DEIS Figure 2-31, "Locations of Crocodile Nests in the Turkey Point IWF, 1978-2010", and DEIS Figure 2-31, "Locations of Crocodile Nests in the Turkey Point IWF, 2011-2013." Additionally, neither figure shows nests located upon the spoils disposal areas. (emphasis added) (0619-4-11 [Maher, William])

**Response:** The commenters suggested changes are correct. Text in Section 4.3.2 was revised to reflect these comments. The new and corrected information does not alter the staff's conclusions of impact.

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Appendix F-4, Section 2.0, Page 2-1, Lines 30-33 "FPL's application states that **preconstruction activities**, which include activities the USACE denotes as "construction," are **expected to occur for 60 months** and construction activities, as defined by the NRC...to occur for 66 months (FPL 2014-TN4058)." ER Subsection 1.1.2.7 ER Section 3.9 ER Table 3.9-1 "No site preparation activities would occur...and the required U.S. Army Corps of Engineers permits are obtained. The project schedule assumes **a 69-month duration for preconstruction activities**." (ER Section 3.9 and Table 3.9-1 also indicate a 69-month duration for preconstruction activities.) (**0619-2-29** [Maher, William])

**Comment:** DEIS Appendix F-2, Subsection 3.2.1, Page 3-11, Table 3-1 and Appendix F-3, Subsection 4.2.1, Page 4-7, Table 4-1: The following inconsistencies were identified in comparing USFWS BA Table 3-1 and DEIS Table 5-1 on page 5-11. a. The listed concentration for "Triclosan" in USFWS BA Table 3-1 and NMFS BA Table 4-1 differs from the concentration for the same chemical; in the referenced DEIS Subsection 5.2.1.1, Table 5-1, page 5-11. b. "Ciprofloxacin" in USFWS BA Table 3-1 and NMFS BA Table 4-1 is not listed in the referenced DEIS table, Subsection 5.2.1.1, Table 5-1, page 5-11. c. The header for the values reads "**Annual** Average Drift - Deposition Rates"; however, the units are shown as (g/m<sup>2</sup>-month) in USFWS BA Table 3-1 and NMFS BA Table 4-1. (emphasis added) d. Estimated values in USFWS BA Table 3-1 and NMFS BA Table 4-1 for "HHCB" and "Phenanthrene" differs from the values in the referenced DEIS Subsection 5.2.1.1, Table 5-1, page 5-11. (0619-6-12 [Maher, William])

**Comment:** DEIS Appendix F-2, Section 4.10, Pages 4-9 through 4-12, Lines 17-20 (for text inconsistencies): USFWS BA states: "Recent crocodile monitoring data provided by FPL from 2000 to **2012** are summarized in Table 4-1. The number of successful nests observed from 2000 to **2012** has ranged from a low of 14 in 2001 to a high of 28 in 2008; the number of hatchlings captured has ranged from 134 in 2004 to 548 in 2009." Table 4-1 also includes **2013** data. Also, Figure 4-4 is entitled "Crocodile Nests Observed in 2011 and 2012: The nests shown in this figure do not match the nests shown for the same time period in the FPL Annual American Crocodile Report for 2011 and for 2012. Figure 4-4 also includes 2013 data. USFWS BA Figure 4.4 is consistent with the DEIS Figure 2-32. (emphasis added) (**0619-6-14** [Maher, William])

**Comment:** DEIS Appendix F-4, Subsection 2.3.1, Page 2-8, Lines 28-29 and Appendix F-4, Subsection 5.1.1, Page 5-2, Line 15-16: NMFS EFH (Subsection 2.3.1) states, "The RWTF would be located **west of the proposed units**..." Similar language is found in Appendix F-4 (Subsection 5.1.1). However, NMFS EFH Figure 2-2 shows the RWTF will be located **northwest of the proposed units**. (emphasis added) (**0619-7-10** [Maher, William])

**Comment:** DEIS Appendix F-4, Subsection 2.3.2, Page 2-9, Line 5: NMFS EFH states, "The maximum saltwater makeup-water rate under normal operating conditions would be approximately 43,200 gpm, assuming 1.5 cycles of concentration in the cooling towers." ER Subsection 3.4.1.1.1 states, "The maximum saltwater makeup rate to the circulating water system would be approximately **43,200 gpm** per unit." (emphasis added) (**0619-7-11** [Maher, William])

**Comment:** DEIS Appendix F-2, Section 6.1, Page 6-2, Lines 20-22: USFWS BA states: "As previously noted, this sanctuary would be located **south and west** of the existing IWF in an area adjacent to the Sea Dade Canal (FPL 2012-TN1618)." Turkey Point Units 6 & 7, Transmittal of Federal Biological Assessment for Six Listed Species dated November 2012, DEIS reference (FPL 2012-TN1618), Subsection 6.2.1.5 "Units 6 & 7 Crocodile Conservation and Monitoring Plan", page 77 states: "...and construction of an additional crocodile nesting and foraging sanctuary (Sea Dade Canal Crocodile Sanctuary) **south** of the industrial wastewater facility within the EMB." (emphasis added) (**0619-7-3** [Maher, William])

**Comment:** DEIS Appendix F-2, Section 6.1, Page 6-2, Lines 26-28, 31: USFWS BA states: "FPL predicted that the increase in capacity derived from the NRC-approved uprate of Units 3 and 4 (77 FR 20059) (TN1001) would increase water temperatures within the cooling canals by **2°F** and increase salinity by **2-3 ppt** (FPL 2014-TN4058)." ER Section 5.11.2.1, states: "The uprated Units 3 & 4 would have an increased thermal discharge into the cooling canals of a **maximum of 2.5°F** and would increase salinity by **6 percent**." Two different temperatures are referred to—one within the cooling canals and one for the discharge into the cooling canals. (emphasis added) (**0619-7-4** [Maher, William])

**Comment:** DEIS Appendix F-3, Subsection 3.1.1.2, Page 3-6, Line 14-16: NMFS BA states, "These pipelines would be routed from the Turkey Point peninsula along the existing berm east of the plant area, **and be situated above ground** (Figure 3-3)." ER Subsection 3.9.1.7 states: "The pipelines from the radial collector wells would require excavation on the Turkey Point peninsula and the existing berm east of the plant area, **but would be above ground on the plant area**." (emphasis added) (**0619-7-6** [Maher, William])

**Comment:** DEIS Appendix F-3, Subsection 4.1.2.2, Page 4-4, Lines 15-19 and Appendix F-4, Section 5.3, Page 5-6, Lines 24-26: NFMS BA states, "the current deliveries will likely decrease significantly, but during the 6-year construction period, **approximately 80 additional deliveries of construction equipment and modules would occur** (FPL 2014-TN4058)." Similar language is found in Appendix F-4. ER Subsection 4.3.2.2.1 states: "The number of weekly shipments of fuel oil would not be expected to change; however, during the 6-year construction period, there would be approximately 80 additional barge trips for delivery of construction equipment and modules **per unit**." (emphasis added) (**0619-7-7** [Maher, William])

**Comment:** DEIS Appendix F-3, Subsection 4.2.1, Page 4-6, Lines 31-33: NMFS BA states "With the exception of TDS, calculated depositional rates were very low, ranging from 7.5 x  $10^{-10}$  to 2 x 10-7 g/m<sup>2</sup>-month." NMFS BA calculated depositional rates in Table 4-1 range from 3.5 x  $10^{-10}$  to 8.4 x  $10^{-7}$  g/m<sup>2</sup>-month. (emphasis added) (0619-7-8 [Maher, William])

**Comment:** There are instances in DEIS Appendix F-3 that describe the possible impacts to aquatic species through impingement and entrainment if flow pathways occur through fracturing. For example DEIS Appendix F-3, Page 4-87, Line 5 states: "Operation of the RCW system to supply cooling water to proposed Units 6 and 7 could affect aquatic T&E species or their prey through impingement or entrainment if preferential flow pathways through the limestone above

the well lateral occur through fracturing (i.e., frac-out)..." However, Conditions of Certification **require a reverse-flow scenario that will maintain control of the drilling water within the drill bore and within the caisson minimizing the potential for frac-outs**. "Should fracturing occur...FPL shall mitigate for adverse impacts to Biscayne Bay Aquatic Preserve and its aquatic resources that have been caused by the fracturing event." (emphasis added) Instances in the DEIS include: a. DEIS Appendix F-3, Subsection 4.2.2, Page 4-7, Lines 5-9 b. DEIS Appendix F-3, Subsection 4.2.2, Page 4-8, Lines 17-20 c. DEIS Appendix F-3, Subsection 4.2.2, Page 4-9, Lines 29-32 (0619-7-9 [Maher, William])

**Response:** The commenter is correct; the described inaccuracies occur in the BAs submitted to the FWS and NMFS as part of ESA Section 7 consultation and the EFH assessment submitted to NMFS as part of ESA consultation between the NRC, USACE, and the FWS and NMFS. No changes were made to submitted consultation as result of these comments. Discussions and correspondence with the services since issuance of the BAs have kept them informed of changes, new analyses, and inaccuracies associated with the consultations. The new and corrected information does not alter the staff's conclusions of impact. Sections 4.3.2 and 5.3.2 were revised to reflect updated consultation status.

**Comment:** The current status of American Crocodiles within Biscayne Bay and nearby areas of South Florida is well below restoration targets set by CERP. The overall crocodilian indicator status for American crocodiles within Biscayne Bay dropped from "yellow" in 2012 to "red" in 2014. Given recent information on the declining trends of crocodilians within Biscayne Bay and other areas of South Florida (see Brandt et al. 2014), potential impacts to American crocodiles of the proposed project need to be better assessed, and NPS recommends that local populations be monitored either through establishment of a new program or through funding continuation of existing work. Potential impacts of the proposed activity on population sizes, growth rates, hatchling survival rates, and body condition for American crocodiles within Biscayne Bay must be better understood. [Footnote 5: Brandt, L.A., J. Beauchamp, M. Cherkiss, A. Clark, R.F. Doren, P. Frederick, E. Gaiser, D. Gawlik, S. Geiger, L. Glenn, E. Hardy, A. Huebner, R. Johnson, K. Hart, C. Kelble, S. Kelly, K. Kotun, J. Lorenz, C. Madden, F. J. Mazzotti, L. Rodgers, A. Rodusky, D. Rudnick, B. Sharfstein, R. Sobszak, J. Trexler, A. Volety, 2014. System-wide Indicators for Everglades Restoration. 2014 Report. Unpublished Technical Report.]

The NPS encourages the NRC to clarify in revisions to the DEIS that crocodiles utilize Biscayne Bay and thus move in and out of Biscayne NP. Section 5.3.2 discusses variations in salinity from the pumping of the RCW and mentions there was a transient increase near two practical salinity units (psu). The EIS should clarify whether those areas included critical habitat for the American crocodile. Additionally, the 2014 report for the System-wide Ecological Indicators for Everglades Restoration states that Biscayne Bay has moved into the red (highest concern) ranking (down from yellow in previous years), and system-wide survival of hatchlings beyond 6 months old is less than 3%. This downward trend is disturbing and should be considered when analyzing direct and cumulative impacts on crocodiles from this project. (0622-2-3 [Austin, Stan])

**Response:** The NRC Staff acknowledges the concern about habitat requirements for the protected American crocodile. Direct and cumulative effects from construction and operation of new Units 6 and 7 on the American crocodile were assessed in a BA as part of ESA Section 7 consultation with the FWS. Updated information regarding anticipated impacts and mitigation related to protected species was communicated with the Services and is presented in Sections 4.3.2 and 5.3.2 of the EIS. Updated information about the status of consultations is presented in Sections 4.3.2, 5.3.2, and 7.3.2 of the EIS.

Comment: AMERICAN CROCODILES AND DESIGNATED CRITICAL HABITAT. Appendix F Section 5.10 describes 270 acres of permanent loss of federally designated critical habitat for the American crocodile as a result of wetlands and surface waters that would be directly destroyed by the project and 211 acres of additional critical habitat that would be adversely affected for resident crocodiles. These impacts are being characterized in the DEIS as "unavoidable". In addition, at least one crocodile has already been killed by the project during construction of the first deep injection well for the Units 6 and 7 project according to the DEIS. Please clarify whether the USFWS has considered the cumulative impacts of this project in addition to the continuing degradation of adjacent critical habitat in and adjacent to the cooling canal system as temperatures and pollutant loads increase due to operation of Units 3 and 4. Please be advised that MDC has issued land use approvals (Z-56-07) for this project that include consultation conditions between FPL, the USFWS and Miami-Dade County for this issue and this informal consultation was initiated. At the time, FPL agreed to the establishment of development setbacks to prevent both direct and indirect impacts to crocodile habitat and these requirements are included within the land use approval. Has the NRC's analysis indicated any development setbacks that could reduce the acreage of impact to designated critical habitat for the crocodile? Have any other mitigation measures (beyond that proposed by the applicant) been identified through this review process, either by the NRC or USFWS to reduce these "unavoidable impacts"? An analysis of the cumulative impacts of the proposed project combined with the continuing degradation of adjacent critical habitat in and adjacent to the cooling canal system as temperatures and pollutant loads increase due to Units 3 and 4 is needed as part of this effort. MDC also requests information and clarification on the following issues: As part of the review for the American crocodile, have the cumulative impacts to areas adjacent to the cooling canals been considered including the continuing degradation of water quality throughout the cooling canals? For example, we understand that the USFWS has concurred with FPL that the water quality in the CCS surface water has become inappropriate for release of crocodile hatchlings due to increased salinity and temperature, and therefore all hatchlings last year were relocated to areas outside the cooling canals. Please confirm if our understanding is correct. Has the ongoing monitoring data on the adult crocodiles within this area been examined to determine whether there is any indication that the overall health of the adults may be decreasing or if their numbers are decreasing? Has the NRC or FWS considered the indirect as well as cumulative impacts to the crocodile mitigation area that was required by the Army Corps for the unit 5 project? Should the degradation or loss of this habitat require mitigation since it was previously required as a regulatory action? Pursuant to Condition 2 of Z-56-07, Miami-Dade County's Unusual Use Zoning approval for this project, MDC requests continued coordination with USFWS on the issue of the American crocodile and any required management actions or mitigation that may be required prior to finalization of the EIS. (0110-1-6 [Hefty, Lee N.])

**Response:** An assessment of the cumulative effects of building and operating Turkey Point Units 6 and 7 and all other past, present, and reasonably foreseeable future projects on aquatic resources, including the American crocodile, is discussed in Section 7.3.2 of the EIS. Sections 2.3.1 and 2.4.2 of the EIS have been revised to discuss the changes in the cooling canal system that have affected American crocodile habitat. The review was performed in consultation with the FWS as described in the BA and in accordance with Section 7 consultation requirements. If the FWS determines that environmental setbacks are necessary to reduce the permanent loss of designated critical habitat, they could be required as part of Section 7 consultation and be incorporated in the terms and conditions of a Biological Opinion. Such requirements would be determined by the FWS and are not determined by the NRC. FPL continues to work with the FWS on surface water quality in the cooling canals that are necessary for Turkey Point Units 3 and 4. Improved water quality in the IWF would be beneficial to the resident crocodile population. Section 7.3.2 of the EIS has been updated to reflect the 2015 status of crocodile populations near the cooling canals and coordination between FWS and FPL with regard to water quality. The information in the comment does not alter the staff's conclusion of impact.

**Comment:** *Recommendations:* The FEIS should specifically and holistically describe impacts to the ENP, BNP and BBAP. Because these are vitally important national and regional resources, the NRC should individually and robustly address potential impacts, both construction and operational, to these public lands.

These specific impacts for the ENP, BNP and BBAP should be separately described in the Affected Environment (Chapter 2), Construction Impacts at the Turkey Point Site (Chapter 4), Operational Impacts at the Turkey Point Site (Chapter 5), and Cumulative Impacts (Chapter 7), sections of the FEIS. (0617-1-32 [Mueller, Heinz J.])

**Response:** The commenter is concerned that impacts on Everglades National Park, Biscayne National Park, and the Biscayne Bay Aquatic Preserve are not described in specific subsections for all affected resources. The direct and indirect effects of construction and operation of Units 6 and 7 on the National Parks and the Preserve are described in the context of the affected resources in Sections 4.2.2, 4.2.3, 4.3.1, 4.3.2, 5.2.2, 5.2.3, 5.3.1, 5.3.2, 7.2.1, 7.2.2, 7.3.1, and 7.3.2 of the EIS. No changes were made to the EIS as a result of this comment.

**Comment:** EPA recommends NRC and USACE develop a robust monitoring and adaptive management plan (in collaboration with resource agencies) to address any unforeseen future impacts to ENP, BNP and BBAP especially related to the potential operational impacts associated with the RCW. EPA recommends these commitments be reflected in the ROD. (0617-1-33 [Mueller, Heinz J.])

**Comment:** FKNMS concurs with National Marine Fisheries Service comments (submitted May 22, 2015) requesting development of a biological monitoring and adaptive management plan to assess ecological impacts of the project at construction, implementation, and operation phase to continue throughout the life of the project. FKNMS welcomes the opportunity to contribute to development of this plan and requests that results and outputs from any biological monitoring be shared with FKNMS. (**0618-2** [Morton, Sean])

**Comment:** FKNMS conducts water quality monitoring and special studies through its longstanding Water Quality Protection Program (WQPP). Administered by the Florida Department of Environmental Protection and U.S. Environmental Protection Agency, the WQPP is a collaborative effort dedicated to protecting and improving water quality, coral reefs, seagrasses, fisheries and recreational opportunities within the FKNMS. The WQPP has supported and funded long-term research and monitoring programs that track water quality, coral reef and seagrass communities; results from monitoring and research studies have been instrumental in decision-making and in determining what actions are needed to sustain a healthy ecosystem. As such the WQPP could help inform the design of a water quality and biological monitoring program for this project that includes potential impacts to downstream aquatic ecosystems. (0618-3 [Morton, Sean])

**Comment:** Need for a Biological Monitoring and Adaptive Management Plan[.] A biological monitoring and adaptive management plan based on ecologically relevant impacts should be developed, and the NMFS offers to assist development of the plan. The plan should be developed to measure impacts predicted from a reliable impact assessment that considers ecologically relevant water quality conditions and interactions between the cooling canals and Biscayne Bay waters. The plan should be implemented in perpetuity for the life of the RCWs

and include no less than three years of baseline monitoring (pre-operation) during dry years to characterize the ambient conditions at the site. (**0724-11** [Fay, Virginia M.])

**Comment:** Seagrass monitoring should also be a component of this plan. The NMFS reviewed the FDEP Certificate of Conditions (May 2014) containing recommendations for monitoring changes to the seagrass communities near the Turkey Point Nuclear Plant resulting from RCW operation. The NMFS believes the monitoring effort would be more efficient by incorporating relatively new approaches, for example using geo-spatial video-based survey techniques described in Lirman et al. (2008). The monitoring plan should demonstrate capability in detecting the level of biological change that constitutes an adverse effect to seagrass and fishery resources in Biscayne Bay. The sampling plan should be supported by a power analysis to demonstrate the sampling proposed is sufficient to detect the expected impacts. (0724-13 [Fay, Virginia M.])

**Comment:** One way to efficiently accomplish developing the biological monitoring and adaptive management plan would be to establish and interagency team to contribute to the development of the plan. Ideally, the team should be composed of staff from the NMFS, NPS, NRC, USACE, U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service, FDEP, Florida Fish and Wildlife Commission, Miami-Dade Department of Environmental Resources Management, South Florida Water Management District, and FPL. The final plan implemented should reflect substantial input from this team. The NMFS, National Park Service, and others are currently planning to meet May 29, 2015, in Homestead to discuss this monitoring need (please contact Jocelyn Karazsia for additional information about this meeting, her contact information is at the end of this letter) (**0724-14** [Fay, Virginia M.])

**Response:** The commenters are requesting a biological monitoring and adaptive management plan for aquatic resources that may be affected by construction and operation of Units 6 and 7. The staff agree that an interagency team would be valuable to coordinate monitoring efforts and share data. The FDEP provides detailed monitoring requirements for assessing potential adverse effects on ecological resources and water quality during the construction and operation of the RCW system, which include a 2-year period of pre-construction monitoring (State of Florida 2014-TN3637). The USACE would also provide special conditions regarding any monitoring and mitigation for USACE authorized activities in accordance with 33 CFR 320.4 for compliance with Federal and state wildlife provisions and for water quality standards under the Clean Water Act if Department of the Army permit is issued. Additional clarifying text has been added to Sections 4.3.2 and 5.3.2 of the EIS to provide more detail concerning surface water and biological monitoring and mitigation requirements as provided in the FDEP COCs.

**Comment:** The DEIS also fails to provide sufficient information about current species diversity, abundance, and habitat utilization in the vicinity of proposed radial collector wells and therefore fails to complete a full and adequate analysis of the impacts of the wells to the Biscayne Bay ecosystem. This data is necessary to determine the ways in which disruptions to the salinity regime caused by the radial collector wells will impact Biscayne National Park, wildlife species, and their habitats. The DEIS does not contain comprehensive biological studies on wildlife utilization, plant cover, and species in the area adjacent to the radial collector wells. (0113-1-18 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** Furthermore, a baseline survey of benthic fauna and seagrass cover has not been conducted near the location of the radial collector wells. Seagrasses can be particularly sensitive to changes in salinity and water quality and benthic habitat could be impacted by the radial collector wells. [Footnote 20: South Florida Water Management District, Second

Completeness Review, FPL Turkey Point Units 6 & 7, Site Certification Application, Power Plant & Associated Facilities, January 2, 2010, 3.] The DEIS cannot fully consider the potential impacts of the wells on wildlife resulting from the disruption of salinity regimes without providing comprehensive surveys and studies of the flora and fauna within the bay, particularly in areas near the radial collector wells. Without providing this data, the DEIS fails to establish an environmental baseline by which to evaluate impacts and alternatives. (0113-1-19 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** <u>Barge unloading facility</u>. To support construction activities, the equipment barge unloading area, located at the northeastern portion of the Turkey Point Power Plant site, will be enlarged by 0.75 acres. This activity will require the dredging of approximately 0.1 acre of marine bottoms in the turning basin, and the installation of sheet piling to support building activities. Surveys conducted in 2008 indicate that at least some seagrasses occur in the area to be affected. We recommend that FPL resurvey the area to be affected to determine the extent of seagrasses and provide mitigation for the loss of these valuable marine resources. (0227-11 [Stanley, Joyce])

**Comment:** Further, the proposed project would impact submerged aquatic vegetation (SAV), which includes *Ruppia maritima, Thalassia testudinum*, and *Halodule wrightii*. Fin and shell fish commonly associated with this species include Florida crawfish, stone crab, blue crab, penaeid shrimp, sea trout, gray snapper, red drum, pinfish, mullet, and flounder. Moreover, SAV provides attachment sites for periphyton which in turn increases food value for the base of marine and estuarine food webs. SAV aids in stabilizing the shallow water submerged land which promotes water quality. SAV also performs important nutrient uptake functions, which assist in the maintenance of water quality. For these reasons, the EPA also considers SAV to be ARNI. (0617-1-11 [Mueller, Heinz J.])

**Comment:** EPA understands that a benthic survey has not been completed at the FPL Turkey Point site for some years. In order to evaluate the proposed project, the FEIS should include a colored copy benthic survey of the boat basin, radial collector well locations, and the Units 6 & 7 site. The benthic survey should extend a radius of 50 feet around submerged lands of these locations. The benthic survey should include a description of the protocol used to complete the survey, sampling dates, and a map that illustrates the density and location of each SAV found at the site. The seagrass survey should be conducted between the months of June and September to ensure the survey is conducted during the active growing season. The benthic survey is necessary for the EPA to determine extent of SAV impacts that will occur by the proposed project. (0617-1-12 [Mueller, Heinz J.])

**Comment:** Equipment Barge Unloading Area[.] The existing barge-unloading facility would be enlarged to accommodate the larger barges used to deliver components for the proposed units. According to the DEIS, "approximately 90 ft. by 150 ft. would be excavated on the northwest edge of the existing barge-turning basin resulting in a total disturbed area of 130 ft. by 250 ft. or 0.75 ac ... The expansion of the barge-unloading facility would require dredging a 4,356 ft2 (0.1 ac) area in the turning basin." A survey from 2008 indicated that some seagrasses are found in the project area. The NPS recommends that the area be resurveyed to enable more accurate estimation of potential impacts to submerged aquatic vegetation. The NPS suggests that USACE consider supporting NPS restoration of "orphan" vessel grounding injuries in Biscayne NP sea grass habitat to offset dredging impacts. Some progress has been made, but much more work remains. We contend that orphan site restoration will help support the integrity of the seagrass ecosystem, which in tum supports manatees, sea turtles, critical habitat, economically important fisheries, and other marine life. (0622-2-11 [Austin, Stan])

## Comment: Equipment Barge Canal Expansion

The equipment-barge uploading area at the northeastern portion of the Turkey Point Nuclear Facility would be expanded by dredging 0.75 acres of estuarine bottom, including 0.10 acres of seagrass habitat, to support construction activities. The NRC and FPL propose use of turbidity curtains to limit water quality degradation caused by dredging. The EFH assessment states the basin contains sparse growth of seagrass and macroalgae. The NMFS requests the final EIS and EFH assessment include a more detailed habitat characterization and compensatory mitigation to offset the seagrass impacts. (0724-3 [Fay, Virginia M.])

**Response:** The commenters are requesting additional ecological characterization of nearshore aquatic resources associated with the barge unloading and the RCW areas. Section 2.4.2 of the EIS has been modified to provide additional ecological baseline information for the barge unloading area and the nearshore area surrounding the RCW location, and include seagrass locations and density. Sections 4.3.2 and 5.3.2 of the EIS have been revised to provide additional context for the construction and operation impacts at the barge unloading area, and include experimental results to support assessment of RCW effects on seagrass and other aquatic resources. State of Florida required monitoring and surveys for seagrass and marine organisms are also included in Sections 4.3.2 and 5.3.2. The additional information does not change the impact determination that the effects to aquatic resources in these locations from dredging and RCW installation and operation are minor.

**Comment:** Comment 2. The DEIS is incomplete because it does not evaluate possible harm to the ecosystem of Biscayne Bay if the hypersaline plume under the cooling canals is forced into the bay by pumping from the radial collector wells - The DEIS indicates that intermittent pumping, as proposed in the DEIS, could displace the hypersaline plume into the path of fresh water flowing eastward: "Intermittent operation could result in an increase of hypersaline flow into the aquifer beneath the bay that could migrate into the bay when the RCW is not operating." [DEIS p. G-29] Emergence of hypersaline water into Biscayne Bay could result in localized hypersalinity that would kill sea grass beds in Biscayne National Park, as happened during periods of hypersalinity in Florida Bay in the early 1990s (e.g., Zieman et al. 1999); those areas of Everglades National Park have not fully recovered. The final EIS must note possible harm to Biscayne National Park ecosystem if hypersaline plume is relocated into Biscayne Bay. (0106-5 [Stoddard, Philip K.])

Comment: Everglades National Park. Biscayne National Park and Biscayne Bav Aquatic Preserve. The EPA is concerned about the proposed project's potential impacts to the Everglades National Park (ENP), Biscayne National Park (BNP) and Biscayne Bay Aquatic Preserve (BBAP). Turkey Point is in close proximity to both the BNP and BBAP. In the Affected Environment section of the DEIS (pages 2-10 -2-13), the NRC recognizes the unique characteristics of the ENP, BNP and BBAP, and that many of these waters are listed as Outstanding Florida Waters. Although the DEIS generally addresses some of the issues facing these national and state protected lands, the DEIS does not specifically address potential impacts facing these fragile and vital resources. EPA is concerned that the radial collector wells (RCWs) could impact the hydrology of BNP, and potentially impact tidal cycles and inflow of freshwater towards the national parks and the aquatic preserve. The FEIS should clarify whether there will be pre and/or post construction monitoring to ensure that the RCWs are not impacting the ENP, BNP and BBAP. EPA is concerned that the proposed projects' additional wastewater discharges to the IWF could contribute to increased salinity in the underlying Biscayne Aquifer, and increase the salinity and nutrient loading to BNP and BBAP. (0617-1-24 [Mueller, Heinz J.])

**Comment:** If the proposed action needed to rely on the radial wells as the primary source of cooling water for extended periods during the project's projected life, the impacts to the near shore aquatic ecosystems should be assessed. Impacts of concern include how the volume of water required for cooling purposes and drawn from Biscayne Bay may potentially affect the salinity levels of the near shore Biscayne Bay, and the associated aquatic ecosystem. (**0617-4-8** [Mueller, Heinz J.])

**Comment:** Overall, the NRC provided an initial determination that construction and operation of the RCWs, 105 acres of mangrove impact, and 0.10 acres of seagrass impact, located within or adjacent to the Biscayne Bay Aquatic Preserve and designated Habitat Areas of Particular Concern (HAPCs) by the South Atlantic Fishery Management Council, would not result in an adverse impact on EFH or federally managed fishery species. The NRC provides individual determinations on the effects of six actions or activities on mangrove, seagrass, and unconsolidated bottom habitats in the EFH assessment (Table 1). As described further below, the NMFS disagrees with these determinations and concludes the proposed dredging and operation of the RCWs would result in adverse impacts to seagrass or mangroves. In particular, the RCW operation could alter nearshore water quality resulting in hypersalinity and hyperthermal conditions impacting additional seagrass and fishery resources in the Biscayne Bay Aquatic Preserve. Due to the potential severity of these impacts, a biological monitoring and adaptive management plan is recommended to evaluate the predicted impacts of RCW operation relative to the actual impacts and to implement corrective actions or mitigation measures if environmental thresholds are reached. (**0724-1** [Fay, Virginia M.])

**Comment:** FPL and the National Park Service, Biscayne National Park (NPS), are currently conducting water quality monitoring, and the NMFS recommends installing an additional four or five continuous water quality monitoring sites with similar equipment to assess the frequency duration, and intensity of hyperthermal and hypersaline events. The NMFS can assist in determining the location of the sites (spatially with respect to other sites and the work proposed and location in the water column). The water quality monitoring component of the plan should clearly identify the environmental thresholds requiring adaptive management and options to manage the operation. Because this type of monitoring generates a lot of data, an efficient plan to manage, analyze, and share data is also recommended. (0724-12 [Fay, Virginia M.])

**Comment:** Operation of the RCWs would result in hypersaline conditions and thermal events within estuarine habitats in Biscayne Bay known to support federally managed species. The severity of these effects would depend on annual rainfall levels (i.e., more severe effects are expected during dry years than wet years). This is of concern because hypersaline conditions and thermal events can be bio-energetically expensive and reduce capacity for reproduction or growth. Impacts to seagrass habitats and fishery resources from the RCW operation are not quantified in the public notice. However, the draft EIS attempts to quantify these effects based the modelling FPL has completed to predict the influence RCWs will have on local salinity regimes in Biscayne Bay (provided in the draft EIS Appendix G). The draft EIS also briefly describes how the recent upgrades of Turkey Point Units 3 and 4 have led to increased discharge temperatures within the cooling canals contributing to an extensive algal bloom (draft EIS, Section 7.2.2.1). Based on maps provided with the public notice, it appears the RCWs would collect water in the vicinity of elevated temperature discharge plumes from the cooling canals. (0724-9 [Fay, Virginia M.])

**Response:** Section 5.2.1 and Appendix G were revised to provide an updated assessment of groundwater and surface water connectivity and salinity changes caused by RCW operation. Additional information about the RCW inflow volume under State of Florida permitted

conditions compared to the total tidal volume of Biscayne Bay is provided in Section 5.3.2 of the EIS. Additional information has been included in Section 5.3.2 of the EIS to clarify the predicted changes in salinity to nearshore areas and Biscayne Bay (Biscayne National Park and Biscayne Bay Aquatic Preserve) based on modeling from RCW operation, and support the NRC Staff's conclusion that no adverse effects on aquatic resources are anticipated from RCW operation. The State of Florida COCs require water quality and biological pre-construction monitoring for 2 years prior to RCW installation activities, monitoring during construction, and at least 2 years of operational monitoring to include the first two RCW operational events, which are limited by the State of Florida to not exceed 60 days per year. Monitoring would take place in Biscayne Bay waters surrounding the RCW location and at reference sites in accordance with an FDEP approved RCW System Monitoring Plan.

**Comment:** <u>American crocodile</u>. The proposed project will result in the loss of approximately 270 acres of designated critical habitat for the crocodile associated with the construction of Units 6 and 7. The project also has the potential to affect water quality in the cooling canal system at the Turkey Point site. The cooling canal system provides important habitat to crocodiles. Drift from the cooling towers from the use of reclaimed water is expected to deposit a small amount of chemical contaminants (*e.g.*, 1,4-dichlorobenzene, phenanthrene, copper *etc.*) into waters of the cooling canal system, although information provided in the DEIS indicate that the deposition rates of these contaminants is extremely low. Additional water quality testing in the canal system should be considered to address these contaminants. (**0227-4** [Stanley, Joyce])

**Response:** Section 5.3.2 discusses operational effects from cooling-tower drift including those on nearby water bodies and effects on aquatic species. A BA was submitted to the FWS to address effects to protected species, such as the American crocodile, through ESA Section 7 consultation. The NRC staff agrees that additional water quality testing in the canal system should be considered by the State of Florida, the applicant, and FWS. No changes to the EIS were made as a result of this comment.

**Comment:** FPL intends to store the muck removed from the project footprint on the berms within the cooling canal system. This practice has the potential to introduce organic matter and nutrients (*e.g.*, nitrogen, phosphorus *etc.*), and decrease the quality of the water in the cooling canal system. This will undoubtedly further exacerbate the poor water quality currently experienced in the cooling canal system and further adversely affect the crocodile that inhabit the system. (**0227-5** [Stanley, Joyce])

**Response:** Section 5.3.2 discusses the applicant's plan to place the muck on the cooling canal berms. The staff does not expect the placement of muck on the canal berms to significantly affect water quality in the IWF or Biscayne Bay. See Section 3.2.2.3 and 4.3.2.1 for a detailed explanation of muck disposal. Additional information has been added to Section 5.3.2 regarding the placement of muck on these cooling canal berms and the potential for its effects on aquatic species, including the American crocodile. The information in the comment does not alter the staff's conclusion of impact.

Comment: Comment 9. The DEIS is incomplete (a) in failing to consider a complete list of bioactive chemicals found in the wastewater stream, (b) in failing to identify the bioactivity class of all chemicals listed, and (c) in failing to address additive and synergistic effects of those chemicals on aquatic organisms in the adjacent Biscayne National Park - Ecotoxicology studies show that some pollutants act in tandem to produce greater effects than any single chemical does at is particular concentration. Compound action can be additive or synergistic (Crews et al. 2000). Chemicals in the same class of bioactivity often act in an additive manner, with effects proportional to the sum of the concentrations of multiple chemicals (Kortenkamp 2007). For other bioactive waste products, especially chemicals acting on different endocrine or biochemical pathways, the combined activity of multiple chemicals can be synergistic, with actions greater than the sum of the constituents (e.g., Vonier et al. 1996; Arukwe et al. 2001). Because of additive and synergistic effects, environmental consequences of exposure can only be estimated by knowing the entire constituency of chemicals released in treated wastewater, upon what body systems they act, and how they interact in the organism. The DEIS does not consider or present an exhaustive list of bioactive chemicals in the local wastewater stream, only those quantified by one prior study (Lietz and Meyer 2006). One example of a chemical missing from the DEIS is triclocarban (TCC), a chemical common to personal hygiene products, and likewise common in municipal wastewater (Lozanoa et al. 2013). While TCC has no endocrine action on its own, it acts synergistically to enhance action of androgens (Chen et al. 2008). Projected levels of TCC are not stated in DEIS. Triclosan is listed in the DEIS, but methyltriclosan, also common in wastewater, is omitted. Since triclosan and methyltriclosan will have additive effects, the omission of one of these necessarily results in underestimation of the likely effects of that chemical class on aquatic organisms. Lietz and Meyer (2006) did not pretend to be exhaustive in their analysis of wastewater chemicals, however the EIS must be exhaustive in order to give us an accurate picture of the possible hazards to the sensitive ecosystem surrounding the nuclear plant. The final EIS must consider additive and synergistic bioactivity of toxins and endocrine disrupters released as aerosols. (0106-12 [Stoddard, Philip K.])

**Comment:** EPA is concerned that drift deposition could impact ENP, BNP and BBAP. The NRC should provide additional details regarding these impacts, and any other project impacts to ENP, BNP and BBAP. (**0617-1-31** [Mueller, Heinz J.])

## Comment: Page 5-60

Lines 14-18: The DEIS states, "When toxicological benchmarks were used, no-observed effect concentration (NOEC) levels were chosen for sensitive, representative aquatic species to provide a conservative assessment." How is sensitive defined here and how were the most representative aquatic species determined? For what endpoints (e.g., growth, reproductive success, mortality, etc.) were the NOECs selected and for what period of time (e.g., 96-h, 7d, etc.)? Depending on the answers to these questions, the NOECs selected may NOT provide the most conservative assessment. Revisions to the DEIS should include a discussion regarding this topic.

Lines 21-24: The DEIS states, "For chemicals without established water-quality criteria, including most CECs, those present at >1/10 of a toxicological benchmark chosen by the review team to be protective of aquatic resources were included in the fate and effects evaluations (Table 5-1)." How were these toxicological benchmarks selected and what criteria were they based on? How were selected benchmarks determined to be protective of aquatic resources? Specifically, what aquatic resources were included in the above benchmark selection process? Revisions to the DEIS should include a discussion regarding this topic.

This section does not discuss the impacts of contaminants on species present in the mangrove wetlands. This type of habitat is known to be a nursery for a multitude of fish species and two, if not three, of the contaminants mentioned in Table 5-1 are endocrine disruptors (EDCs). Only very small concentrations of EDCs are needed to cause developmental effects and potentially reproductive effects. (**0622-1-7** [Austin, Stan])

**Comment:** *Page 5-140,* Table 5-24 (under Aquatic Ecosystems) states, "The use of reclaimed water from Miami-Dade County to operate the cooling system would not result in noticeable impacts on onsite and offsite aquatic resources." How was this determined? The revised DEIS should discuss known potential interactive effects of these chemicals not only with other pesticides, but also with other chemicals expected to be present from drift or other means. (See comments above regarding EDCs and their effects.) Revisions should include a discussion of the contaminants present in the reclaimed water, their environmental fate and transport and their potential environmental effects. (0622-1-9 [Austin, Stan])

**Response:** The commenters are concerned about the potential for adverse effects on aquatic resources from the presence of chemicals of emerging concern (CECs) that may be present in the cooling-tower drift. Sections 5.2.1 and 5.3.2 of the EIS provides an assessment of the region of potential effect for CECs. Section 5.3.2 of the EIS has an extensive discussion of the EPA criteria used to assess the potential toxicity or adverse effects of CECs on aquatic species known to be sensitive to chemical compounds and at critical life stages. Because it is not possible to assess every potential chemical or chemical byproduct that may be present in the reclaimed water source, representative and most abundant chemical compounds were provided for different functional chemical classes, including endocrine disrupting compounds. The use of No Observed Effects Concentrations (NOEC) for assessing toxicity thresholds is a widely used criterion in aquatic toxicology, and represents the highest concentration threshold acceptable in these toxicity tests for the correlated exposures. Section 5.3.2 has been expanded to demonstrate the overall sensitivity differences between freshwater and marine or estuarine species to further validate the described endpoints and species used in the assessment. One commenter suggests further analysis of synergistic interactions between compounds. The NRC staff agrees that synergistic or additive interactions may occur, but antagonist interactions are just as likely to occur and are supported by as many studies. Section 5.3.2 has been expanded to discuss environmentally relevant complex mixture interactions. The proposed high level disinfection and filtration of reclaimed water to be provided to the FPL water treatment plant is consistent with State of Florida regulations and water reuse management practices (FAC 62-610.688). FPL would further treat the reclaimed water prior to cooling water system use, which would further reduce any CECs in the water, and represents additional water treatment not provided for other reclaimed water uses such as direct irrigation for food crops and pastures for livestock, recharge of groundwater, and restoration enhancement efforts. Section 5.3.2 has been expanded to provide context for reclaimed water use in Florida.

**Comment:** <u>Construction and Operation of RCWs[.]</u> *Construction of RCW*: The draft EIS and EFH assessment note frac-outs may occur during the drilling needed for the RCWs; however, the discussion focuses only on one aspect of what constitutes a frac-out. The NRC describes a frac-out as one or more significant fractures of the limestone above the RCW lateral pipelines altering fine-scale water flows during RCW system operation potentially resulting in impingement or entrainment of early life stages of fishery species. It is not clear to the NMFS how the NRC views this impact. While the NRC notes monitoring and detecting this type of fracout and its impacts would be difficult, it goes on to conclude no adverse impacts would result from the entrainment or impingement of aquatic resources but later states there would be small, localized adverse effects. The NMFS requests the final EIS and EFH assessment clarify this issue. (0724-5 [Fay, Virginia M.])

**Response:** The commenter is concerned about the potential for adverse effects from installation and operation of the RCWs. Sections 4.3.2 and 5.3.2 of the EIS have been revised to include additional context and clarity concerning the potential for adverse effects on aquatic resources during installation and operation of the RCWs; the RCWs include specific installation

requirements of the State of Florida (2014-TN3637) and do not use high-pressure water injection, thus negating any potential for a pressure induced frac-out. The information in the comment does not alter the staff's conclusion of impact.

**Comment:** You know, we did accidentally unearth a nest in 1977 with a backhoe, and part of our environmental stewardship we adopted a conservation effort from the University of Florida folks, Dr. Mozzotti in the International Park, and never took any money, he did it all in-house to monitor the crocodile population. And it steadily increased year after year. We did some evolving with the animals and the civil engineer and the biologists. You know, the canal system is an engineered supporting system for a fossil/nuclear plant. Sometimes those berms got to be cleared off. But also the biologists, we need to have the mangroves, we need to have some preservation for these to hatch some babies. And the ideas came together where we created a habitat. We dug out freshwater ponds when the babies were hatching so now the females, the nesting females won't take those babies to freshwater refugia away from these sanctuaries which, then, they became impregnated. So many predators, raptors, terrapins, raccoons, snakes, you couldn't count them. Now they're staying in the same place. And the best news about that, from '96 to 2006, that ten-year swath, the population went up tenfold in ten years. And then the State, U.S. Fish and Wildlife looked at that information and in 2007 the State of Florida downlisted the species from endangered to threatened. And all of us at Turkey Point take great pride in that accomplishment. It is the crocodiles. (0723-15-2 [Bertelson, Bob])

# **Response:** The commenter expresses general support for the enhancement of crocodile habitat on FPL property. No changes were made to the EIS as a result of this comment.

**Comment:** There are instances in the DEIS where, due to the timing of events with respect to drafting the DEIS, specified dates, or future actions, indicated in the DEIS have passed. Instances in the DEIS include (emphasis added):...DEIS Appendix F-2, Section 1.0, Page 1-1, Lines 22-25: Appendix F-2 states: "A proposed Conditions of Certification dated May 24, 2013, was issued to FPL authorizing construction, operation, and maintenance of Turkey Point Units 6 and 7 and associated facilities subject to the requirements listed (FDEP 2013-TN2629)." On May 19, 2014, the Governor and Cabinet issued the Site Certification Order with the final Conditions of Certification (State of Florida 2014-TN3637). d. DEIS Appendix F-2, Section 2.1, Page 2-4, Lines 11-12 and DEIS Appendix F-2 Subsection 3.1.3, Page 3-6, Lines 26-30: Appendix F-2 (Section 2.1) states: "FPL has proposed an original location and an alternative location for the RWTF and both are on the Turkey Point site." Similarly, USFWS (Section 3.1.3) states: "Land cover at the alternate location is mostly Australian pine established on upland spoil, canals, and ditches with some sawgrass marsh, dwarf mangroves, and Australian pine wetlands (FPL 2014-TN4058)." ER Section 3.9 "Preconstruction and Construction Activities", Figure 3.9-1 "Construction Utilization Plan", does not include the original location, only what used to be the called the "alternate" location. e. DEIS Appendix F-2, Subsection 3.1.1, Page 3-4, Lines 29-31: Appendix F-2 states with regards to dredging in the turning basin for the equipment barge unloading area improvement: "FPL would submit an application to USACE for a permit to dredge under the CWA, Section 404(b)(1) "Guidelines for Specification of Disposal Sites for Dredged or Fill Material" (40 CFR 230) (TN427), as described in ER Revision 6 (FPL 2014-TN4058)." The 404 permit application submitted to ACOE on June 30, 2009 includes dredging in the turning basin. f. DEIS Appendix F-2, Section 6.1, Page 6-2, Lines 10-11: Appendix F-2 states: "Conversion of Units 1 and 2 to synchronous condenser mode would reduce onsite vehicular traffic attributable to these two existing units." Unit 2 already operates in synchronous condenser mode as stated on Page 6-1, lines 19-20 of this document, which states: "In January 2013, Unit 2 was converted to operate in synchronous condenser mode..." (0619-1-12 [Maher, William])

**Response:** The commenter describes updates to referenced documents and processes described in the BA submitted to the FWS as part of ESA Section 7 consultation between the NRC, the USACE, and the FWS. No changes were made to submitted consultation as result of this comment.

**Comment:** The USACE did not make an initial determination in its public notice on whether the impacts to 1,000 acres of wetlands, including over 100 acres of mangroves, would result in an adverse impact on EFH or federally managed fishery species noting the NRC is the lead federal agency for the EIS and is responsible for the EFH consultation. (0724-2 [Fay, Virginia M.])

**Response:** The commenter is correct that NRC is the lead federal agency responsible for EFH consultation, but the USACE is a cooperating agency. Sections 4.3.1 and 4.3.2 of the EIS have been revised to further describe the type of wetlands and mangroves that would be adversely affected by installation activities. Section 4.3.2 of the EIS has been further revised to describe the potential for adverse effects on aquatic habitats and species, including EFH and federally managed species from impacts on mangrove habitats. This additional information does not change the assessment of an overall SMALL impact to aquatic resources from installation activities.

**Comment:** DEIS Section 4.11, Page 4-146, Table 4-18: In DEIS Table 4-18, in the "Aquatic Ecosystems" impact category, the DEIS states: "FPL would follow the guidance provided by the National Marine Fisheries Service (NMFS) to protect sea turtles and Smalltooth Sawfish during nearshore construction activities." The reference is a December 19, 2006 letter from Shelley Norton (NMFS) to Harriet Nash (NRC). The "Reasonable and Prudent Measures" outlined by NMFS represent a significant commitment for FPL. Among the documents reviewed (ER, SCA, RAIs), there is no record that FPL has committed to these actions. In-water work is limited to 0.1 acres of dredging within the existing turning basin; this area will be isolated from adjacent waters and manatee observers will be utilized in accordance with the FWC Standard Manatee Conditions for In-Water Work. These protective measures would also minimize the potential for impact to smalltooth sawfish or sea turtles if they were to occur within the project area. (0619-4-16 [Maher, William])

#### **Response:** The commenter is correct. Text in Table 4-17 was revised to reflect this comment.

**Comment:** There are instances in DEIS Appendix F-2 that describe potential impacts to the American crocodile due to the location of the spoils piles. For example, the USFWS BA (Subsection 3.1.1) states: "Potential impacts on American crocodile include the permanent loss of approximately 270 ac of designated critical habitat to accommodate proposed Units 6 and 7 and the associated infrastructure, and adverse effects to approximately 211 ac of habitat related to the relocation of material not suitable for reuse ... "Whereas, DEIS reference, (FPL2012-TN1618), Section 5.1, page 5-2 states: "Areas designated for placement of spoil materials excavated from the Units 6 & 7 Site were specifically selected due to their lack of suitable nesting substrate for the American crocodile and lack of recorded crocodile nesting in these areas." Also, DEIS reference (FPL2011-TN1283), Section 7.2.1 "American Crocodile", page 59 states: "These spoils areas do not contain suitable nesting habitat, nor do they contain any freshwater refugia for juvenile crocodiles; therefore, no adverse impacts to the breeding population are anticipated." (emphasis added) Instances in the DEIS Appendix F-2 include: a. DEIS Appendix F-2, Subsection 3.1.1, Page 3-4, Lines 1-6. b. DEIS Appendix F-2, Section 5.10, Page 5-6, Lines 29-32. c. DEIS Appendix F-2, Subsection 5.10.2, Page 5-7, Lines 42-43. d. DEIS Appendix F-2, Section 6.6, Page 6-7, Lines 20-23. e. DEIS Appendix F-2, Section 7.0, Page 7-1 Lines 15-17. (0619-6-8 [Maher, William])

**Response:** The NRC Staff acknowledges the analysis prepared by FPL for habitat effects for the protected American crocodile. The NRC Staff did an independent analysis of the FPL references, other scientific literature, and discussions with crocodile researchers and prepared a BA as part of ESA Section 7 consultation with the FWS. The effect of spoils pile placement did not only consider direct effects associated with reproduction, but indirect effects on crocodile habitats and individuals, such as changes in water quality and restriction of migration across the IWF. Updated information about the result of consultation is presented in Sections 4.3.2, 5.3.2, and 7.3.2 of the EIS.

**Comment:** The NMFS believes applying the results of the modelling conducted by FPL to predict impacts to seagrass and federally managed species is problematic because it focuses on mean conditions as opposed to ecologically relevant conditions. In addition, the modelling performed was based on an inaccurate assumption that the cooling canals are a closed system (i.e., no exchange between the canals and Biscayne Bay). A more reliable way to analyze the impacts would be to examine ecologically relevant scenarios, such as the frequency, duration, and intensity of the salinity and temperature disturbance (i.e., extreme) events. In addition, the impact analysis should be updated to characterize and quantify the level of exchange between the cooling canals and Biscayne Bay and then incorporate that working understanding of the level of exchange into the analysis of impacts and the development of monitoring to verify those impacts. (0724-10 [Fay, Virginia M.])

**Response:** The review team performed additional groundwater modeling of the interaction between the planned RCWs, the existing hypersaline plume, and the cooling canals using a two-dimensional cross-section model and a limited-extent three-dimensional model. These simulations were performed to better understand the effects of RCW pumping on salinity in the aquifer beneath the bay combined with the existing hypersaline plume from the Units 3 and 4 cooling canals and planned remediation actions, and the analysis has been added to Appendix G. This model was useful in showing salinity changes that occur in the aguifer near the RCWs when the wells are operated. The results showed that when the wells are not operating hypersaline water from the cooling canals is present in the high permeability zone where the well laterals are installed. This saline water is drawn into the wells during the first few days of RCW pumping, resulting in increasing, then decreasing, salinity at the well. The salinity of the water produced by the operating RCW eventually dropped to about the concentration of the bay water. Water flowing down through the bed of the bay and into the RCWs is therefore expected to have about the same salinity as bay water. When RCW pumping ceases, water in the high permeability zone again increases in salinity because of the migration of water from the hypersaline plume. This migration of hypersaline water into the high permeability zone would occur regardless of the presence of the RCWs. Predicted future change in sea level and its effect on interactions between the RCWs and the hypersaline plume were also simulated. The additional modeling confirmed that pumping of the RCWs would move hypersaline water toward the RCWs and would remove some groundwater captured by the RCWs from the hypersaline plume region of the Biscavne aguifer. The model also indicated that RCWs operation is not likely to reduce the effectiveness of hypersaline plume remediation actions specified in the consent order between FPL and Miami Dade County. Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs. The review team determined that the primary reclaimed water source is reliable because of the need for Miami-Dade County to dispose of large volumes of treated wastewater that now go to the ocean. Therefore, it is likely that the RCWs would be used less than the 60 days per year permitted under the COCs. Sections 5.2.1 and 5.3.2 were revised to

include the results of the additional modeling and effects to aquatic resources in Biscayne Bay such as seagrass and aquatic species, however the new information did not change the SMALL effect characterization on aquatic resources for operation of Units 6 and 7.

**Comment:** Operation of RCWs: The primary source of cooling water for the proposed Turkey Point Units 6 and 7 would be reclaimed wastewater from the Miami-Dade Wastewater and Sewer Department. Because the availability of the reclaimed wastewater supply will vary, FPL plans to install four RCWs on the Turkey Point peninsula to provide a secondary source of cooling water. Each RCW would consist of a central reinforced concrete caisson with 8 to 12 lateral pipelines (horizontal collector lines) extending out from the caisson. The horizontal extent of the RCW lateral pipelines would be up to 900 feet beneath Biscayne Bay and would be approximately 25 to 40 feet below the bay bottom. In order to maintain the RCW system, the RCWs would be used up to 60 days per year with a maximum saltwater makeup-water rate under normal operating conditions being 43,200 gpm. The EFH assessment does not address use of the RCW system outside this maintenance; i.e., when it becomes the main water supply when the primary supply is inadequate. The NMFS recommends the final EIS and EFH assessment analyze the effects of operating the RCW as the main water supply when the reclaimed wastewater becomes unavailable for longer periods than expected. Alternatively, the NRC or the USACE may need to reinitiate EFH consultation prior use of RCWs for time periods exceeding those evaluated in the draft EIS and EFH assessment. (0724-8 [Fay, Virginia M.])

**Response:** Reclaimed wastewater would be the primary source of cooling water for the proposed reactors. Saline water from the RCWs beneath Biscayne Bay would only be used when reclaimed treated wastewater is not available in sufficient quantity or quality, and for a maximum of 60 days per year that is permitted under the Florida State COCs. The review team determined that there is a very large volume of treated municipal wastewater that can be used for cooling the proposed plants without impacting other demands for fresh water. MDWASD staff have stated that they must find ways to dispose of large volumes of treated wastewater that currently go into the ocean. Therefore, the review team concluded that the reclaimed water supply is reliable. Therefore, it is likely that the RCWs would be used less than the 60 days per year permitted under the COCs. The commenter is incorrect that the 60 day RCW annual maximum operation is required for maintenance.

### E.2.11 Comments Concerning Socioeconomics

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...I see the potential of economies of scale boosting FLP's ability to provide safety and efficiency over what it is today. (**0015-4** [Goldmeier, Barry])

**Response:** The NRC acknowledges the commenter's support for new nuclear power. Economies of scale to the applicant are not part of the scope of the socioeconomics analysis. No change was made to the EIS as a result of this comment.

**Comment:** Plus putting such large ugly power poles along a roadway which goes thru many residential and low rise commercial establishments and neighborhoods of high end homes are unacceptable choices. Just because you can build it does not mean it should be built. The human needs and emotional needs are great in this area, and we should all be very cautious when locating such extreme projects in this Miami area. (**0050-2** [Simon, Gary P.])

**Comment:** Tourists and residents do not come to National Parks to see huge power lines. (0159-5 [Bazzone, Barbara])

**Comment:** Electricity produced by the proposed Units 6 and 7 will be distributed to the existing power grid through two new transmission line corridors: the east corridor and the west corridor. The northern segment of west corridor will be located either in the Preferred Corridor or the Consensus Corridor. The Department notes that the Preferred Corridor will be located immediately adjacent to the (ENP). As such the installation of this new transmission line will adversely affect the aesthetic experience of visitors to the ENP. (**0227-15** [Stanley, Joyce])

**Response:** The comments express opposition to the visual impact of the transmission lines to serve FPL's proposed Turkey Point Units 6 and 7. Although electrical transmission is outside the regulatory authority of the NRC, the review team considered the visual impacts of transmission lines in Sections 4.4.1.6 and 5.4.1.6 (aesthetics) and the cumulative impacts of transmission lines with past, present, and foreseeable future actions in Chapter 7, Cumulative Impacts. No new information was provided by these comments that was not already considered in the analysis. No changes were made to the EIS as a result of these comments.

**Comment:** I encourage you all to rethink this "let's make quick money and let the next generation deal" mentality and discontinue support for this dangerous and frankly lazy attempt on FP&L's part to keep up with the market or grow their business a par 15% per annum or whatever is motivating this plan to expand the Turkey Point facility rather than pursue what they already have in the can, ready to go, the motivation is obviously not hospitable or even aware that there is a population south of spaghetti junction as long as they keep paying the bills. (**0056-3** [McCall, Eric])

**Comment:** Investing in dirty, dangerous nuclear plants that may never even be built is very profitable for FPL and its shareholders. That's why they want to do it. But it' a financial and environmental disaster for our local area, our state and all who live here. (**0078-12** [Wilansky, Laura Sue])

**Comment:** Investing in dirty, dangerous nuclear plants that many never even be built, is very profitable for FPL and its shareholders. That's why they want to do it. But it's a financial and environmental disaster for our local area, our State, and all who live here. (0721-28-13 [Wilansky, Laura Sue])

**Response:** Environmental and socioeconomic impacts from construction and operation of the proposed nuclear reactors are analyzed in Chapters 4 and 5 of the EIS. Financial considerations are outside the scope of the EIS. The comment did not provide new information relevant to this EIS and will not be evaluated further. No change was made to the EIS as a result of this comment.

**Comment:** The State should be for people and wildlife. Tourism is a very sustainable industry but will fall by the wayside if our environment is wantonly destroyed. (**0060-5** [Beckman, Yvonne and Douglas])

**Comment:** I am told that expansion of the power plant will result in 800 new jobs. Any destruction to Biscayne National Park, will negatively impact the hundred of thousands visitors that we have annually to our area and the businesses that rely on them. I am also greatly concerned that any environmental change could potentially effect the only living coral reef we have in United States waters, The John Pennekamp National Coral Preserve. These resources

are far to unique, valuable and delicate to jeopardize. Undoubtedly, the negative economic impact of lost eco visitors will far out weigh the positive economics of the Turkey Point project for south Florida. (**0081-4** [Benson, Mary] [Skove, Ellen H.] [Tompkins, Constance])

**Comment:** Turkey Point is located within six miles of two biologically rich natural parks, a state aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. Everglades National Park is recognized as an endangered UNESCO World Heritage Site, an International Biosphere Reserve and supports a unique array of ecosystems and wildlife. Biscayne National Park, located directly adjacent to Turkey Point, is one of our largest marine national parks, and home to incredible biodiversity and important marine and wetland habitat that has now enacted notake zones to save its dwindling fish stocks. Expansion of these reactors will adversely impact these national treasures and severely curtail the public's use and enjoyment of them. (0288-11 [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** We also feel that Miami's economy relies heavily on its tourism industry and it's in the best interest of the tourism economy to keep Biscayne National Park pristine, safe and clean for the people who come here to see its beauty every year. (0722-14-5 [Kaul, Devika])

**Comment:** Because you guys, you own those national parks, people come here from all over the world to see them. It's a huge part of our economy. Everybody wants to see Everglades National Park and thousands and hundreds of thousands want to see Biscayne National Park. (0723-9-7 [Schwartz, Matthew])

**Response:** These comments express concern about impacts on tourism through impacts on the environment. The review team analyzed environmental impacts from construction and preconstruction (Chapter 4) and from operations (Chapter 5) of the proposed nuclear reactors. Summaries of these impacts can be found in Section 4.12 (Summary of Construction and Preconstruction Impacts) and Section 5.12 (Summary of Operational Impacts). Because the site is already heavily industrialized and there is no indication industrialization has significantly affected current tourism the review team determined an incremental addition to the site should not have a noticeable effect. Impacts on recreational infrastructure are discussed in Sections 4.4.4.2 and 5.4.4.2 (recreation). No changes were made to the EIS in response to these comments.

**Comment:** As a South Florida resident I am deeply concerned about the potential environmental impacts of the proposed Turkey Point expansion (reactor units 6&7). But as the founder of the future Underline, it will be tragic to erect massive powerlines along a park and trail that is will bring so much good and much-needed alternative transportation infrastructure to our community. (**0076-2** [Daly, Meg])

**Response:** The commenter expresses opposition to the transmission lines to serve FPL's proposed Turkey Point Units 6 and 7, because of their location along a proposed park and trail. Although electrical transmission is outside the regulatory authority of the NRC, the review team considered the visual impacts of transmission lines in Sections 4.4.1.6 and 5.4.1.6 (aesthetics) and the cumulative impacts of transmission lines with past, present, and foreseeable future actions in Chapter 7, Cumulative Impacts. The potential for adverse cumulative impacts along the proposed transmission line routes with proposed land uses is discussed in Section 7.1 (Land-Use Impacts), which recognizes potential moderate and adverse impacts. No changes were made to the EIS as a result of this comment.

**Comment:** The Biscayne National Park has been trying for years to put new management regulations into place that will hopefully give what little marine life we have left a chance to regenerate. I am shocked that they are not pursuing every legal avenue available to prevent the FPL expansion from occurring. Over the next decade, millions of people will visit this area. That is unless, god forbid, an accident happens. Then, the resource could be lost forever and the visitors simply won't come. (**0081-5** [Benson, Mary] [Skove, Ellen H.] [Tompkins, Constance])

**Comment:** I am a Florida native; growing up in Miami, I have seen the unfortunate change to this unique subtropical environment as it is. This proposal subjects our delicate environs to the horrable and - INEVITABLE - hurricane impact that would be devastating on many levels; not the least of which is to Floridas' survival as a tourist destination. Our beautiful beaches are an intricate part of our survival as a state. This will devistate our fishing,our swimming, our Everglades, the intrinsic beauty, life style and safety of our unique and beloved state. (0580-2 [Lawrence, Theresa])

**Response:** The comments express concern about impacts on tourism if the environment is destroyed due to a natural disaster. The review team assessed the potential for environmental impacts from postulated accidents (design basis accidents and severe accidents) in Section 5.11 (Environmental Impacts of Postulated Accidents). The review team found the potential environmental impacts (risks) to be small. No changes were made to the EIS as a result of these comments.

**Comment:** The proposed expansion of Turkey Point could also have significant impacts on the diverse ecosystems and valuable recreational experiences protected by our national parks. Biscayne National Park is particularly vulnerable to the impacts of the proposed project due to its location directly adjacent to Turkey Point. The park visitor center and entrance are located only two miles north of the site proposed for Units 6 & 7 and water areas of the park are just 2000 feet east of the proposed new units. Viewsheds from the waters of Biscayne will be significantly impacted above current levels due to the construction and presence of the new units and ancillary facilities, impacting visitor use and experience. (0113-1-12 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** This infrastructure will also mar the view for visitors who come from all over the world to this UNESCO World Heritage site. (**0246-6** [Shlackman, Mara])

**Comment:** It's going to create an industrial landscape for the hundreds of thousands of people who go visiting that area on airboats, on canoes and kayaks, people who paddle to Shark River Slough. And you know that observation tower up there when you get up to the top of it; you're going to see power lines. That's a human impact. (**0721-22-6** [Schwartz, Matthew])

**Response:** These comments express concern about impacts on recreational experiences or tourism via visual impacts in the vicinity of the proposed nuclear reactors. The review team considered the visual impacts of construction and operation of the proposed nuclear reactors in Sections 4.4.1.6 and 5.4.1.6 (aesthetics). The analysis conducted in those sections concludes that there would be minor or temporary aesthetic impacts from building and operating the proposed new units. The comment does not introduce any new information not already considered in the analysis. No changes were made to the EIS as a result of these comments.

**Comment:** People come from all corners of the world to visit South Florida. They don't come to visit FPL or nuclear power plants. They come to swim in the ocean, enjoy the clean air, soak up

some sunshine, visit the Everglades, and a host of other activities that give them reasons to come back. I invite you to come and enjoy our beautiful peninsula. (**0207-6** [Cleland, Noel])

**Comment:** People come from all corners of the world to visit South Florida. They don't come to visit FPL or nuclear power plants. They come to swim in the ocean, enjoy the clean air, soak up some sunshine, visit the Everglades, the Keys, Biscayne National Park, and a host of other activities that give them reasons to come back. (**0677-6** [Chiszar, Benjamin J.] [Jacobs, Lee] [Klopfer, Carol])

**Response:** These comments express general opposition to new power plants and appreciation for environment-based tourism. No new information was provided regarding the environmental or socioeconomic impacts of the proposed plants. Therefore, no changes were made to the EIS as a result of these comments.

**Comment:** Also, removing the negative externalities of pollution will free up investment. Businesses will invest more when the oft-hidden costs of pollution are removed. More investment means more jobs. Lastly, new ventures and industries that are too energy-intensive under our nuclear-deficient energy system--venture like indoor vertical farming--will be possible with increased nuclear energy generation. (0378-4 [Macher, Nathan])

**Response:** The NRC acknowledges the commenter's support for new nuclear power. The impacts of the proposed nuclear reactors relative to alternative energy sources is discussed in Section 9.2 (Energy Alternatives). No change was made to the EIS as a result of this comment.

**Comment:** Socioeconomics. We note the distinction in the DEIS between temporary construction impacts and longer-term operation impacts. However, since the facility's construction is likely to be underway for seven years, these impacts may be considered significant for the local communities. Issues regarding traffic congestion, socioeconomic impacts, Environmental Justice, and other issues that directly concern the local communities, as well as operational impacts related to these matters, should be fully clarified in the FEIS, pursuant to our comments. We understand that the NRC cannot include mitigation measures in the licenses that do not pertain to safety and security. However, the EPA encourages the project team and the applicant to continue coordinating with the communities that will be impacted by the proposed project, and to continue a comprehensive public outreach strategy to inform residents of the risks and impacts as a result of the proposed project. In particular, potential traffic impacts and emergency preparedness measures should be coordinated with local communities. *Recommendations:* The EPA encourages a comprehensive public outreach strategy. This should include, but is not limited to, targeted outreach campaigns to neighbors, informational literature, and updated websites. Traffic impacts and emergency preparedness measures are particular topics that should be addressed and coordinated with local communities. (0617-3-1 [Mueller, Heinz J.])

**Response:** This comment recommends a comprehensive public outreach strategy to address traffic impacts, emergency preparedness measures, and other impacts in coordination with local communities. These actions are outside the scope of NRC's NEPA requirements and outside the scope of NRC's Atomic Energy Act mission. No change was made to the EIS as a result of this comment.

**Comment:** Having said that, Cyndee, please relax. "Gigantic 26 foot high cooling towers" are not going to drive tourists away from Florida. As a matter of fact, nothing they are going to do at

Turkey Point is going to drive anybody away from Florida. No, we have no problem looking at the Turkey Point Plant. (**0680-3** [Hubbard, Stanley S.])

**Response:** The NRC acknowledges the commenter's view that the proposed nuclear reactors would have no impact on tourism. The comment does not raise any new information not already considered in the analysis. No changes were made to the EIS as a result of this comment.

**Comment:** And that is the breeding ground for the entire Florida Keys, so salinity there threatens the \$7.6 billion fishing and tourist industries. (**0721-12-5** [White, Barry J.])

**Comment:** [past and current Boulder Zone discharges to the Atlantic] It's destroying our fishing. Everybody who fishes in Biscayne Bay knows what happened to the fishing. It's not even worth doing it anymore for most people. (0723-9-19 [Schwartz, Matthew])

**Response:** Impacts on aquatic resources from operations are assessed in Section 5.3.2 (Aquatic Impacts Related to Operation). The review team concluded that impacts would be small. No changes were made to the EIS as a result of these comments.

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[w]hy sould Miami-Dade residents pay of power generated as far away as Canada when we can be employing local people to whom our payments go who in turn support the economy. (**0015-11** [Goldmeier, Barry])

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[t]he relatively high paid construction and ongoing jobs in operation will serve as an economic boost for Homestead...FPL has been collecting the funds for this expansion for years. from Miami-Dade County. It should be reinvested here. (0015-7 [Goldmeier, Barry])

**Comment:** This construction is going to generate 800 permanent jobs, highly technical permanent jobs, and an additional 3,500 job just for the construction, not to mention the added benefits that the local economy is going to see just from the large influx of money. (**0721-15-9** [Kuraza, Devon])

**Comment:** Reports indicate that Turkey Point Units 6 and 7 will create 3,500 jobs over a multitude of year's construction period, and 800 good paying --good paying, jobs once the facility is completed and becomes operational. The construction of these units will represent one of the largest projects in this State's history, and the jobs it creates will benefit thousands, thousands of South Florida families while protecting all environmental issues. In addition to the construction of the project these units will need to be maintained and refueled on a reoccurring basis, just like the current units require. These periods are also known as outages, resulting in hundreds of temporary jobs for area workers, which help local businesses keep the customers that they already have and generate a large ripple effect throughout the economy. (0721-19-3 [Riley, Bill])

**Comment:** The south Florida community has benefited immensely from the FPL's investments for the last 40 years. The Turkey Point Plant, not only has generated clean energy, but also has helped our local economy. The reports indicate that Turkey Point Units 6&7 will generate 3,500 jobs that will last for many years, in addition to more than 800 maintenance jobs once the plant starts functioning. The construction of these units will be one of the largest projects in the history of the state of Florida, and will generate jobs that will benefit thousands of families in south

Florida. Furthermore, the new units will require maintenance work. The maintenance work known as "Outages" will result in the creation of hundreds of additional jobs in the area, which in turn will benefit local business. We are convinced that this important project will be positive and beneficial for the entire state. (0721-20-2 [Garcia, Javier])

**Comment:** Additionally, the nuclear energy facilities in Florida are heavyweights when it comes to economic growth in the State, as you've heard from several others here today. These facilities employ more than 2,270 highly skilled workers with an annual payroll of \$191 million. They also pay more than \$32 million in State and local taxes. This support of local communities through jobs and tax revenue is tangible and would be sorely missed if a plant were to be taken offline. (0721-21-2 [Martin, Patrick])

**Comment:** The Hurricane Andrew wiped out Homestead, pretty much all the businesses dropped, our population dropped dramatically and we're rebuilding now but we're not there yet. Unlike other cities north of us who have rebounded economically, Homestead is still struggling.

We are coming around the corner, we're making some major progress but we definitely need more jobs and we're looking at a potential of greater jobs and higher paying jobs with this expansion. So we really --I can't speak to the science, I'm not a scientist, there's much smarter people in this room than I. But I do know that the impact of our downtown and the partnerships we've had over the last few years with FPL has greatly helped us[.] (0722-11-1 [Knowles, Yvonne])

**Comment:** We [Redland Market Village] are in full support of this application and the reason that we have, the main reason is that we are part of a very low-income persons that are part of our business. And every penny counts. (0722-12-1 [Infante, Jose Renee])

**Comment:** There will be a huge -- as many other people have mentioned earlier -- huge economic, continued economic impact to deep South Dade and not only deep South Dade but the communities going up the north and south U.S. 1 corridor as well. (**0722-13-3** [Duquette, Bill])

**Comment:** [T]here's 700 employees at Turkey Point with an additional industry of indirect jobs related to that which brings in, it nets us \$500 million annually toward local economies. So for every dollar spent at Turkey Point the local economies produce about 43 which is a huge impact.

And as Yvonne did mention, post Hurricane Andrew, we're finally getting back to the previous level we were so this would be a huge boom to our local community.

The additional units will, of course, provide additional -- a number of additional jobs. After all is said and done comparatively, plus construction of about ten years, that will be an additional 800 full-time higher paying jobs not only again in deep South Dade, Homestead and Florida City and up the road. (0722-13-4 [Duquette, Bill])

**Comment:** We have to be realistic. I say with the impact of jobs, of good growth community, I think we need the reactors. (0722-19-2 [Hudak, Jill])

**Comment:** [T]he building of these Units 6 and 7 presents us with employment opportunity. And to be more specific on that, it's going to produce about 3,500 jobs during construction and 800 stable jobs upon completion. And these are jobs that I can take as well as many other students, many of my other colleagues.

It's important to note that these jobs will be available not just to myself but generations to come due to the longevity and reliability that comes from running nuclear reactors. (0722-5-1 [Silva, Nicolas])

**Comment:** Reports indicate that Turkey Point Units 6 and 7 will create 3,500 jobs during the course of construction and 800 permanent, good-quality paying jobs for our local residents once the plant has become operational. The construction of these units will represent one of the largest projects in the State's history and the jobs it creates will benefit thousands of South Florida families while protecting the environmental issues. (**0722-9-3** [Riley, Bill])

**Comment:** In addition to the construction projects these units will need maintenance and refueling on a regular basis just like the existing nuclear units. These periods are known as outages resulting in hundreds of additional temporary jobs for area workers which helps local businesses keep their customers that they already have and generate a large ripple effect through the economy. (0722-9-4 [Riley, Bill])

**Comment:** a supporter of the environment. I want my kids to have fresh air, clean water, abundant wildlife, flora and fauna. But you know, as we are the city, there's another element to our environment that sometimes gets overlooked. It's the working men and women of our community. They're part of the environment, too. A project like this, the building construction stage will generate 3,500 construction jobs followed by approximately 800 permanent jobs. These are not retail jobs, these are real, real important substantial salaries that people will make and then reuse in the community. So when you talk about the environment, never forget people, that they're part of it, too. And I've seen that happen too many times in presentations where that element of need is often left out. (0723-1-5 [Wallace, Otis])

**Comment:** As a mayor, got to talk taxes as a reality. This project will generate \$100 million in taxes for our community. Rich folks don't care about stuff like that, or they whine about paying taxes. They do whine more than anybody else. But when it comes to making money, I think it's important that people be allowed living wages to make money, but the 100 million in taxes generated would be significant running our community, a community within Dade County. (0723-1-7 [Wallace, Otis])

**Comment:** ...we do see that study shows benefits on day-to-day operations when we see the huge economic impact in our community. (**0723-10-1** [Brito, Rosa])

**Comment:** We see Turkey Point supports over \$540 million of annual economic activity locally which is really important for small businesses in our area which are dependent on plant business and employees spending to stay afloat. For every dollar FPL's Turkey Point plant spends locally the economy produces \$1.43. When you do the math, this is a huge amount of money for a small town of 60,000 citizens. (0723-10-4 [Brito, Rosa])

**Comment:** We also heard some folks talk about the actual monitoring of the project after it's built and some of the experience that goes in, and the knowledge that goes into doing that. But also in the construction of this we have skilled trades people that are going to be working on these projects. It's going to develop just good jobs. Not just jobs but good jobs, good paying jobs for professional people. (0723-13-2 [Simpson, Chris])

**Comment:** But just to move along here real quick, reports indicate that Turkey Point Units 6 and 7 would create 3,500 jobs, as you've heard tonight, over a multitude of years of construction period, and 800 good, qualified paying jobs for multiple local residents once the plant has

become operational. The construction of these units will represent one of the largest projects in the State of Florida's history and the jobs it creates will benefit thousands of South Florida families while protecting environmental issues. In addition to the construction projects, these units will need maintenance and refueling on a recurring basis just like the existing nuclear unit are now at Turkey Point. These periodic shut-downs are known as outages, the results of hundreds, hundreds of additional temporary jobs for area workers, area workers in Homestead, Miami, Broward, Conyer County, Naples, wherever. There are hundreds of jobs on each one of these shutdowns. It keeps the customers they have and businesses active and also generates a large ripple effect throughout the economy when they shut down. People, local people and a lot of other people participate in those activities. (0723-14-4 [Riley, Bill])

**Comment:** And whereas the project, during its construction and completion will bring economic stimulus via jobs both during construction and permanent as well as high technology employment to Miami Dade County. (0723-2-7 [Trowbridge, Mark])

**Comment:** I do consider the fact that this proposed plants, the two separate sites, 6 and 7 will bring to -- in jobs... (0723-8-2 [McDuffie, Stephen])

**Response:** These comments express support for the proposed nuclear reactors due to their impacts on the economy and specific aspects of it such as jobs, earning, output, and fiscal impacts but do not introduce any new information to inform the assessment of impacts. The NRC acknowledges these comments. Impacts on employment, earnings and fiscal revenues are assessed in Sections 4.4.3 and 5.4.3 (Economic Impacts on the Community). No changes were made to the EIS as a result of these comments.

**Comment:** And then the last thing I would mention too, is, that I just want to speak directly to my Union brothers and sisters here in the audience, the ones who are working for FPL. I understand that you all -- that this is your livelihood, and I know what it's like. Believe me. I know what it's like to be in a situation where I have to advocate on behalf of my employer. But I would mention, too, that before I taught here at FIU, before I was a member of the United Faculty of Florida, I was a member of the United Auto Workers, and I was a very proud Union member, except for the point where my Union, I thought, sold us all out by going before Congress and advocating against the CAFÉ standards, the minimum standards for fuel efficiency on automobiles. They went to Washington arguing the same thing that the automakers were arguing, was that the CAFÉ standards were going to cost jobs. They said it was an economic argument, much like the one that you guys are making now. And I can you tell you, they were wrong. It didn't keep American -- it didn't keep auto working jobs here in America. It did nothing to help the Union, and the Union suffered. We all suffered. Don't let FPL, which is beholding not to you, but to its shareholders, try to make an artificial argument between economic growth in your jobs versus, I don't know what the other alternative is, that we all live in darkness. It's a false choice. (0721-16-5 [Rifkind, David])

**Comment:** Now, I want everybody in this room to understand, there will be jobs. There will be a future, there will be power. (0721-30-11 [Ullman, John])

**Response:** These comments express opposition to the proposed nuclear reactors suggesting that claims of forgone jobs under the No Action Alternative are overstated. Impacts on employment, earnings and fiscal revenues are assessed in Sections 4.4.3 and 5.4.3 (Economic Impacts on the Community). These comments do not provide new information to inform the assessment of impacts. No changes were made to the EIS as a result of these comments.

**Comment:** I am a realtor and I strongly believe that all the property value in Miami is at extreme risk with turkey point. (**0055-10** [Roedel, Kitty])

**Comment:** More nuclear electric generating plants would not only be a danger, but will also severely impact billions of dollars in value of the business, homes, and infrastructure of Miami-Dade county and beyond. (**0091-3** [Boyce, Sheila])

**Comment:** And 6 and 7 would cost every FPL homeowner about \$5,200 or 2 percent of the value of their own home. (**0721-12-11** [White, Barry J.])

**Response:** These comments suggest that construction of the proposed nuclear reactors would have a negative effect on property values. In response to these comments, the review team assessed the current literature on the effects of nuclear reactors on property values. The review team concluded that the current literature is inconclusive and that any potential adverse or beneficial impacts would be expected to be small. Section 4.4.4.3 (Housing) was edited to include this review.

Comment: Comment 10. The DEIS is incomplete in that its analysis of alternate sites did not consider the economic impacts of transmission infrastructure necessitated by a new nuclear plant and it did not consider the disparate economic impact of that infrastructure on a county with a disproportionately minority and low income population - Miami-Dade County has a predominantly minority population and a higher number of people living in poverty (25.6%) than the statewide average (20.8%) (U.S. Census & American Community Survey). Economic effects of the entire TPN 6&7 project include not just the plant itself, but also the attendant infrastructure, including new transmission lines. All components that can affect the County's tax base must be taken into economic consideration within the DEIS because they will affect the ability of the County to provide needed services countywide. The DEIS does consider the economic benefits to the County during construction, but not the countywide costs caused by infrastructure necessitated by the plant. Most of the economic benefits reported in the DEIS will accrue only during construction, but the economic costs will be permanent and recurring. Economic analysis by Dr. Richard Weisskoff, Chairman of the Economics Dept. at the University of Miami (2011) has projected that the transmission line infrastructure will cost the county's tax base by \$35 million annually (adjusted for change in real estate values since the study was done in 2010). FPL's analysis shows approximately 6500 temporary jobs will be added countywide during construction. However, Dr. Weisskoff's analysis, not mentioned in the DEIS, shows that 4000-8000 permanent jobs will be lost by routing supporting infrastructure (transmission lines) through areas of high economic activity. It should be noted that FPL engaged the property appraiser from Leon County, Florida to critique Dr. Weisskoff's analysis. That individual concluded that Dr. Weisskoff's valuation data were erroneous, however it appears the property appraiser did not understand that the Miami-Dade County Property Appraiser's valuation listings treat condominiums differently than other property types, combining values of land and structure in a single column of numbers rather than breaking them out separately. Thus the valuation discrepancy reported by the Leon County property appraiser appears to stem from his own misunderstanding of local property appraiser listings and not from any error in Dr. Weisskoff's data collection or analysis. The final EIS must evaluate disparate countywide impacts of site selection and attendant infrastructure on minorities and lowincome residents of Miami-Dade County. (0106-13 [Stoddard, Philip K.])

**Comment:** In addition we find likely adverse consequences for the Miami-Dade County economy as a whole that are overlooked in the DEIS. (**0106-3** [Stoddard, Philip K.])

**Comment:** The lines traverse well-populated areas with unsightly towers, impacting property values. (0117-3 [Robertson, Alyce])

**Comment:** We will lose property value due to these poles and we are in the prime real-estate area in South Florida. (0149-9 [Nelson, Joyce E.])

**Comment:** As for the residents on both sides of US Hwy 1: Coral Gables, Cutler Bay, Florida City, Homestead, Miami, Palmetto Bay, Pinecrest, Princeton and un-incorporated Miami Dade property values will see an immediate, tangible drop upon completion of FPL's would-be power line. A rudimentary economic-impact study will bear out this fact. This, in turn, will lower tax revenues for all municipalities and taxing units; further impoverishing the public sector so private interests may benefit. (**0408-7** [Sifko, Basilio])

**Comment:** And also, another thing also is that, you know, what someone else mentioned earlier about the lady from Roads saying, oh, it's going to reduce the property values to the Roads neighborhood. And, yeah, that's true. I mean, who wants to live next to those ugly power lines that nobody wants. (0721-31-9 [Almirola, Alejandro])

**Response:** These comments refer to potential adverse effects on property values of the construction of transmission lines associated with the proposed project. The review team assessed the current literature on the effects of nuclear reactors and transmission lines on property values and concluded that the current literature is inconclusive and that any potential adverse or beneficial impacts would be expected to be small. Section 4.4.4.3 (Housing) was edited to include this review.

**Comment:** Overall, the expansion of Turkey Point will end up costing our communities jobs and our taxpayers, money. Despite the addition of temporary jobs during construction, research from the University of Miami indicates that more jobs will be lost due to the routing of transmission lines through areas of high economic activity. Furthermore, Florida Power & Light customers have been footing the bill for the expansion up front, regardless of whether the new reactors are ever built. The expansion of Turkey Point does not make economic sense for the people of South Florida. (**0254-6** [Dudley, Dwight] [Lerner, Cindy] [Regalado, Tomas] [Stoddard, Philip K.])

**Response:** This comment expresses opposition to the proposed nuclear reactors because of potential adverse effects on local economies, as well as the cost to electricity consumers. The economic impacts of construction and operations of the proposed project are discussed sections 4.4.3 and 5.4.3, respectively. Changes in the cost of electricity are outside the scope of the NRC's authority and were not addressed in the EIS.

**Comment:** [The Turkey Point Nuclear Plant Units 6 & 7 application should be viewed in context of a region facing the enormous water quality and land use related challenges imposed by climate change.] Therefore, the final Environmental Impact Statement ought to consider not only the direct impact of this project to a region currently under threat, but also how the project's operations will constrain investments made to manage future challenges and correct a history of destabilizing influences. In sum, the region is confronted with a deteriorating baseline and will need to adapt. (0456-2 [Miami, City])

**Response:** Section 2.3 (Water) describes the current water use in the affected area. Appendix I of the EIS documents the review team's consideration of the potential changes in impacts that may occur as a result of the changes to the environment resulting from global climate change,

including sea-level rise. The changes that were considered include potential changes in temperature, rainfall, and the occurrence of severe weather events. The effects of sea-level rise were also considered. No changes were made to the EIS in response to this comment.

**Comment:** In early 2015, FPL announced the change of the commercial operation dates (CODs) for Units 6 & 7 from 2022 and 2023 to 2027 and 2028, respectively. A new and significant information review was conducted by FPL where it was concluded that there would not be an impact to any significance level or conclusion drawn in the ER with respect to the change in CODs. There are instances in the DEIS, however, where references to CODs differ from the newly announced CODs. Instances in the DEIS include: a. DEIS Subsection 4.4.3.1, Page 4-107, Lines 2-5: In DEIS Subsection 4.4.3.1, the commercial operations dates are mentioned in relation to economic analysis: "The impacts of building the proposed units on the local and regional economy ...For this analysis, FPL assumed site preparation activities would begin in 2016 and commercial operation dates would be 2025 for Unit 6 and 2026 for Unit 7." b. DEIS Subsection 5.4.2, Page 5-66, Line 22: In DEIS Subsection 5.4.2, the commercial operations dates are mentioned in relation to demographic analysis: "For analytical purposes, Unit 6 is scheduled to start operation by 2025 and Unit 7 by 2026." (0619-1-6 [Maher, William])

# **Response:** The NRC includes clarification in Sections 4.4 and 5.4 regarding FPLs modification of the expected commercial operation dates.

**Comment:** DEIS Subsection 9.3.6.2, Page 9-247, Lines 12-19: The DEIS states, "The **impacts** of traffic at the Martin site are MODERATE to LARGE (depending on the timing of other projects in the area), while the impacts at the Turkey Point site are MODERATE because of visual impacts along the eastern corridor, while the impacts at the Martin site are SMALL because the new transmission lines are expected to follow the path of existing lines. Finally, impacts on cultural and historic resources at the Turkey Point site are MODERATE because of visual impacts along the eastern corridor, while the impacts at the Martin site are SMALL because the new transmission lines are expected to follow the path of existing lines. Finally, impacts on cultural and historic resources at the Turkey Point site are MODERATE because of visual impacts along the eastern corridor, while the impacts at the Martin site are SMALL because the new transmission lines are expected to follow the path of existing lines." These sentences appear to conflate the discussion of traffic, transmission, visual, and cultural/historic impacts. (emphasis added) (0619-5-19 [Maher, William])

**Response:** Section 9.3.6 (Comparison of the Impacts of the Proposed Action and the Alternative Sites) offers socioeconomic assessments of four different sites, each of which has different characteristics of importance. These differences are the source of the concerns in the comment. After review of each analysis, the staff determined the analyses are not incorrect. No changes were made to the EIS in response to this comment.

**Comment:** There were some comments by the Mayor about people paying taxes. None of us like paying all of our electric bill, right? But it's basically a fixed cost that we all have to do. And anything that we can do to help drive that cost down helps all of us in the long run. (0723-6-2 [Murphy, Mike])

**Response:** The comment suggests the proposed nuclear reactors could help decrease electrical bills. The impact of the proposed nuclear reactors on electricity prices is beyond the scope of this EIS. No changes were made to the EIS in response to this comment.

**Comment:** ...our Chamber hereby supports the proposed Turkey Point Units 6 and 7 which will result in the creation of additional jobs, reliability and significant infrastructure improvements. (0723-2-9 [Trowbridge, Mark])

**Response:** This comment expresses support for the proposed nuclear reactors due to their impacts on the economy and infrastructure, but does not introduce any new information to inform the assessment of impacts. Impacts on the economy are assessed in Sections 4.4.3 and 5.4.3 (Economic Impacts on the Community) and impacts on the infrastructure are assessed in Sections 4.4.1 and 5.4.1 (Physical Impacts). No changes were made to the EIS as a result of this comment.

**Comment:** So if you want to give FPL credit for employing people you ought to also on the other hand look at all the jobs they've been destroying. (0723-12-8 [Henry, Jim])

**Response:** This comment refers to jobs that would be created if solar power were developed instead of the proposed nuclear reactors. The consideration of jobs created by alternative generating technologies is outside the scope of the EIS. No changes were made in the EIS in response to this comment.

**Comment:** They pay very little tax in the way of after-tax profits, their actual corporate tax rate in 2005 to 2009 averaged 1.3 percent. They're one of the lowest taxpayers in the United States because they take advantage of unaccelerated appreciation and being able to write off a lot of that expenditure. (0723-12-2 [Henry, Jim])

**Response:** The tax impacts of the proposed nuclear reactors area assessed in Sections 4.4.3 and 5.4.3 of this EIS. The taxes paid by a licensee are outside the scope of the NRC's authority. No information is provided in the comment that would alter the analysis done in those sections. No change was made in the EIS in response to this comment.

**Comment:** And I want to echo the sentiments of the lady from the Roads neighborhood who's against this plan as well, because I personally will be affected. I'm a lifelong resident of the Roads neighborhood and I echo the sentiments of the City Attorney and the City, in saying it's a bad idea to make our neighborhood look ugly with those ugly power lines that nobody wants. Nobody from the Roads wants those power lines. And so it's going to be the ugly thing to see on top of those banyan trees on Coral Way, and it's just going to kill the historic value of the, you know, the historic nature of the neighborhood. (0721-31-2 [Almirola, Alejandro])

**Response:** The commenter expresses opposition to the visual impact of the transmission lines to serve FPL's proposed Turkey Point Units 6 and 7, as well as the impact of transmission lines on the historic character of the neighborhood. Although electrical transmission is outside the regulatory authority of the NRC, the review team considered the visual impacts of transmission lines in Sections 4.4.1.6 and 5.4.1.6 (aesthetics), and concluded the aesthetic impacts of transmission lines would be minor. Historic and cultural impacts are assessed in Sections 4.6 and 5.6. No new information was provided by the commenter that was not already considered in the analysis. No changes were made to the EIS as a result of this comment.

**Comment:** The construction industry is the second larger employer in Miami-Dade County. And there have been talk before about the minorities on this project, the impact of this project on the minorities. The majority of the workers in the construction industry are minority, members of the minority community, and we need -- we need the additional power in order to keep this construction boom going. (**0721-27-2** [Rodriguez, Manuel J.])

**Response:** Impacts on minority and low-income populations are discussed in Sections 4.5 and 5.5. No new information was provided in the comment that was not already considered in the analysis. No changes were made to the EIS in response to this comment.

**Comment:** Finally, there's an economic issue. The Impact Statement talks about benefits to the County, economic benefits. It was modeled by FPL. They talk about creating jobs. They talk about other benefits to the economy. But those are temporary jobs that are created. Those are temporary benefits during construction only. (0721-2-13 [Stoddard, Philip K.])

**Response:** The EIS discussed both temporary and long-term impacts of the proposed nuclear reactors during construction and operations. This analysis was included in Sections 4.4 and 5.4 of the EIS. No changes in the EIS were made in response to this comment.

### Comment: 5) Analysis of Visual, Lighting, and Noise Impacts

The DEIS does not sufficiently analyze impacts to NPS scenery, night skies, nocturnal habitat, acoustic environment and wildlife health to determine impacts to these resources and values. Effects to these resources are of particular importance to the NPS because they affect wildlife movement and habitat use, and the visitor experience within both NPs. NPS recommends NRC update its analysis of impacts to these resources and values, as well as, develop photo simulations.

As discussed, the DEIS virtually dismisses the visual impacts of the plant construction, plant profile, powerline corridor and other powerline infrastructure on Biscayne and Everglades NPs. Moreover, we contend that the computer illustration of the facility found in the DEIS is inadequate and that a full visual analysis that include photo simulations is warranted. As a result, the NPS and the public have not been able to assess how this major energy project will impact the viewscape at Biscayne and Everglades NPs. Photo simulations are routinely completed for environmental reviews relating to energy infrastructure and are a critical component that informs the NEPA process as to the relationship of people with the natural and physical environment. [Footnote 1: 40 CFR part 1508.14] The NPS requests that a visual analysis be included in a revised DEIS that includes development of photo simulations of the proposed project and examines the visibility of project components and the level of change in the existing landscape.

The NPS is happy to collaborate with the NRC to identify important vantage points from within Biscayne and Everglades NPs for these simulations. Based on our experience working with other agencies, we can also share with you our suggested guidelines on site photography, simulations, and output. Furthermore, the NRC can utilize photo simulations included in the NPS's Acquisition of FPL land in the East Everglades Expansion Area DEIS. (0622-1-11 [Austin, Stan])

**Comment:** The NPS also encourages the NRC to further analyze potential increases in light pollution and resultant impacts related to construction and operation of Turkey Point Units 6 and 7. As construction would likely be ongoing throughout the night, construction lighting under standard practices can adversely affect night sky quality by contributing to glare and atmospheric scattering (light domes). Glare can directly affect nearby wildlife and visitors while light domes can affect wildlife habitat quality, overall photic environmental conditions, and scienci and scientific views of the night sky. The reflective nature of water can exacerbate the scattering of construction lighting more so than an equivalent project on land. Impact from artificial light can be reduced by limiting where lighting will occur, limiting hours of operation, limiting nighttime operation during seasonally sensitive periods (e.g., bird migration), limiting total lumen output of artificial lighting (either per fixture or by calculating lumens per acre), and directing lighting downward and shielding the fixtures.

In addition to the lighting design criteria discussed in section 5.3.1, the NRC should consider other lighting areas and lighting color. Warmer lighting colors typically have less ecological impact and adequate lighting can be achieved with less amount of lighting than is often used. We also encourage the NRC to consider whether illumination of Units 6 and 7, which would be sited within a key area within the Atlantic Flyway, would impact migratory birds. This evaluation should address whether new lighting may also increase illumination of existing structures, thereby increasing risk to migratory birds. The NPS requests that lighting plans, analysis of lighting impacts, and mitigation techniques be included in revisions to the DEIS.

NPS recommends that section 5.3.1 be updated to include information related to the effects of noise on NPS resources and acoustic environment in Biscayne NP. Currently, only a day-care facility and Homestead Bayfront Park are categorized as "sensitive receptors," however we maintain that NPS resources should also be considered sensitive to noise. Changes in overall decibel levels, maximum decibel levels, and audibility can have effects on the acoustic environment, wildlife interactions, and park visitors. The DEIS does not appear to analyze noise impacts on Biscayne NP. We encourage the NRC to consider the relationship between increased noise generated at the facility compared with the natural ambient baseline sound levels for Biscayne NP. The NPS recommends that further documentation and environmental analysis include:

Determination of the natural ambient acoustic condition that exists in Biscayne NP;

Assessment of the cumulative noise output of all noise sources on site during construction and under full operating conditions;

Determination of the distance at which noise will attenuate to natural ambient levels. The inclusion of a noise map with contours would be helpful;

Calculation of noise levels at the park boundary and comparison with natural ambient levels;

Assessment of the effects that these increased noise levels would have on park wildlife and visitors; and

The use of an analytical framework for evaluating impacts that is appropriate for a national park setting (e.g., not a community noise framework).

The NPS's "Baseline Ambient Sound Levels in Biscayne National Park" report from November 2011, which has already been shared with the NRC, should prove helpful in gathering this information. (0622-1-13 [Austin, Stan])

**Response:** These comments suggest that further analysis is needed regarding the impacts of light and noise at the Turkey Point site. As explained in Sections 4.4.1 and 5.4.1, the review team assessed the potential impacts from construction- and operations-related light at the Turkey Point site and concluded that the visual impact of the building of proposed Units 6 and 7 would be noticeable but temporary and the visual impacts of operations would be minor. Noise impacts on the general public would be minimal given the use of the mitigation actions included in applicable regulations and because noise attenuates rapidly with distance, intervening vegetation, and variations in topography. NEPA guidance states the depth and detail of an analysis must be proportional to the expected severity of the impacts. Because the staff determined small impacts from light and noise, no changes were made in the EIS in response to these comments.

**Comment:** Contrary to the assertion of the NRC (EIS) that the "socioeconomic "effects of building and operating the proposed reactors #6 and #7, are "small and beneficial" I believe the actual risk to the population of South Florida is astronomical and potentially devastating. (0358-2 [Norman, Ronald])

**Response:** This comment expresses the view that the risks to the population of South Florida are very high. The review team analyzed impacts on people from construction and preconstruction (Chapter 4) and from operations (Chapter 5) of the proposed nuclear reactors. Summaries of these impacts can be found in Section 4.12 (Summary of Construction and Preconstruction Impacts) and Section 5.12 (Summary of Operational Impacts). The analysis does not support the view that the "risk to the population of South Florida is astronomical and potentially devastating," and the comment does not introduce any new information not already considered in the analysis. No changes were made to the EIS in response to this comment.

**Comment:** Florida law allows FPL to charge its customers for the licensing and construction costs for this project. In the past three years, FPL has charged us \$209 million. Even if FPL never completes the new reactors, it keeps our money. These charges include new transmission lines in Everglades National Park and the heart of Miami-Dades dense commercial and residential neighborhoods. Massive 105-foot tall towers along Dixie Highway would cut through Pinecrest, South Miami, Coral Gables, Coconut Grove, and then Brickell, on their way into downtown Miami, carving tens of millions annually from the countys tax base and killing thousands of jobs in the process. (0675-4 [Rodriguez, Jose Javier])

**Response:** This comment expresses opposition to the proposed nuclear reactors because of adverse effects on consumer rates as well as the adverse effects of the associated transmission lines on the county's tax base and jobs. The NRC does not assess impacts on electricity rates and electrical transmission is outside the regulatory authority of the NRC. In addition, the comment did not provide evidence to support the claim that transmission lines would have an adverse impact on the tax base and jobs. Although the review team recognizes the potential for land use conflicts in Chapter 7, Cumulative Impacts, the impact of the transmission line on property values (and consequences for the tax base) is not possible to determine based on the existing literature (see Section 4.4.4.3 for a discussion). No change was made to this EIS as a result of this comment.

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 2.5.2.6, Page 2-179, Lines 27-29 "There are 35 colleges or universities that are accredited.... that offer professional and paraprofessional training (FPL 2014-TN4058)." ER Subsection 2.5.2.8.3 ER Table 2.5-43 "There are **12 colleges** or universities that are accredited...that offer professional and paraprofessional training within 50 miles..." ER Table 2.5-43 also identifies **12.colleges**. (**0619-2-21** [Maher, William])

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 4.4.2, Page 4-104, Lines 8-11 Subsection 4.4.2, Page 4-105, Lines 37-38 On page 4-104: "...assessment of population impacts is based on FPL's estimated peak project workforce analysis (FPL 2014-TN4058). The proposed project schedule assumes 10 years-- **36 months for preconstruction activities** and 84 months for NRC-authorized construction--to build both units....." On page 4-105: "Also shown is the **36 months of preconstruction activities**." ER Subsection 3.10.1.1 ER Table 3.9-1 ER Table 3.10-2 DEIS Figure 4-6 ER Figure 3.10-1 ER Figure 3.10-3 "As described in Section 3.9, preconstruction activities could occur **39 months (start of 2nd quarter 2013 through end of 2nd quarter 2016)**... before the start of safety-related construction for Units 6 & 7." ER Tables 3.9-1 and 3.10-2 project **39 months for preconstruction** activities prior to safety related construction. (Note DEIS Figure 4-6 and ER Figures 3.10-1 and 3.10-3 also illustrate 39 months for preconstruction activities.) (**0619-2-24** [Maher, William])

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 4.4.4.5 Page 4-118 through 4-119 Lines 39 through 3 Subsection 5.4.4.5, Page 5-77, Lines 9-10 On page 4-118 and 4-119: "...**15.4 percent** of students in Miami-Dade County...attend private schools (FPL 2014-TN4058)...**Fifteen point four percent** of in-migrating students..." Similarly, on page 5-77 "...**15.4 percent** of students County...attend private schools (FPL 2014-TN4058)." ER Subsection 4.4.2.2.8.3 ER Subsection 5.8.2.2.8.3 "...assumption...percentage of inmigrating...private school... **(15 percent)**...The assumption...percentage of in-migrating...private schools...attending private schools in Miami-Dade County **(15 percent)**. (This percentage, **15 percent**, is also consistent with ER Subsection 5.8.2.2.8.3) (**0619-2-25** [Maher, William])

**Response:** The text in Sections 2.5, 4.4, and 5.4 was revised to be consistent with Revision 6 of the ER.

**Comment:** In some portions of the document, there are descriptions of the area within the 50 mile radius as highly developed, densely populated, with some of the highest incomes in the county. However, language in other sections of the document identifies the proposed plant site location as if it were located within a completely undeveloped area. Turkey Point lies within 12 miles from the Cities of Homestead and Florida City, within 8 miles from the developed area Ocean Reef on North Key Largo, 16 miles from the city of South Miami, and 20 miles from downtown Miami. The 50 mile radius, the Gateway to both National Parks, includes Miami-Dade County with the highest and densest (by land area) population in the State of Florida. That population is in large part concentrated along the coast and along U.S. Highway One north of the parks. The DEIS does not sufficiently evaluate this population and its location particularly with respect to use and economic contribution of their travel to the NPs (0622-1-30 [Austin, Stan])

**Response:** The EIS acknowledges both the significant population centers near Turkey Point and the large areas of undeveloped land in the vicinity included in the nearby National Parks, aquatic preserves, and mitigation banks. Section 2.5 of the EIS addresses the Socioeconomic setting of the Turkey Point site and describes the population and significant communities in the counties surrounding the site. Section 2.2 describes the various land uses in the surrounding region. The impacts of building and operating the proposed new units at Turkey Point on local populations and on undeveloped regions are described in Chapters 4 and 5 of the EIS. No changes were made to the EIS as a result of this comment.

**Comment:** There are over a dozen threatened and endangered species in Biscayne Bay and nearly half a million visitors visited Biscayne National Park in 2013. And there are -- there's an active community of fishermen, boaters, divers, snorklers and recreational and commercial fishing area that is important. And you know, those jobs and those livelihoods and that culture and heritage should be considered in this process as well. Even if you've never visited the Coral Reef you're never going to catch lobster, you're never going to go fishing for permit. (0722-7-7 [Silverstein, Rachel])

**Response:** The comment expresses concerns about the potential impacts to tourism, recreation, and ecological impacts to the nearby Biscayne Bay including the Biscayne National Park. The review teams agree that Biscayne National Park is an important resource for marine biodiversity and has added an expanded discussion to Sections 4.3.1 and 5.3.1 of the potential effects of the project on ecological resources of the South Florida ecosystem as they pertain to

both Biscayne and Everglades National Parks and the experience of visiting these parks. Furthermore, Sections 4.4 and 5.4. provide the review teams analysis of the potential socioeconomic impacts from construction and operation of the proposed Turkey Point Units 6 and 7.

# E.2.12 Comments Concerning Environmental Justice

Comment: Environmental Justice (EJ). Pursuant to Executive Order 12898, the DEIS (Section 2.6) includes demographic and impact data, including minority and low-income populations. The project team assessed the potential for disproportionately high and adverse health and environmental impacts, and concluded that there are no environmental pathways where the identified EJ populations in the 50-mile region would be likely to suffer disproportionately high and adverse environmental or health impacts as a result of the proposed project (page 10-7). Communities may experience both benefits and burdens associated with this project, and should be involved in meaningful discussions with the project team throughout the decisionmaking process. We encourage the project team to continue coordinating with the communities that will be impacted by the licensing and permitting actions. Community involvement and discussion of project issues should take place throughout project planning. In particular, local communities have voiced their concerns regarding transmission line routing and potential economic impacts resulting from the location of these lines. Demographics: The NRC includes demographic information related to minority and low income populations. The project area contains minority and low-income populations within the 50 mile project area that includes Miami-Dade County and portions of Broward, Collier, and Monroe Counties. U.S. Census data from the American Community Survey was used to evaluate minority and low-income populations prior to the identification of disproportionate impacts. Thresholds that include the 50% Criterion and the Meaningfully Greater Criterion were used to compare race and income data from the block group level to the reference population at the State. The use of these thresholds are consistent with the Council for Environmental Quality EJ Guidance. Analyses: Based on our review, EPA has concerns regarding how the Meaningfully Greater Criteria was applied. The DEIS used a 20% threshold, however, the manner in which it is applied or calculated can mean that minority or low-income populations may not be appropriately identified. In the DEIS, 20% is simply added to the reference population (i.e., 20% threshold +42.2% minority population = 62.2% minority threshold). However, the way the threshold should be used to yield consistent benchmarks involves taking 20% of 42.2% minority population, which is 8.44, and adding that to 42.2, resulting in a benchmark of 50.64%. Using this mathematical calculation will yield consistent benchmarks that will be 20% higher than the reference population, regardless of the initial percent population value. Meaningful engagement: Communication with minority and low-income populations and other interested individuals, community, community and organizations should consider (as appropriate) encompassing adaptive and innovative approaches to both public outreach, (i.e. disseminating relevant information), and participation (receiving community input), since minority populations and lowincome population often experience barriers to engagement. NRC indicates that there was active phone and field consultations with various organizations and study of applicant's Environmental Report (ER) to identify affected populations and unique exposure pathways. **Recommendations:** The FEIS EJ sections should include information about the outreach and participation methods to minority and low-income populations that may have limited English proficiency, particularly since migrant workers that are primarily Hispanic are located approximately 3 miles from the proposed site. In addition, the FEIS should also include a summary of any EJ comments or concerns, and the NRC's response to those comments. (0617-3-2 [Mueller, Heinz J.])

**Response:** Application of the meaningfully greater criteria is consistent with NRC regulations. Information about the outreach and participation methods, including comments received and responses, is provided in Appendices B through F of this EIS. No modifications to the document were made in response to this comment.

**Comment:** <u>EJ Impacts</u>: The NRC's EJ analysis includes a summary of noise, air quality, water resource and traffic impacts on affected minority and low-income populations, including Native American tribes and populations that are dependent on subsistence resources. According to the DEIS, there are no disproportionate high and adverse impact to EJ populations.

**Recommendations:** Based on our review of the EJ section of the DEIS, it was difficult to identify the impacts to minority and low-income populations. Most of the impacts are marginalized for various reasons, including proximity. While the DEIS summarizes the impacts associated with the construction of the reactors and traffic, it is unclear whether there are other impacts that should be considered, such as impacts associated with transmission lines constructed through minority and low-income communities. The FEIS should clarify whether these and other impacts will primarily be borne by EJ communities.

Local residents should be involved in meaningful discussions with the project team throughout the decision-making process. Efforts should be made to meaningfully involve and outreach to residents near the site and with increased visibility to the facility's structures and its emissions. The project team should take community concerns regarding transmission line routing and impacts into consideration, and these concerns should be fully addressed to the extent feasible. Dialog between the project team and the communities should continue. (0617-3-3 [Mueller, Heinz J.])

**Response:** Section 2.6.1 (Methodology) explains the NRC's approach to the environmental justice (EJ) analysis. The review team investigated special pathways by which EJ populations of interest could be disproportionally affected by adverse impacts. No impacts considered small could lead to disproportionately high and adverse human health or environmental effects without special pathways through which EJ populations of interest could be disproportionately affected. Sections 4.5 and 5.5 summarize the results of the analysis. No special pathways were identified through which EJ populations of interest could be disproportionately affected by adverse impacts. Although electrical transmission is outside the regulatory authority of the NRC, the analysis includes the potential impacts of transmission lines associated with the proposed nuclear reactors. Recommendations for meaningful outreach and involvement of the local communities is outside the NRC's NEPA and Executive Order 12898 requirements. No changes were made to the EIS in response to this comment.

**Comment:** Let me make a mention in terms of environmental justice. Under Federal guidelines it's critical that Federal agencies review environmental justice impacts. Miami-Dade County is a very diverse county, as many as 80 to 85 percent minority. I think I've not seen a proper analysis in terms of that. The impact of this on low income people, on minorities, and I think that needs to be reviewed as well. (0721-7-6 [Edmond, Gabriel])

**Response:** The comment suggests no proper EJ analysis was done but no supporting details are provided in the comment. The review team followed its guidance under NUREG-1555, the Environmental Standard Review Plan, in its assessment of EJ impacts. The EJ analysis is presented in Sections 4.5 and 5.5. No changes were made to the EIS in response to this comment.

**Comment:** And Miami-Dade County, as everybody around here knows, is -- has a disproportionally high population of minority members and poor. And so the damage to the County's economy and the tax base and the job loss is going to be greater in this disproportionally poor and minority community than elsewhere. And I think that's a flaw in the site selection process that needs to be addressed. (0721-2-15 [Stoddard, Philip K.])

**Response:** The comment requests that impacts on disproportionally poor and minority communities be addressed. Sections 4.5 and 5.5 address impacts on minority and low-income populations in the study area. No changes were made to the EIS in response to this comment.

# E.2.13 Comments Concerning Historic and Cultural Resources

**Comment:** I agree with the DEIS review team's conclusion that the impacts from the construction and preconstruction activities of Units 6 and 7 will be small (and therefore unlikely to impact cultural resources listed on or eligible for listing on the National Register of Historic Places, or NRHP). I also agree that the impacts from the construction and preconstruction activities for the proposed transmission lines and other offsite activities have the potential to adversely affect eligible NRHP resources. (0139-2 [Parsons, Timothy A.])

**Response:** The comment from the Florida SHPO express agreement with the findings of the historic and cultural resources analysis in the draft EIS. No changes were made to the EIS as a result of the comment.

**Comment:** In a letter to the Corps' Miami Permits Section dated April 2, 2015 (DHR #: 2015-1221), our office requested that all previously unsurveyed portions of the offsite APE be subjected to professional archaeological survey and that the resultant report be submitted to us in order to facilitate Section 106 review. I look forward to continuing Section 106 consultation with the Corps of Engineers to assess effects to the resources within the area of potential effects, and to consult on any necessary avoidance, minimization, or mitigation strategies that might be necessary. (0139-3 [Parsons, Timothy A.])

**Response:** The comment from the Florida SHPO states that future Section 106 procedures will be required of the USACE. These procedures include professional surveys of previously unsurveyed portions of the offsite APE (primarily along the transmission line corridors), and submission of the resulting report to the SHPO. These requirements are described in the EIS. No changes were made to the EIS as a result of these comments.

**Comment: Tribal Coordination.** <u>Consultation</u>. The EPA encourages government to government consultation with the Seminole Tribe of Florida and Miccosukee Tribe of Indians of Florida at all levels of decision-making. The EPA works closely with both Tribes on Everglades-related matters, and is committed to working with other federal partners to prioritize the Tribes' water quality and water management concerns. (0617-3-4 [Mueller, Heinz J.])

**Response:** The NRC and the USACE have engaged in government-to-government consultation with the Seminole Tribe of Florida and Miccosukee Tribe of Indians of Florida as described in Section 2.7 of the EIS. The NRC appreciates that the EPA also works closely with both Tribes. No changes were made to the EIS as a result of this comment.

**Comment:** National Historic Preservation Act (NHPA). <u>*Historic Preservation*</u>. NRC's evaluation anticipates that indirect visual impacts on National Register-eligible buildings will occur in the transmission line corridor. Specific impacts are to be determined based on USACE

impact evaluation related to transmission lines on cultural resources. FPL agreed to develop a work plan for additional cultural resources studies related to requirements for the transmission line corridors and offsite facilities. The DEIS (Section 2.7) describes the project team's coordination with the Florida State Historic Preservation Office (SHPO) and tribes. The document concludes that the potential impact of license renewal on cultural and historic resources is minimal. The USACE is the lead federal agency for Section 106 of the National Historic Preservation Act (NHPA), and the consultation for this project is in progress. Recommendations: Compliance with Section 106 of the National Historic Preservation Act (NHP A) should be documented as the project progresses. The FEIS should include an update regarding the mitigation measures developed in consultation with the Florida State Historic Preservation Officer (SHPO). The FEIS should also include an update of coordination activities with the SHPOs and tribes, along with the finalized decision documents pursuant to Section 106 of the NHPA, if available. The EPA defers to the SHPOs and tribes on these issues. EPA encourages government-to-government consultation with the Seminole Tribe of Florida and Miccosukee Tribe of Indians of Florida at all levels of decision-making. (0617-3-5 [Mueller, Heinz J.])

**Response:** The NRC and the USACE agree with the EPA recommendations. Section 2.7 was modified to include government-to-government consultation meetings with the Tribes that took place subsequent to the publication of the draft EIS. Section 106 consultation between the USACE, the Seminole Tribe of Florida, and Miccosukee Tribe of Indians of Florida is ongoing. Section 2.7 of the EIS was updated to include the current status of National Historic Preservation Act (NHPA) Section 106 consultation. Special conditions that the USACE typically uses for permitting actions dictate that all work and ground-disturbing activities shall halt within a 100-meter radius of any unanticipated discovery of cultural materials or human remains, and that the USACE shall notify the Florida State Historic Preservation Office(r) (SHPO) and appropriate Tribal Historic Preservation Officers (THPOs) of the finds. Sections 4.6 and 5.6 of the EIS were modified to clarify the USACE's special conditions regarding work stoppage.

**Comment:** There are instances in the DEIS where, due to the timing of events with respect to drafting the DEIS, specified dates, or future actions, indicated in the DEIS have passed. Instances in the DEIS include (emphasis added): a. DEIS Section 4.6, Page 4-124, Lines 31-33 and DEIS Section 5.6, Page 5-82, Lines 2-3: The DEIS (Section 4.6) states: "(3) if consultation with the Florida SHPO concluded with a finding of no historic properties affected... (FDHR 2010-TN1455; FPL 2014-TN4058, Appendix 2.5A)..." Similarly, The DEIS (Section 5.6) states: "(4) if consultation with the Florida SHPO concluded with a finding of no historic properties affected..." However, as indicated in DEIS Section 4.6, ER Subsection 4.1.3.1, and ER Subsection 5.1.3, the work plan was submitted and Florida SHPO concurred. DEIS Section 4.6, page 4-123, lines 34-36 states: "The Florida SHPO concurred with FPL's informal determination of "no historic properties affected" (Appendix 2.5A in FPL 2014-TN4058)." ER Subsection 4.1.3.1, states: "The survey identified no newly or previously recorded archaeological sites or historic resources...The Work Plan was submitted to SHPO and concurrence with the recommendation was received by FPL (FDOS Jul. 2009a)." And, ER Subsection 5.1.3, states: "Based on the findings contained in these two reports...no further surveys or investigations are warranted at the plant or associated non-linear facilities due to the lack of any cultural resources in these areas. The SHPO has concurred with these recommendations (FDOS Jul 2009a)." (0619-1-10 [Maher, William])

**Response:** This comment pertains to a discrepancy in the draft EIS where similar wording in Sections 4.6 and 5.6, describing a SHPO finding of no historic properties affected for the Units 6 and 7 onsite APE, conflicts with subsequent wording in the same sections. The NRC agrees

# with the comment. Sections 4.6 and 5.6 were revised to clarify that consultation with the Florida SHPO did reach a finding of no historic properties affected for the Units 6 and 7 onsite APE.

**Comment:** There are instances in the DEIS where there are inconsistencies and/or discrepancies relating to authorizations, permitting and certifications. Instances in the DEIS include (emphasis added):...DEIS Section 4.6, Page 4-124, Lines 12-16: The DEIS states: "In addition, the **USACE**, the Florida SHPO (FPL 2014-TN4058, Appendix 2.5A), and the Miami-Dade County Office of Historic and Archaeological Resources (NRC 2010-TN1458) **have required FPL to conduct surveys and other studies of offsite areas** and, if practicable, avoid National Register-eligible sites or mitigate effects in an acceptable manner, as determined through consultation with these agencies." The USACE permit has not been issued and there are no USACE requirements in the Conditions of Certification. (**0619-2-10** [Maher, William])

**Response:** This comment pertains to a statement in the draft EIS where the wording implies that USACE has already issued requirements concerning archaeological survey and other required studies of the offsite APE. The commenter correctly notes that the USACE has not yet issued any specific conditions concerning these requirements. The NRC agrees with the comment. Section 4.6 was modified to remove reference to the USACE in the State-level review.

**Comment:** There are instances in the DEIS where there are inconsistencies and/or discrepancies relating to authorizations, permitting and certifications. Instances in the DEIS include (emphasis added):...DEIS Section 5.6, Page 5-81, Lines 33-40: The DEIS states: "All work within a **100-meter radius would be halted** while the appropriate specialist consults with the Florida SHPO and USACE Project Manager, **per the Special Conditions of the DA permit, if one is issued**...Any ground-disturbing activity that impacts a historic property that is potentially eligible, eligible to the NRHP, or contains human remains, all **ground disturbing activities shall halt within 100-meter radius buffer** of the site, and the USACE Project Manager and SHPO notified. Work shall not commence without written notice from both the USACE and SHPO." FPL has not included nor has SHPO required a specific "work halting radius" in the work plans. (**0619-2-13** [Maher, William])

**Response:** This comment pertains to statements in the draft EIS that describe a 100-meter radius within which work would halt should there be an unanticipated discovery of a cultural resource during operations. The special conditions that the USACE typically uses for permitting actions dictate that all work and ground-disturbing activities shall halt within a 100-meter radius of any unanticipated discovery of cultural materials or human remains, and that the USACE shall notify the Florida SHPO and appropriate THPOs of the finds. Sections 4.6 and 5.6 of the EIS were modified to clarify the USACE's special conditions regarding work stoppage.

**Comment:** DEIS Subsection 2.7.3, Page 2-198, Lines 30-36: The DEIS states, "The indirecteffects APE...has been set at 500 ft on either side of the centerline of the alignment...(FPL 2009-TN1513; FPL 2009-TN1515; FPL 2011-TN95; FPL 2013-TN2941)." One of the cited references, (FPL 2009-TN1515), "Cultural Resource Assessment Survey Work Plan for the Turkey Point Units 6 & 7 Associated Linear Facilities", states: "For the purposes of this preliminary analysis, Janus Research defined the areas of potential effects (APE) as 100 feet from each side of the East Preferred Corridor ...In addition, a review of previously recorded historic resources within 500 feet of each side of corridors, pipelines, roads, and bridges was conducted." The final APE will be established in consultation with the Florida Department of State, Division of Historical Resources and State Historic Preservation Office (DHR/SHPO)." (emphasis added) (0619-3-15 [Maher, William]) **Response:** This comment concerns the definition of the Area of Potential Effect (APE) for Section 106 of the NHPA, which, as stated in the comment, will be defined by the USACE in consultation with the SHPO. The EIS text in Section 2.7 was modified to clarify that, for purposes of the review team's analysis, a preliminary APE of 500 ft on either side of the centerline for linear facilities was used to guide the data collection. This preliminary APE may or may not correspond to the final APE adopted by the USACE and SHPO because consultation is not completed for the transmission line route.

**Comment:** DEIS Subsection 2.7.3, Page 2-199, Lines 25-28: The DEIS states: "In addition to the desktop research for the transmission line APE, FPL also conducted a search of the National Register and Florida SHPO site files for a distance of 1.2 mi from the eastern and western transmission line corridors. The research for the offsite linear facilities identified 359 resources and 16 resource groups located with 1.2 mi of these facilities." The cited reference (FPL 2009-TN1513) "Cultural Resource Assessment Survey Work Plan for the Turkey Point Units 6 & 7 Site and Associated Non-Linear Facilities" did not contain information regarding a search of the National Register and Florida SHPO site files for a distance of 1.2 mi., nor did FPL conduct a search of the National Register and Florida SHPO site files for a distance of 1.2 mi.

**Response:** This comment refers to a statement in the EIS that refers to a background records search conducted by FPL of the area encompassing 1.2 mi around the offsite linear facilities, including transmission lines. The comment indicates that the cited reference in the draft EIS, prepared by FPL's consultant, does not report on this records search, and also states that FPL did not conduct a search of the National Register of Historic Places and Florida SHPO site files. The NRC agrees that FPL's consultant did not conduct the records search, and that the draft EIS should not have cited the consultant's report (FPL 2009-TN1513). Rather, reference should have been made to the Turkey Point Nuclear Plant COL ER (FPL 2014-TN4058), which does contain the information. The NRC therefore disagrees with the comment that FPL has not conducted a records search within 1.2 mi of the transmission line corridors. As stated in the COL ER in Section 2.5.3.6 (FPL 2014-TN40). "A search of records maintained by the National Park Service, Florida Division of Historical Resources, Miami-Dade County, and city of Homestead was conducted to identify significant cultural resources located within 1.2 miles of the transmission lines, substations, and reclaimed water pipelines." Section 2.7 was revised to include the correct citation and to clarify the source of the information for the records search.

**Comment:** A large number of archaeological sites have been recorded throughout southeast Florida and as noted in the draft EIS, numerous sites are known to occur near the proposed transmission line corridors. We are concerned with the possible impacts of any undertaking on cultural resources which may be present within the area of potential effect. Since it does not appear that either of the possible transmission line corridors have been subjected to a systematic Phase I cultural resources assessment survey, we request that such a survey be conducted at the appropriate time and that the results of such survey be provided to the STOF-THPO for review and comments. If any preliminary or desktop/archival investigations have already been completed we would like to be provided copies of those reports. (0727-1 [Mueller, Bradley M.])

**Response:** Preliminary desktop surveys have been completed for the proposed transmission line corridors and are summarized in Section 2.7 of the EIS. The USACE would provide the Seminole Tribe of Florida with these reports and any other reports as they are developed. Phase I cultural resources surveys would be conducted at the appropriate time and the results of such surveys would be provided to the Seminole Tribe of Florida through

continued consultation between the USACE and the Seminole Tribe of Florida. No changes were made to the EIS as a result of this comment.

**Comment:** Our experience has shown that archaeological sites in the Everglades have a high likelihood of containing burial resources (human skeletal remains, etc.). This is especially relevant with regards to the West Consensus Corridor. It is the Tribes position that the remains of ancestors should be left undisturbed and every effort should be made to identify sites in advance of any ground disturbance, and those sites avoided whenever feasible. We also request that at the appropriate time, prior to any ground disturbing activities, the USACE, the STOF-THPO, and other appropriate parties develop protocols to follow in the event of the unanticipated discovery of human remains during any phase of the proposed undertaking. (0727-2 [Mueller, Bradley M.])

**Response:** These comments from the Seminole Tribe of Florida provide information about the likely presence of sensitive cultural resources, including those containing human remains, within the transmission line corridors, and especially the western corridors, and that the Tribe's preferred treatment for human remains is preservation in place. They also state that efforts should be made to identify such resources prior to disturbance, and that appropriate procedures for unanticipated finds should be in place prior to construction. The EIS in Section 2.7 indicates that both pre-construction surveys and unanticipated finds procedures would be required by the USACE and other agencies prior to construction. Regarding unanticipated finds procedures, the special conditions that the USACE typically uses for permitting actions dictate that all work and ground-disturbing activities shall halt within a 100-meter radius of any unanticipated discovery of cultural materials or human remains, and that the USACE shall notify the Florida SHPO and appropriate THPOs of the finds. Work cannot resume until an appropriate treatment has been determined. In response, Sections 2.7, 4.6, and 5.6 of the EIS have been modified to include information about sensitive cultural resources provided by the Tribe.

**Comment:** At least one area considered sacred to the Seminole, a natural spring, is located near a portion of the East Preferred Corridor. We are concerned with the possible effects of transmission line construction on the hydrology of that area and request that sufficient technical analysis be conducted to assess if water flowing to the spring would be interrupted or adversely affected. We would also ask that the USACE make available an appropriate, knowledgeable individual to discuss the results of such investigations with members of the Tribal community if needed. (0727-3 [Mueller, Bradley M.])

**Response:** Regarding the sacred area near the eastern transmission line corridor, Sections 2.7, 4.6, and 5.6 of the EIS have been modified to include information about cultural resources provided by the tribe. Regarding the effects of transmission line construction on the hydrology of the spring, FPL's ER indicates that local dewatering might be required at some of the transmission tower bases. This would result in a temporary drop in the groundwater levels near the excavation of that particular transmission tower, but the groundwater levels are expected to return to normal after the tower base is in place and backfilled. BMP's and requirements of the construction permits would assure no introduction of contaminants that could affect the quality of the groundwater that may eventually reach springs or wells near the transmission tower construction site. If necessary, the USACE would perform analyses to determine the effects of transmission line construction on water flowing to the spring, and can provide an appropriate knowledgeable individual to discuss the results of the investigation with members of the tribal community.

**Comment:** [I]n the USACE's April 4th, 2015 public notice announcing the release and availability of the Turkey Point draft EIS, it is stated that a short section of the transmission line, presumably the East Preferred Corridor, will cross beneath the Miami River as an underground cable system. The area proposed for this crossing, east of Interstate I-95, is rich in aboriginal archaeological sites including sites that have been shown to contain numerous burials. We caution that any ground disturbing activities in these areas has a heightened potential for encountering cultural and/or burial resources and we would like to be consulted further when details of such a river crossing are being developed. We again recommend that protocols be developed in consultation with the STOF-THPO to deal with the unanticipated discovery of human remains. (**0727-4** [Mueller, Bradley M.])

**Response:** This comment from the Seminole Tribe of Florida provides information about the likely presence of subsurface cultural resources, including those containing burials within the Miami River crossing for the eastern transmission corridor. The tribe requests that they be consulted as details of the crossing are developed. Sections 2.7, 4.6 and 5.6 of the EIS have been modified to include information about cultural resources provided by the tribe. Details of the crossing would be discussed during ongoing consultation between the USACE and the Seminole Tribe of Florida. Ongoing consultation would also ensure that the Seminole Tribe of Florida is involved in the development of treatment protocols for the unanticipated discovery of human remains.

**Comment:** Please continue to consult with us on this project since it is occurring within an area that is especially important to the Tribe. (0727-5 [Mueller, Bradley M.])

**Response:** This comment from the Seminole Tribe of Florida reiterates the request for further government-to-government consultation regarding the project. In response, Section 2.7 of the EIS has been modified to include meetings held among the NRC, USACE, and the Tribe in June 2015, and to clarify that consultation with the Tribe is ongoing.

**Comment:** Thank you for providing the Florida State Historic Preservation Officer with the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Turkey Point Units 6 and 7 combined license application. Pursuant to a letter from NRC dated October 23, 2014, I note that the U.S. Army Corps of Engineers is now the lead federal agency for compliance with Section 106 of the National Historic Preservation Act of 1966, and that the Section 106 process will not be completed through the completion of this NEPA document. (0139-1 [Parsons, Timothy A.])

**Response:** This comment acknowledges that the USACE would serve as the lead Federal agency for NHPA Section 106, and that the Section 106 process would not be completed through the NEPA document. These decisions are described in Section 2.7 of the EIS and no changes were made as a result of this comment.

**Comment:** DEIS Subsection 2.7.1, Page 2-195, Lines 1-2: The DEIS states: "Lake Okeechobee and Everglades regions, and **Fort Davis**...became a base of operations." The name should be **Fort Dallas** as indicated in Cultural Resource Assessment Survey for the Turkey Point Units 6 & 7 Site, Associated Non-Linear Facilities, and Spoils Areas on Plant Property [Enclosure 1 of FPL's response to NRC RAI No. 2.7-1 (eRAI 5480), DEIS reference (FPL2011-TN1512)]. (emphasis added) (**0619-3-14** [Maher, William])

**Response:** Section 2.7 was revised to read Fort Dallas.

### E.2.14 Comments Concerning Meteorology and Air Quality

**Comment:** Greenhouse Gases (GHGs). EPA appreciates the thorough GHG analysis in the DEIS, which evaluated the carbon dioxide (CO<sub>2</sub>) equivalent emissions of the proposed two new nuclear power plants in context of building, operating, and decommissioning (Sections 4.7, 5.7.1, 6.1.3, and 6.3). NRC made conservative GHG-emission estimates by basing them on the most GHG-emission intensive nuclear technology (i.e., the uranium fuel cycle). Consequently, NRC estimated the total nuclear power plant lifecycle footprint to be 10,500,000 MT CO<sub>2</sub>e, with a 7-year preconstruction and construction phase, 40 years of operation, and 10 years of decommissioning. NRC concluded the cumulative impacts from other past, present, and reasonably foreseeable future actions on air quality resources in the geographic areas of interest would be moderate for GHGs. Additionally, NRC concluded the fossil fuel impacts, including GHG emissions, from the direct and indirect consumption of electric energy for fuelcycle operations would be small (page 6-9). *Recommendations:* EPA recommends that the NRC address the following in its FEIS: •The GHG emissions analysis used a 40-year (Section 7.6.2, p. 7-33) operation period while the Climate Change Effect analysis (Appendix J) incorporated the license renewal which could extend operation of the two reactors another 20 years. EPA recommends NRC's GHG emissions analysis use the 60-year operation period similar to that used in Appendix J. •Clarify what the uranium fuel cycle is, i.e., identify the activities associated with the production of electricity from nuclear reactions. This could be done effectively with a simple diagram. • Whether the GHG emissions analysis in the DEIS addresses the GHG emissions associated with decommissioning the existing 2 nuclear power plants (Units 3 and 4), in addition to the new ones (Units 6 and 7). EPA recommends the decommissioning of units 3 and 4 also be included as part of the GHG cumulative-effects analysis. (0617-4-9 [Mueller, Heinz J.])

**Response:** The greenhouse gas (GHG) appendix and the climate change appendix both used a 40-year period for the proposed action. The EIS has been revised to delete the sentence "If applied for and if granted, license renewal could extend operation of the reactors until 2082 and 2083" (draft EIS pages I-2, lines 37-38), because it could be interpreted as including a license renewal period in the analysis. The uranium fuel cycle is defined in Section 6.1, and a diagram of the fuel cycle appears in Figure 6-1. The GHG appendix does not include the emissions from decommissioning of the existing Units 3 and 4. As stated in EIS Section 1.2, the proposed NRC Federal action is issuance, under the provisions of 10 CFR Part 52, of COLs for authorizing the construction and operation of two new Westinghouse AP1000 reactors at the Turkey Point site while the proposed USACE Federal action is the decision about whether to issue, issue with modification, or deny a Department of the Army permit pursuant to the requirements in Clean Water Act Section 404 (40 CFR 230) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403 et seq.) to authorize certain activities potentially affecting Waters of the United States. Decommissioning of existing Units 3 and 4 is not part of the proposed Federal actions. Additionally, the decommissioning of power facilities is subject to a separate environmental review that must be conducted prior to the start of decommissioning activities in order to satisfy the requirements of 10 CFR 50.82(a)(6)(ii), which states that a licensee must not perform any decommissioning activity that causes significant environmental impacts not previously reviewed. Assessment of GHG emissions associated with decommissioning existing Units 3 and 4 will be addressed in the decommissioning environmental review, which will be conducted by the NRC when FPL decides to terminate their NRC license for Units 3 and 4. Additional information about the NRC's decommissioning environmental review process can be found on the NRC's website at:

http://www.nrc.gov/waste/decommissioning/process.html#rea.

**Comment:** All the endangered wildlife and sea mammals help us so much in our lives without us, the people, really knowing it. This breaks my heart that you people are willing to just destroy their lives and our lives by putting toxins into our air that we breath from. (**0188-1** [Frederickson, Kelly])

**Response:** The comment concerns the release of air pollutants into the environment. Airquality impacts from operation of the power plant are discussed in Section 5.7.1 and Section 5.7.2 addresses the cooling-tower impacts. Emissions from the cooling towers would be the largest source of air emissions and the air pollutant of most concern. The cooling-tower emissions would be required to adhere to the New Source Performance Standards (40 CFR 60.40Da) and the applicant would need to demonstrate compliance with national ambient airquality standards by acquiring a Prevention of Significant Deterioration (PSD) Permit before operating. In Section 5.7.2 it was concluded that air-quality impacts from operating the cooling towers would have minimal impacts. No change was made to the EIS as a result of this comment.

**Comment:** The reactors also threaten to degrade our air quality with excessive chlorides and industrial contaminants, creating more health problems for our population. (**0340-3** [Tweeton, Tanya])

**Response:** Section 5.7.2 discusses the potential impacts from the cooling-tower salt-drift deposition when using saltwater in the cooling system. Impacts were examined both within the Turkey Point site and in maximum impact locations near the site. No significant increases were found in the salinity levels in the canals or in the nearby environment. Section 5.2.1.3 discuss the potential impacts to the environment from the cooling-tower salt-drift deposition when using treated reclaimed water in the cooling system. The review team considered Florida requirements for reclaimed wastewater and concluded that compliance with Florida requirements for the treatment and use of reclaimed wastewater by FPL would be protective of public health. No change was made to the EIS as a result of this comment.

**Comment:** Turkey Point is located on a coastline in an area that is susceptible to hurricanes, flooding, storm surges, and even the possibility of a tsunami. (**0710-3** [Platt, George Seth])

**Comment:** Hurricane Andrew. This agency, the Nuclear Regulatory Commission, did a complete study on the impacts of Hurricane Andrew, which basically it was a direct impact, August 1992, Cat. 4 hurricane hit, Hurricane Andrew. This is what they identified happened: Loss of all offsite power for more than five days. No offsite power. The plant ran off the generators. Complete loss of communications systems. Closure of the access road. One access road was closed. The high water tank collapsed onto the fire water system rendering the fire protection system inoperable. This is the NRC's report. The potential collapse of the damaged Unit 1 chimney onto the diesel generator buildings. (0721-22-9 [Schwartz, Matthew])

**Comment:** What we have here is a problem that really needs to be recognized for what it is. We are on the verge of a possible calamity. Had Hurricane Andrew been ten miles further to the south we wouldn't even be sitting here. They would've had a 17 foot tidal surge instead of just a 5 foot one because of the rotation. (0721-6-2 [Harris, Walter])

**Response:** EIS Section 2.9.1.4 discusses the potential for severe weather events, including hurricanes, at the Turkey Point site. The historical record observed that three hurricanes make landfall per decade within 100 mi of the Turkey Point site. As part of the NRC's site safety review, the staff will consider whether the site is suitable based on the potential for flooding,

storm surge, and the potential for tsunami. The results of this review will be found in the site Safety Evaluation Report. This issue is not within the scope of the environmental review. No change was made to the EIS as a result of these comments.

**Comment:** Now, this brings me to the subject of the aerosols. So the new technology brings down most of the aerosols back into the towers, but there is still going to be about 4.2 million gallons a year of this stuff strewn out across the site. We don't know the spatial distribution. The modelers do know; they didn't put it in the Impact Statement. (0721-2-11 [Stoddard, Philip K.])

**Response:** Section 5.7.2 of the EIS discusses the spatial distribution of the salt-deposition analysis from cooling-tower drift using saltwater from the RCWs as the primary cooling-water source. Maximum deposition rates as high as 105 kg/ha/mo were found near the makeup-water reservoir, decreasing to 1 to 70 kg/ha/mo in the cooling canals. Salt-deposition rates greater than 10 kg/ha/mo were generally confined to the Turkey Point site except for areas adjacent to the southeastern portion of the site. No change was made to the EIS as a result of this comment.

**Comment:** What's going to be coming out of those cooling towers? What are people going to be breathing in, (**0723-9-17** [Schwartz, Matthew])

**Response:** In Section 5.2.1.3, the NRC discusses what is emitted from the cooling towers. Small droplets of water (drift) and salt particles would be emitted from the cooling towers during operation of the power plant. As a result, salt along with any potential contaminants in the cooling water would be deposited on the area surrounding the cooling towers. When using treated reclaimed wastewater for makeup water in addition to salt, priority pollutants (metals and organic compounds) and emerging pollutants of concern (EPOCs) could be contained in the drift. No changes was made to the EIS as a result of this comment.

**Comment:** And then she goes on to say, "regarding nuclear energy it is especially important as provided about 12 percent of the State's electricity but accounts for a full 98 percent of the emissions-free electricity." So emission-free electricity. (0722-9-10 [Riley, Bill])

**Comment:** I have two articles that I'd like to leave with you. I won't go into them too much other than to say one is in the -- one was in the "Sun Sentinel" by the ex-governor of New Jersey. And just a quick comment quote, "moreover, nuclear energy provides 98 percent of Florida's carbon-free electricity. Because nuclear plants produce no greenhouse gases, Florida has -- reactors have effectively offset 15 billion tons of carbon emissions each year. That equivalence of removing three million cars from the roadways." And that was by Christine Whitman. (0722-9-8 [Riley, Bill])

**Comment:** And whereas additional nuclear power generation will provide reliable and cost effective electricity to maintain our standard of living and economic vitality without additional gas emissions. (0723-2-5 [Trowbridge, Mark])

**Response:** These comments provide general information in support of nuclear power. They do not provide any specific information related to the environmental effects of the proposed action. No changes were made to the EIS as a result of this comment.

**Comment:** And then I see that it says here that: Additional plan treatment of the reclaimed wastewater prior to use also is expected. Therefore, the actual concentration of these constituents in drift could be either higher or lower. (**0721-11-7** [Roff, Rhonda])

**Response:** This statement is in regard to the inhalation screening risk in drift from reclaimed water discussed in Section 5.8.5, Footnote (a) in Table 5-8, indicating "higher or lower" has been revised to indicate "lower" concentration only. Treatment of the reclaimed water should only lower concentration and the conservative estimates used in the air-dispersion modeling (Section 5.2.1.3) also support the conclusion that the estimated concentrations in Table 5-8 are maximum concentrations. Table 5-8 has been revised in response to this comment.

**Comment:** My background is as an environmental chemist, so I stress out a lot about things that Mayor Stoddard was talking about, about the aerosol drift and the accumulation. And it is kind of surprising to look at the uncertainties in the EIS regarding that. (0721-11-1 [Roff, Rhonda])

**Response:** Section 5.3.1.1 discusses the impacts of accumulation from aerosol drift. The section broadly discusses the possible impact from salt deposition onto leaves, surface water, and accumulation in soil on vegetation found within and near the facility as well as possible impacts on fish and other wildlife. No changes were made to the EIS as a result of this comment.

Comment: Air Quality. Air Quality Criteria Pollutants. Section 5.7.1 discusses the potential impacts of criteria pollutants associated with operation of Units 6 and 7. The analysis indicates that the principal emissions associated with the new units are emissions of particulate matter with an aerodynamic diameter of 10 microns or less (PM10). Table 5-7 includes estimates of anticipated emissions of criteria pollutants associated with the operation of proposed units 6 and 7. Emission factors from PM10 are cited for the maximum mechanical drift from all six cooling towers. However, it is unclear what assumptions were used to estimate emissions of PM2.5. Section 7.6. I discusses the cumulative impacts of criteria air pollutants and indicates that the operation of Units 6 and 7 cooling towers would result in plumes and salt deposition, including "significant salt deposits" when using make-up water, with the highest concentrations occurring within the Turkey Point site, specifically including deposition on the current industrial cooling canals. Hence, the impacts of salinity of the cooling canals cannot be separated from impacts of the new units. Potential impacts related to interactions of the Unit 6 and 7 cooling towers with the emissions from the stack of the combined-cycle generating Unit 5 were not discussed in the impacts or cumulative impacts sections. The analysis indicates that CALPUFF modelling was performed to determine the impact area, however, this analysis was not included in the appendices. Hence, it is not possible to determine if interactions between these stacks may occur. Of particular concern is the formation of PM2.5 from nitrates, ammonium, or other salts. Table 5-1, which addresses the constituent salts, does not address whether ammonium salts are present. It is not clear from the discussion whether ammonia was not present in samples from the reclaimed water facility, or whether no tests were conducted for this constituent. **Recommendations:** EPA recommends that a report documenting the findings of the plume modelling be included in the FEIS appendices, including information on stack height and interaction between the emissions plumes from Units 5, 6, and 7. In addition, EPA recommends clarification of Tables 5-1 and 5-7 or related text to include assumptions used to estimate emissions of PM2.5 from the cooling towers, and the presence of ammonia or ammonium salts related to the use of reclaimed water from the sewage treatment facility. (0617-2-3 [Mueller, Heinz J.])

**Response:** In Section 5.7, Table 5-7 reports particulate matter with an aerodynamic diameter of 10 microns or less ( $PM_{-10}$ ) and particulate matter with an aerodynamic diameter of 2.5 microns or less ( $PM_{-2.5}$ ) emission rates from cooling towers. The basis for the  $PM_{10}$  and the  $PM_{2.5}$  emissions for the escape of the dissolved salts that could be emitted from cooling-tower outflow as drift is the peak in  $PM_{10}$  and  $PM_{2.5}$  emission rate, which occurs at 4,000 ppm total

dissolved salts for  $PM_{10}$  and 5,000 ppm for  $PM_{2.5}$  based on the methodology of Reisman and Frisbie (2002-TN1022). The staff identified from the FPL Response to NRC RAI No. 4.2-2 (RAI 5765; FPL 2012-TN263) that based on measurements in reclaimed water ammonia (as N) concentrations ranged from 19.1 to 29.0 mg/L from 5 yearly samples. The maximum ammonia found in the reclaimed water along with the ammonia emissions from Unit 5 was then used as input to the CALPUFF dispersion model to determine the maximum ammonia concentrations in the ambient air that would be available to interact with Unit 5's emissions of oxides of sulfur  $(SO_x)$  and nitrogen oxides  $(NO_x)$ . The maximum 24-hour and annual average ammonia concentrations were 14.7 and 0.60 ppb, respectively. A background concentration of 0.35 ppb was added to these modeled concentrations to estimate maximum ammonia concentration levels. The background concentrations were based on monitoring data for a suburban Florida location (Saylor et al. 2015-TN4605). These ammonia concentrations were then used as the background ammonia level in the CALPUFF model. The conservative MESOPUFF II chemical scheme option in the model was applied to predict nitrate and sulfate particulate matter concentrations. In response to RAI 8508 FPL provided the location of the Unit 5 exhaust stacks, ammonia,  $SO_x$  and  $NO_x$  emission rates for the annual average and maximum short-term period (FPL 2016-TN4501). These emissions were then modeled with CALPUFF to determine the maximum annual average and 24-hour sulfate and nitrate aerosol concentration. Results from these simulations showed that the maximum increase in total particulate matter concentration (sulfate plus nitrate) for 24-hour average was less than 0.05  $\mu$ g/m<sup>3</sup> and long-term was less than 0.0003  $\mu$ g/m<sup>3</sup>. These changes would be difficult to measure and are less than 0.2 percent of the national ambient air quality standard. On this basis, the review team concludes that the impacts of Unit 5 operating concurrently with the cooling towers of Units 6 and 7 on air quality would be SMALL and warrant no further mitigation.

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 2.9.4, Page 2-210, Lines 8-9 "... backup meteorological tower is located about **0.4 mi northwest** of...proposed Units 6 and 7." ER Subsection 6.4.2.2 "...the LU tower is currently approximately **0.30 miles northwest** of Units 6 & 7...." (0619-2-22 [Maher, William])

**Response:** The text in Section 2.9 was revised to be consistent with Revision 6 of the ER.

# E.2.15 Comments Concerning Health - Nonradiological

**Comment:** I am concerned as well about the health and well being of individuals, including children who live close to the lines as I believe that there is the potential of cancer from these high voltage power lines. Whether you believe that there is or is not such danger, it has not yet been sufficiently negated by any study that I have read, and you should err towards caution as opposed to err towards risk. Also, the people who traverse the area regularly (as there is a bike path/walking path adjacent to SW 151 Avenue) would also be placed at risk. (0073-5 [Commenters, Multiple])

**Comment:** 5. The health and well being of individuals, as well as the people who traverse the area regularly on bikes or on foot, including children who live close to these proposed lines, is a real cancer concern. Whether or not you choose to acknowledge this danger, keep in mind that such has not been negated by any study I have read and it is always better to err towards caution. Should these lines be placed in the neighborhood, they should be buried underground to a level that will not pies a threat to those traversing the area or to the neighborhood. (0077-4 [de Armas, Maria Cristina])

**Comment:** We all know that High voltage transmission towers produce an unhealthy environment even making sick to people who live under these towers. (**0088-7** [Lange, Alexandra])

**Comment:** The lines that will carry this high voltage for miles to its ultimate use will be going through populated areas that cannot be protected adequately from the electro-magnetic radiation. (0337-3 [Philips, Sally B.])

**Comment:** I am concerned as well about the health and well being of individuals, including children who live close to the lines. Whether you believe that there is or is not such danger, it has not yet been sufficiently negated by any study that I have read, and you should err towards caution as opposed to err towards risk. Also, the people who traverse the area regularly (as there is a bike path/walking path adjacent to SW I st A venue) would also be placed at risk. (?) (**0685-2** [Batista, Carlos])

**Comment:** [W]e're going to have hundred plus lines on poles running down on street on First Avenue from U.S. 1, through our neighborhood, I'd say 150 feet from my home. Homes around me, including homes where kids are, there are babies, there are toddlers, they are teenagers, and there are us, and we don't want it. I don't care whether you believe in that radiation or not. Wouldn't you want to err on the side of caution? (**0721-26-1** [Koenigsberg, Linda])

**Comment:** Also, I mean, you know, I'm concerned for the health and safety of everyone in the Roads. My neighbors and myself included, especially children who live close to the lines that because, you know, there could be cancer risks with those high voltage lines right there to everyone. And so, you know, I don't know why we need to put ourselves at risk of cancer and other problems with those things there that nobody wants. (0721-31-8 [Almirola, Alejandro])

**Response:** These comments relate to the impacts of the electromagnetic fields (EMFs) associated with the transmission lines and the applicable regulatory standards. As discussed in Sections 3.2.2.3 and 5.8.3 of the EIS, all transmission lines would comply with National Electric Safety Code (NESC) provisions, which are protective of human health. No change was made in the EIS as a result of these comments.

**Comment:** DEIS Section 4.8, Page 4-129, Lines 14-16: The DEIS states: "Extrapolating from data in the ER (FPL 2014-TN4058), in 2010 approximately **87,000 people** lived within 10 mi of the site and approximately **50,000 others** are estimated to have worked or visited within this radius..." The DEIS references the ER for this data; however, ER Table 2.5-1 and FSAR Subsection 2.1.3.1 show **192,594 combined residents and transients** within 10 miles of Turkey Point. FSAR Subsection 2.1.3.3 indicates that 53,547 of these people are transients. Subtracting yields **139,047 residents, not 87,000**. (emphasis added) (**0619-4-13** [Maher, William])

**Response:** The text in EIS Section 4.8, Nonradiological Human Health, regarding population numbers within 10 mi of the site was updated to be consistent with data provided in the FSAR (Final Safety Analysis Report), Subsection 2.1.3.3.

**Comment:** Numerical value inconsistencies within the draft EIS: Subsection 2.10.1.2, Page 2-212, Lines 36-39 "As seen in Table 2-57, rates of injuries and illnesses per 100 full-time workers for years 2003-2010 in the **heavy and civil engineering construction sector**-- an important sector baseline for assessing building impacts (Chapter 4) -- ranged from 3.8 to 5.9 for the United States and **2.4** to 7.0 for Florida." DEIS Subsection 4.8.1.2, Page 4-130, Lines 21-23 DEIS Table 2-57 "As noted in Section 2.10, the total recordable cases rate published by the BLS for 2010 for heavy and civil engineering construction was 3.8 per 100 full-time workers

in the United States overall and **3.4** per 100 full-time workers in Florida." DEIS Table 2-57 indicates, for the heavy and civil engineering construction sector for Florida, the range is **3.4** to 7.0 per 100 full-time workers in Florida. (**0619-2-32** [Maher, William])

**Comment:** Numerical value inconsistencies within the draft EIS: Subsection 2.10.1.2, Page 2-214, Lines 15-16 "As seen in Table 2-58, fatal injury rates for utility operations ranged from 3.6 to **6.1** per 100,000 workers." DEIS Table 2-58 DEIS Table 2-58 indicates the range is 3.6 to **6.3**. (**0619-2-33** [Maher, William])

**Comment:** DEIS Subsection 4.8.2, Page 4-132, Lines 21-32: The DEIS states: "Similarly, the nearest residences at Homestead Bayfront Park (2.7 mi from the proposed units)...which would be close to the measured **background** noise levels of 49.4 dBA for the daytime and **47.3 dBA for the nighttime**...The day-care facility (2 mi from the proposed units), would experience a maximum noise level during the site preparation and construction phase of about 49.6 dBA **during the daytime** and **51.1 dBA during the nighttime**..." The data in this paragraph references the noise study in the Site Certification Application (SCA). However, Table 5.7.4-3 (and Table 5.7.4-5) of the SCA reports the **background nighttime** sound pressure level for site S7 (Homestead Bayfront Park) value to be **47.2 dBA**. Additionally, the maximum sound pressure level for site S6 (day-care facility) during pre-construction and construction as reported from the noise study in the Site Certification Application (SCA), Table 5.7.4-4 of the SCA, are **50.2 dBA for daytime** and **50.4 dBA for nighttime** for preconstruction. And, Table 5.7.4-6 on construction reports **49.2 dBA for daytime** and **49.5 dBA for nighttime**. The DEIS is reporting values for site S5 (the northern FPL boundary). (emphasis added) (**0619-4-14** [Maher, William])

**Response:** The text in the Nonradiological Human Health Sections 2.10 and 4.8 of the EIS was revised to be consistent with the referenced material.

**Comment:** The vented hot steam will likely contain household chemicals, pharmaceuticals, bacteria and viruses that end up in the county's wastewater. Even in small amounts, these can affect human health[.] (**0078-6** [Wilansky, Laura Sue])

**Comment:** Aerosol droplets known as "drift" can travel far and contain pharmaceuticals, cleaners, and detergents and other household chemicals as well as bacteria which can grow inside the cooling towers themselves as bacterial slime. This all impacts the human environment as well as dozens of threatened species in the vicinity. (0153-2 [Goldman, Emanuel])

**Comment:** Aerosol droplets known as "drift" can travel far and contain pharmaceuticals, cleaners, detergents and other household chemicals, as well as viruses and bacteria (which can grow inside the cooling towers themselves as bacterial slime). Impacts on the human environment as well as on dozens of endangered and threatened species in the vicinity are largely unknown. (**0240-4** [Commenters, Multiple])

**Comment:** The vented hot steam will likely contain household chemicals, pharmaceuticals, bacteria and viruses that end up in the countys wastewater. Even in small amounts, these can affect human health. (**0353-4** [Royce, M.])

**Comment:** The vented hot steam will likely contain household chemicals, pharmaceuticals, bacteria and viruses that end up in the countys wastewater. Even in small amounts, these can affect human health[.] (0356-10 [Shlackman, Jed])

**Comment:** I do NOT want a CHANCE of the vented hot steam which likely contains household chemicals, pharmaceuticals, bacteria and viruses ending up in the countys wastewater. Even in small amounts, these can affect human health. (**0362-2** [Hurley, Paula])

**Comment:** The vented hot steam will likely contain household chemicals, pharmaceuticals, bacteria and viruses that end up in the county's wastewater. Even in small amounts, these can affect human health[.] (0366-4 [Griffith, Ed and Harriet])

**Comment:** The vented hot steam will likely contain household chemicals, pharmaceuticals, bacteria and viruses that end up in the countys wastewater. (**0370-9** [Vayu, Satya])

**Comment:** The primary source of cooling water for the proposed Turkey Point 6 and 7 reactors is waste water from Miami. Some of this water will be turned into steam and released into the surrounding environment, along with its constituent pesticides, inorganic solvents, industrial wastes, household chemicals, and dissolved pharmaceuticals. This waste water turned into steam will spread out into clouds over the entire population of Miami-Dade and Broward counties and rain down on the population with its chemical, waste, and pharmaceutical components, creating polluted air vapors and polluted rainfall. (**0615-2-19** [Bethune, David])

**Comment:** It seems that the ingredients for a 'Perfect Storm' are being assembled as I read that you will also be adding 'wastewater' to the mix with its intendant biohazards. (**0639-3** [Haselhurst, Richard])

**Comment:** There is nothing safe about two new 1,117 megawatt nuclear reactors being built on Floridas east coast, especially because they will be cooled by 90 million gallon per day of recycled Miami-Dade County sewage and wastewater. This water will not be pure water and some will be released over Biscayne Bay and surrounding wetlands along with steam in the planned cooling towers. Aerosol droplets known as "drift" can travel far and contain pharmaceuticals, cleaners, detergents and other household chemicals, as well as viruses and bacteria (which can grow inside the cooling towers themselves as bacterial slime). Impacts on the human environment as well as on dozens of endangered and threatened species in the vicinity are largely unknown. (**0674-2** [Dwyer, Karen])

**Comment:** The vented hot steam will likely contain household chemicals, pharmaceuticals, bacteria and viruses that end up in the countys wastewater. Even in small amounts, these can affect human health[.] (0676-6 [Kassel, Kerul])

**Comment:** [W]e have all kinds of contaminants through drift; we have waste products to manage. I look at the list of chemicals including the metals, including the anti-scaling, including the things that we know are toxic, including the things that are considered endocrine disruptors. We don't know what safe level they are. We don't know their synergistic effects. (0721-11-6 [Roff, Rhonda])

**Comment:** [F]or the rest of the year chemically laden reclaimed water with descaling chemicals added to the water by FPL will fall within a 1 mile radius. This will fall on workers there, and on already salinity challenged cooling canals for Turkey Point 3 and 4. (**0721-12-3** [White, Barry J.])

**Comment:** There's a whole panoply of chemicals that are listed, many of them are endocrine disruptors. The amounts are small, but endocrine disruptors work in small amounts. There is nothing in the Environmental Impact Statement that lets a scientist, such as myself, determine what safe levels actually are relative to the levels that are going to be produced. Furthermore, at

the National Pesticide Forum this weekend, everybody was talking about synergistic effects, all the major eco-toxicologists who study endocrine disruptors, talk about synergistic effects. There's no indicator of synergistic effects in the Environmental Impact Statement. (0721-2-12 [Stoddard, Philip K.])

**Comment:** Let's look at the cooling towers a little bit and these 90 million gallons a day of wastewater that they're going to be putting in there. What's in that wastewater? I want to know everything that's in that wastewater. We, as people, need to know what's going into --excuse me, we just had a meltdown --what's going in to this wastewater that they're pouring through this nuclear power plant? Is it going to be pure H2O? No. I started reading the research from people who deal with wastewater experts, engineers. It ain't pure. There's thousands --think of everything you buy at a CVS. Think about all the things we put down our toilet bowls; the cleaning fluids, the pharmaceuticals, the bacteria, the viruses. All of that's going into that wastewater. How clean could they get it? It ain't pure. (0721-22-12 [Schwartz, Matthew])

**Comment:** We've heard about the 90 million gallons of wastewater, the chemicals and the pollutants that would be in that water, how that water is going to be disbursed, aerosolized[.] (**0721-28-6** [Wilansky, Laura Sue])

**Response:** These comments express concern that the use of reclaimed wastewater for cooling of Turkey Point Units 6 and 7 could result in the release of additional etiological and chemical agents in the cooling-tower drift. Sections 5.3.1 and 5.3.2 discuss the relative deposition of a number of contaminants of concern that may be present in reclaimed wastewater and concluded that the expected trace amounts would have negligible effects due to the extremely low concentration and dilution in receiving water bodies. The review team considered Florida requirements for reclaimed wastewater and concluded that compliance with Florida requirements for the treatment and use of reclaimed wastewater by FPL would be protective of public health. No changes were made to the EIS as a result of these comments.

**Comment:** Nuclear expansion is not going to be good for public health or environment at Biscayne National Park. Why don't you really admit this? One more dollar profit is really not everything to you, is it? (0726-1 [Poolos, Hazel])

**Response:** The EIS was developed to disclose the environmental and health impacts of building and operating the proposed Turkey Point Units 6 and 7. The impacts of building the units are described in Chapter 4 and the impacts of operating the units are described in Chapter 5. Nonradiological health impacts are described in Sections 4.8 and 5.8 of the EIS. Section 5.9 of the EIS describes the radiological impacts of operating the proposed units. No changes were made to the EIS in response to this comment.

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 4.8.1.2, Page 4-130, Lines 31-33 "The resulting estimates are an annual average of **89** (based on U.S. data) and **96** (based on Florida data) recordable cases and a peak 12-month amount (months 34 to 45) of **162** (U.S.) and **174** (Florida) recordable cases." ER Table 4.8-1 ER Table 4.8-1 indicates: the Incidence at US Rate annual average as **86**; TRC Incidence at FL Rate annual average as **93**; TRC Incidence at US Rate Peak 12-month period as **161**; and TRC Incidence at FL Rate 12-month period as **173**. (DEIS values are consistent with an earlier revision for the source.) (**0619-2-26** [Maher, William])

**Comment:** DEIS Section 4.8, Page 4-129, Lines 12-13: The DEIS states: "The area south and southwest of the site consists primarily of marshland and glades, and contains no resident

human population." However, ER Table 2.5-1 shows 2,249 people living to the south (ranging from 5 to 30 miles) and 15 people living to the southwest (ranging from 40 to 50 miles). (0619-4-12 [Maher, William])

#### **Response:** The text in Section 4.8 was revised to be consistent with Revision 6 of the ER.

**Comment:** The FEIS should include detailed information regarding impacts associated with potential exceedances of the NNC. The Florida Department of Environmental Protection (FDEP) approved NNC water quality standards for estuaries including Biscayne Bay. However, there is no discussion in the DEIS regarding the project's potential impacts regarding the NNC and Biscayne Bay. (0617-1-35 [Mueller, Heinz J.])

**Comment:** EPA acknowledges that there are no current exceedances of the NNC. However, the DEIS should evaluate the future project in the context of potential NNC impacts and possible related algal blooms beyond the IWF. EPA requests that the NRC better describe the existing condition of the current operations of Units 3 and 4 and related water quality impacts in the FEIS and, if available, disclose the results of the FPL studies discussed in the DEIS. The EPA is concerned that the combined and additional wastewater discharges into the IWF could potentially lead to exceedances of the NNC.

**Recommendations:** The EPA is concerned that the proposed project could cause NNC exceedances within Biscayne Bay, and requests that more detailed information be provided in the FEIS. Specifically, EPA requests that the NRC consider the additive effects of all the wastewater being placed into the IWF. The FEIS should describe how the additional wastewater discharges to the IWF could potentially impact the Biscayne Aquifer, potentially increase NNC levels within Biscayne Bay and the potential for the algal bloom to expand beyond the IWF. (0617-1-36 [Mueller, Heinz J.])

**Response:** Compliance with Numerical Nutrient Criteria (NNC) is a regulatory responsibility of the FDEP, not the NRC or USACE. The NNC is only of interest in this review inasmuch as it helps inform the aquatic ecologists about the thresholds of potential impacts to the aquatic ecosystems. Nonetheless, the review team did consider the incremental increase in nutrients in Biscayne Bay from drift, which is the only new source of nutrients associated with the proposed units. The staff also considered drainage and leakage from muck as a source of nutrients to the canals. While these nutrients are not new to the local environment, they would likely become more mobile and available for movement outside the boundaries of the IWF. The review team has acknowledged the subsurface migration of hypersaline water, but as discussed in Appendix G, determined that upward migration into the affected environment would be minor. Therefore, the minor incremental increase in nutrient concentration and minor potential for entering the surface of the Bay itself would be minor impact. No changes to the EIS were made based on these comments.

### E.2.16 Comments Concerning Health - Radiological

**Comment:** ESE breezes prevail, any mishap and where do you think that takes the contamination, directly over the largest concentration of human beings south of. Hello is anybody thinking?? (**0065-1** [Wilson, J. D. Bruce])

**Comment:** As previously mentioned, there is no way to guarantee that some, or many of these substances will not find their way into the local environment. Some of these substances have a

halflife of 80 million to over 700 million years! Can FPL, or the NRC guarantee they will be contained for all of that time? None of us know how to do that. (**0078-9** [Wilansky, Laura Sue])

Comment: Nuclear advocates frequently state that both xenon and krypton decay and disappear in a matter of seconds or minutes. What they don't tell us is that these isotopes decay into daughter isotopes that are extremely deadly emitters. Many credible physicians, scientists and other nuclear experts -- free of the self-interests of nuclear profits, academic sponsorship or career advancement -- have outlined the absence of epidemiological studies of certain radionuclides emitted or flushed at nuclear reactors. Dr. Helen Caldicott has elaborated the detrimental health effects of the noble gases xenon (Xe) and krypton (Kr), and she notes that these have appearance hundreds of miles from reactors believed to have emitted them. --Xenon 137, with a half-life of 3.9 minutes, converts almost immediately to the notoriously dangerous cesium 137 with a half-life of thirty years. --Krypton 90, half-life of 33 seconds, decays to rubidium 90, half-life of 2.9 minutes, then to the medically toxic strontium 90, half-life of twenty-eight years. -- Xenon 135 decays to cesium 135 with an incredibly long half-life of 3 million years. --Large amounts of xenon 133 are released at operating reactors, and although it has a relatively short half-life of 5.3 days, it remains radioactive for 106 days. --Krypton 85, which has a half-life of 10.4 years, is a powerful gamma radiation emitter. -- Argon 39 has a 265year half-life (0264-4 [Dwyer, John P.])

**Comment:** All reactors as part of normal operations regularly emit radioactive material into both the air and the cooling water used [to] manage the heat produced by the reactors. Radioactivity generated by the mining of uranium, the ore refining and enriching facilities, the fission process in reactors and the toxic radioactive waste all pose a danger to human life. Radioactive emissions that are a necessary product of nuclear power generation are linked to cancer, birth defects, developmental delays in children, reproductive problems and other chronic health issues such as heart disease. (**0511-3** [Draper, Lonnie M.])

Comment: This is simply very dangerous to our health! (0524-1 [Garcia, Alda S.])

**Comment:** The NRC cannot persist in a shell game that pretends radiation isn't both a safety and environmental concern. (**0615-1-11** [Bethune, David])

**Comment:** The most serious shortcomings in the draft EIS relate to radiation releases and accident mitigation. Although the staff present at last night's meeting tried to shift questions about radiation off to a closed-door safety review which does not allow public participation, the truth of the matter is that safety and environmental impact cannot be separated when it comes to the manufacture and release of fission products, whether intentional or unintended. Every radioactive isotope created at the proposed plants is both a safety hazard and an environmental hazard. (**0615-1-8** [Bethune, David])

**Comment:** Even precluding their release, the mere creation of radioactive isotopes such as plutonium with its 24,000 year half life poses unavoidable risks to health and the environment. (0615-1-9 [Bethune, David])

**Comment:** I have family in Florida, and am very aware of the high radiation levels they are being exposed to daily! Miami has had rad levels above 450 counts per minute almost daily! anything above 50 cpm is shelter in place! (**0624-2** [Galles, Camilla])

**Comment:** People need to check netc.com to know what we are all being poisoned with at present, and go to enenews.com to find out just what is coming your way from the nuclear power plants already spreading their poison every time they refuel! (**0624-3** [Galles, Camilla])

**Comment:** There is no safe dose and we're risking the human genome. It's madness. It's cruel to the people in the area and everyone downwind, not to mention downstream. To extend this is random premeditated murder in my opinion. It is a crime against humanity and our unborn children as well. (**0644-3** [Anonymous, Anonymous])

**Comment:** As previously mentioned, there's no way to guarantee that some or many of these substances will not find their way into the local environment. Some of them have a half-life of 80 million to over 700 million years. Can FP&L or the NRC or any of us guarantee that they'll be contained for all that time? We can't do that. (0721-28-9 [Wilansky, Laura Sue])

**Response:** The NRC's primary mission is to license and regulate the Nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment. The NRC's regulatory limits for radiological protection are set to protect workers and the public from the harmful health effects of ionizing radiation on humans. The limits are based on the recommendations of standards-setting organizations. The NRC radiation standards reflect extensive scientific study by national and international organizations and incorporate conservative assumptions and models to account for differences in gender and age so as to ensure that workers and all members of the public are adequately protected from radiation.

The NRC disagrees with the comments that "[t]here is no safe dose" or that the existing population in the area of the Turkey Point site is exposed to high levels of radiation. The dose standards are set conservatively by NRC based on the conclusions and recommendations of numerous national and international expert panels in part to account for the potential uncertainties. These dose standards are based on the linear, no-threshold dose-response model described in the Biological Effects of Ionizing Radiation (BEIR) VII report. The report states "Lower doses would produce proportionally lower risks." It does continue to support the conclusion that there is some amount of cancer risk associated with any amount of radiation exposure and the risk increases with exposure and exposure rate. It also concludes that the risk of cancer induction at the dose levels in the NRC's and EPA's radiation standards is very small.

As reported to the Commission in SECY-05-0202 (Staff Review of the National Academies Study of the Health Risks From Exposure to Low Levels of Ionizing Radiation (BEIR VII) -October 29, 2005), the staff stated "that the findings presented in the National Academies BEIR VII report contribute to our understanding of the health risks from exposure to ionizing radiation. The major conclusion is that current scientific evidence is consistent with the hypothesis that there is a linear, no-threshold dose response relationship between exposure to ionizing radiation and the development of cancer in humans. This conclusion is consistent with the system of radiological protection that the NRC uses to develop its regulations. Therefore, the NRC regulations continue to be adequately protective of the public health and safety and the environment."

As discussed in Sections 2.11 and 5.9.6 of this EIS, the amount of radioactive material released from nuclear power facilities is well measured, well monitored, and known to be very small. The doses of radiation received by members of the public as a result of exposure due to nuclear power facilities are very low (i.e., less than a few millirem). To put this in perspective, the

average dose per individual in this country is approximately 360 millirems from natural sources of radiation (NRCP Report # 160 (NRCP 2009-TN420)). Radiation from natural and man-made sources is not different in its properties or effects. To ensure that the nuclear power plants are operated safely within radiation protection requirements, the NRC licenses the plants to operate, licenses the plant operators, and establishes license conditions for the safe operation of each plant. The NRC provides continual oversight of plants through its Reactor Oversight Process to verify that they are being operated in accordance with NRC rules and regulations.

The comments do not provide any information that was not already considered in the evaluation in the draft EIS, and no changes were made to the EIS as a result of these comments.

**Comment:** The municipalities of Homestead and Florida City have allowed extensive residential development east of U.S. and within a few miles of the Turkey Point plant. Moreover, most of the most populous areas of Miami-Dade County are downwind of the plant and within a few dozen miles of it. Please note the following: The RPHP "Tooth Fairy Project-" grew out of the work of Dr. Jay Gould, Director of the Radiation and Public Health Project (RPHP) and author of The Enemy Within: The High Cost of Living Near Nuclear Reactors. By analyzing 50 years of US National Cancer Institute data, Dr. Gould proved that.....of the 3,000-odd counties in the United States, women living in about 1,300 nuclear counties (located within 100 miles of a reactor) are at the greatest risk of dying of breast cancer. Dr. Gould found even higher risks for prostate cancer among men living in nuclear counties. (**0093-4** [DuPriest, William Robert])

**Response:** As presented in the public summary introduction of the BEIR VII report (National Research Council 2006-TN296), the health risks from exposure to radiation are related to the dose one receives:

"Specifically, substantial evidence exists that exposure to high levels of ionizing radiation can cause illness or death. Further, scientists have long known that in addition to cancer, ionizing radiation at high doses causes mental retardation in the children of mothers exposed to radiation during pregnancy. Recently, data from atomic bomb survivors suggest that high doses are also connected to other health effects such as heart disease and stroke."

# And,

"This report, BEIR VII, focuses on the health effects of low levels of low linear energy transfer (LET) ionizing radiation. Low-LET radiation deposits less energy in the cell along the radiation path and is considered less destructive per radiation track than high-LET radiation. Examples of low-LET radiation, the subject of this report, include X-rays and  $\gamma$ -rays (gamma rays). Health effects of concern include cancer, hereditary diseases, and other effects, such as heart disease."

The occurrence of cancers is known to be related to a number of factors, including age, sex, time, and ethnicity, as well as exposure to environmental agents such as ionizing radiation. Understanding the role of exposure in the occurrence of cancer in the presence of modifying effects is a difficult problem. Contributing to the difficulty are the stochastic nature of cancer occurrence, both background and exposure related, and the fact that radiogenic cancers are indistinguishable from nonradiogenic cancers. Therefore, the BEIR committees have judged that the linear no-threshold model (LNT) provided the most reasonable description of the relation between low-dose exposures to ionizing radiation and the incidence of solid cancers that are induced by ionizing radiation. Simply stated, the NRC currently assumes that any increase in dose, no matter how small, results in an incremental increase in health risk.

The NRC accepts this theory as a conservative model for estimating health risks from radiation exposure and recognizes that the model probably overestimates those risks. On the basis of this theory, the NRC conservatively establishes limits for radioactive effluents and radiation exposures for workers and members of the public, as found in 10 CFR Part 20.

As discussed in Sections 2.11 and 5.9, the amount of radioactive material released from Turkey Point Units 3 and 4 is well measured, well monitored, and known to be very small. Based on this operational experience and the new facility design, the NRC believes that the amount of radioactive material to be released from the Turkey Point, Units 6 and 7 would also be well measured and well monitored, and the NRC also believes the release would be very small. The total whole body dose from both ingested radionuclides due to liquid and gaseous releases and direct radiation from the Turkey Point site is and would be negligible compared with the public's exposure from natural background radiation alone (approximately 360 mrem per year), and 620 millirem per year from the combination of natural background, medical irradiation, and radiation from consumer products (NRCP 2009-TN420).

Although a number of studies of cancer incidence in the vicinity of nuclear power facilities have been conducted, there are no studies to date that are accepted by the scientific community that show a correlation between radiation dose from nuclear power facilities and cancer incidence in the general public. Specific studies accepted as scientifically valid include:

- In 1990, at the request of Congress, the National Cancer Institute conducted a study of cancer mortality rates around 52 nuclear power plants and 10 other nuclear facilities. The study covered the period from 1950 to 1984 and evaluated the change in mortality rates before and during facility operations. The study concluded that there was no evidence that nuclear facilities may be linked causally with excess deaths from leukemia or from other cancers in populations living nearby.
- In June 2000, investigators from the University of Pittsburgh found no link between radiation released during the 1979 accident at the Three Mile Island power plant and cancer deaths among nearby residents. Their study followed 32,000 people who lived within 5 mi of the plant at the time of the accident.
- In January 2001, the Connecticut Academy of Sciences and Engineering issued a report on a study around the Haddam Neck nuclear power plant in Connecticut and concluded that radiation emissions were so low as to be negligible.
- The American Cancer Society (ACS) in 2001 concluded that although reports about cancer clusters in some communities have raised public concern, studies show that clusters do not occur more often near nuclear plants than they do by chance elsewhere in the population.

Likewise, the ACS report found no evidence that links strontium-90 with increases in breast cancer, prostate cancer, or childhood cancer rates. The ACS also found that radiation emissions from nuclear power plants are closely controlled and involve negligible levels of exposure for nearby communities.

Also in 2001, the Florida Bureau of Environmental Epidemiology reviewed claims that there are striking increases in cancer rates in southeastern Florida counties caused by increased radiation exposures from nuclear power plants. Using the same data to reconstruct the calculations on which the claims were based, Florida officials were not able to identify unusually

high rates of cancers in these counties compared with the rest of the state of Florida and the nation.

• In 2000, the Illinois Public Health Department compared childhood cancer statistics for counties with nuclear power plants to similar counties without nuclear plants and found no statistically significant difference.

The NRC has reviewed a number of studies by the Radiation Public Health Project (RPHP) that assert that levels of radioactive strontium-90 are rising in the environment and that these increased levels are responsible for increases in cancers, particularly cancers in children, and infant mortality. The group claims that radioactive effluents from nuclear power plants are directly responsible for the increases in strontium-90. In one study, researchers reported that strontium-90 concentrations in baby teeth are higher in areas around nuclear power plants than in other areas. This has sometimes been referred to as "The Tooth Fairy Project." However, as discussed in a background paper prepared by the NRC, (http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/tooth-fairy.pdf), numerous peer-reviewed, scientific studies do not substantiate the RPHP claims, and the NRC finds that there is little or no credibility in the RPHP's studies.

As presented in the above NRC backgrounder, approximately 99 percent of strontium-90 in the environment came from atmospheric testing of nuclear weapons. The second largest source of strontium-90 in the environment was the Chernobyl accident. The amount of strontium-90 from all commercial nuclear power plants is a tiny fraction of the amount from Chernobyl. The estimated radiation dose from all sources of strontium-90 in the environment is approximately 0.3 percent of the dose that the average person in the United States receives from natural background radiation. These dose levels are well below the levels that are known to cause any health effects. The NRC requires nuclear power plant licensees to monitor the releases of radioactivity from their facilities to the environment and to annually report these releases to the NRC. Additionally, these licensees are required to monitor the environment around their facilities and report results annually to the NRC. The NRC routinely inspects these aspects of nuclear power plant licensee performance.

Due to the concern about the issues regarding the increased cancer rates raised by the RPHP, the Florida Department of Health (FDOH) chose to also look at the cancer rates using the same data used by RPHP. Staff from the Bureau of Environmental Epidemiology interviewed the RPHP staff to determine the source of data and then performed their own calculations and graphed the results (FDOH 2001-TN4744). Overall the FDOH could not identify any unusually high rates of cancers in the area. While some county rates appear higher than state and national trends and some appear lower, this variation is within the expected, statistical variation, meaning the variation would be expected to occur by chance. These rates fluctuate from year to year and in some situations large fluctuations occur with a small number of cases in small underlying county populations. Therefore, the claim by the RPHP that there are elevated rates of cancer in the vicinity of the plant are unsubstantiated and refuted by the State of Florida study.

No changes were made to the EIS as a result of these comments.

**Comment:** Don't you know that the radiation monitors in Florida for EPA have been long since TURNED OFF to conceal form the people of Florida how they are already impacted from the wind currents coming in from Fukushima? (**0628-2** [Anonymous, Anonymous])

**Response:** Given the great distances between Fukushima Dai-ichi and the United States and the large amount of dilution and dispersion that would occur over this distance, only a trace amount of radioactivity was detected in the United States from this event. Based on the environmental measurements made to date by government agencies and non-government organizations, the Fukushima Dai-ichi accident has had no detectable impact on human health in the United States. In particular, the EPA's air monitoring data have not shown any radioactive elements associated with the damaged Japanese reactors since late 2011, and even then, the levels found were very low—always well below any level of public health concern (EPA 2015-TN4217).

No changes were made in the EIS as a result of this comment.

**Comment:** Nuclear power plants also release dangerous radiation into the air and water during their daily operations. This radiation is linked to all kinds of cancers, heart disease, diabetes, birth defects, miscarriages, thyroid problems, leukemia, the list goes on and on. (**0603-2** [Anonymous, Anonymous])

**Comment:** During refueling, nuclear power plants can release up to 1,000X the amount of radiation and Dr. Ian Fairlie believes this is what causes the increases in childhood leukemias around nuclear power plants. (0603-3 [Anonymous, Anonymous])

**Comment:** Let's discuss the childhood leukemias and cancer deaths that researchers say arecaused by nuclear energy:

Quote from Dr. Ernest Sternglass ---> The official measurements carried out by the Office ofRadiological Health, and by the government, and the Public HealthService, they measured the radiation doses around the first bigreactors in Dresden near Chicago, and they found that indeed therewere doses almost as high as half of the normal background, andaccording to Dr. Stewarts finding, that would mean an increaseof 40-50% in childhood cancers and leukemias around the fence of every nuclear plant. SOURCE: youtube /watch?v=hN7rcjSnxZs. (0603-4 [Anonymous, Anonymous])

**Comment:** Let's also not forget Dr. John Gofman's research which states that approximately 1,600 CANCER DEATHS PER YEARcan becaused by EACHnuclear power plant. (**0603-5** [Anonymous, Anonymous])

**Comment:** While the potential public health effects are much less significant than some of the other issues everyone has talked about tonight, I think they do bear mention. At least one study found increased thyroid problems in areas near nuclear plants in the Northeast, and there have been studies from the U.S. and abroad correlating some forms of leukemia with proximity to nuclear plants. Despite no family history of leukemia, I lost a parent to leukemia a couple years ago. (0721-32-3 [Schlackman, Mara])

**Response:** The NRC's primary mission is to protect the public health and safety and the environment from the effects of radiation from nuclear reactors, materials, and waste facilities. The NRC's regulatory limits for radiological protection are set to protect workers and the public from the harmful health effects of radiation on humans and can be found in 10 CFR Part 20 (Standards for Protection Against Radiation). The limits are based on the recommendations of standards-setting organizations. Radiation standards reflect extensive scientific study by national and international organizations (International Commission on Radiological Protection and Measurements

[NCRP], United Nations Scientific Committee on the Effects of Atomic Radiation [UNSCEAR], and the National Academy of Sciences [NAS]) and are conservative to ensure that the public and workers at nuclear power plants are protected.

Health effects from exposure to radiation are dose-dependent. At low doses, radiation can be responsible for inducing cancers such as leukemia, breast cancer, and lung cancer. At very high doses (several hundred rem or higher) and dose rates, radiation has been known to cause prompt (or early, also called acute) effects, such as vomiting and diarrhea, skin burns, cataracts, and even death.

Currently, there are no scientifically conclusive data that unequivocally establish the occurrence of cancer following exposure to low doses, below about 0.1 Sv (10 rem). However, radiation protection experts conservatively assume that any amount of radiation may pose some risk of causing cancer and that the risk is higher for higher radiation exposures. Therefore, a linear, no-threshold dose response relationship is used to describe the relationship between radiation dose and cancer induction. Simply stated, any increase in dose, no matter how small, results in an incremental increase in health risk. The NRC accepts this theory as a conservative model for estimating health risks from radiation exposure and recognizes that the model probably overestimates those risks. On the basis of this theory, the NRC conservatively establishes limits for radioactive effluents and radiation exposures for workers and members of the public, as found in 10 CFR Part 20.

The amount of radioactive material released from Turkey Point Units 3 and 4 is well measured, well monitored, and known to be very small. Based on this operational experience and the new facility design, the NRC believes that the amount of radioactive material to be released from the Turkey Point Units 6 and 7 would also be well measured and well monitored, and the NRC also believes the release would be very small. The total whole body dose from both ingested radionuclides due to liquid and gaseous releases and direct radiation from the Turkey Point site is and would be negligible compared with the public's exposure from natural background radiation, medical irradiation, and radiation from consumer products of more than 300 millirem per year.

Although a number of studies of cancer incidence in the vicinity of nuclear power facilities have been conducted, there are no studies to date that are accepted by the scientific community that show a correlation between radiation dose from nuclear power facilities and cancer incidence in the general public. Specific studies that have been conducted include:

- In 1990, at the request of Congress, the National Cancer Institute conducted a study of cancer mortality rates around 52 nuclear power plants and 10 other nuclear facilities. The study covered the period from 1950 to 1984 and evaluated the change in mortality rates before and during facility operations. The study concluded that there was no evidence that nuclear facilities may be linked causally with excess deaths from leukemia or from other cancers in populations living nearby.
- In June 2000, investigators from the University of Pittsburgh found no link between radiation released during the 1979 accident at the Three Mile Island power plant and cancer deaths among nearby residents. Their study followed 32,000 people who lived within 5 miles of the plant at the time of the accident.
- In January 2001, the Connecticut Academy of Sciences and Engineering issued a report on a study around the Haddam Neck nuclear power plant in Connecticut and concluded that radiation emissions were so low as to be negligible.

- The American Cancer Society in 2001 concluded that although reports about cancer clusters in some communities have raised public concern, studies show that clusters do not occur more often near nuclear plants than they do by chance elsewhere in the population. Likewise, there is no evidence that links strontium-90 with increases in breast cancer, prostate cancer, or childhood cancer rates. Radiation emissions from nuclear power plants are closely controlled and involve negligible levels of exposure for nearby communities.
- Also in 2001, the Florida Bureau of Environmental Epidemiology reviewed claims that there are striking increases in cancer rates in southeastern Florida counties caused by increased radiation exposures from nuclear power plants. Using the same data to reconstruct the calculations on which the claims were based, Florida officials were not able to identify unusually high rates of cancers in these counties compared with the rest of the state of Florida and the nation.
- In 2000, the Illinois Public Health Department compared childhood cancer statistics for counties with nuclear power plants to similar counties without nuclear plants and found no statistically significant difference. No changes were made to the EIS as a result of these comments.

**Comment:** DEIS Subsection 4.9.1, Page 4-137, Lines 18-20 and Appendix G, Section G.2.4.4, Page G-16, Line 27: The DEIS (Subsection 4.9.1) states: "...FPL calculated an annual dose to the construction worker of **0.009** mrem (FPL 2014-TN4058)" and references the ER. Similar language appears in Appendix G (Subsection G.2.4.4). The ISFSI dose was subsequently revised to **0.013** mrem in the response to RAI 12.4.1.9.3-1 (eRAI 5430), L-2014-322, dated October 22, 2014, ML14297A026. (emphasis added) (**0619-4-15** [Maher, William])

**Response:** The typographical error was noted after publication of the draft EIS. The 0.009 mrem (mrem/yr) has been changed to 0.013 mrem (mrem/yr) in Sections 4.9.1 and G.2.4.3 in the final EIS.

**Comment:** DEIS Subsection 5.9.1, Page 5-98, Lines 23-26: The DEIS states: "For the gaseous effluent release pathway, FPL considered the following exposure pathways in evaluating the dose to the maximally exposed individual (MEI): ...ingestion of goat milk..." ER Subsection 5.4.1.2 states: "The input parameters for the gaseous effluent exposure pathway are presented in Table 5.4-5", and Table 5.4-5 includes "**Milk cows**" and does not include "goat milk". (emphasis added) (**0619-4-19** [Maher, William])

**Response:** This comment indicates that cow milk was a parameter for the population dose assessment and that goat milk was not considered as a parameter for the population dose assessment. Therefore, in Section 5.9.1, the phrase "ingestion of goat milk," has been deleted from the final EIS.

**Comment:** DEIS Subsection 5.9.1, Page 5-98, Lines 27-28: The DEIS states: "For population doses from the gaseous effluents, FPL used the same exposure pathways as those used for the individual dose assessment." The FPL analysis included cow milk in population doses but not in MEI doses. (**0619-4-20** [Maher, William])

**Response:** The sentence in Section 5.9.1 was amended in the final EIS to reads as follows: "For population doses from the gaseous effluents, FPL used the same exposure

pathways as those used for the individual dose assessment, with the addition of a pathway for the ingestion of cow milk."

**Comment:** DEIS Appendix G, Subsection G.2.1.4, Page G-7, Table G-3: DEIS Appendix G Table G-3 incorrectly states that the driller doses in ER Table 5.4-3 are for an **adult**. They are for a **child**, as indicated in the last paragraph of ER Subsection 5.4.1.1. The lower doses calculated by the Staff are for an adult, leading to the differences noted in Table G-3.(emphasis added) (**0619-7-12** [Maher, William])

**Response:** ER Table 5.4-3 (FSAR Table 11.2-209) gives no indication that the subsistence driller dose is based on a child rather than an adult for conservatism. This is only discussed in the last paragraph on ER page 5.4-5 (third paragraph on FSAR page 11.2-29).

In Table G-3, the following changes were made in the final EIS for clarification:

In the FPL column, "(adult)" was changed to "(child)" and "(liver)" was changed to "(child's liver)"

In the NRC column, "(liver)" was changed to "(adult's liver)"

Note "a" now includes the following additional sentence: "ER Table 5.4-3 (FPL 2014-TN4058) and FSAR Table 11.2-209 (FPL 2015-TN4502). For conservatism, FPL used the parameters of a child for the driller's dose based on the radiological liquid effluent releases from two AP1000 units."

**Comment:** DEIS Appendix G, Subsection G.2.2.6, Page G-14, Table G-11: DEIS Table G-11, "Calculated Doses to the Population Within 50 mi of the Turkey Point Site from Gaseous and Liquid Pathways (Two AP1000 Units)", contains calculated whole body doses by various pathways and reports the "FPL Estimate" for each cited pathway. The "FPL Estimate" contains a footnote which cites (FPL 2014-TN4058), FPL's ER Revision 6. However, the listed doses by pathway in Table G-11 that are attributed to the ER do not appear in the ER. (**0619-7-14** [Maher, William])

**Response:** Section G.2.2.6 and Table G-11 along with their references have been revised as appropriate.

**Comment:** DEIS Appendix G, Subsection G.2.4.4, Page G-17, Table G-15: DEIS Table G-15, "Comparison of FPL and NRC Staff Estimated Gaseous Effluent Doses to Unit 7 Construction Workers," compares annual dose values by source. There are instances where the doses attributed to FPL are inconsistent with ER Table 4.5-4: a. For the "Units 3 and 4" source, the "Skin Dose" reported for FPL is **0.0022** mrem/yr. ER Table 4.5-4 reports this same dose as **0.0031** mrem/yr. b. For the "Units 3 and 4" source, the "TEDE" reported for FPL is **0.0022** mrem/yr. ER Table 4.5-4 reports this same dose as **0.0031** mrem/yr. ER Table 4.5-4 reports this same dose as **0.0023** mrem/yr. (**0619-7-15** [Maher, William])

**Response:** In the final EIS, Section G.2.4.4, Page G-17, Table G-15 dose values have been changed to the following FPL dose values:

For row "Units 3 and 4" the FPL Skin Dose has been changed from 0.0022 To 0.0031.

For row "Units 3 and 4" the FPL TEDE Dose has been changed from 0.0022 To 0.0023.

**Comment:** DEIS Appendix G, Subsection G.2.5.3, Page G-19, Table G-18: DEIS Table G-18, "NRC Staff Estimate of Non-Human Biota Doses for Proposed Turkey Point Units 6 and 7 for One Unit", presents estimates of non-human biota doses expressed as annual absorbed dose. For consistency with DEIS Table G-19, these doses should be expressed as daily absorbed dose. (0619-7-16 [Maher, William])

**Response:** The dose values in Table G-18 are in mrad/yr because the GASPAR output is in annual doses. However, in Table G-19, the doses are being compared to International Atomic Energy Agency/NCRP guidelines, which necessitates providing doses in mrad/d. No changes to the EIS were made as a result of this comment.

**Comment:** DEIS Appendix G, Subsection G.2.2.4, Tables G-8 and G-9, Page G-12: DEIS Table G-8 lists values for the "FPL and NRC Staff Skin Dose (mrem/yr)" for Inhalation, Vegetable, and Meat. ER Table 5.4-7 reports "0" for each of the corresponding doses. Additionally, the "Total MEI Dose" via the Skin pathway by Inhalation reported in the DEIS for an adult is **0.0622 mrem/year** and is **0 mrem/year in** ER Table 5.4-7. This discrepancy also appears in DEIS Table G-9 in the 5th row. **DEIS Table G-9 reports** a Skin dose of **0.04 mrem/year for a child** via the Inhalation pathway, whereas the **ER reports 0 mrem/year for a child**. (0619-7-13 [Maher, William])

**Response:** In the final EIS, for clarification, for each value in question in Tables G-8 and G-9, the following format is now used: [FPL]/[NRC] (where [FPL] is the FPL value and [NRC] is the NRC value). A note has been added to each table to discuss the revised format.

**Comment:** There are a few instances in the DEIS text where the DEIS either states that Revision 6 of Florida Power & Light's (FPL) Environmental Report (ER) (FPL 2014-TN4058) incorporated Revision 19 of the Westinghouse AP1000 Design Control Document (DCD) or that the FPL application refers to Revision 17 of the AP1000 reactor certified design. Revision 19 of the AP1000 DCD was incorporated as early as Revision 3 of the Units 6 & 7 COLA, DEIS reference (FPL 2011-TN127). Instances in the DEIS include: a. DEIS Section 5.9, Page 5-97, Lines 36-41. (**0619-1-3** [Maher, William])

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 4.9.2, Page 4-138, Lines 5-7 "FPL estimated a **total body dose** from Unit 6 of...**5.5 mrem/yr** based on a worker occupancy...2,080 hours annually (FPL 2014-TN4058)." ER Table 4.5-4 ER Table 4.5-4 shows the **total body dose** of **5.2 mrem** from Unit 6 and the total effective dose equivalent **(TEDE) of 5.5 mrem** from Unit 6. (**0619-2-27** [Maher, William])

**Response:** The text in Sections 4.9 and 5.9 was revised to be consistent with Revision 6 of the ER.

**Comment:** Numerical value inconsistencies within the draft EIS: Subsection 5.9.3.2, Page 5-107, Lines 22-25 "...the estimated collective **whole body dose** to the population living within 50 mi of the Turkey Point Units 6 and 7 is **9.4 person-rem/yr**..." Subsection 5.9.3.2 Page 5-10 Lines 10-12 ER Table 5.4-10 DEIS Subsection 5.9.3.2: "In ER Table 5.4-10 (FPL 2014-TN4058), FPL estimated...collective **total body dose** within a 50 mi radius...**8.0 person-rem/yr**..." ER Table 5.4-10 reports **8.0 person-rem/yr** as the collective dose for Turkey Point Units 6 and 7. (**0619-2-36** [Maher, William])

**Response:** Section 5.9 of the EIS was updated to correct the inconsistency related to whole body dose.

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Appendix G Subsection G.2.4.3, Page G-16, Line 33-35 "For dose calculation purposes, the average location of the Unit 7 worker was assumed to be at the center of Unit 7 reactor. Table 3.10-2 from the ER (FPL 2014-TN4058) estimates the maximum workforce for Unit 7 during any month to be **3,950 people**." ER Table 3.10-2 ER Subsection 4.5.3.3 DEIS Table G-16. ER Table 3.10-2 reports the maximum construction workforce as **3,950 people**. (The maximum construction workforce after fuel load is **2800 people**.) Table G-16 defines footnote '(c)' and refers to a maximum Unit 7 worker population of **2800 people** (**0619-2-30** [Maher, William])

**Response:** Table G-16 has been changed to be consistent with the expected workforce numbers reported in Revision 6 of the ER.

**Comment:** The potential economic impacts of radioactively contaminating these ports and waterways is staggering. The draft EIS for Turkey Point 6 and 7 is incomplete because it fails to take into account the site's location alongside economically and biologically critical waterways of the United States. (**0615-2-22** [Bethune, David])

**Response:** The EIS takes into account the areas around Turkey Point Units 6 and 7. The NRC reviews and assesses the impacts (both radiological and non-radiological) on land and water features, and includes (but not just limited to) biological, human, and economic impacts of the construction, operation, and decommissioning of Turkey Point Units 6 and 7.

The NRC review and assessment looks at normal, off-normal, and postulated accident releases to the environment. As a result of this review and assessment, the NRC determined that the release of gaseous radioactive effluents enveloped the postulated releases from Units 6 and 7.

As presented in EIS Section 5.9, due to the applicant meeting the regulations of 10 CFR Part 20 for gaseous radioactive effluent releases, the health effects to members of the public and non-human biota from all radioactive effluent releases are SMALL. This includes nearby ports and waterways.

No change was made to the EIS as a result of this comment.

# E.2.17 Comments Concerning Accidents - Severe

Comment: I don't want another Fukushima. (0008-10 [Finver, Jody])

**Comment:** FPL should be denied a license for Turkey Point expansion for many reasons:...2. Too dangerous. We don't want Fukushima here in Miami. (**0022-2** [Read, Alice Gray])

**Comment:** I was born in the 1950's, and have been living with the threat of nuclear energy for my whole life, as long as I can remember. Although the dropping of atomic bombs on Hiroshima and Nagasaki was unspeakable, I believe the ongoing nuclear catastrophe at Fukushima poses the greatest threat to the future of life on Earth that we have ever seen. The people of Japan trusted the TEPCO power plant owners and developers who pooh-poohed the dangers of building multiple nuclear plants in that beautiful spot by the ocean. Their trust has proven to be woefully misplaced. (Added while speaking) So to Devin Caraza, the gentleman from FPL who spoke, you'll forgive me if I just can't take your word for it when you tell us everything is safe now. After Fukushima, it's clear that nuclear energy is way too dangerous, and it's impossible to either prevent or clean up nuclear accidents. (**0078-1** [Wilansky, Laura Sue])

**Comment:** HAVE WE NOT LEARNED FROM THE JAPAN DISASTER THAT PUTTING A NUCLEAR PLANT BY A WATER SOURCE IS STUPID!!!!! (0108-1 [Jurin, Richard])

**Comment:** It is a bad place to build a nuclear plant as it is too close to the water as was Fukashima. (0122-3 [Meyer, Paul])

**Comment:** We are totally opposed to the expansion of nuclear generated energy at Turkey Point - for the following reasons: 1) Too dangerous (as in the Fukushima disaster in Japan) (**0129-1** [Mayer, Doug])

**Comment:** Of course, beyond the daily addition of heated waters and waste, the potential disaster related to weather or other operational failure looms large. We might think we've engineered the plant properly, but as Fukishima showed us, Mother Nature has a way of overwhelming man made systems. (0130-3 [Jones, Diane])

**Comment:** Often the NIMBY attitude is applied to perfectly reasonable plans. This is not one of those cases. By approving this proposal, and putting South Florida at Fukushima-like risk, the NRC could have blood on its hands in the future. (**0133-4** [Corral, Oscar])

Comment: Another disaster waiting to happen like in Japan. (0149-8 [Nelson, Joyce E.])

**Comment:** BUT A MUCH LARGER DANGER LOOMS. ALL ONE HAS TO DO IS REMEMBER THE DEVASTATION THAT OCCURRED IN JAPAN NOT VERY LONG AGO TO KNOW THAT MOTHER NATURE WILL REEK HAVOC AT WILL IN SPITE OF ANY AND ALL HUMAN PRECAUTIONS. CLOSE PROXIMITY TO OPEN WATER AND RISING SEA LEVELS IS A DISASTER WAITING TO HAPPEN. (0164-1 [Chrissos, H. L. Chris])

**Comment:** We should learn and apply some important lessons from the Fukushima Daiichi disaster. (0174-1 [Swensen, Harry])

**Comment:** The tragedy of Fukushima should have been the last word on building nuclear plants in vulnerable coastal locations like this one. (**0240-8** [Commenters, Multiple])

**Comment:** Proponents of FPL's new nukes claim that expansion is safe, and that every eventuality has been considered and planned for. I must point out that the TEPCO must have made the same claims while seeking approval of Fukushima. (**0252-11** [Van Leer, Sam])

**Comment:** We could rethink this after Fukushima is no longer threatening to destroy the planet? (0276-1 [Taylor, Kirk])

**Comment:** Look what has happened at Chernobyl and Fukushima. The risk is way too high[.] (0329-3 [Baumwall, Douglas])

**Comment:** The ongoing disaster at Fukushima, Japan is precisely the sort of thing that might happen at Turkey Point. None of the experts can actually say for certain how high the dikes need to be in every possible event. (**0342-2** [Merleaux, Derek])

Comment: No more Fukishima's. (0344-2 [Hull, Meagan])

**Comment:** Did we learn nothing from what happened in Japan? (**0359-2** [LoBiondo, Roana and Michael])

**Comment:** The era of nuclear power ended with the Fukushima melt down. (0440-2 [Hoyle, Lester and Judy])

**Comment:** After Fukushima, we know that nuclear power plants are NOT safe, and we should never be expanding or building new ones. (**0441-1** [Bender, Kae])

**Comment:** ... and-as the world has seen from the Fukushima power plant debacle-a profound potential for incalculable damage to everything, people included, should the unthinkable happen and a disaster strike. (**0449-1** [Benton-Janetta, Lori])

**Comment:** The ongoing disaster at Fukushima should has shown convincingly that nuclear power is a dead-end, quite literally. (**0458-1** [Polk, James])

**Comment:** If you all need a hint look at how the Fukushima nuclear plant is faring. How many more of these time bombs are you all willing to place in our country? (**0459-2** [Smyke, Pete])

**Comment:** After Fukashima and the continuing radiation disaster, Are you Crazy???? (0487-1 [Caswell, Susan])

Comment: You might remember Fukushima, as well. (0492-3 [Mckee, Sarah])

**Comment:** We don't need to be reminded of the horror the Japanese suffered when their power plant was hit by a big wave. (0495-3 [Mazzarella, Rebecca])

Comment: Do you want another Fukushima??? (0540-1 [Burge, Laura])

**Comment:** We do not plan to have a catastrophe but it has happened with Japan's nuclear plants as well as oil spills that had disastrous results for the local areas and widespread areas in Japan. (**0541-2** [Zarsky, Terry])

**Comment:** There are so many reasons why this is a BAD decision. We can't afford to have a FUKUSHIMA incident off the South East Coast of Florida. It will be a matter of time before a hurricane will hit this area again. (**0548-2** [Scott, Ruth])

**Comment:** Look what happened in Japan you think that won't happen here? (**0549-2** [Allison, Noreen])

**Comment:** The tragedy of Fukushima should have been the last word on building nuclear plants in vulnerable coastal locations like this one. (**0551-3** [Anonymous, Anonymous])

**Comment:** Although I am not opposed to nuclear power generally (so long as waste can be properly dealt with), I believe this application is misguided. Clearly, the experience of Fukushima in Japan should be causing all regulators to seriously question the wisdom of siting ANY additional nuclear facilities adjacent to low-lying shorelines, nature preserves, and significant population centers. (0573-2 [Trauner, Keith])

**Comment:** Hurricane damage to the fuel pool building or its cooling water supply equipment is of particular concern at Turkey Point, as without a constant supply of water, a meltdown of the fuel rods is assured. (0615-2-26 [Bethune, David])

**Comment:** The tragedy of Fukushima should have been the last word on building nuclear plants in vulnerable coastal locations like this one. (**0625-3** [Felinski, Julee])

Comment: I will sum it up with one word Fukishama! (0638-1 [Anonymous, Charity])

Comment: Think Fukushima!!! (0651-4 [Young, Kim])

**Comment:** We have seen what can happen when nuclear plants are located near large bodies of water-witness Japan. (0692-1 [Nickerson, Nancy])

Comment: We still have to deal with Fukushima, you know. (0695-3 [Nappe, Judith])

**Comment:** Do we really want to set ourselves up for the problems Japan experienced with their nuclear reactors recently? (**0699-1** [Stocker, Nancy])

**Comment:** The tragedy of Fukushima should have been the last word on building nuclear plants in vulnerable coastal locations like this one. No amount of "profit" will ever replace the destruction and loss of life from having a nuclear fallout or leak from a facility such as this. (0712-1 [Almer, Anessa])

**Comment:** One of the big lessons we learned from Fukushima is that when you lose the ability to run cooling water through the core reactor, through the thousands of pounds of waste nuclear material, that sits right now on the shores of Biscayne Bay, it melts down. It did melt down in Fukushima. It almost could have happened at Turkey Point. That was -- we dodged the bullet there. All these things happened. All these things happened. And this is safe? (0721-22-10 [Schwartz, Matthew])

**Comment:** Another big concern of mine that's been raised here by some other people is the spent fuel storage. This is exactly the same setup as Fukushima, and this plant uses the same type of fuel. They use a zirconium coated fuel pellets. The zirconium interacts with steam and water, in the case of a meltdown, to produce hydrogen, and that hydrogen is explosive. It's exactly what exploded in Fukushima. (0721-23-5 [Bethune, David])

**Comment:** So we're creating, if we license this plant here, another potential Fukushima situation with two fuel pools that are exposed and open to the air essentially, and in largely unprotected buildings. If those fuel pools lose water we will have a meltdown. And not only will we have a meltdown, but the site will be unapproachable to human beings until the end of time. Once that fuel pool is uncovered and there is no water in there, no human beings can go back to that site to perform any kind of work at all. So these design basis accidents, about it's all -- it's going to be over in three days and we'll just go back and make things right, are completely unrealistic. We already saw that with our own eyes that that's not what happens in a fuel pool meltdown situation. (0721-23-7 [Bethune, David])

**Comment:** The last thing I want to bring up is the fact that we're creating another Fukushima situation here with multiple plants on the same site. (**0721-23-8** [Bethune, David])

**Comment:** So if you had an accident at one of the nuclear plants, whether it be here or anyplace else, we'd probably not be -- not the roof blowing off like in the Ukraine which can produce like 10 or 12,000 Roentgens blowing in the air. But you would have no problem here but you may have a problem if somebody accidentally or otherwise took the water out where the spent rods storage is. It would release probably 1,000, 1,500 Roentgens if that was released. So that would be the only thing. (0722-15-2 [McColgan, Robert])

**Comment:** It perhaps borders on insanity to begin to even consider another one or two power plants, after seeing what has happened with Chernobyl, and Fukashima. (**0731-1** [Council, Barbara])

**Response:** The first several pages of Section 5.11 of the EIS discusses the actions taken by NRC to enhance the safety of U.S. reactors based on specific lessons learned from the event at Japan's Fukushima Dai-ichi Nuclear Power Plant. On March 12, 2012, the Commission issued three Orders and a Request for Information (RFI) under 10 CFR 50.54(f) to holders of U.S. commercial nuclear reactor licenses and construction permits. The first Order (EA-12-049) requires a three-phase approach for mitigating beyond design-basis external events that employs installed structures, systems, and components (phase 1), onsite portable equipment (phase 2), and offsite support (phase 3). For the AP1000 passive design, passive means assure the cooling for the core, spent fuel pool, and containment are assured in the first 72 hours after an accident or external event. The AP1000 design includes ancillary diesel generators and features to provide make-up water after 72 hours and up to 7 days to the passive systems, such as the passive containment cooling water ancillary storage tank, and ancillary diesel generators. This equipment is protected from external hazards including the safe-shutdown earthquake (SSE). The third Order (EA-12-051) requires reliable spent fuel pool level instrumentation (77 FR 16082) (TN1424). The AP1000 containment design differs from those identified in the second Order; therefore, the actions addressed in the second Order are not applicable to Turkey Point Units 6 and 7. The NRC staff, with the Commission's approval, implemented a plan to address the requirements in the Orders and the RFI for pending COL applications.

In regard to the Turkey Point COL application, the NRC staff issued RAIs to FPL requesting information to address the requirements of the first Order on mitigation strategies for beyond design basis accidents and the third Order on spent fuel pool instrumentation, respectively, and information sought in the first RFI for a seismic reevaluation and the fifth RFI in regard to emergency preparedness (NRC 2012-TN3239). FPL addressed the first and third Orders along with the fifth RFI by proposing license conditions that would require action before initial fuel loading for proposed Units 6 and 7 (FPL 2014-TN4058; FPL 2014-TN4103). The NRC's evaluation of FPL's responses are addressed in the NRC's advanced safety evaluation (ASE). In particular, ASE Section 2.4 documents the staff evaluation of the potential effects of hurricanes on the proposed new units (NRC 2016-TN4775), and ASE Section 9.1 documents the staff evaluation of the spent fuel pool design (NRC 2016-4803). As discussed in Section 5.11.2.4 of the EIS, the AP1000 reactor vendor considered extratropical cyclones, hurricanes up to Category 5 on the Saffir-Simpson scale, and tornadoes up to EF5 on the enhanced Fujita scale in the AP1000 design. The total contribution of high winds to core damage frequency (CDF) was reported to be  $1.38 \times 10^8$  per year by the AP1000 reactor vendor (Westinghouse) 2011-TN261), assuming that only safety systems are available. The more detailed analysis in the FSAR (FPL 2014-TN4069) specifically for Turkey Point site also estimated CDF probability from high wind on the order of  $1.0 \times 10^8$  per year. The safety design features of the AP1000, lead warning time before the arrival of hurricane force winds, and NRC's oversight policies are all considered in the NRC evaluation of plant safety in case of hurricane events. The common concern raised by the comments is already considered in Section 5.11 of the EIS; therefore, there were no changes made to this EIS.

**Comment:** The lessons of Chernoble and the nuclear disaster at Fukushima Daiichi after the Earthquake & Tsunami of March, 2011 teach me that the balance of risk versus reward has not been properly considered with this proposal. Planning & Construction fail to be designed to meet the extremes of the unexpected. The unexpected occurs frequently enough that the

consequences need be considered. One consequence of the Fukushima nuclear disaster was the evacuation of everyone within a fifty-mile radius of those plants. A fifty-mile radius evacuation here, because of a possible disaster at Turkey Point, would extend from Islamorada in the Florida Keys all the way to Hollywood, Florida. See this link: <a href="http://www.nytimes.com/interactive/2011/03/16/world/asia/japan-nuclear-evaculation-zone.html">http://www.nytimes.com/interactive/2011/03/16/world/asia/japan-nuclear-evaculation-zone.html</a>. (0213-2 [Hyams, Charles])

**Comment:** Haven't we learned anything from the devastation that resulted from the reckless planning that went into not only building the Nuclear plant in Fukushima but the clean up process for a accident/meltdown as well? As I type a steady flow of radioactive toxic water is released into the Pacific ocean and the world stands by helpless! We can build the best bombs and weapons in the world but we can NOT contain nor sufficiently clean up from a nuclear accident or a deep water well blow out! (**0259-1** [Lettieri, Tammy])

**Comment:** The idea that a nuclear plant will never have an accident that endangers the public health and safety defies both history and logic. All industries experience accidents of one kind or another sooner or later and the latest example in Japan shows how the manufacture of energy using nuclear power can result in a killing calamity that takes human life and destroys property. (0332-1 [Ross, Sherwood])

**Comment:** You would think that Three Mile Island, Chernobyl, and Japan's Fukushima disasters would tell us all we need to know about the sudden, unexpected and long, long term dangers of nuclear energy. (0339-1 [Provost, Allan])

**Comment:** History has shown that unanticipated "incidents" can occur at Nuclear Power generating facilities. History has also shown that the results of such an incident can be catastrophic and long lasting. (0358-3 [Norman, Ronald])

**Comment:** No matter how safe those who profit say they are, a Fukushima type accident or terrorist attack could render most of South Florida uninhabitable. (0371-2 [Haffmans, Edmund])

**Comment:** And I have been reading about Japan. They are finding radiation pretty far from the plants. (0373-6 [Lee, Nancy])

**Comment:** I realize that the risk of a nuclear accident is very low. But the consequences are astronomical. Can you image a Fukushima-type accident here in Florida? Can you imaging evacuating everyone from the Palm Beaches to Key West? Do you want to be responsible for such a disaster? (**0643-1** [Joannou, Jr., Benjamin])

**Comment:** Until there is technology to cean up a meltdown, like in Fukushima and Chernobyl and God only knows what else. I say absolutely not. (**0644-2** [Anonymous, Anonymous])

**Comment:** I believe that the ongoing nuclear catastrophe at Fukushima poses the greatest threat to the future of life on earth that we've ever seen. The people of Japan trusted the TEPCO power plant owners and developers who poo-poo'd the dangers of building multiple nuclear plants in that beautiful spot by the ocean. Their trust has proven to be woefully misplaced, and I'm sorry, but I just can't take the assurances of Devon and the folks from FPL that they've got everything handled. I don't believe that. After Fukushima it's clear that nuclear energy is way too dangerous and it's impossible to either prevent or clean up nuclear accidents. (0721-28-2 [Wilansky, Laura Sue])

**Response:** The Great Tohoku earthquake of March 11, 2011, and the subsequent resulting tsunami produced widespread devastation across northeastern Japan, resulting in approximately 25,000 people dead or missing, displacing many tens of thousands of people, and significantly affecting the infrastructure and industry in the northeastern coastal areas of Japan. Nonetheless, the damage to the Fukushima Dai-ichi nuclear power plant from the tsunami, including the loss of ac power and almost all safety systems, has not resulted in any radiation exposure-related fatalities (UNSCEAR 2014-TN4762; UNSCEAR 2015-TN4763). The comments correctly refer to the evacuation of the population residing near the reactor site and the need for decontamination near the site. Evacuation and land decontamination are part of the input to the MACCS code for the severe accident analysis as described in Section 5.11.2 of this EIS. In the event of an actual accident, emergency response management authorities would consider whether evacuation is warranted, depending on the circumstances.

The Turkey Point severe accident risk analyses in Table 5-18 of EIS Section 5.11 includes population dose risk, risks of fatalities, and costs associated with evacuation, resettlement, land decontamination, interdiction, and condemnation. Table 5-21 of the EIS provides the calculated costs of all severe accidents. These costs are part of the evaluation process for implementation of severe accident mitigation alternatives as discussed in Section 5.11.3 of the EIS. The comments do not provide any information that was not already considered in the evaluation in the draft EIS, and no changes were made to the EIS as a result of these comments.

**Comment:** Radiation from Fukushima is hitting US shores. Where do you think radiation and chemicals from Turkey Point will end up? (**0078-10** [Wilansky, Laura Sue])

**Comment:** BUILDING A NUCLEAR FACILITY NEAR A SENSITIVE ECOSYSTEM IS FOOLISH. JUST LOOK AT THE CONTINUING DAMAGE FROM THE FUKUSHIMA NUCLEAR DISASTER, WITH RADIATION POURING INTO THE PACIFIC OCEAN AND WAFTING OVER THE PACIFIC TO THE WESTERN U.S.A. RADIATION COUNTS NEAR OUR WESTERN COAST WERE STOPPED LONG AGO BECAUSE PEOPLE WERE UNWILLING TO REVEAL THE REAL THREAT TO THE AMERICAN & CANADIAN PUBLIC. (**0201-1** [Reid, Sarah])

**Comment:** Locating two new nuclear reactors at Turkey Point would seem to invite disaster if a severe weather event were to occur, similar to the one that devastated the nuclear plant in Japan. Radioactive waste from that disaster has spread by water across the seas to countries thousands of miles away. (**0280-1** [Betts, Cynthia])

**Comment:** The ongoing radioactive contaminatio horror emanating from the nuclear fission time-bomb plants in Fukushima will be poisoning the Northern Pacific Ocean for countless centuries. Fukushima is an extinction level event! (**0513-1** [Roehl, Richard Ralph])

Comment: We know that Fukushima has poisoned the whole Pacific. (0673-3 [Dwyer, John P.])

**Comment:** Radiation from Fukushima is hitting U.S. shores. Where do you think radiation and chemicals from Turkey Point will end up? (0721-28-10 [Wilansky, Laura Sue])

**Response:** Only a trace amount of radioactivity has been detected in the United States from this event from airborne or waterborne pathways (Kratchman et al. 2015-TN4737). Based on these measurements, the Fukushima Dai-ichi accident resulted in no or negligible impact on human health in the United States. This result is unsurprising, since the great distances between Fukushima and the United States would result in large amounts of dilution and dispersion over those distances, which, in turn, would result in negligible doses in the United

States from the Fukushima accident. The comments do not provide any information that was not already considered in the evaluation in the draft EIS, and no changes were made to the EIS as a result of these comments.

**Comment:** It's [the reactor] a prime target in the event of a hurricane. (0008-6 [Finver, Jody])

**Comment:** I would like to express my concerns and opposition to this projects on environmental and quality-of-live grounds. First, we only need to look at the Fukushima incident in Japan, a country I lived for over 5 years, to understand the catastrophic potential of this project in Hurricane prone Florida. (**0024-1** [Roque, Julio])

**Comment:** I also, have great concerns about the condition of the existing facility. I remember that during Hurricane Andrew significant damage occurred at Turkey Point. I can't even imagine what will happen to this area if something like that happens again if a facility the size of what is proposed becomes reality. (**0081-2** [Benson, Mary] [Skove, Ellen H.] [Tompkins, Constance])

**Comment:** My understanding is that their proposal involves antiquated technology and would be highly vulnerable to modest storm surges. (**0093-2** [DuPriest, William Robert])

**Comment:** Nuclear power should not be placed in locations with high hurricane or tsunami risk. Fukushima is a lesson we should never forget. (**0109-2** [Platt, David])

**Comment:** The area is also very susceptible to the threats of hurricanes. Hurricane Andrew, which hit two decades ago, was a small intense storm. Its full force did not effect Turkey point. Its 200+ mph winds totally destroyed the area a few miles to the north. Had it hit Turkey Point directly, the consequences could have been devastating and irreversible to our entire community. (0115-7 [Trencher, Ruth])

**Comment:** With Florida being proned to Hurricanes this could be detrimental to our communities and our environment. Don't you remember what happened to Japan in 2011? (**0128-2** [Bach, Lili])

**Comment:** Hurricanes may severely damage them and cause untold damage as was done in Japan. (0159-4 [Bazzone, Barbara])

**Comment:** I need not remind you of the 1992 nuclear reactors at Turkey Point which took a direct hit from Hurricane Andrew. . . READ THE DATA. (**0250-4** [Fulks, Anna Louise])

**Comment:** Building the reactors in a hurricane flood zone was unsafe, and just plain stupid in the first place. This common sense has been confirmed by the NRC's own findings after Hurricane Andrew, which knocked out all or part of its safety, power, access, security and fire-fighting capacities... for 5 days. (**0252-2** [Van Leer, Sam])

**Comment:** DIDN'T WE LEARN ANYTHING FROM JAPAN'S DISASTER? WHAT HAPPENS IF IT GETS HIT WITH A HURRICANE???? (0279-1 [Hall, Linnea M. Fronce Thomas])

**Comment:** Current safety approaches have been found to be inadequate for preventing melt down accidents according to the authors of a report submitted by a very prominent panel of scientists, physicists, and engineers, recently convened by Congress. (the best safety efforts were used by the Fukashima reactors,but the accident happened anyway, so what will happen during a potential huge future hurricane event ?) (0340-9 [Tweeton, Tanya])

Comment: A strong hurricane would devastate South Florida. (0360-4 [Palmer, Majorie])

**Comment:** These plants are especially vulnerable to hurricane impacts also. (**0647-1** [Burns, Terry])

**Comment:** If there is a hurricane nearby, it will be a huge disaster. (**0654-4** [Guy, Sharon]) **Comment:** 

### NRC's Draft EIS is Deficient Because it Mischaracterizes the Impact of Hurricane Andrew

on the Turkey Point Site: Not only has NRC's DEIS failed to address the potential impacts upon the Turkey Point site of climate change but when NRC did address Hurricane Andrews impact on the site NRC mischaracterized and downplayed the risk posed by severe weather events. According to NRC's DEIS:

Hurricane Andrew was historic because it was the first time that a hurricane significantly affected a commercial nuclear power plant. The eye of the storm, featuring sustained winds of up to 145 mph and gusts of 175 mph, passed over the Turkey Point site and caused extensive onsite and offsite damage. However, there was no damage to the safety-related systems of Units 3 and 4 except for minor water intrusion and some damage to insulation and paint (NRC 1993-TN542).

This is a significant mischaracterization of the impact of Hurricane Andrew on Turkey Point. In fact Hurricane Andrew resulted in a loss of offsite power at Turkey Point that lasted six and a half days according to the joint NRC/INPO review:

A high priority was placed on restoring offsite power to Turkey Point. The Davis 1 line to the Turkey Point switchyard was energized 4V2 days after the storm, but suffered intermittent losses for several hours. Six and one-half days after the storm, the startup transformers for Units 3 and 4 were energized, and the EDGs were shut down. A second offsite line became available about a day later (see Appendix K for details). 25 Section 3

When offsite power was not available, the four EDGs ran continuously to supply plant safetyrelated loads. An EDG tripped on two instances during this period. Seven hours after the storm had passed, the "A" EDG for Unit 4 tripped during efforts to troubleshoot and isolate a ground on the dc control power supply. The crew immediately recognized that the troubleshooting procedure in use applied when the bus is energized from offsite power but not when the EDG is supplying loads. The EDG was restarted again after a few minutes, and the procedure revised. The "A" EDG for Unit 3 tripped 3!/? days after the storm. Troubleshooting to locate the cause of the trip was unsuccessful, and the EDG was successfully restarted in 2/4 hours. No further problems were encountered. (Effects of Hurricane Andrew on the Turkey Point Nuclear Generating Station from August 20-30, 1992, Jointly sponsored by Institute of Nuclear Power Operations and the U.S. Nuclear Regulatory Commission, March 1993, section 3, p. 25. (http://www.osti.gov/scitech/servlets/purl/10158520/)

The NRC seems to have merely cut and paste the Information Notice on Hurricane Andrew into its EIS but for some reason NRC decided to edit the following which contradict the blithe assurances in the DEIS. The NRC's Information Notice on the impact of the Category 5 hurricane on the site states that, "(t)he onsite damage included loss of all offsite power for more than 5 days, complete loss of communication systems, closing of the access road, and damage

to the fire protection and security systems and warehouse facilities. (http://www.nrc.gov/readingrm/doc-collections/gen-comm/infonotices/1993/in93053.html)

Damage at the Turkey Point Site was not limited to the electrical infrastructure. As the Union of Concern Scientists has pointed out FPL, Turkey point and the people of Florida got lucky:

"The fire protection system at the plant was disabled when winds knocked a high tower tank onto a 500,000 gallon tank containing water for the fire protection system .... If the damaged stack had fallen, it could have landed on the building housing the emergency diesel generators for the nuclear units. Considering that the diesel generators were the only source of ac power at the plant for several days, it was extremely fortunate that the leaning stack of Turkey Point did not fall." (http://allthingsnuclear.org/fission-stories-48hurricane-andrew-vs-turkey-point/) [FIGURES-Water tower and Chimneys]

The extent to which NRC mischaracterized the impact of Hurricane Andrew in the DEIS is demonstrated by the fact that NRC's own risk analysts found the hurricane to be an important accident precursor. NRC's risk analysts counted both units as accident precursors and attributed a risk of 1.6E-4 or 1 in 10,000. (U.S. Nuclear Regulatory Commission, Precursors to Potential Severe Core Damage Accidents: 1992 A Status Report, NUREG/CR--4674 ORNL/NOAC-232 Vol. 17, December 1993, p. 31.

(http://www.osti.gov/scitech/servlets/purl/10125322/) (0716-9 [Riccio, Jim])

**Response:** The NRC disagrees with the comments concerning Hurricane Andrew effects on Turkey Point Units 3 and 4. The NRC has years of experience with hurricanes and other severe storms. Nuclear facilities were affected by Hurricane Andrew in Florida in 1992, by Katrina in Louisiana in 2005, and by Sandy along the East Coast in 2012, among others. Lessons learned from each hurricane are examined and enhancements to safety are made if deemed necessary. Since hurricanes have long lead warning times (on the order of days), plant shutdowns are commenced long before a hurricane arrives along with other protective measures and actions. In response to lessons learned from previous weather events, emergency planning and evacuation notification systems have been enhanced (e.g., see NRC Information notices 93-53 and 97-05 for Hurricane Andrew). Additionally, as part of the NRC's Fukushima lessons learned actions and orders, Turkey Point Units 3 and 4 have undergone additional analyses, including for hurricane events (NRC 2014-TN4738). The site is also part of the industry's FLEX initiative to address mitigation strategies for beyond design basis external events.

The comments cite the estimated risk of CDF calculated using probabilistic risk assessment (PRA) techniques for existing Turkey Point Units 3 and 4. The estimated risk for the existing units, however, does not apply to the proposed new units, nor do those numbers reflect how the Units 3 and 4 in fact performed in the face of Hurricane Andrew, which is discussed further below. As discussed in Section 5.11.2.4 of the EIS, the AP1000 reactor vendor considered extratropical cyclones, hurricanes up to Category 5 on the Saffir-Simpson scale, and tornadoes up to EF5 on the enhanced Fujita scale in the AP1000 design proposed for Turkey Point Units 6 and 7. In regard to the estimated risk for proposed Turkey Point Units 6 and 7, calculated with PRA techniques, the total contribution of high winds to CDF was reported to be  $1.38 \times 10^8$  per year by the AP1000 reactor vendor (Westinghouse 2011-TN261), assuming that only safety systems are available. The more detailed analysis in the FSAR (FPL 2014-TN4069) specifically for Turkey Point site also estimated CDF probability from high wind on the order of  $1.0 \times 10^8$ per year. The safety design features of AP1000, lead warning time before the arrival of

hurricane force winds, and NRC's oversight policies are all considered when assuring plant safety in case of hurricane events.

The comments provided no new information or challenges to the proposed new reactors not considered in the draft EIS; therefore, no changes were made to the EIS in response to these comments.

**Comment:** It's not cost effective for us and it poses a mayor catastrophic risk in the event a big hurricane hits us or with the rise in sea levels. (**0087-3** [Lange, Alexandra])

**Comment:** While I am normally not opposed to nuclear energy generation, I would like to know how the project's design engineers have addressed the concern of susceptibility to storm surge from a hurricane, so as to learn from and further prevent the existential threat posed by a repeat of the Fukushima Daiwa plant in our own back yard. (**0132-1** [Mauri, Tom])

**Comment:** I believe the purpose of these lines to maintain a fully depreciated facility ignores the risk of an outdated & highly dangerous technology (i.e. Japan's Fukushima disaster) in an area prone to powerful hurricanes, storm surge, and increasing sea levels which heightens the risk of water contamination & damage to the reactor or its cooling system. (0134-1 [Lucero, Olga])

**Comment:** This area is subject to sea level rise and tropical storm impacts. It is inconceivable that this location could be used for a nuclear power plant. It is not possible to guarantee the safety of the operation. (**0151-1** [Stanko, Janet L.])

**Comment:** Tsunamis may not be as frequent as in the Pacific but they are possible in the Atlantic and storm surges can be as bad as many tsunamis. By not accounting for sea level rise along with tsunamis and storm surges we are risking another Fukushima on our own doorstep. (0236-2 [Enfield, David])

**Comment:** This is an unsafe place for a nuclear plant being barely above sea level, in a hurricane zone & next to an ocean. (0729-1 [Rader, D.L.])

**Response:** As discussed in Section 5.11 of this EIS the AP1000 reactor vendor considered extratropical cyclones, hurricanes up to Category 5 on the Saffir-Simpson scale, and tornadoes up to EF5 on the enhanced Fujita scale. The total contribution of high winds to CDF was reported to be  $1.38 \times 10^{-8}$  per year by the AP1000 reactor vendor (Westinghouse 2011-TN261), assuming that only safety systems are available. The more detailed analysis in the FSAR (FPL 2014-TN4069) specifically for Turkey Point site also estimated CDF probability from high wind on the order of  $1.0 \times 10^{-8}$  per year. The safety design features of the AP1000, lead warning time before the arrival of hurricane force winds, and NRC's oversight policies are all considered when assuring plant safety in case of hurricane events.

Similarly, for possible severe accidents due to external flooding, the EIS in Section 5.11 states that each new reactor application evaluates the natural phenomena that are pertinent to the site for the proposed reactor design by applying present-day regulatory guidance and methodologies. This includes a determination of the characteristics of flooding at the site. The plant design elevation accounts for high tides in Biscayne Bay, which, in combination with maximum storm surge plus sea-level rise, are controlling for external floods. ASE Section 2.4 assesses the maximum external flood as being within the design basis of the site (NRC 2016-TN4775). The associated severe accident risk due to external flooding is discussed in Section 5.11.2.4 of the EIS and also shown to be small.

The comments did not provide any information in addition to that already considered in the draft EIS. Therefore, no changes were made to the EIS as a result of these comments.

**Comment:** FPL has failed to adequately account for the intersecting impacts of sea level rise and storm surge. A study by John Perkins and Natalie Kopytko published in the journal Energy Policy in January 2011 concerning 9 coastal nuclear reactors in the US found that while currently operating nuclear plants were built high enough to withstand sea level rise alone for the next 50 years, which is beyond the operating lifetime of those plants, storm surges from Category 4 and 5 hurricanes will completely inundate those plants within their lifetimes--see <u>http://www.climatecentral.org/news/sea-level-rise-brings-added-risks-to-coastal-nuclear-plants.</u> (0246-2 [Shlackman, Mara])

**Comment:** Some people consider Hurricane Andrew to be a Category 6 for its power (the conventional scale tops out at Cat 5). It spawned many tornadoes, with wind-speeds that were in addition to the Hurricane's. Many climate scientists to be growing in strength, and perhaps in frequency. Numerous records have been broken in the past decade. Hurricane Storm-Surge will be boosted to higher levels by SLR with each passing year. (**0252-10** [Van Leer, Sam])

**Comment: Deeper Examination of Foreseeable Emergencies.** As noted in the previous section, the DEIS acknowledges the potential that "[c]limatological changes might affect the average environmental risks of severe accidents," however it concludes that the core damage frequencies of the relevant reactor design are low enough that this is an unlikely problem. DEIS at I-13. This does not appear to be a thorough analysis. Simply stating, without further discussion or support, that the reactor design standards are sufficient to protect from future climate harm, does not satisfy NEPA. (0456-18 [Miami, City])

**Comment:** Comment 12: The final Environmental Impact Statement should incorporate a full analysis of the potential for severe accidents related to climate change or cite to relevant research. Although the DEIS does acknowledge that there is the potential for a severe accident resulting from climatological changes, it does not discuss specific scenarios or estimated probabilities. The final Environmental Impact Statement should include a full analysis to better demonstrate the nature and likelihood of the risks acknowledged in the DEIS. (0456-19 [Miami, City])

**Comment:** Comment 13: The final Environmental Impact Statement should incorporate a full analysis of the potential for severe accidents related to climate change or cite to relevant research. Although the DEIS does acknowledge that there is the potential for a severe accident resulting from climatological changes, it does not discuss specific scenarios or estimated probabilities. The final Environmental Impact Statement should include a full analysis to better demonstrate the nature and likelihood of the risks acknowledged in the DEIS. (0611-14 [Haber, Matthew S.])

**Comment:** However, due to rising sea-levels and hurricanes the potential for this plant to become another Fukushima in its lifetime is very real. (**0639-2** [Haselhurst, Richard])

**Comment:** The site proposed for expansion is located directly on the shores of Biscayne National Park. If designed correctly there would be no concerns like Japan plant flooding do to weather related wind/huricane potential sea level rise. (**0694-5** [Carpenter, Rory])

**Response:** As discussed in Section 5.11, the AP1000 reactor vendor considered extratropical cyclones, hurricanes up to Category 5 on the Saffir-Simpson scale, and tornadoes up to EF5 on

the enhanced Fujita scale. The total contribution of high winds to CDF was reported to be 1.38  $\times$  10<sup>-8</sup> per year by the AP1000 reactor vendor (Westinghouse 2011-TN261), assuming that only safety systems are available. The more detailed analysis in the FSAR (FPL 2014-TN4069) specifically for Turkey Point site also estimated CDF probability from high winds on the order of 1.0  $\times$  10<sup>-8</sup> per year. The safety design features of the AP1000, lead warning time before the arrival of hurricane force winds, and NRC's oversight policies are all considered when assuring plant safety in case of hurricane events.

EIS Appendix I indicates that nuclear power plants must be designed to withstand natural events. General Design Criteria 2 of 10 CFR Part 50 Appendix A requires nuclear power plants to be designed to withstand the effects of natural phenomena without loss of capability to perform their safety functions. A plant's design must reflect appropriate consideration of the most severe natural phenomena events that have occurred at or near the proposed site, with margin to account for uncertainty. In addition, the EIS does recognize that the safety review assesses the plant's capability to withstand external flooding, which is part of the design basis for proposed Turkey Point Units 6 and 7. As discussed in the staff's ASE Section 2.4 (NRC 2016-TN4775), the plant design elevation accounts for high tides in Biscayne Bay, which, in combination with maximum storm surge plus sea-level rise, are controlling for external floods. Therefore, with the information in Section 5.11.2.4 of this EIS and the safety finding that the plant at this site would meet all necessary regulatory requirements, the associated severe accident risk due to external flooding is small.

Climate change in general and rising sea level are expected to be gradual. Under 10 CFR 50.54(f), the NRC could determine whether or not a license should be modified based on a review of the impact of climate change on plant operation and adaptation, emergency preparedness, and the availability of nearby structures used for plant operation and safety. If the NRC determines that additional safety enhancements are necessary based on information obtained in accordance with 10 CFR 50.54(f), the NRC can require that such enhancements be implemented in a timely manner to assure adequate protection of the public within the current NRC regulatory process.

In conclusion, the NRC staff published an Advanced Safety Evaluation that analyzes all aspects of reactor and operational safety including hurricane and flooding events. The primary purpose of the EIS is to evaluate the environmental impacts resulting from the construction and operation of the proposed plant. The comments express concern about the possibility of an event that might damage the proposed units, but do not raise any issue in regard to the substance of the severe accident evaluation in EIS Section 5.11. The staff clarified in Appendix I of the EIS the NRC process for ensuring plant safety over the licensing period with respect to sea level rise as a result of these comments.

**Comment:** History has shown that the potential exists for unplanned "incidents" to occur at or within Nuclear Power Plants. Fukushima, Three Mile Island and Chernobyl are just 3 examples of when the best intentions can go terribly wrong. The results of such an unplanned "incident" can be catastrophic and long lasting. (**0039-2** [Violich, Francesca])

**Comment:** Very recent history has demonstrated that the potential exists for unanticipated "incidents" to occur at or within Nuclear Power facilities. Fukushima, Three Mile Island and Chernobyl are just three examples of how the very best intentions can go terribly wrong. The results of these actual unanticipated "incidents" have proven both catastrophic and long-lasting. FP&I's recent problems with the reactor cooling water temperatures only reinforces the fact that

unanticipated problems and "incidents" remain a distinct possibility at Turkey Point. (**0044-2** [Commenters, Multiple])

**Comment:** History (Fukushima, Three Mile Island, and Chernobyl) provides solid evidence that nuclear incidents devastate large areas and destroy lives. (**0057-3** [Neway, Roberta])

**Comment:** I do not want to have the next "Fukushima" or "Chernobyl" on my doorsteps! As I stated in last month's NRC meeting in Miami at FIU, it's just a bad idea waiting to happen. (0178-2 [Almirola, Alejandro])

**Comment:** Attached is a list of Nuclear power station accidents and incidents with the IAEA description for your information and before any approval is given for two new nuclear reactors. (**0250-1** [Fulks, Anna Louise])

**Comment:** Fukushima, Three Mile Island and Chernobyl are just three examples of how the very best intentions can go terribly wrong. The results of these actual unanticipated "incidents" have proven both catastrophic and long-lasting. FP&I's recent problems with the reactor cooling water temperatures only reinforces the fact that unanticipated problems and "incidents" remain a distinct possibility at Turkey Point. (**0263-1** [Orzechowicz, Holly])

**Comment:** An MIT team has estimated that give the expected growth of nurlear power over the 50 year span from 2005 to 2055, at least 4 serious nuclear accidents would be expected. (0333-4 [Anonymous, Anonymous])

Comment: I remember 3 mile island. Learn from your mistakes. (0373-9 [Lee, Nancy])

**Comment:** We should have learned from the errors of Chernobyl, Three Mile Island, and the ongoing disaster that is Fukashima that nuclear power is the wrong choice for our energy future. (0382-2 [Mikowski, George])

**Comment:** Really think this doesn't need to happen especially since there have been nuclear reactors disasters already. (0455-1 [Hardin, Lillian])

**Comment:** Let's not have another 3 mile island or Fukushima in the United States! (0460-1 [Yarter, E. C.])

**Comment:** When the regular occurrence of nuclear accidents and meltdowns such as occurred at Chernobyl, Three Mile Island and the Fukushima disaster are factored in, the health risks of nuclear power rise exponentially and make this form of power generation totally unacceptable. (**0511-4** [Draper, Lonnie M.])

**Comment:** I wanted to mention, though, that before I came to South Florida I grew up in Philadelphia, which is 90 miles downwind from Three Mile Island, and I can tell you firsthand what it's like to live in a metropolis of 2 million people undergoing -- or in the midst of a nuclear reactor meltdown. And I know that you can reassure us that the same thing can't happen here. But remember, too, that NASA assured us that there was no way that a second shuttle could fail, right? And so things happen. (**0721-16-1** [Rifkind, David])

**Comment:** I want to talk to the Union guys for a second. When I was a young guy I was a Union member, Local 23, Mason Tenders Union. I worked real hard. We had a building in New York we were building that we were real proud of, the World Trade Center. We looked at those buildings go up, carried lumber, did concrete work. My best friend was Tom Consadine, an

electrician. We were so proud to be involved in that project. There was no way on this earth those buildings could go down. Nobody ever thought of that. Tommy's still my friend. You know what he did the last few years? He's been building the new World Trade Center. I'm going to leave everybody with one fact from this meeting they're never going to forget. April 26, 1986, a crew of workers goes in to Reactor Number 4 to do a safety check, and they botched it. Nothing was wrong with the reactor. They botched the safety check. Well, it's 29 years later and a thousand square miles -- this is no exaggeration -- over a thousand square miles around the Chernobyl Nuclear Plant are inhabitable from a safety check. So anybody in this room who believes it can't happen here, you're kidding yourself. That's all I have to say. (0721-25-1 [Corda, Charles])

**Comment:** "You would think that Three Mile Island, Chernobyl, and Japan's Fukushima disasters would tell us all we need to know about the sudden, unexpected and long-term dangers of the nuclear energy. But apparently not. At least not when some large corporation like FP&L stands to make greater profits by putting Americans in danger and destroying the beauty and safety of Florida neighborhoods. (0721-26-2 [Koenigsberg, Linda])

Response: These comments indicate that severe reactor accidents such as those that occurred at Three-Mile Island Unit 2 (TMI-2), Chernobyl, and Fukushima Dai-ichi. and their consequences are unavoidable. The design of nuclear power plants in accordance with NRC requirements affords protection to public health and safety in two basic ways: (1) prevention of core damage events such that the likelihood of events that lead to core damage is very low, and (2) mitigation of consequences in the event of an accident. The NRC has determined that the combination of these two aspects of protection of public health and safety results in an acceptably low risk. In addition, enhancements to safety have been made based on the lessons learned from previous accidents to further reduce the acceptably low risk from severe accidents. The TMI-2 accident brought about regulatory changes for nuclear power plants and heightened oversight by NRC, as did the Fukushima accident. The Chernobyl accident did not result in regulatory changes for enhancing safety because the design, construction, and operation of U.S. reactors is fundamentally different than the Chernobyl reactor. As described above in this comment response section, the NRC has taken several actions regarding the lessons learned from the Fukushima accident specifically for the Turkey Point Units 6 and 7 COL application. Additionally, the AP1000 is a passive design and it provides core, containment, and spent fuel pool cooling for 72 hours with no operator action needed. These cooling functions can be sustained for an extended period beyond 72 hours during which the only operator actions are to refill the tank that is the source of water for the passive safety systems and distribute the water when needed. The enhanced safety of the AP1000 due to these passive features is clearly illustrated in Table 5-20 of the EIS, which compares the health risks from severe accidents for an AP1000 reactor at the Turkey Point site with the risks for current-generation reactors at various sites. The comments do not provide information other than what the review team has already considered in the EIS. Accordingly, no changes were made to the EIS as a result of these comments.

**Comment:** Turkey Point is adjacent to fragile natural resources and a "stone's throw" from the densely populated areas of Miami-Dade County. Any "major" incident would destroy our ecosystem and wreck havoc on the lives of more than two million people. (**0057-4** [Neway, Roberta])

**Comment:** This area is highly populated. Any problem that arises would affect hundreds of thousands of people, not to mention multiple millions of dollars in property. It is clear from Three

Mile Island, and other "accidents" around the world, that nuclear plants and city and towns should not be mixed. (**0061-2** [Lague, Victoria])

**Comment:** Contrary to the assertion of the NRC (EIS) that the "socioeconomic" effects of building and operating the proposed reactors #6 and #7, are "small and beneficial" I believe the actual risk to the population of South Florida is astronomical and potentially devastating. History has shown that unanticipated "incidents" can occur at Nuclear Power generating facilities. History has also shown that the results of such an incident can be catastrophic and long lasting. (**0067-2** [Commenters, Multiple])

**Comment:** Locating a Nuclear Power Generating Facility in close proximity to a densely populated metropolitan area of more than 2,500,000 people, is an ill conceived notion at best. Although this decision may be a means to enrich the shareholders of FP&L, it places the entire population of South Florida in extreme jeopardy. (**0067-3** [Commenters, Multiple])

**Comment:** The expansion is a direct threat to our drinking water. An accident, a la Chernobyl or Fukushima would destroy one of the most beautiful places in America. (**0097-3** [Geary, Craig W.])

**Comment:** Contrary to the assertion of the NRC (EIS) that the "socioeconomic' effects of building and operating the proposed reactors# 6 and# 7, are "small and beneficial" I believe the actual risk to the population of South Florida can be devastating. History has shown that unanticipated "incidents" can occur at Nuclear Power generating facilities. History has also shown that the results of such an incident can be catastrophic and long-lasting. (**0206-2** [White, Holly])

**Comment:** There is no question if an accident will happen but when, maybe not in our lifetime but it WILL happen and the consequences for the earth and people leaving near there will be devastating! (0222-1 [Glass, Rachel])

**Comment:** Obviously you have not considered the possible danger to the residents of South Florida. (0331-2 [Anonymous, Anonymous])

**Comment:** We live in the the historic and beautiful Coconut Grove section of Miami, a short distance due north of Turkey Point. A southerly breeze would bring the tragic effects of a nuclear disaster at Turkey Point straight to our homes and our lives in Coconut Grove, adding our community to the names Fukushima, Three Mile Island, and Chernobyl. (**0338-1** [Kavanaugh, Daniel])

**Comment:** There are real safety concerns with this proposal for more reactors to be built so close to a huge metropolitan area. (0340-8 [Tweeton, Tanya])

**Comment:** Please make sure any expansion of Turkey Point's reactors is accomplished in a manner that will assure that there is Zero possibility of any harm coming to South Florida's people or environment as a result of any expansion of the facilities. (**0554-1** [Denninger, Frank])

**Comment:** The cost of a nuclear meltdown is astronomical. One TRILLION dollars and counting for Fukushima and Chernobyl. (**0603-7** [Anonymous, Anonymous])

**Comment:** Operators of PWR reactors like the AP1000 often store the full core inventory in the spent fuel pool during maintenance operations, alongside the older fuel kept in long-term storage there. The larger the number of rods in the fuel pool at one time, the greater the risk of

criticality accidents, meltdown, hydrogen explosion, and the release of fission products. An extended station blackout, terrorist attack, or aircraft accident taking place when the fuel pool was full or nearly full presents a risk to human health and the environment of unprecedented proportions. Fission releases from fuel pool meltdowns at Fukushima were one of the principal sources of land and water contamination and human exposure to radiation. Spent fuel pools at Japanese reactors typically have far fewer fuel rods than their US counterparts owing to that country's use of spent fuel reprocessing. In the four years since the events at Fukushima, the NRC has allowed the start of construction of AP1000 plants in Georgia and South Carolina with spent fuel pools that are no different from pre-Fukushima designs. Those plants are situated at inland, rural locations. Turkey Point is located on the Atlantic Ocean near a major metropolitan area. A fuel pool accident or hydrogen explosion at Turkey Point 6 or 7 presents an unjustifiable risk to the large human population, Florida Everglades National Park, and to the marine environment along the coast including Biscayne Bay National Park. Fuel pool meltdowns were and continue to be the cause of the largest releases of radioactivity from Fukushima, where the surrounding land has become uninhabitable and the plant continues to pour dangerously radioactive water into the sea every day as the utility company attempts to prevent further criticalities. A catastrophic release of radiation into the waters around Turkey Point would have devastating consequences for tourism and shipping industries as the plant sits alongside one of the most heavily trafficked waterways of the United States and just south of important sea ports at Miami and Fort Lauderdale. (0615-2-17 [Bethune, David])

**Comment:** Allowing a total of four nuclear reactors to Turkey Point would mean paradoxically siting of one of the country's largest nuclear reactor installations alongside an urban population of 4 million people. Siting at this location presents an extreme hazard to public health and safety in the event of an evacuation due to catastrophic environmental release of radiation. South Florida is laid out along the coast of the Atlantic Ocean and lacks evacuation routes to the west. (**0615-3-8** [Bethune, David])

**Comment:** And, of course, there's always accident scenarios. We don't even want to talk about an accident. We've seen them. I lived through --I'm old enough to have been through Three Mile Island and we - our jaws are still dropped open from Fukushima. I know it's not the same kind of power plant, but accidents can happen. So all bets are off. All those estimates about environmental impacts changes dramatically, in the event of a release in an accident scenario. (0721-11-9 [Roff, Rhonda])

**Comment:** First, the population data right now is inaccurate. The models are not looking at this project effecting as many as 4 million people, all the way up to Fort Lauderdale, and they're not even taking into account the 2 million in Miami-Dade County. Right now the models are really looking at about 150,000 people that could be affected if there is a problem with the plant. (0721-5-1 [Mendez, Victoria])

**Response:** As discussed in Section 5.11 of the EIS, the severe accident risks listed in Table 5-18 include the population dose risk values. Specifically, the risk values include the risk to human health in terms of calculated cumulative doses to the general public residing within 50 mi of the site and estimated early fatalities and latent cancer fatalities in the exposed population; total economic costs from evacuation, rehabilitation, and land interdiction, condemnation and decontamination; estimated areas of surrounding farm lands requiring decontamination; and from water ingestion. The staff review applied the latest available census data of 2010, and accounted for the increasing population trend, and the property values for independently assessing the applicant's results as presented in the EIS. Thus, the staff considered the most recent information in evaluating severe accident risk for the proposed new reactors. As discussed in Section 5.11.2 of the EIS, the environmental risks from various classes of severe accidents for the Turkey Point site were considered for the purpose of severe accident analysis Site-specific information appears in Table 5-18 as population dose risk (personrem/Ryr), offsite economic costs (\$/Ryr), and population dose risk from water ingestion (personrem/Ryr). The AP1000 design has several passive safety features to reduce the risk from severe accidents. For example, as described in the AP1000 DCD Appendix 19B, one of the key AP1000 severe accident design features is the capability to retain the core debris within the reactor vessel for a large number of severe accident sequences by flooding the reactor cavity and submerging the outer surface of the reactor vessel. The heat removal capability of the water on the external surface of the reactor vessel prevents the reactor vessel wall from reaching temperatures at which failure of the reactor vessel could occur. This has been termed in-vessel retention (IVR). The primary benefit of in-vessel retention of the core is that ex-vessel severe accident phenomena associated with relocation of core debris to the containment, which can be a dominant containment failure mechanism, are physically prevented. Thus, retention of the core within the reactor vessel results in a significant reduction in the potential for large fission product releases to the environment for core damage accidents.

In accordance with the Commission policy statement on severe reactor accidents (50 FR 32138) (TN4519), the severe accident risks of the proposed new reactors are presented in Table 5-18 of Section 5.11.2 of this EIS in terms of risk values per reactor-year, which are the product of the probability of a severe accident and its consequences. The NRC considers these risk values to represent the most meaningful way to place the risk in context and inform the environmental assessment process.

The NRC carries out its mission to protect public health and safety by specifying licensing and operational requirements that nuclear power plants must meet and by inspecting and enforcing compliance with these requirements. The NRC staff does not claim that the risk from a severe accident is zero or that a severe accident "cannot happen here," or that there would not be impacts to tourism or other economic activities. Rather, the NRC staff estimates the risk from a severe accident as described above and uses the estimates in the environmental analysis. The risk values include selected measures that are used for comparative analyses of societal risks and benefits. Specifically, the population dose and economic costs are used for assessing viable severe accident mitigation alternatives, or design alternatives, as explained in Section 5.11.3 of the EIS. The average individual fatality risk for the Turkey Point site, as shown in Table 5-19 and discussed in Section 5.11.2.1, are well below the Commission's safety goals (51 FR 30028) (TN594). The comments provided no information in addition to that considered in the draft EIS analysis, and no changes were made to the EIS as a result of these comments.

**Comment:** There are a few instances in the DEIS text where the DEIS either states that Revision 6 of Florida Power & Light's (FPL) Environmental Report (ER) (FPL 2014-TN4058) incorporated Revision 19 of the Westinghouse AP1000 Design Control Document (DCD) or that the FPL application refers to Revision 17 of the AP1000 reactor certified design. Revision 19 of the AP1000 DCD was incorporated as early as Revision 3 of the Units 6 & 7 COLA, DEIS reference (FPL 2011-TN127). Instances in the DEIS include:....DEIS Section 5.11, Page 5-131, Lines 10-11. (0619-1-4 [Maher, William])

**Response:** The text in Section 5.11 was revised to reflect FPL's application and Appendix D of 10 CFR Part 52 reference Revision 19 of the AP1000 Design Control Document.

## Comment: <u>NRC's Draft EIS is Flawed Because it Fails to Adequately Address the</u> <u>Impacts of Severe Accidents From Multiple Units and or Spent Fuel Pools.</u> According to

the NRC's DEIS: The NRC staff evaluated the environmental impacts from DBAs and severe accidents for an AP1000 at the Turkey Point site. Based on the information provided by FPL and NRC's own independent review, the NRC staff concludes that the potential environmental impacts (risks) from a postulated accident from the operation of the proposed Turkey Point Units 6 and 7 would be SMALL, and no further mitigation would be warranted. (See Appendix D, p. D-3. http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr2176/) NEPA provides for a detailed statement of, "the environmental impact of the proposed action, (and) any adverse environmental effects which cannot be avoided should the proposal be implemented." 42 U.S.C. § 4332(2)(C). However, the NRC characterizes impacts as "Small," "Moderate," or "Large." NRC's characterization of the postulated impacts as "small" is not supported by facts and instead relies upon claims of low probability of severe accidents. However as former Chairman MacFarlane acknowledged in one of her votes after Fukushima: While postulated frequencies of accidents at nuclear power facilities inte h U.S. are often expressed anywhere from one in 1,000 years to one in 1,000,000 years, it's important to recognize that the world has seen three severe accidents at nuclear facilities in the last 33 years -or essentiallyone every ten years, on average. Even though the circumstances, regulatory requirements, and plant designs differed from one accident to the next, these distinctions do not reassure most members of the public. To the contrary, this recurrence rate feeds much of the concern the public expresses about the safety of nuclear power. (U.S. Nuclear Regulatory Commission, Commission Voting Record, SECY-12-0157, Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II Containments, March 19, 2003, p. 3, http://www.nrc.gov/reading-rm/doc-collections/commission/cvr/2012/2012-0157vtr.pdf) Not only does NRC characterization of accidents as "small" violate NEPA but also the DC Circuits decision in New York v NRC, which found that, "(o)nly if the harm in question is so 'remote and speculative' as to reduce the effective probability to zero may the agency dispense with the consequences portion of the (NEPA) analysis." (New York v NRC, 68 F.3d 471, 482. (DC Cir. 2012) Given the commercial nuclear industry's track record of a meltdown per decade and the 2011 triple melt down of General Electric designed reactors in Japan, a severe nuclear accident at a U.S. nuclear plant involving multiple units is anything but speculative. (0716-10 [Riccio, Jim])

**Response:** The staff recognizes and appreciates the concern the public has about the safety of nuclear power. In recognition of this concern, the staff assesses the environmental impacts from postulated accidents in Section 5.11 of the EIS in accordance with Commission policy statements, the regulations of 10 CFR Part 51, and the guidance in Sections 7.2 and 7.3 of NUREG-1555. Nonetheless, the NRC disagrees with the comment that the draft EIS is flawed concerning the risks from severe accidents and that the NRC violates NEPA by assigning an environmental impact finding of "SMALL" to severe accidents.

As for the comment's citation to the decision in New York v NRC, 681 F.3d 471, 482. (D.C. Cir. 2012), the Court of Appeals for the District of Columbia Circuit decision there invalidated an NRC rule. In that case, the NRC had not prepared an environmental impact statement, and the D.C. Circuit held that the challenged rule was not supported by an environmental assessment finding of no significant impact. The rule challenged in the New York v. NRC case differs from the application for COLs for Turkey Point Units 6 and 7 under consideration here because the NRC has prepared an EIS in connection with requested COLs, and the NRC staff has considered the plant-specific facts, including those raised in the comment."

Specifically, the NRC staff did consider severe accidents affecting more than one unit. As the EIS states in Section 5.11.2.4, "[t]he consequences of a severe accident would be the same regardless of whether one or two reactors were built at the site. If two reactors were built, the

risks would apply to each reactor, and the total risk for the site would be approximately double the risk for a single reactor." In the evaluation of severe accidents presented in Section 5.11.2 of the EIS, the staff has shown that the combination of probability and harm is sufficiently minimal in terms of the expected risks of a severe accident for the AP1000 reactor design to reach an environmental finding of SMALL.

Specifically regarding the Fukushima accident, the staff discusses in Section 5.11 the actions that have been taken during the safety review to address this concern and addresses the design features of the AP1000 that are specifically designed to counter the type of severe accidents that could affect multiple reactor units. Therefore, the staff concludes in Section 5.11 of the EIS that "none of the information the staff has identified about the Fukushima accident or the steps taken by the NRC to date to implement the task force recommendations suggests that the seismic and flooding hazards or the available mitigation capability assumed in the Turkey Point Units 6 and 7 EIS analysis of severe accidents would be affected. For these reasons, the NRC's analysis of the environmental impacts of design-basis and severe accidents presented herein remains valid." Additional information concerning the actions taken by the applicant to address actions for the mitigation of beyond-design-basis external events are presented in Chapter 20 of the ASE, Requirements from Fukushima Task Force Recommendations (NRC 2016-TN4806). For example, ASE Chapter 20 notes how passive cooling of the spent fuel is achieved using the water inventory of the SFP and safety-related makeup, and does not rely on active components or ac power (NRC 2016-TN4806).

The staff provided further clarification on the consideration of external events in Section 5.11.2.4 of the EIS in response to this comment.

# E.2.18 Comments Concerning the Uranium Fuel Cycle

**Comment:** Finally, the high-level nuclear waste generated by Turkey Point Nuclear Units 6 &7 will end up and harm the environment for <u>tens of thousands of years to come</u>! (**0010-9** [Saporito, Thomas])

**Comment:** None of the chronic problems of nuclear power have been permanently solved. High-level nuclear waste continues to accumulate at reactor sites all across the U.S. We should not be building more reactors that create this deadly stuff, until we have a permanent repository for nuclear waste. (**0037-1** [Schoene, William])

**Comment:** Complicating all of this is that with no solution in sight for the long-term management of highly radioactive nuclear waste, there is no reason to support the licensing of these proposed reactors. (**0104-5** [Commenters, Multiple])

**Comment:** We are totally opposed to the expansion of nuclear generated energy at Turkey Point -- for the following reasons.....3) No long term solution for waste disposal (**0129-3** [Mayer, Doug])

**Comment:** Complicating all of this is that with no solution in sight for the long-term management of highly radioactive nuclear waste (**0141-4** [Lucas, Carmen])

**Comment:** We are still dealing with disposal issues. This waste lasts for centuries. Where will it be stored? (0146-3 [Grant, Randy])

**Comment:** Thousands of pounds of spent fuel rods (nuclear waste) have already piled up on the shores of Biscayne Bay. There is no long term safe storage on the horizon. (**0158-1** [Carlson, John])

**Comment:** WE STILL DO NOT HAVE CONSENSUS ON THE DISPOSAL OF WASTE. IT IS WRONG OF US TO LEAVE THIS PROBLEM TO OUR DESCENDANTS TO LIVE OR DEAL WITH. (0164-3 [Chrissos, H. L. Chris])

**Comment:** Complicating all of this is that with no solution in sight for the long-term management of highly radioactive nuclear waste, there is no reason to support the licensing of these proposed reactors. (0192-6 [Lebatard, David])

Comment: AND, HOW TO SAFELY STORE SPENT FUEL??? (0201-3 [Reid, Sarah])

Comment: Spent fuel storage [is unacceptable]. (0245-4 [Lindsey, Jerrie])

**Comment:** One item that was heatedly argued by the commissioners present was the "safe" disposal of "spent" nuclear fuel rods which, some commissioners insisted could be converted into "glass logs" and thus neutralized. Depleted uranium doesn't deplete very much. Plutonium-239 only lasts 24,100 years. And Plutonium 244 only lasts 80 million years. (**0264-2** [Dwyer, John P.])

**Comment:** US spent-fuel storage sites are packed with no place to go. This is EXTRAORDINARILY RISKY AND DANGEROUS. Taxpayers are paying for storage for some utilities that have run out of storage space, and some have even sued the federal government for breach of contrac, because it failed to keep the 1998 deadline to establish long-term storage. (0273-1 [Stewart, Berkeley])

**Comment:** And then there is the problem of nuclear waste disposal. We dont have a good long term solution for it and as we speak, it is being stored on site, too close for comfort! (**0340-5** [Tweeton, Tanya])

**Comment:** Another environmental issue that has not even been addressed by FPL or any government agencies is the huge accumulation of nuclear waste, with no place to dispose of it. The plan was to send it to Yucca Mountain, and now it has been determined that there are environmental problems with disposal at Yucca. What will be the environmental impact of keeping nuclear waste with no place for an environmentally safe place for disposal? (**0365-8** [Fischer, Antoinette])

**Comment:** The U.S. still has not settled upon a place to store radioactive waste materials. The Yucca Mountain reserve has proven to have to many problems for storage of dangerous materials for 50,000+ years. (**0382-1** [Mikowski, George])

**Comment:** If you cannot create a SAFE way to dispose, reverse, or eliminate nuclear waste in that the piles/deposits, etc. do not last thousands of years, THEN DON'T BUILD ANY MORE NUCLEAR PLANTS!!!!! DO YOU UNDERSTAND THIS BASIC FACT????? (0406-1 [Ledbetter, Carolyn])

**Comment:** Furthermore, we have never devised a way to deal with nuclear waste, and at this point it seems unlikely we ever will. The kitty litter disaster at the WIPP is just one example of the insanity that plagues the nuclear waste industry. Here in California we're storing vast quantities of nuclear waste from the San Onofre plant (which had to be decommissioned

because the owners tried to skirt regulations and made "upgrades" which effectively destroyed it) right on active earthquake faults. What could possibly go wrong? (**0431-1** [Hicklin, Mary])

**Comment:** Where do you plan to store the nuclear waste? SDD (0434-1 [Dahlgren, Shelley])

Comment: AND, where goes the waste, in whose backyard? (0448-1 [Rush, Charlene])

**Comment:** And nobody has answers to the final question: What to do with spent fuel? Is this left for our children to take care of? (**0467-1** [Veijalainen, Pertti])

**Comment:** No one knows what to do with nuclear waste. It will be there forever. (0469-1 [Weber, Zorina])

**Comment:** 2) after 30 years, the waste still has nowhere to go. Before expansions can be considered, the mounting spent nuclear waste problem has to be addressed. Suggest giving NASA a new mission - get the Nuc waste off the planet - shoot it into the sun or whatever. (**0502-2** [Brumleve, Charles])

**Comment:** To collect additional Nuclear waste material at that site, without a method of disposal, is irresponsible. (0509-1 [Otto, Peter])

**Comment:** The waste created by these plants are a hazard to the planet and all like on it. (**0529-2** [Brandariz, Anita])

**Comment:** Uranium 238 is permanent since and has a half-life of 4.5 billion years, making contaminated areas uninhabitable for eternity. And where are you guys going to bury the nuclear waste? You have already run out of places to bury it. (**0561-2** [G., Ambriel])

**Comment:** Nuclear power has lethal by products, nuclear waste, that will be around for hundreds of years. Has FPL developed a viable plan to deal with this waste? I doubt it. I think they are being irresponsible and not protecting the public welfare if there is no workable plan to safely dispose of these highly toxic wastes. (0579-3 [Schwab, Roy])

**Comment:** The proposed additional, new nuclear reactors at FPL's Turkey Point would produce even more radioactive waste that would not decay for the next 250,000 years or more. Solar and wind power do not produce any radioactive pollution. (**0592-10** [Brexel, Sr., Charles])

**Comment:** NO ONE has figured out how to make radioactive waste safe. (0627-2 [Dolben, Hollis])

**Comment:** Nuclear power will ultimately destroy humanity-just think of the waste problem. (0632-2 [Moll, Wolfgang])

**Comment:** And what about nuclear waster? No one has any idea what to do with the growing mountains of nuclear waster. (**0643-5** [Joannou, Jr., Benjamin])

**Comment:** Where are they going to store the waste?WIPP, in the open air, by the great lakes, in the ocean, on mars? (**0644-4** [Anonymous, Anonymous])

**Comment:** Our technology surpasses our ability to control, maintain, service, and dispose of wastes from nuclear plants, but we proceed, just as we continue to bum fossil fuels. (**0657-3** [Hartmann, Donald])

**Comment:** One item that was heatedly argued by the commissioners present was the safe disposal of spent nuclear fuel rods which, some commissioners insisted could be converted into glass logs and thus neutralized. Depleted uranium doesn't deplete very much. Plutonium-239 lasts 24,100 years. And Plutonium 244 lasts 80 million years. (**0673-2** [Dwyer, John P.])

**Comment:** But probably the number one thing that stuck out at me was the United States' approach to storing this hazmat and the nuclear waste, not only from power plants but from military. They come up with the Yucca Flats idea, initially it sounded great. Let's put all this stuff in one spot, put it underground, we can seal it off forever. And really, that's what we need as far as the long-term storage of these products is forever because some of the harmful effects can affect humans for 300,000 years, so that's basically forever. The country needs to come up with a national storage facility and get rid of all these onsite storage locations. It's just too hazardous having this stuff parked all over the country. Let's get it in one spot and not have any more nuclear plants put online until we have that policy in effect. And I think that this needs to be done, it needs to be a national priority and we all need to be letting our elected representatives know that we need a national plan for dealing with this waste. Until then there is no such thing as safe nuclear power. (0721-24-1 [Eastman, John])

**Comment:** Will there be anyone here to oversee storage of these substances, keeping them from leaching into the environment? (**0721-32-8** [Schlackman, Mara])

**Comment:** So to get down to the point, Monroe County has a safety plan in case of a spill, and spill could see -- okay, they say our core of reactors may produce 10,000 Roetgens. You're loading up the Westinghouse, the rods to say three and a half percent uranium. When you get finished with them you bring down about one and a half percent uranium, it's called spent rods. Unfortunately we do not have a good repository in the United States to store them so they're stored onsite. (0722-15-1 [McColgan, Robert])

**Response:** These comments are concerned with Continued Storage and long term disposal of high-level waste. While a repository for final disposal of spent nuclear fuel has yet to be constructed, the Commission has, through rulemaking, considered the environmental impacts of spent fuel disposal in light of the current national policy regarding spent fuel. Specifically, on August 26, 2014, the Commission issued a revised rule at 10 CFR 51.23 and an associated Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157). Continued Storage is defined as the storage of spent fuel after the end of the licensed life for operations of a nuclear reactor and before final disposal in a permanent repository. The revised rule adopts the generic impact determinations made in NUREG-2157 and codifies the NRC's generic determinations regarding the environmental impacts of continued storage of spent nuclear fuel beyond a reactor's operating license. As directed by 10 CFR 51.23(b), the impacts assessed in NUREG-2157 are deemed incorporated into this EIS in Section 6.1.6. Section 6.1.6 also explains that current national policy mandates that high-level and transuranic wastes are to be buried at deep geologic repositories and that no release to the environment is expected to be associated with deep geologic disposal. The comments provided no information in addition to that considered in the draft EIS analysis and NUREG-2157. Accordingly, no change was made to the EIS as a result of these comments.

**Comment:** More operating nuclear reactors at Turkey Point will produce more long-lived, highly radioactive nuclear waste in the form of spent nuclear fuel for which no safe storage and long-term management yet exists. Coupled with the high vulnerability of this area to sea level rise and severe storm surges from extreme weather events, which will increase from the effects of global climate change, the DEIS is deficient in assessing the impacts to the environment and

public health and safety of indefinite on-site, long-term, potentially permanent, storage of this nuclear waste. Having such a large amount of radioactivity clustered in a population-dense, hurricane-prone area could create significant safety and health concerns for Floridians. The NRC must address these cumulative impacts. (0112-8 [Barczak, Sara])

**Comment:** With the two new reactors having a much larger power capacity than the existing ones, increasing amounts of spent nuclear fuel containing uranium-235, plutonium, and other dangerous radioactive materials will be accumulating in a flood and hurricane prone location for many years to come. (**0158-2** [Carlson, John])

**Comment:** Expanding a nuclear power plant in an area that is ground zero for sea level rise threatens our communities and the environment, especially if large amounts of spent nuclear fuel are stored on---site. (**0210-6** [Sharp, Andrea Heuson])

**Comment:** In addition to the highly dangerous nuclear fuel in the reactor cores - thousands of pounds of spent fuel rods (nuclear waste) have already piled up on the shores of Biscayne Bay. There is no long term safe storage on the horizon. With the two new reactors having a much larger power capacity than the existing ones, increasing amounts of spent nuclear fuel containing uranium-235, plutonium, and other dangerous radioactive materials will be accumulating in a flood and hurricane prone location for many years to come. (**0240-7** [Commenters, Multiple])

**Comment:** There are already thousands of pounds of spent nuclear fuel rods accumulating onsite at Turkey Point, and that accumulation will be compounded by the addition of two reactor units. Given the half-lives of Uranium 235 and plutonium, this waste will remain radioactive for thousands of years, and yet it is accumulating in a location vulnerable to sea level rise and storm surges, whose impacts FPL has underestimated. The spent fuel rods greatly multiply the risks from adding two reactors at this location, to the human population and even more so the wildlife in the nearby national parks. (**0246-4** [Shlackman, Mara])

**Comment:** Expanding a nuclear power plant in an area that is ground zero for sea level rise threatens our communities and the environment, especially if large amounts of spent nuclear fuel are stored on-site. (**0253-5** [Bloom, Justin] [Campbell, Cara] [Causey, Charlie] [Cavros, George] [Chenoweth, Mike] [Daly, Meg] [England, Margaret] [Fuller, Manley] [Jones, George L.] [Keller, Alan] [Martin, Drew] [McLaughlin, Caroline] [Reynolds, Laura] [Silverstein, Rachel] [White, Paton] [Williams, Elinor])

**Comment:** Expanding a nuclear power plant in an area that is ground zero for sea level rise poses a multitude of threats to our communities, especially if large amounts of spent nuclear fuel are stored on-site. (**0254-4** [Dudley, Dwight] [Lerner, Cindy] [Regalado, Tomas] [Stoddard, Philip K.])

**Comment:** The half-life of the main fuel, U-235, is 703.8 million years. Plutonium is also routinely created in the process of running a nuclear plant. It is highly toxic and its various isotopes have half-lives ranging from about 25,000 to 80 million years. These extremely dangerous substances will require secure storage and protection for a very long period of time in an area likely to be hard hit by increasing sea-level rise, storm surges and hurricanes. (**0356-14** [Shlackman, Jed])

**Comment:** The half-life of the main fuel, U-235, is 703.8 million years! Taking a CHANCE on the natural resources we HAVE REMAINING NOW is not a game. Plutonium often created in the process is highly toxic and its various isotopes have half-lives ranging from about 25,000 to

80 million years! Our wildlife and the eco-SYSTEMS that interacts dynamically have delicate balances, just like the human body. Securing storage and protection of dangerous substances I for a very long period of time in an area likely to be hard hit by increasing sea-level rise, storm surges and hurricanes does not seem logical. Once a resource is gone, it's not coming back! Risking throwing anything off in the slightest way can have effects that scientists haven't studied and I would like our next generation to be able to enjoy nature, just as I have today. (0362-4 [Hurley, Paula])

**Comment:** The half-life of the main fuel, U-235, is 703.8 million years. Plutonium is also routinely created in the process of running a nuclear plant. It is highly toxic and its various isotopes have half-lives ranging from about 25,000 to 80 million years. These extremely dangerous substances will require secure storage and protection for a very long period of time and we do not have an agreed upon place to store or agreed way to transport nuclear waste. This is especially a problem for these two nuclear plants because they are in an area likely to be hard hit by increasing sea-level rise, storm surges and hurricanes. (**0366-11** [Griffith, Ed and Harriet])

**Comment:** The half-life of the main fuel, U-235, is 703.8 million years. Plutonium is also routinely created in the process of running a nuclear plant. It is highly toxic and its various isotopes have half-lives ranging from about 25,000 to 80 million years. These extremely dangerous substances will require secure storage and protection for a very long period of time in an area likely to be hard hit by increasing sea-level rise, storm surges and hurricanes. (0370-13 [Vayu, Satya])

**Comment:** In addition to the highly dangerous nuclear fuel in the reactor cores -thousands of pounds of spent fuel rods (nuclear waste) have already piled up on the shores of Biscayne Bay. There is no long term safe storage on the horizon. With the two new reactors having a much larger power capacity than the existing ones, increasing amounts of spent nuclear fuel containing uranium-235, plutonium, and other dangerous radioactive materials will be accumulating in a flood and hurricane prone location for many years to come. (**0551-2** [Anonymous, Anonymous])

**Comment:** No New Nukes until you figure out how to dispose of the waste. Letting it pile up for decades in a hurricane potential area is not what the public wants. (**0621-1** [Datz, Amy])

**Comment:** With the two new reactors having a much larger power capacity than the existing ones, increasing amounts of spent nuclear fuel containing uranium-235, plutonium, and other dangerous radioactive materials will be accumulating in a flood and hurricane prone location for many years to come. (**0625-2** [Felinski, Julee])

**Comment:** In addition to the highly dangerous nuclear fuel in the reactor cores, Im also deeply concerned about the thousands of pounds of spent radioactive fuel rods being stored on the shores of Biscayne Bay. There is no long term safe storage on the horizon. Two new reactors mean that increasing amounts of spent nuclear fuel rods containing uranium-235, plutonium, and other dangerous radioactive materials will be accumulating in a known hurricane lane as well as a flood zone for decades to come. The tragedy of Fukushima should have been the last word on building nuclear plants in vulnerable coastal locations like this one. (**0674-5** [Dwyer, Karen])

**Comment:** The half-life of the main fuel, U-235, is 703.8 million years. Plutonium is also routinely created in the process of running a nuclear plant. It is highly toxic and its various isotopes have half-lives ranging from about 25,000 to 80 million years. These extremely

dangerous substances will require secure storage and protection for a very long period of time in an area likely to be hard hit by increasing sea-level rise, storm surges and hurricanes. (0676-10 [Kassel, Kerul])

**Comment:** I'd like to conclude with some thoughts regarding the highly toxic radioactive substances involved in nuclear plant operations. The main fuel is Uranium 235 with a half-life of 700 million years. Plutonium which is created in the process of running a nuclear plant has isotopes with half-lives of 25,000 years to 80 million years. These half-lives have to be looked at in conjunction with the depopulation of South Florida as sea level rise occurs. (0721-32-7 [Schlackman, Mara])

**Response:** These comments are concerned with Continued Storage, long-term disposal of spent fuel, and how climate change may affect spent fuel storage at the Turkey Point site. While a repository for final disposal of spent nuclear fuel has yet to be constructed, the Commission has, through rulemaking, considered the environmental impacts of spent fuel disposal in light of the current national policy regarding spent fuel. Specifically, on August 26, 2014. the Commission issued a revised rule at 10 CFR 51.23 and an associated Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157). Continued Storage is defined as the storage of spent fuel after the end of the licensed life for operations of a nuclear reactor and before final disposal in a permanent repository. The revised rule adopts the generic impact determinations made in NUREG-2157 and codifies the NRC's generic determinations regarding the environmental impacts of continued storage of spent nuclear fuel beyond a reactor's operating license. As directed by 10 CFR 51.23(b), the impacts assessed in NUREG-2157 are deemed incorporated into this EIS in Section 6.1.6. Section 6.1.6 also explains that current national policy mandates that high-level and transuranic wastes are to be buried at deep geologic repositories and that no release to the environment is expected to be associated with deep geologic disposal. In particular, NUREG-2157, Section 4.17 and Appendix E, describes the effect of long-lived isotopes including those mentioned in the comments.

Climate change, including future sea-level rise, is addressed in Chapter 2, Chapter 7, and Appendix I of the EIS. NRC-licensed spent fuel storage facilities are evaluated to ensure that the performance of their safety systems, structures, and components is maintained during flooding events, and they are monitored when in use. The NRC safety oversight process includes collection and analysis of information regarding changes in the severity or frequency of natural hazards, such as flooding from storm surge and sea level rise, as discussed in SECY-15-0137 (TN4731). When warranted, the NRC can request licensee study and analysis of changing natural hazards, and can impose additional design or operation requirements to address those changing hazards. The comments provided no information in addition to that considered in the draft EIS analysis and NUREG-2157. Accordingly, no change was made to the EIS as a result of these comments.

**Comment:** DEIS Section 6.1, Page 6-2, Table 6-1: In DEIS Table 6-1, "Table S-3 from 10 CFR 51.51(b), Table of Uranium Fuel-Cycle Environmental Data", portions of Table S-3 have been omitted. The complete table is found in Table S-3 of 10 CFR 51.51 and ER Table 5.7-1. The omissions in Table 6-1 occur under the subheading "Effluents - Chemical (MT)" following the entry for "Particulates" at the bottom of page 6-2. Following "Particulates", there are omissions for "Other Gases," F and HCI, and the associated notes regarding those emissions. The "Other Gases" entries should be followed by the subheading "Liquids" and entries for SO4-, NO3-, and Fluoride. Notes from Table S-3 in 10 CFR 51.51(b) documenting various assumptions about how the reference reactor values were derived and regarding the

likely dilution requirements for liquid chemical constituents have also been omitted. (emphasis added) (**0619-5-1** [Maher, William])

**Response:** The missing information from Table S-3 from 10 CFR 51.51(b) has been restored to Table 6-1.

**Comment:** The nuclear fuel cycle utilizes large quantities of fossil fuel at all of its stages--the mining and milling of uranium, the construction of the nuclear reactor and cooling towers, robotic decommissioning of the intensely radioactive reactor at the end of its 20 to 40-year operating lifetime, and transportation and long-term storage of massive quantities of radioactive waste, all are risking our environment and our lives. (**0264-7** [Dwyer, John P.])

**Comment:** Nuclear power is touted as a greenhouse solution, but the ancillary inputs to the nuclear fuel cycle such as mining, milling, reactor vessel construction, dealing with the waste that remains radioactive for millions of years, etc. negates any greenhouse mitigation. (0371-3 [Haffmans, Edmund])

**Comment:** They are also not carbon free. It takes many carbon producing steps to prepare the fuel. (0645-2 [Anonymous, Anonymous])

**Comment:** The nuclear fuel cycle utilizes large quantities of fossil fuel at all of its stages--the mining and milling of uranium, the construction of the nuclear reactor and cooling towers, robotic decommissioning of the intensely radioactive reactor at the end of its 20 to 40-year operating lifetime, and transportation and long-term storage of massive quantities of radioactive waste, all are risking our environment and our lives. (**0673-7** [Dwyer, John P.])

**Response:** These comments relate to fossil fuel use and the carbon footprint of the uranium fuel-cycle activities. The NRC staff evaluated the carbon footprint impacts from the life-cycle of uranium fuel production, construction, operation, and decommissioning of the Turkey Point Nuclear Plant Units 6 and 7. These impacts are discussed in Chapters 4, 5, 6, and 7 of the EIS. The generic impacts of the uranium fuel cycle are codified in 10 CFR 51.51(b), Table S-3, Table of Uranium Fuel Cycle Environmental Data. In accordance with 10 CFR 51.51, the staff relied on Table S-3 as a basis for the impacts of uranium fuel-cycle impacts (including fossil fuel emissions). The staff used the coal and natural gas values in Table S-3 to estimate the greenhouse gas emissions from the fuel cycle. The review team compared the carbon dioxide  $(CO_2)$  footprints of nuclear power and reasonable baseload energy alternatives, and this evaluation is presented in EIS Section 9.2.5. Appendix J of the EIS presents a detailed breakout of the  $CO_2$  footprint of a nuclear power plant. The comments provided no information in addition to that considered in the draft EIS analysis and Table S-3. Accordingly, no changes were made to the EIS as a result of these comments.

**Comment:** I hope the you & your colleagues are un-biased & have enough integrity & complete enough with your science to come to the stronger conclusions against FPL wanting 6 & 7 Nuclear Reactors, because you have also factored in, along with Global Warming flooding where Turkey Point resulting in even greater damage to people's health & tourism, that:....The very source of nuclear power has to be dug out of the ground, through huge mines & has to be transported over states to the nuclear power plants. As I believe PFL representatives said, not just the one time they start a new nuclear reactor or/and a nuclear power plant, but regularly to replace the spent source. Plus, since the nuclear waste that is created cannot be safety stored, the transporting & attempting to safely store the nuclear waste has a huge cost in terms of global warming & our world's environment. (0120-3 [Shark, Jason])

**Response:** This comment is concerned with Continued Storage, long-term disposal of spent fuel, transportation of radioactive material, and climate change impacts. While a repository for final disposal of spent nuclear fuel has yet to be constructed, the Commission has, through rulemaking, considered the environmental impacts of spent fuel disposal in light of the current national policy regarding spent fuel. Specifically, on August 26, 2014, the Commission issued a revised rule at 10 CFR 51.23 and an associated Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157). Continued Storage is defined as the storage of spent fuel after the end of the licensed life for operations of a nuclear reactor and before final disposal in a permanent repository. The revised rule adopts the generic impact determinations made in NUREG-2157 and codifies the NRC's generic determinations regarding the environmental impacts of continued storage of spent nuclear fuel beyond a reactor's operating license. As directed by 10 CFR 51.23(b), the impacts assessed in NUREG-2157 are deemed incorporated into this EIS in Section 6.1.6. Section 6.1.6 also explains that current national policy mandates that high-level and transuranic wastes are to be buried at deep geologic repositories and that impacts to the environment would not be significant as associated with deep geologic disposal. Section 6.1.8 discusses the transportation impacts of the uranium fuel cycle and Section 6.2 discusses the impacts under normal operating and accident conditions of the transportation of nuclear fuel and radioactive waste, in accordance with 10 CFR 51.52 and Table S-4, Environmental Impact of Transportation of Fuel and Waste To and From One Light-Water-Cooled Nuclear Power Reactor. Climate change, including future sealevel rise, is addressed in Chapter 2, Chapter 7, and Appendix I. The impacts of climate change on the storage of spent fuel are included in NUREG-2157. Climate change impacts on the safe operation of Units 6 and 7, including sea-level rise, flooding, hurricanes, and storm surge, will be addressed in the staff's Safety Evaluation Report.

The comments provided no information in addition to that considered in the draft EIS analysis, NUREG-2157, and Tables S-3 and S-4. Accordingly, no change was made to the EIS as a result of this comment.

**Comment:** Storage of radioactive waste in such an area can hardly be described as secure; transport of such waste would be extremely hazardous and presently no long term central storage facility exists. (0463-4 [Gross, Cheryl A.])

**Comment:** Where will the spent rods be disposed of and how will they be transported? (**0550-3** [H., Pat])

**Response:** These comments are concerned with Continued Storage, long-term disposal of spent fuel, and transportation of radioactive material. While a repository for final disposal of spent nuclear fuel has yet to be constructed, the Commission has, through rulemaking, considered the environmental impacts of spent fuel disposal in light of the current national policy regarding spent fuel. Specifically, on August 26, 2014, the Commission issued a revised rule at 10 CFR 51.23 and an associated Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157). Continued Storage is defined as the storage of spent fuel after the end of the licensed life for operations of a nuclear reactor and before final disposal in NUREG-2157 and codifies the NRC's generic determinations regarding the environmental impacts of continued storage of spent nuclear fuel beyond a reactor's operating license. As directed by 10 CFR 51.23(b), the impacts assessed in NUREG-2157 are deemed incorporated into this EIS in Section 6.1.6. Section 6.1.6 also explains that current national policy mandates that high-level and transuranic wastes are to be buried at deep geologic repositories and that no release to the environment is expected to be associated with deep

geologic disposal. Section 6.1.8 discusses the transportation impacts of the uranium fuel cycle and Section 6.2 discusses the impacts under normal operating and accident conditions of the transportation of nuclear fuel and radioactive waste, based on 10 CFR 51.52, Table S-4. The environmental effects of transportation of fuel and waste are codified in 10 CFR 51.52, Table S-4, Environmental Impact of Transportation of Fuel and Waste To and From One Light-Water-Cooled Nuclear Power Reactor.

The comments provided no information in addition to that considered in the draft EIS analysis, NUREG-2157, and Table S-4. Accordingly, no change was made to the EIS as a result of these comments.

**Comment:** Storing these elements in spent fuel pools such as FPL proposes for Turkey Point 6 and 7 creates a serious environmental threat to the people, land, air, and water of this community. (0615-1-10 [Bethune, David])

**Response:** Section 6.1.6 discusses the onsite storage of spent fuel during the licensed lifetime of reactor operations. Environmental impacts from onsite spent fuel storage have been studied extensively and are well understood. Further, effects of normal operation are addressed in EIS Sections 5.9 and 6.1.6 (radiological health), Section 5.1 (land use), Section 5.3.1 (terrestrial ecology), and Section 5.3.2 (aquatic ecology). The overall conclusion is that the environmental impacts of radiation exposure would be small. The comments provided no information in addition to that considered in the draft EIS analysis. Accordingly, no change was made to the EIS as a result of this comment.

**Comment:** The nuclear industry and especially any new construction should pay for the cost of nuclear waste disposal. This should be a cost of nuclear power and not a cost paid for by the government. (0404-1 [Leibowitz, Arthuir])

**Comment:** Nuclear waste is the largest form of LONG-TERM DEBT that any country with nuclear energy will ever have. The cost to store nuclear waste for 250,000 years could bankrupt a country as the cost is INFINITE. (**0603-6** [Anonymous, Anonymous])

**Response:** Licensees, and ultimately their electricity consumers, pay for the storage and ultimate disposal of spent fuel. Under the Nuclear Waste Policy Act, licensees are required to pay a fee into the nuclear waste fund, which is to be used to fund permanent disposal of spent fuel; DOE recently suspended collection of the fee in response to the decision in NARUC v. DOE. In addition, under 10 CFR 50.54(bb) and 10 CFR 72.22(e), licensees are required to provide funding for spent fuel storage costs whether the storage occurs onsite or at an independent spent fuel storage installation. As discussed in Section B.3.4 of NUREG-2157, the NRC acknowledges that, because of delays in the siting and licensing of a repository, the Federal government bears an increasing financial responsibility for spent fuel storage at some time in the future. The comments provided no information in addition to that considered in the draft EIS analysis and NUREG-2157. Accordingly, no change was made to the EIS as a result of these comments.

## E.2.19 Comments Concerning Transportation

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[b]y increasing the capacity to generate power from nuclear the dependence on various non-renewable fuels will diminish decreasing the need

for transportation of oil and liquefied natural gas over rail tracks which are becoming overcrowded with new passenger and commuter services to the east, trains plus increased freight demand from the port expansion etc...As development continues to expand fewer people will be exposed to the dangers of train accidents which are even more threatening to people and the environment if the train carried oil or gas...The decrease in train transportation of fuel for the generation of electricity will have a very substantial positive environmental effect and result in a decrease in greenhouse gas emissions from the transportation alone. (**0015-5** [Goldmeier, Barry])

**Response:** The review team agrees with the comment. Fewer rail shipments are needed to support operation of a commercial nuclear power plant than would be needed to achieve the same electrical generating capacity at coal- or oil-fired power plants. No changes were made to the EIS as a result of this comment.

**Comment:** There are instances in the DEIS where, due to the timing of events with respect to drafting the DEIS, specified dates, or future actions, indicated in the DEIS have passed. Instances in the DEIS include (emphasis added):...DEIS Subsection 7.11.2, Page 7-41, Lines 23-26: The DEIS states: "The Tunnel Access Improvement project is located about 26 mi northeast of the Turkey Point site, but it is unlikely construction of the two projects would overlap because the tunnel improvement project **is scheduled to be complete in 2014**..." This project **was completed in 2014**. (0619-1-11 [Maher, William])

**Response:** Section 7.11.2 of the EIS was revised to remove the reference to the Tunnel Project.

**Comment:** DEIS Subsection 6.2.1.1, Page 6-21, Table 6-4: In DEIS Table 6-4, the parameter, "Dose rate at 1 m from vehicle, **mrem/hr**", is reported as 0.1. In ER Table 5.7-6, the same parameter, with a different unit, "Dose rate at 1 meter from vehicle, **person-rem per hour**" is reported as 0.1.? (emphasis added) (**0619-5-2** [Maher, William])

**Response:** There appears to be a typographical error in the ER. The correct unit for the dose rate emitted from a shipment is mrem/hr. Person-rem refers to collective radiation doses to groups of persons or populations, and not dose rate. No changes to the EIS were necessary as a result of this comment.

**Comment:** DEIS Subsection 6.2.1.1, Page 6-23, Lines 20-21 and Subsection 6.2.1.1, Page 6-23, Lines 27-29: The DEIS (Subsection 6.2.1.1, Lines 20-21) states: "The following discussion **applies to unirradiated fuel shipments**..." Additionally, the DEIS (Subsection 6.2.1.1, Lines 27-29) states: "**In all cases in this EIS**, the NRC staff assumed that the dose rate from the shipping containers would be 10 mrem/hr at a distance 2 m (6.6 ft) from the side of the transport vehicle." This transport dose rate assumption (equivalent to 14 mrem/hr at 1 m) greatly exceeds that presented in DEIS Table 6-4 (0.1 mrem/hr at 1 m for **unirradiated fuel shipments**). Recommend replacing "In all cases in this EIS..." with "In all irradiated fuel cases in this EIS..." (emphasis added) (**0619-5-3** [Maher, William])

**Response:** The staff agrees with the comment that the 10 mrem/hr dose rate does not apply to all cases in the EIS. The NRC staff revised the EIS to indicate that the 10 mrem/hr dose rate applies to the analysis of radiation doses to maximally exposed individuals from transportation of irradiated fuel. The radiation dose rates used for calculating incident-free and accident impacts from transportation of irradiated fuel on populations are specified in the EIS Tables 6-6 and 6-8.

**Comment:** DEIS Subsection 6.2.2.2, Page 6-34, Table 6-10: In DEIS Table 6-10 footnote (a) indicates the radionuclide inventory in DEIS Table 6-10 was obtained from ER Table 7.4-3. ER Table 7.4-1 contains the radionuclide inventories found in DEIS Table 6-10 with the exception of Kr-85—this exception should be noted in the DEIS Table 6-10. (**0619-5-4** [Maher, William])

**Response:** The comment is correct. The Kr-85 source term was taken from an Idaho National Engineering and Environmental Laboratory document (INEEL 2003) and has been included in previous EISs for AP1000 reactors. The NRC staff revised EIS Table 6-10 to reflect this comment.

**Comment:** DEIS Subsection 6.2.2.2, Page 6-36, Table 6-11: In DEIS Table 6-11 includes an incorrect footnote (a). Values in the table are reported in person-rem/year, not person-Sv/yr. Footnote (a) should provide the conversion from person-rem to person-Sv as in DEIS Subsection 6.2.1.1, page 6-22, Table 6-5 and DEIS Subsection 6.2.2.1, page 6-31, Table 6-9. (0619-5-5 [Maher, William])

**Response:** The footnote in the EIS Table 6-11 is correct, but the review team agrees with the comment to the extent that the conversion should be from units of person-rem reported in the Table to person-Sv. The review team revised EIS Table 6-11 to reflect this change.

**Comment:** DEIS Subsection 6.2.2.2, Page 6-36, Lines 8-10: The DEIS states: "This risk is very small compared to the **4.5 x 10<sup>-5</sup> person-rem/yr** that the same population would incur annually...Turkey Point site to Yucca Mountain from exposure to natural sources of radiation." The DEIS Subsection 6.2.2.1, Page 6-33, Lines 10-12 correctly states: "This dose is very small compared to the estimated **4.5 x 10<sup>5</sup> person-rem** that the same population...Turkey Point site to Yucca Mountain would incur annually from exposure to natural sources of radiation." Turkey Point site to Yucca Mountain would incur annually from exposure to natural sources of radiation." (emphasis added) (**0619-5-6** [Maher, William])

**Response:** The comment correctly identifies a typographical error in Section 6.2.2.2. The review team revised the statement in the EIS Section 6.2.2.2 to correctly reflect the 4.5x10<sup>5</sup> person-rem/yr exposures to natural background radiation.

**Comment:** DEIS Subsection 7.11.2, Page 7-43, Lines 3-7 and Subsection 7.11.2, Page 7-43, Lines 10-12: The DEIS (Subsection 7.11.2, Lines 3-7) states: "...the NRC staff considers to be acceptable for the 1,000 MW(e) reference reactor." Similarly, lines 10-12 refer to a 1,000 MW(e) reference reactor. Impacts presented in Table S-4 are based on an **1100 MWe reference reactor** evaluated in the reference WASH-1238. (emphasis added) (**0619-5-10** [Maher, William])

**Response:** The statement in Section 7.11.2 of the EIS was revised to correct this typographical error.

# E.2.20 Comments Concerning Decommissioning

**Comment:** As a resident of Key Largo, I am hopeful that you will reconsider the proposed expansion and begin thinking about decommissioning the plant as it's useful life reaches its limits. (0130-4 [Jones, Diane])

**Comment:** As the Turkey Point reactors age, they should be dismantled. (**0213-5** [Hyams, Charles])

**Comment:** My god, you should be planning its dismantling even as we speak! (**0384-2** [Franzmann, Paul])

**Response:** At the end of the operating life of a nuclear power reactor, NRC regulations require that the facility be decommissioned. Decommissioning is discussed in Section 6.3 of the EIS. The environmental impact from decommissioning a permanently shut-down commercial nuclear power reactor is also discussed in Supplement 1 to NUREG-0586, Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, which was published in 2002. In Supplement 1, NRC staff found that for most environmental issues, the impact from decommissioning activities is considered small.

No changes were made to the EIS in response to these comments.

### E.2.21 Comments Concerning Cumulative Impacts

**Comment:** According to NRC and NEPA requirements, the DEIS must discuss and analyze the environmental impacts of the proposed Turkey Point expansion, including the direct, indirect and cumulative impacts. Current operations of Turkey Point already pose risks to the ecological integrity of surrounding environments, particularly to Biscayne Bay and Biscayne National Park. Specifically, water from the cooling canal system (CCS), a designated industrial wastewater facility (IWF) used to cool waters from the operation of Units 3 & 4, is seeping into groundwater, creating a hypersaline plume emanating out in all directions. [Footnote 22: Lewis, M. United States Department of the Interior, National Park Service Letter to M. Harris, Florida Department of Environmental Protection, November 13, 2009, L76, 1.] Despite being described as a "closed system" by FPL, the CCS is an unlined system with direct connections to groundwater. (0113-2-2 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** This failure to address the current crisis of the cooling canals, the fact that there has not been presented any proposed long term solution in the Draft EIS is a fatal flaw in the Draft statement, and can only be addressed by studying these current emergency conditions, and the cumulative effect of this new and likely long-term scenario, the impact of the uprate on the cooling canal system, the significant impact on our water sources, and the CUMULATIVE EFFECT of current conditions when planning for the future, then factoring it into the scenario for the two proposed new plants. The failure to address current conditions and to establish the potential scenario fails to provide a comprehensive evaluation as recommended by the USGC Global Sea Level Rise Scenarios for the US national Climate Assessment. (**0145-6** [Lerner, Cindy])

**Comment:** The NRC review should not separate the new reactor impacts from the persistent damage being caused by the existing reactor operations. The continued damage to Biscayne National Park must not be allowed to continue as it runs counter to the National Parks mission and the Nation's promise to its citizens that the Park and its biological resources be protected for current and future generations. (0172-6 [Cava, Daniella Levine])

**Comment:** Not effectively addressing the ongoing environmental degradation as part of the NRC's environmental review of the proposed additional nuclear power plants would be a disservice to the residents of Miami-Dade County, the rate-payers of the State of Florida, and Nation. Please ensure that the environmental review for Turkey Point 6 & 7 evaluates the cumulative impact and use this opportunity to correct the problems as they exist now. (0172-8 [Cava, Daniella Levine])

**Comment:** The DEIS does not adequately describe the cumulative impacts of constructing and operating Units 6 and 7. Information should be included related to impacts from other ongoing actions as we have indicated herein, federal or non-federal, that are likely, when added to the

incremental effects of the proposed action, to have an impact on the affected environment. This view is consistent with the CEQ regulations for implementing NEPA which defines cumulative impacts as, "The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions." Most notably, the analysis does not fully consider the following impacts: effects of sea level rise and storm surge, and impacts from the IWF hypersaline plume, freshwater utilized to alleviate IWF emergencies, operation of the RCWs on NPS resources, impacts on surface water and groundwater, and effects on imperiled flora and fauna and aquatic resources. The NRC should update its cumulative impacts analysis in revisions to the DEIS. Many of the specific cumulative impact concerns are described in previous comments on specific topics such as sea-level rise and climate change, water quantity and quality. (0622-2-5 [Austin, Stan])

**Response:** The NRC is aware of the 1997 guidance from the Council on Environmental Quality (CEQ) regarding cumulative impacts. The NRC's process for assessing cumulative impacts is described in the introduction to Chapter 7. In performing its cumulative impacts analysis, the NRC follows the requirements of NEPA, the NRC's regulations, and the guidance provided in NUREG-1555, the Environmental Standard Review Plan (NRC 2000). This analysis considers the current environmental conditions at the Turkey Point site and in the surrounding region as described in Chapter 2 of the EIS. Chapter 2 includes a description of the existing units at the site and the environmental conditions associated with their operation. The analysis considers the impacts associated with construction and operation of Turkey Point Units 6 and 7 described in Chapters 4 and 5 to be those that are also important to consider in a cumulative impact context. Chapter 7 provides a list of other important projects within the general 50-mi region surrounding Turkey Point that could contribute to cumulative impacts. For each resource area considered, the EIS further describes the geographical area of interest and provides a technical justification for its extent. These geographical areas of interest encompass the areas in which direct, indirect, and cumulative impacts would be expected to occur for each resource area. The EIS has been updated to reflect data collected since the publication of the draft EIS.

# E.2.22 Comments Concerning the Need for Power

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons: 1-The area needs a dependable long term source of electric power to accommodate future growth[.] (**0015-1** [Goldmeier, Barry])

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...I would imagine that more nuclear generation capacity from new plants will take the strain off the older facilities allowing them to be upgraded and have their safety mechanisms improved. (**0015-12** [Goldmeier, Barry])

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...In the event of a disruption in the power grid because of terrorism, accidents or weather having a Miami-Dade generated source of electric power would proved to be a tremendous advantage for our County and boost our stability. (0015-8 [Goldmeier, Barry])

**Comment:** I also am aware that FP&L has decommissioned several power plants in Florida and the requirements for extra power, especially with the huge influx of immigrants and others from our northern states, is critical. (0035-3 [Larrabee, Laura])

**Comment:** South Florida is growing and more Electrical Power is needed. (**0041-1** [Williams, Paul])

**Comment:** There have been some questions about the need for this project, and to us in the construction industry there is no question about the need for this project. All it takes is you drive down Downtown Miami, the Biscayne corridor, Brickell, the Design District and you see cranes everywhere and you see high-rises going up everywhere. And that construction growth, that boom in construction that we're experiencing right now, needs additional power capacity. Each high-rise consumes on the average from 2 to 3,000 kva's of load. And that is the reason why this project is necessary, the need for additional power capacity to maintain this growth. (0721-27-1 [Rodriguez, Manuel J.])

**Comment:** In essence we have taken the position as a city the need for additional power as we grow our city. As you all well know our community is growing really fast and we don't have the capacity to generate enough of our own so we do purchase a lot from Florida Power and Light. They are an extremely good partner, they've been with -- you know, we've been partners for a long time. Actually, we're the sister city so of record. (**0722-1-1** [Porter, Jeff])

**Comment:** I've lived here, as I said, for 30 years which means I lived through Hurricane Andrew. Can I see a show of hands? How many of you here in the room lived through Hurricane Andrew? You know, that is indicative of what happens when you no longer have a reliable supply of electricity. And that is what my concern is and that is what brought me here today.

Turkey Point 6 and 7 represent what I believe to be a necessary element of additional power to this community. We operate, we live at the end of the power grid. All of our energy with the exception of what's coming out of Turkey Point is basically imported from the north which makes us highly vulnerable in the case of storms and other potential natural interruptions. (0722-10-2 [England, Peter])

**Comment:** And then aside from that there's the concern that South Florida needs energy. (0722-5-2 [Silva, Nicolas])

**Comment:** [W]as the additional power needed? Second, was it safe and cost efficient? Over the years as I've become more informed. I've been convinced that we need -- we will need additional power. (0723-1-1 [Wallace, Otis])

**Comment:** ...whereas FPL has plans to expand electrical generation at its Turkey Point facility meeting the electrical needs of its customers and service area in Miami Dade County. (0723-2-2 [Trowbridge, Mark])

**Comment:** [A]nd kilowatt hours, that it will bring to extra capacity for Miami Dade County. (0723-8-3 [McDuffie, Stephen])

**Response:** These comments express support for nuclear power because of the growth of the area and the concomitant increase in the need for power. No changes were made to the EIS as a result of these comments.

**Comment:** FPL has cancelled its renewable programs for ratepayers, is engaged in anti rooftop solar astroturf campaigns and disinformation propaganda to limit competition from rooftop solar that would make the need for new reactors unnecessary. This is poor coporate social responsibility that should not be rewarded. (0710-6 [Platt, George Seth])

**Comment:** And I think the last cost that I think is really hard to quantify is the long-terms cost of business and our economy by doubling down on nuclear at a time when we are not in crisis. No one is predicting brown-outs in the near future. Instead, we're at a time of opportunity. We don't know what our future will be in terms of energy, but we'd be doubling down for 50 to 80 years on nuclear, when we're at a time where on the ballot in 2016 is a measure that would allow us -- allow voters to consider whether they want competition and diversification on how power is generated and distributed. (0721-1-9 [Rodriguez, Jose Javier])

**Comment:** Lastly, it's no surprise that FPL argues that there's a need for a \$20 billion nuclear reactor project to meet the demand 12 years from now. They have gutted their energy efficiency programs for customers and they don't assign any capacity avoidance value to solar power, so they've cleared the deck of all clean energy options. (**0721-8-10** [Cavros, George])

**Response:** These comments express general opposition to the environmental costs of power plant construction or raise societal issues that are not within the purview of NRC or USACE to address as part of the environmental review process. They did not provide new information related to the environmental effects of the proposed action. Therefore, no changes were made to the EIS as a result of these comments.

**Comment: Overall: The overall project purpose is to meet the public's need for reliable increased electrical baseload generating capacity in Florida Power & Light's service territory.** My question is: Is this public need for the entire state or specifically for Miami? (0008-3 [Finver, Jody])

**Comment:** The NRC wholly relied on the Florida Public Service Commission (FPSC) need determination as stated above [commenter pasted text from EIS Section 8.2.1 and its subsections into their correspondence] - and <u>failed</u> to properly make an "independent" "NEED" determination in this matter. (0010-4 [Saporito, Thomas])

**Comment:** FPL should be denied a license for Turkey Point expansion for many reasons:...5. No need. Miami's demand for electricity is falling, not rising. (**0022-5** [Read, Alice Gray])

**Comment:** We continue to have serious concerns about FPL's proposal to potentially build two new Toshiba-Westinghouse AP1000 reactors at their existing Turkey Point site in Miami-Dade County. The uncertainties of this more than \$20 billion, decade-delayed project continue to escalate, putting utility ratepayers and the environment at increasing risk. Fundamentally, there is no purpose and need for the two reactors. (0112-1 [Barczak, Sara])

**Comment:** The power lines would be sold upstate, Orlando and Tampa, and out of state. It is not for local use. So who does it serve? (0149-7 [Nelson, Joyce E.])

**Comment:** The power that will be generated at these reactors is not for the local area. (0337-2 [Philips, Sally B.])

**Comment:** Another reason to support the "No Action" alternative is that there is no need for the proposed ~\$20 billion reactors--the fact that they have been delayed several times and the inservice date pushed back at least ten years is just one indication. The fact that FPL will not commit to actually completing the project is clearly another. Further, the NRC's reliance on Florida Public Service Commission orders and the state's utility resource planning process is badly misplaced. The alleged need for the new reactors is the product of a disjointed state utility planning process that the NRC should not rely on. (0379-4 [Commenters, Multiple])

**Comment:** It is quite possible that the plants will never be built, if FPL decides, for example that their use would be uneconomical. (**0615-1-13** [Bethune, David])

**Comment:** When asked to justify the electrical demand for a new plant, another staff member simply reported that the state Public Utilities Commission had deemed it necessary. (**0615-1-4** [Bethune, David])

**Comment:** Even though you rely upon the state of Florida for the electric needs assessment and determination of need it is important to point out that these two new reactors may not be needed. Florida is moving to an economy based upon new electric sources of power. (**0641-8** [Martin, Drew])

**Comment:** Florida needs to strengthen and secure its grid through diversity of electricity generation, not create large reactors at the tip of the State that feed energy elsewhere. (0710-7 [Platt, George Seth])

**Comment:** And so as I look at this synopsis of the Draft Environmental Impact Statement, I have to wonder about the age of some of the statistical basis that have been invoked by FP&L and by other parts, the Public Utilities Commission, for example, as a basis for making the claim for the need for these two units. So, that's one question that I have, and I want to raise for our visitors. (0721-17-1 [Breslin, Tom])

**Comment:** Second one is, our area may need more electricity, but there is no present foreseeable crisis that exists. (0721-31-4 [Almirola, Alejandro])

**Comment:** The determination of need right now is based on antiquated data that was done in 2008. The NRC review based on a seven-year-old determination of need that was done before the market crashed and the real estate crash is not adequate information to base this plant expansion on. It seems to be a desktop review and not appropriate with such large threshold questions. (0721-5-2 [Mendez, Victoria])

**Comment:** FPL's proposed Turkey Point reactors are neither low cost nor low risk. While there are a host of environmental and safety impacts, from the extremely water intensive proposed reactors, I'm going to limit my comments to the need for power. And with all due respect, Dan and Alicia, there is no need for the proposed reactors. The fact that they have been delayed several times and the in-service dates have been pushed back at least ten years, is but one indication. The fact that FP&L will not commit to actually completing the projects is another clue. (0721-8-1 [Cavros, George])

**Comment:** But let me circle back to the DEIS, because, you know, why is this important in that context? Because the alleged need for the power plant is the product of a disjointed State utility planning process upon which the NRC relies. To reach this determination that the need is there the NRC concludes that Florida's utility planning process is systematic, comprehensive, subject to confirmation, and responsive to forecasting uncertainty. (0721-8-8 [Cavros, George])

**Comment:** The reason I asked the question earlier about the demand forecast is I don't think you can trust even an honest and well-managed utility with the lowest power cost in the nation, like FPL, to make these projections for the demand for power, baseload power. They have a bias in the system. Basically they get a guaranteed return on every dollar they spend. (0723-12-1 [Henry, Jim])

**Comment:** We have to think of some alternatives to the demand forecasts that they have laid out here, which are -- you know, if they're -- I mean, they're directly relevant to the DEIS. Because if the demand forecast isn't right then we have to go back to square one. (0723-12-4 [Henry, Jim])

**Response:** These comments generally suggest that NRC's reliance upon the State's Determination of Need process implemented by the Florida Public Service Commission (FPSC) is invalid, unfounded, or that the need for Units 6 and 7 has not been clearly established. In 2008, the State granted the applicant a Determination of Need for Units 6 and 7. Chapter 8 of the EIS provides the review team's analysis of the findings of the FPSC process in support of granting FPL's Determination of Need. The Chapter 8 discussion includes analysis of the most recent annual update to FPL's feasibility assessment approved by the FPSC in October, 2015. As indicated in Section 8.4 of NRC's Environmental Standard Review Plan (NUREG-1555), when a State agency has regulatory authority over determining a need for power, NRC defers to that agency's decision. Chapter 8 of the EIS has been updated to reflect any relevant new information provided by FPL or the FPSC regarding the need for proposed Units 6 and 7. In addition, it discusses FPSC's condition in its granting of FPL's Determination of Need - that FPL regularly update its long-term forecasting to regularly reassess the need for the project.

**Comment:** DEIS Subsection 8.1.1, Pages 8-3/8-4, Lines 4/5: The DEIS states: "FPL relies on **two measures of reliability** in its resource planning..." However, in FPL's 2014 Ten Year Power Plant Site Plan (DEIS reference [(FPL2014-TN3360)], **FPL introduced a third criterion**: "Therefore, FPL is implementing a new reliability criterion of a 10% GRM in its resource planning work to complement its other two reliability criteria: a 20% total reserve margin criterion for Summer and Winter, and an annual 0.1 day/year loss-of-load-probability (LOLP) criterion." (emphasis added) (**0619-5-12** [Maher, William])

**Comment:** DEIS Subsection 8.1.1, Page 8-4, Table 8-1: DEIS Table 8-1 cites (FPL 2014-TN3360), "Ten Year Power Plant Site Plan 2014-2023", as the reference. However, only the Industrial values can be verified per Schedules 2.1 and 2.2 (pages 37-38) from the Ten Year Power Plant Site Plan 2014-2023. (**0619-5-13** [Maher, William])

**Response:** These comments identify inconsistencies or point out reliance on outdated sources in Chapter 8 of the EIS. Changes to Chapter 8 have been made to reflect updated sources of information and to correct any inconsistencies in the text.

**Comment:** These "grid-tied" solar systems not only "decrease" FPL's "NEED" for more generating base load capacity - they actually "decrease" FPL's base load requirements. To the exent that the FPSC failed to properly consider these types of grid-tied home solar systems in making their "NEED" determination - the NRC's reliance on FPSC's determination is flawed in kind. One of the major and leading home solar system providers - Solar City - offers a leasing option for Florida home owners with NO upfront costs as shown here and below: <u>http://www.solarcity.com/residential/how-much-do-solar-panels-cost</u> [ad placed here - refer to PDF file] As can be seen here - a customer of FPL can simply lease a complete home solar power generating system for their home without making any upfront payments. As previously stated - these grid-tied systems generate excess power back to FPL's electric grid. Thus, <u>FPL's base load demand is reduced in two ways</u> - (1) reduced customer demand for electric power from the FPL grid since these solar power systems can generate 100% of a home owner's energy needs; and (2) the solar systems generate electric power back to FPL's grid. (0010-10 [Saporito, Thomas])

**Comment:** The NRC's reliance on the Florida need determination process is misplaced. The foundation for the need for power, which is a foundational consideration in the DEIS, is based on a 2008 state need determination order by the Florida Public Service Commission (PSC), whose underlying assumptions have been not stood the test of time. In fact, the load forecast assumptions made in 2008 regarding the need for the reactors to meet demand bear no resemblance to today's load forecast realities. Moreover, the NRC analysis of the need determination order is cursory and not weighed against current forecast realities to determine if the process meets the NRC's own requirements (NUREG-1455) for responsiveness to forecasting uncertainty. Instead, the NRC offers a conclusory opinion with mere references to the order that are not independently verified by FPL's own subsequent filings with the Florida PSC. Therefore, the NRC should take a "hard look" at the underlying need for power by conducting an analysis of Florida regulations and the load forecasts, as they exist today, in rendering a decision on the need determination's responsiveness to load forecasting uncertainty. If it does so in a through manner, it can only conclude that the process that determined need for the plant is obsolete, not remotely responsive to load forecast uncertainty, and does not support the need for power upon which the DEIS is based. The NRC relies exclusively on the PSC's Order No. 08-0237-FOF-EI in concluding that there is a need for power. (DEIS 8-4 -- 8-12). Yet, the load projections, and the related assumption for the need for the reactors in the 2008 need determination were flat wrong. The order states, in part that "FPL's peak load is expected to increase by over 6,000 MW by the year 2020." (PSC Order 08-0237-FOF-EI p.10). In fact, the increase in peak load demand projected from the Company's 2015 Ten Year Site Plan shows that the increased peak load from 2008 to 2014 and projected peak load out to 2020 only amounts to a 3,847 MW increase in peak demand. (FPL 2015 Ten Year Site Plan, p. 42). The order upon which the NRC relies, goes on to state the following: [I]if load forecasts were to dramatically drop or the amount of DSM or renewable generation available were to substantially increase, the likely result would be the deferral or avoidance of some natural gas-fired power plants which have not been certified to date, rather than the deferral or avoidance of new nuclear base-load generation.(emphasis added). (PSC Order 08-0237-FOF-EI p.10). Truth is, with the dramatic drop in demand, it is the proposed reactors that have been pushed back, not new natural gas plants. The in-service dates for Turkey Point 6 and 7 have been delayed several times. It was most recently announced that the new projected inservice dates for the reactors is 2027/2028.<sup>3</sup> [Footnote 3: FPL Press Release, January 26, 2015. At http://newsroom.fpl.com/2015-01-26-FPL-announces-plans-to-install-more-than-1million-solar-panels-at-three-additional-solar-power-plants-as-part-of-continued-strategy-ofadvancing-affordable-clean-energy-in-Florida. And FPL testimony from Richard O. Brown filed on May 1, 2015 with the Florida Public Service Commission, Docket No. 150009, p. 17, states: "...the in-service dates of Turkey Point 6 & 7 utilized in the 2015 feasibility analyses are changed from 2022 and 2023 to 2027 and 2028. These dates represent the earliest practical deployment date for Turkey Point 6 & 7." At http://www.psc.state.fl.us/library/FILINGS/15/02473-15/02473-15.pdf.] The determination of need never contemplated an in-service date pushed back almost a decade. (PSC Order 08-0237-FOF-El p.1). In the absence of the proposed reactors, the Company has continued to repower existing natural gas plants and intends to return to the PSC for another determination of need for a natural gas combined cycle plant this year with a projected in-service date of 2019. (FPL 2015 Ten Year Site Plan, p. 9). There is no discussion of this new dynamic in the DEIS. The DEIS continues to be riddled with inaccuracies. It states that FPL is expected to fall below the 20 percent summer reserve margin requirement in 2016 by 824 MW. By 2022, the projected year referenced in the DEIS during which Unit 6 might become operational, the reserve margin would be 5.4 percent. (DEIS 8-9). This is simply incorrect and not consistent with FPL's 2015 Ten Year Site Plan and further indicates the NRC's careless analysis of PSC Order 08-0237-FOF-EI against the realities that exist in Florida today. Moreover, the NRC inexplicably shifts its focus from the 2018/2020 timeframe (in service dates

used in the need determination) to a 2022 timeframe without any explanation of how it transitioned to that year nor why it failed to incorporate the most recent projected operation dates of 2027/28. (DEIS 8-9). The DEIS must analyze its conclusion that there is a need for power in the context of the FPL's current resource planning scenario as identified in its 2015 Ten Year Site Plan. The DEIS does not directly address the fact that FPL has currently missed the projected in service dates by almost a decade, nor does it address the issue that the utility continues to not commit to actually construct the proposed reactors<sup>4</sup> [Footnote 4: Florida Public Service Commission, Docket No. 130009, Hearing Transcript Volume 3, p. 617.] and simply continues to seek determinations of need for natural gas combined cycle facilities that were not contemplated in the very PSC order on which the NRC places its reliance. Not only have the facts today proven that the Turkey Point 6 and 7 need determination is not responsive to forecast uncertainty, as a matter of law, once the order is issued, it cannot be revisited -rendering any decision related to need unresponsive to load forecast uncertainty. The Florida PSC is the sole forum for a determination of need as plainly stated in Florida statute. In making its determination on a proposed electrical power plant using nuclear materials or synthesis gas produced by integrated gasification combined cycle power plant as fuel, the commission shall hold a hearing within 90 days after the filing of the petition to determine need and shall issue an order granting or denying the petition within 135 days after the date of the filing of the petition. The commission shall be the sole forum for the determination of this matter and the issues addressed in the petition, which accordingly shall not be reviewed in any other forum, or in the review of proceedings in such other forum. (emphasis added). (§403.519 (3), Fla. Stat.) Hence, pursuant to the need determination process, the need for the Turkey Point reactors cannot be challenged or revisited once the order has been issued. Therefore, if the PSC grants a determination of need based on economic conditions which are no longer relevant, and the need determination cannot be revisited, it begs the question: how can the NRC reach its tersely explained conclusion that the need determination process is responsive to load forecast uncertainty, when it is in-fact not? The NRC's reliance on the state process is misplaced. The agency must take a hard look at the need for power. (0112-4 [Barczak, Sara])

Comment: Clarify Analysis of Need for Power and Population Projections. NEPA requires that a final Environmental Impact Statement discuss the purpose of and need for the action "to which the agency is responding in proposing the alternatives including the proposed action." 40 CFR § 1502.13. In particular, Chapter 8 of the Nuclear Regulatory Commission's Environmental Standard Review Plan provides a review and analysis of the "need for power". Through this section, the Nuclear Regulatory Commission may weigh the benefits of the power plant against the environmental impacts of construction and operation of a nuclear power reactor. Comment 15: The final Environmental Impact Statement should assess and explain projections of future demand for electricity in South Florida. The Florida Bureau of Economic and Business Research (BEBR) at the University of Florida released a Florida Detailed Population Projection for the years 2015-2040 in 2014. http://tinyurl.com/BEBR2015-2040. This study projects that the rate of population growth in Miami-Dade County will continue to rise until 2020. At that point, the rate of population growth will begin to decrease and level off. The DEIS acknowledges this projection and states that "high rates of population growth are anticipated from 2014 until 2018 and then level off after 2018." DEIS at 8-6. Moreover, BEBR produced a Florida Estimates of Population analysis in 2014. See http://tinyurl.com/BEBR2014. This analysis shows that the rate of population growth has decreased from 16.3% to 4.7% in Miami-Dade County from 1990 to 2014. See id. at Table 3. The previous study suggests that this rate will continue to decline to 3.1% by the year 2040. Similarly, the SFWMD decreased water allocation from the Biscayne Aquifer in a 2015 water use permit for Miami-Dade County's Water and Sewer Department "due to water conservation measures and updated population projections showing a lower population growth rate through 2033." See SFWMD Individual Use

Permit for MDWASD Permit Number 13-00017-W (Description 4-5). Thus, Miami-Dade County has updated its future demand projections with the availability of new population data, thereby reducing the total amount of water required to meet the needs of Miami-Dade County. Accordingly, the demand for power will likely decrease as the rate of population growth in Miami-Dade continues to decrease and then stabilizes over the coming decades. Therefore, the final Environmental Impact Statement should include a discussion of whether or not a decrease in the rate of population growth in Miami-Dade County will affects the projected demand for electricity. (0456-22 [Miami, City])

**Comment:** FPL's overall electrical energy demand has stabilized and is very slowly increasing. With more focus on energy efficient appliances. LED/LCD tv's, Even cable/sat boxes are now being investigated, more efficient A/C, more thermal installation, etc. As electronics reduce chip feature size, power consumption decreases, modem tablets and cell phones consume a fraction of the energy of the devices they replaced. Air conditioners are now more efficient SEER 14 (Jan 1, 2015) minimum by law. Based on FPSC data for the period 2003 to 2012, FPL's overall electricity sales increased 2.7% for that ten year period. Yet for the period 2013 to 2022 FPL projects a 16% net sales growth! I would say FPL's projections are more than overly optimistic! Ref: Review Of The 2013 Ten-Year Site Plans For Floridas Electric Utilities, FPSC October 2013. Item 6 (loss of net metering) is omitted due to limited space. Complete version of letter attached in .pdf format. (**0545-6** [Keating, Tim])

**Comment:** Also, as residential and commercial properties continue to generate excess daily power by solar energy systems, the utilities in the state will have less of a customer base to bill back as unique charges on their statements for overhead costs (power lines, etc.) resulting in significant increases to their customers over and above the costs of units 6 & 7. (**0653-3** [Hickey, Alan])

**Comment:** I want to talk briefly about what George Cavros said about conservation. I've been able to conserve a lot. And I think when we talk about the need for these two power plants and the reliance on the PSC we -- that is pretty much a biased organization. I've been able to reduce my power usage significantly. I don't use any outdoor lighting. I turned off my hot water heater. People don't realize this, but most of South Florida originally did not use electric or gas water heaters, they used direct sunlight to heat their water. I currently use direct sunlight and it works very well. And when you talk about building these additional plants and you're talking about the need for this, you are ignoring --and you're ignoring how people can reduce their energy use, then the need assessment does not ring true. And I think that's very important. (0721-13-5 [Martin, Drew])

**Comment:** Each year the need for more capacity is deferred. It allows FP&L to choose to build lower cost, more modular resources such as solar power if efficiency cannot meet the entire load in over a decade. Unfortunately, FP&L forthcoming efforts over the next ten years, to help customers reduce energy use and save money on their bills through energy efficiency programs, is simply a national embarrassment. The [Florida Public Service Commission] PSC recently approved the company's request to gut its conservation goals. Now FP&L will meet only 3/100ths of 1 percent of annual demand through energy savings. To put that in perspective. If FP&L were a state it would rank among the bottom, behind Alabama and Mississippi in energy savings for customers. And I have an illustrative chart which I can leave with you. (**0721-8-4** [Cavros, George])

**Response:** The review team followed its Need for Power guidance found in NUREG-1555, the Environmental Standard Review Plan. Some of these comments generally suggest that the

State's Determination of Need process implemented by the FPSC, upon which NRC relies pursuant to Section 8.4 of NRC's Environmental Standard Review Plan (NUREG-1555), is flawed, outdated, or relies upon faulty logic or assumptions. The FPSC process requires FPL to provide an annual update to its feasibility assessment of Units 6 and 7. The FPSC has approved the FPL process through its 2015 independent review of FPL's planning assumptions, cost estimates, feasibility analysis, and other considerations, which FPL must annually report to FPSC. New information regarding the planning assumptions and feasibility of Units 6 and 7 was made public through this process and updates have been made to Chapter 8 and Section 10.6 of the EIS to reflect this new information. The FPSC's 2015 approval of Docket 15009 EI reaffirms the State's 2008 determination that Units 6 and 7 are needed and remain viable (FPSC 2015-TN4521). The review team reviewed the most recent FPSC proceedings in this regard and finds that the process for annually updating the feasibility and associated analyses was (1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty. Other comments in this set challenge the need for the two new nuclear units in favor of other sources of electricity, primarily conservation and solar power generation. These alternatives are discussed in detail in Sections 9.1 (No-Action Alternative), 9.2.1 (Alternatives Not Requiring New Generating Capacity), and 9.2.3 (Other Alternatives). No changes were made to the EIS because of these comments.

**Comment:** To make matters worse, FPL has not even committed to actually completing the project if approved! Why should Floridians support such a project? (**0594-4** [Rapuano, Shannon])

**Comment:** Since, according to the Miami Herald, Florida Power & Light has not formally committed to building the two new reactors, I strongly recommend that NRC withdraw the current document, repair the citations, and reopen the public comment period. (<u>http://www.miamiherald.com/news/local/community/miami-dade/article18627960.html</u>) (**0716-6** [Riccio, Jim])

**Response:** The decision about whether or not to build and operate a new nuclear units is made by the applicant in conjunction with State and local public regulators, not the NRC. The NRC's responsibilities are to review the application according to its regulations outlined in 10 CFR Part 52 and 51. No changes were made to the EIS as a result of this comment.

**Comment:** As I understand it, FPL does not need these reactors for current use, but is planning for the future. Currently, I believe, they are intending to sell the excess power to more northerly climes. (0115-4 [Trencher, Ruth])

**Comment:** If there is going to be a monopoly in our electrical system, then it must be forced to adopt the policies which benefit the most people (taking externalities into account). If not, open up the market and allow for PPAs, the absence of which is squashing solar power in the "Sunshine State". (0119-3 [de Azevedo, Ricardo])

**Comment:** This high-voltage, aboveground power line proposes to distribute power to customers outside Miami-Dade County as well. Residents in the affected area are asked to accept the degradation of their communities so FPL can save a few, none-recurring dollars on placement. We pay FPL handsomely for the power they deliver. Now, we are asked to compromise safety, beauty and despoliation of the public landscape with tourism suffering permanent economic damage to aggrandize FPL's Retained Earnings. Moreover, who is willing to negate FPL intends to sell excess capacity to Georgia Power & Light via this aboveground, high-voltage power line? "Profit" is not a gritty word; however, it is a grimy word when spillovercosts are safety and permanent degradation of our communities. (0408-5 [Sifko, Basilio])

**Response:** These comments express concern about the dispatch of the nuclear power from proposed Units 6 and 7 to areas outside the Miami-Dade area. The allocation of the electricity generated to other markets is beyond the scope of the NRC's Need for Power process under NUREG-1555, Environmental Standard Review Plan. No changes were made to the EIS as a result of these comments.

**Comment:** Cyndee, it is abundant electricity that makes our society the wonderful place that it is. It is unfortunate, because of the global warming scare, that underprivileged people around the world are not getting the opportunity to enjoy our level of abundance. (**0680-4** [Hubbard, Stanley S.])

**Response:** This comment expresses support for nuclear power because of the standard of living it provides. No changes were made to the EIS as a result of these comments.

#### E.2.23 Comments Concerning Alternatives - No-Action

**Comment:** I request that both agencies support the "No Action" alternative in reference to Docket ID: NRC-2009-0337. (0104-2 [Commenters, Multiple])

**Comment:** SACE believes that the DEIS fails to adequately discuss and analyze these potentially adverse impacts and insufficient proposals for mitigation. As such, we recommend that the NRC and USACE support the "No Action" alternative. (**0112-3** [Barczak, Sara])

**Comment:** I request that the Nuclear Regulatory Commission and U.S. Army Corps of Engineers support the "No Action" alternative. (0148-2 [Brinn, Ira])

**Comment:** I request that both agencies support the "No Action" alternative in reference to Docket ID: NRC-2009-0337. (0192-2 [Lebatard, David])

**Comment:** I request that the Nuclear Regulatory Commission and U.S. Army Corps of Engineers support the "No Action" alternative. (0379-2 [Commenters, Multiple])

**Comment:** I support the "No Action" alternative given the project's potentially widespread negative environmental and public health and safety impacts. (0379-7 [Commenters, Multiple])

**Comment:** I request that the Nuclear Regulatory Commission and U.S. Army Corps of Engineers support the "No Action" alternative. (**0508-2** [Harrison, J. M. M.])

**Comment:** Along with probably more than 225 million Americans (i.e. 9 out of 10 Americans in recent surveys) who want more solar and wind power installed rather than more nuclear power and more than 20.236 million members and supporters of the supporting organizations listed below and more supporting organizations, I very strongly urge both agencies to please, right now, support the "No Action" alternative in reference to Docket ID: NRC-2009-0337. (**0592-1** [Brexel, Sr., Charles])

**Comment:** We strongly oppose the expansion of Turkey Point and strongly urge both agencies to please, right now, support the "No Action" alternative in reference to Docket ID: NRC-2009-0337. (**0592-11** [Brexel, Sr., Charles])

Comment: NO ACTION! (0609-3 [Khajeh-Noori, Jeri])

**Comment:** Moreover, the NRC's reliance on the Florida Public Service Commission and its Orders and the State's Utility Resource Planning Process is badly misplaced. As such, we believe that the no-action alternative should be the Agency's preferred choice. (0721-8-2 [Cavros, George])

**Response:** The impacts of a no-action alternative are discussed in Section 9.1 of the EIS. Selecting the no-action alternative would mean a license would not be issued for the proposed reactor and impacts from its construction and operation would not occur. Such a decision would also mean, however, that the purpose and need of the proposed action (to provide additional baseload electrical generation capacity for use in the FPL service territory) would have to be satisfied by other means. The environmental impacts of meeting the need for power by these other means are discussed in Section 9.2, and the review team concluded that none of the feasible alternatives was environmentally preferable to the proposed action. The comments did not provide any information that would change the review team's conclusions. Therefore, no changes to the EIS were made as a result of these comments.

**Comment:** Executive Summary, Page xl, Table ES-4: In DEIS Table ES-4, "Summary of Environmental Impacts of Construction and Operation of New Nuclear, Coal-Fired, and Natural-Gas-Fired Generating Units and a Combination of Alternatives", for the Socioeconomics impact category, the environmental impact levels for coal, natural gas, and combination of alternatives are inconsistent with their corresponding impact levels in DEIS Subsection 9.2.2.1, page 9-15, Table 9-1; Subsection 9.2.2.2, page 9-21, Table 9-2; Subsection 9.2.4, page 9-29, Table 9-3; and Subsection 9.2.5, Page 9-30, Table 9-4. In the case of natural gas, the impact level is listed as "MODERATE (beneficial)" in DEIS Table 9-2 and "SMALL (beneficial)" in DEIS Table ES-4. For the combination of alternatives, the impact levels for beneficial and adverse are reversed. For coal, both beneficial and adverse are MODERATE in DEIS Table 9-1; however, in DEIS Table ES-4, the impact level for beneficial is listed as "SMALL (beneficial)". (0619-2-17 [Maher, William])

**Response:** The tables in the Executive Summary and Section 9.2 were edited to correct the inconsistencies noted in the comment.

### E.2.24 Comments Concerning Alternatives - Energy

**Comment:** We are very susceptible to hurricanes, the last thing we need is 2 more nuclear reactors near us. Why can't FPL invest in solar energy to help them meet the demand of energy that is needed? It comes down to greed. They think about the money and not about the lives they are putting at risk. (**0003-2** [Ortiz, Natalia])

**Comment:** I urge you to instead invest the money in more environmentally sustainable, renewable energies. (**0004-2** [Engelberg, Jodi])

**Comment:** Put up wind farms, require all new construction to incorporate solar like France is doing. Get a bunch of catfish to eat up the algae bloom and tell people to stop blasting their AC 24/7 and opening retail store doors to cool the sidewalk. (**0008-13** [Finver, Jody])

**Comment:** A determination of FPL's application should be done in as sober a manner as possible by weighing the facts. The Greater Miami area has a population of some six million people from Miami to Palm Beach. The prime consideration behind any decision should be the safety and welfare of all of these people. With the abundance of sunshine that South Florida has, it seems clear that clean, safe renewable energy should be pursued rather than a

technology that has a history of catastrophic accidents (Three Mile Island, Chenobyl, Fukushima, to name a few). (**0009-4** [Rose, Simon])

**Comment:** The NRC Failed to Consider Solar Power Energy Alternatives: The solar power industry is extensive in the United States and the associated installation costs have dramatically decreased over the years. Moreover, the efficiency of solar power generating systems have dramatically increased over that same time period. Moreover, a customer of FPL can "lease" an entire home solar energy system without paying any upfront costs or maintenance costs. These solar energy systems can power an entire home and supply FPL's grid with excess power not consumed by the customer. (0010-6 [Saporito, Thomas])

**Comment:** We need more renewable environmentally safe power and educate power consumers to use more efficient electrical devices. (**0012-2** [Shahsavar, Mehran])

**Comment:** Now is the time to invest in solar, wind, and wave energy. (**0014-2** [Westaway, Katharine])

**Comment:** The multi 100M-dollar corporation that is FPL, absolutely MUST be employing solar and wind energy. Conservation, solar & wind are the only way to succeed in living in harmony with nature. Nature -upon which ALL life depends. (**0020-2** [Smith, Leigh Emerson])

**Comment:** Non Nuclear generation of power by solar, tidal current, wind or geothermal methods have no such dangers.or consequences to our life on Earth, which should be a primary consideration in these decision making times. Even natural gas is less expensive and available to accomplish the same goals with less adverse consequences. Florida is blessed with sun and wind as well as the constant Gulf Stream current. Let us take advantage of what we have to our greatest advantage and create the least damage with all our renewal resources. (**0021-2** [Silver, William])

**Comment:** FPL should be denied a license for Turkey Point expansion for many reasons: 1. Too expensive. Nuclear power is much more expensive than solar (**0022-1** [Read, Alice Gray])

**Comment:** FPL should be denied a license for Turkey Point expansion for many reasons:...6. Conservation first. Miami could conserve much more than it does. Most important: Distributed rooftop solar should be top priority for electricity generation. It's cheap, clean, safe, efficient, reliable, and resilient in disasters. No excuse not to make the sunshine state generate all it's power from the sun. All that's needed is efficient energy storage. (**0022-6** [Read, Alice Gray])

**Comment:** In fact, we need to build renewable energy power plants such as wind, solar, etc. so that we can dismantle every single one of our nuclear reactors before they destroy our civilization. (**0023-2** [Joannou, Jr., Benjamin])

**Comment:** In the face of climate change, what we really need is clean, safe, and affordable renewable energy along with energy efficiency and conservation that will not endanger our health, environment, or future. We do NOT need more nuclear plants. Invest in renwables.We live in the Sunshine state...solar...solar...solar. (**0026-1** [San Pedro, Patricia])

**Comment:** I would prefer FPL focus their efforts and money on true clean energy, like solar and wind. (**0027-1** [Neal, Kevin])

**Comment:** Our community needs to consider electricity savings, and sustainable energy sources such as wind and tide, rather than relying on nuclear sources. (**0032-2** [Vinciguerra, Anthony])

**Comment:** The Sunshine State and the Government of the United States should invest in solar energy rather than on obsolete and dangerous nuclear plants. Nuclear energy plants pose a threat to the environment and to the population that resides near the plant. History proves the dangers of nuclear energy production with examples such as Chernobyl and Fukushima. Catastrophe can be prevented by investing in solar energy. (**0033-2** [Van Thienen, Mateo])

**Comment:** Although, I understand that population growth in South Florida has gone up year after year but I don't believe that all other alternative power sources have properly been explored and should be prior to this application being approved. (**0034-2** [Rodriguez, Barbara])

**Comment:** I know this is a difficult decision to make but looking at all the alternative possibilities as to how to supply our community with power for years to come is definitely needed. (**0034-4** [Rodriguez, Barbara])

**Comment:** We live about six miles from Turkey Point.. I don't go to bed at night wondering if the system will go bad but I do think about the possibilities once in a while. I did know TP was there when I bought my second house in this area and I am not opposed to this kind of energy. However, I am strongly opposed to the stand that Florida's big energy firms have taken on solar energy. Florida is the sunshine state, it says everywhere we go.. Yet we are behind many northern states in encouraging solar as a serious power source and I feel that is mostly due to FPL and Duke doing everything they can to keep solar out of this state. Some companies are offering to lease panels to homeowners which is being opposed by our energy firms in this state. If there is a cleaner, cheaper way to produce electricity I have not heard of it.. It should be everywhere in this state. We should set the pace for the entire country. (**0036-1** [DeMent, David L.])

**Comment:** And why, with solar and wind power already economically competitive, should we be building any new power plants that have so many problems when wind and solar do not? (**0037-2** [Schoene, William])

**Comment:** Given the advent of viable, lower cost, and benign alternative power generating technologies such as wind and solar, the risks associated with the expansion of Nuclear Power in South Florida far outweigh any possible benefits that may be derived. As the world moves toward ecologically sound and renewable alternative power technologies, I believe it is contingent upon FP&L to do likewise. FP&L should not resist change, but embrace it. It is in the interests of FP&L's shareholders, customers and a healthier, safer world to do so. (**0039-4** [Violich, Francesca])

**Comment:** Given the advent of viable, lower cost, and benign alternative power generating technologies such as wind and solar, the risks associated with the expansion of nuclear power in South Florida far outweigh any possible benefits that may be derived. (**0043-2** [Grill, Helen])

**Comment:** With the advent of viable, lower cost, and benign alternative power generating technologies such as wind and solar, the risks associated with the expansion of Nuclear Power in South Florida far outweigh any possible benefits that may be derived from the proposed Nuclear Power Plants at Turkey Point. As the world moves toward ecologically sound and renewable alternative power technologies, I believe it is essential that FP&L follow such

established examples of viable and safe utility scale energy production. Times have changed and technologies have advanced since the inception of the Turkey Point facility. The changes and advancements in viable power generating technologies have been even more dramatic within the 9 years that FP&L has pursued this goal of expanding the nuclear facilities at Turkey Point. FP&L should not resist change, but embrace it. It is in the interest of FP&L's shareholders, customers, the residents of Miami-Dade County, the residents of the State of Florida, and a healthier, safer world, to do so. (**0044-8** [Commenters, Multiple])

**Comment:** Why aren't solar farms being considered rather than nuclear power? FPL has done more than any other company in the state to prevent the growth of solar power energy. This is a much safer way to meet the growing demand for more energy. (**0048-3** [Wegner, Geri])

**Comment:** Worse yet, the cost of the proposed expansions will never be realized by production, as already better, safer, and cheaper modes of energy production abound and the technological increases during just the construction phases of this project will make it obsolete. (**0051-3** [Smith, David W.])

**Comment:** We should be moving away from nuclear energy and toward more environmentally friendly sources like sun (hello, this is FLORIDA!), wind and ocean current. (**0052-2** [Roos, Monica])

**Comment:** Let's talk cost. Before billions are spent to build new reactors way far south of the points of use and the transmission lines to carry that power north, we must <u>demand</u> that Florida Power and Light investigate solar panels on all large flat roofs in the urban areas to produce power at the point of use and negate the need for both the reactors and transmission lines to get the power where it is needed. I contend the cost will be levels of magnitude LESS than two nuclear reactors. (**0053-3** [Sasiadek, Alfred])

**Comment:** Florida is the "Sunshine State". We need to use the resources that nature provides us here to save money and save our environment at the same time. I ask you to consider the consequences and alternative to any decision. (**0053-5** [Sasiadek, Alfred])

**Comment:** Encourage Florida Power and Light to invest in renewable safe energy sources for the good of all. (**0057-6** [Neway, Roberta])

**Comment:** It is time we switched to renewable, environmentally responsible energy production in the Sunshine State! (**0058-2** [Imbesi, Nan])

Comment: We need more solar and wind. (0063-2 [Smay, Betty])

**Comment:** And last, I would suggest that you ask FPL to allow homeowners to sell their solar generated power back to the grid so that, over time, we can use our sunshine to our advantage. This is a long term goal that many people are arguing now as the solution to nuclear power. But I do not want to spend my retirement years sitting in darkness waiting while the solar and wind industries mature to the point that they can provide the electricity necessary to power 3 million people's needs. (0070-4 [Lamb, Deborah S.])

**Comment:** FPL is developing solar power too, but they are doing a teeny tiny fraction of what they could be doing. While 95% or more of their advertising and PR is devoted to promoting how much solar development they're doing, they are actually generating less than 1/10 of 1% (that's 0.01%) of their electricity through solar power. I know, I'm a customer and I read the

brochures that come with my bills each month, and see the commercials on TV! Look at the graphs in their brochures and it's obvious! I brought the brochure that came with my February 2015 bill (see below) if you want to see it in their own words, in black and white - or rather green and white. But printing the info in green doesn't make what FPL is doing green - unless the green you're talking about is cash. (0078-11 [Wilansky, Laura Sue])

**Comment:** With so many truly clean, safe, renewable and sustainable technologies now available and in development, there is no reason to build new nuclear plants, which will only drain much-needed resources from full development of better, safer technologies. We will get much better value and results from investing in these technologies. This is THE SUNSHINE STATE! We should be leading the nation, heck, the world in solar development! Instead we rank 13th in total installed solar, and 20th in solar installed in 2014. It' time to end the use of all nuclear power, and put ALL - ALL! of our resources into truly safe, clean and sustainable technologies like conservation, solar, wind, geothermal and others, which absolutely can, and will supply all the energy the state, and the world needs, without destroying the world in the process. (**0078-13** [Wilansky, Laura Sue])

**Comment:** Finally, in the "Sunshine State" it is unforgivable that we are discouraging solar energy utilization. FPL is against this solely for financial reasons! Please consider the responsible future for Florida power!! (**0080-3** [Reiter, Ben])

**Comment:** FPL should be looking to better renewable resources of energy instead of investing OUR money into an antiquated, dirty and very risky system. (**0087-5** [Lange, Alexandra])

**Comment:** I would like to see our local government to explore other sources of energy. Eolic, Solar, even in very underdeveloped countries are using these technologies today. (**0088-3** [Lange, Alexandra])

**Comment:** Given the falling prices of solar power and new batteries, we question the wisdom of committing customers to \$20 billion worth of last century's technology, while closing the door on cheaper, safer and more environmentally responsible options. (**0088-6** [Lange, Alexandra])

**Comment:** WHY ARE WE NOT GOING TOWARDS SOLAR POWER, particularly in FLORIDA??? (0089-2 [Hubler, Gina Marie])

**Comment:** FPL should be looking to better renewable resources of energy instead of investing OUR money into an antiquated, dirty and very risky system. (**0092-3** [Merino, Miriam])

**Comment:** I recommend that you disapprove any further processing of their Turkey Point Nuclear Power plant expansion proposal for the reasons summarized below2)The proposal is not the most environmentally acceptable alternative. FPL has not adequately evaluated other, more cost-effective alternatives to produce electrical energy which do not add the risk of nuclear waste storage at a highly flood and wind prone site. Alternatives for new energy production abound, but were not evaluated based on the falling prices of solar power due to the introduction of new battery technology. Furthermore, FPL has not evaluated other alternatives including energy conservation and efficiency, at one-fifth the cost of new nuclear power generation, thereby concealing how those alternatives, with conservation included, would cost less and have far less public health and hurricane damage risk than this proposal. This \$20 billion project you could only approve by ignoring or deliberately hiding the fact that <u>better</u>, cheaper, safer and more environmentally acceptable alternatives to new power production are available now or in the near future for Southern Florida. (**0094-2** [Fairchild, David]) **Comment:** I recommend that you disapprove any further processing of their Turkey Point Nuclear Power plant expansion proposal for the reasons summarized below6)Finally, the proposal assumes that future growth in demand for electricity must be supplied from the grid. Rapid evolution in the technology needed to locally generate power from solar, wind and wave sources, together with scalable on-site battery storage make that assumption obsolete. The basic justification for this project is <u>a dubious need for large amounts of grid delivered power</u>. That justification must now be reassessed in light of current or soon available new technologies enabling local, non-grid based power generation. (**0094-6** [Fairchild, David])

**Comment:** FPL has the opportunity to use wind or solar energy because it a perfect way to generate power without negatively impacting the National Parks, Preserves and Sanctuaries in our eco-sensitive area. (**0096-3** [Roberts, Linda])

**Comment:** FP&L has bribed the Florida Legislature to block the expansion of solar here in the Sunshine State by blocking net metering. Nuclear is unprofitable, existing only with rate payer and tax payer subsidies. (0097-2 [Geary, Craig W.])

**Comment:** Please consider other sources of renewable energy instead of a nuclear plant. Our environment is not the best suited for these type of project. (**0101-2** [Gomez, Gustavo])

**Comment:** There are other energy choices that don't pose such risks, which are not properly studied in the draft Environmental Impact Statement. Solar power has dropped in price and improved in quality whereas new nuclear reactors continue to increase in cost and have yet to actually be built. Energy efficiency is the lowest cost resource in meeting electricity demand--many times less expensive than these reactors that are approaching \$20 billion. Yet, FPL is doing almost nothing to expand energy efficiency or renewables, which are viable alternatives, nor is the Florida Public Service Commission making decisions that will expand these safer, more affordable options. Y our agencies should not rely on their flawed utility planning process. (0104-3 [Commenters, Multiple])

**Comment:** I would much rather see them invest in solar power rather than anymore nuclear. (0114-3 [Cunningham, Sue])

**Comment:** They have invested very little into solar energy or other renewable sources of energy, sources that do not have the potential problems of a nuclear facility; storage of waste, leakage, breakdown of various elements of the system. (FPL does not encourage the use of solar power on homes and businesses, and, together with Duke Energy, has convinced the Florida legislature to make it **illegal** to sell excess power created through solar collectors. (**0115-5** [Trencher, Ruth])

**Comment:** Our community (other than those who have FPL stock) is concerned and would like responsible, alternative sources of energy (e.g., SOLAR) to be implemented. (**0116-2** [Garcia, Ruslan])

**Comment:** By the time construction is complete alternative energy will have become much cheaper and safer than nuclear (**0118-2** [Zakon, Allan])

**Comment:** They should invest in solar energy. FPL's parent company produces way more solar energy in other states, so it has the capability, knowledge and expertise to do expand solar energy in Florida. It chooses not to because of Florida's weak laws on solar energy. **(0121-2** [Reyneri, Juan])

Comment: We need solar and wind, sustainable solutions. (0124-2 [Colby, Helen])

**Comment:** This expansion would cause a lot of harm in our community. I support alternative forms of energy that are less harmful to the environment. (**0125-2** [Colls, Ana])

**Comment:** Why can't FPL consider championing solar (we are the "sunshine state"), wind or hydro energy? (**0128-3** [Bach, Lili])

**Comment:** We are totally opposed to the expansion of nuclear generated energy at Turkey Point -- for the following reasons.....4) I would rather FPL spend the money on solar and wind generation. (0129-4 [Mayer, Doug])

**Comment:** [C]ould you find a better location for more solar and wind power than South Florida. Wake up please! Save what is left of our environment.! (**0131-2** [Brown, Judith O.])

**Comment:** I herewith want you to note my objection to FPL's planned new nuclear power plans - a dangerous and superfluous proposition, given....the fact that we have plenty of solar energy opportunities in Florida! (0135-2 [Thiel, Markus])

**Comment:** I am writing today from my home to oppose the approval of FPL's two nuclear power at Turkey Point for the following reasons....3. Conservation is by far less costly and productive as is being demonstrated by South Dade Farmers in water conservation with the use of drop irrigation and the use of compost and mulch that hold water and require less irrigation. All energy conservation measures must be implemented now, not more costly nuclear power. Utilize and subsidize more solar power that is making great strides towards becoming more affordable every year. We advertise on our license plates that Florida Is The Sunshine State yet present laws restrict the use if our ever-present Sun to be used for power. We must not commit ourselves to this new nuclear power for 60 years when clean solar energy is being wasted as it is showered over us every day. (0136-3 [Levy, Morgan I.])

**Comment:** I am writing today from my home to oppose the approval of FPL's two nuclear power at Turkey Point for the following reasons....4. My family has stock in FPL and we are against spending the \$20 million on old technology that will be paid for by its customers. As a stock holder, we would prefer that FPL use whatever financial resources are necessary to get our lawmakers in Tallahassee to make solar energy available to every household and commercial building with the latest technology in batteries that can make solar power available 24 hours a day. (**0136-4** [Levy, Morgan I.])

**Comment:** There are other energy choices that don't pose such risks, which are not properly studied in the draft Environmental Impact Statement. Solar power has dropped in price and improved in quality whereas new nuclear reactors continue to increase in cost and have yet to actually be built. Energy efficiency is the lowest cost resource in meeting electricity demandmany times less expensive than these reactors that are approaching \$20 billion. Yet, FPL is doing almost nothing to expand energy efficiency or renewables, which are viable alternatives, nor is the Florida Public Service Commission making decisions that will expand these safer, more affordable options. Your agencies should not rely on their flawed utility planning process. (0141-2 [Lucas, Carmen])

**Comment:** With an abundance of sunshine, our first and best alternative for energy production should be solar. It's time the public be given a chance to install affordable, dependable solar

equipment. Allow tax credits to everyone who can help lower our usage of depleting the worlds reserves. Stop acting in the best interests of what is good for business. (**0146-5** [Grant, Randy])

**Comment:** This would approve old technology. We need new progressive forms of energy like wind and solar. This is the Sunshine State!! Why spend money on old technology? (**0149-6** [Nelson, Joyce E.])

**Comment:** It will devastate our already weak political will in Florida for more sustainable energy policy. (0150-2 [Otis, Martha])

**Comment:** The nuclear expansion at this particular juncture, at this particular location, puts Everglades restoration in jeopardy; it consistutes a costly and short-sighted energy policy, especially considering the viability in Florida of alternatives such as solar and wind--both cheaper options. (**0150-3** [Otis, Martha])

**Comment:** Let's put our money and resources in sustainable energy--we live in the Sunshine State! We should be the leader in solar energy development and use. The technology is here--use the money proposed for Turkey Point expansion to give subsidies to residents and businesses for solar energy and we won't need more nuclear power! (**0152-1** [Agler, Mindy])

**Comment:** This investment of more than 20 billion dollars of the rate-payers money makes no logical sense. FPL should drop this risky project and instead embrace a solar alternative that the company knows its customers want. Solar contains virtually none of the risk of the proposed projects and will contribute to both the ecological ans economic sustainability of our region for years to come. (0153-4 [Goldman, Emanuel])

**Comment:** What happened to Solar Power? We **are** the Sunshine State. (**0159-6** [Bazzone, Barbara])

**Comment:** It's time to exercise environmental responsibility and fast track development of Solar, Wind, and Water powered energy as well as electric and solar powered automobiles! (0170-2 [Ercole, Steven])

**Comment:** Instead, we really need to practice more energy conservation and embrace renewable forms of energy especially solar energy in the Sunshine State. (0178-5 [Almirola, Alejandro])

**Comment:** The future is in renewable energy, not in foolhardy archaic nuclear technology that is environmentally hazardous for thousands of years. (**0183-2** [Piper, Cynthia])

**Comment:** We need to more actively provide safe energy, not expand the dangerous, destructive use of nuclear power! (0185-2 [Balog, Nancy])

**Comment:** No need for more nuclear energy, we need solar panels in Florida. (0190-1 [Johnson, Robert])

**Comment:** There are other energy choices that don't pose such risks, which are not properly studied in the draft Environmental Impact Statement. Solar power has dropped in price and improved in quality whereas new nuclear reactors continue to increase in cost and have yet to actually be built. Energy efficiency is the lowest cost resource in meeting electricity demandmany times less expensive than these reactors that are approaching \$20 billion. Yet, FPL is doing almost nothing to expand energy efficiency or renewables, which are viable alternatives,

nor is the Florida Public Service Commission making decisions that will expand these safer, more affordable options. Your agencies should not rely on their flawed utility planning process. (0192-3 [Lebatard, David])

**Comment:** Renewable energy alternatives such as solar and wind power, should be the only types of energy production to be built starting now. (**0194-2** [Mayotte, Monica])

**Comment:** However, the risks associated with nuclear power are completely avoidable because alternatives are available. From improving energy efficiency to increase use of renewable energy sources, we don't need to invest \$20 billion into a technology that no one wants in their backyard. (**0207-3** [Cleland, Noel])

**Comment:** Being in South Florida, we feel that solar power would be a much better choice. (0212-4 [Ross, Robert and Teresa])

**Comment:** I suggest that instead of allowing a company to charge me more for electricity and the building of nuclear reactors that I don't even want, the government seriously reconsiders policies on energy to keep up on the times. Models can be found all around the world, including Germany which currently subsidizes cleaner energy initiatives, allowing them to become the forerunners of innovation and manufacturing in cleaner energy. When these antiquated energy sources run out, they'll be selling us the equipment to change our state. Why can't Florida become the centre of clean energy technologies? Why do we have to pander to a for-profit company? (0214-7 [Zerulla, Tanja])

**Comment:** Also, at a time of tremendous clean energy and battery advancement, to make a long term, huge financial commitment doesn't make sense. (**0215-1** [Atler, Neal])

**Comment:** I am an FPL customer, and this proposal is idiotic. There's plenty of solar power potential in south florida! (0218-1 [Barlow, Jeffrey])

**Comment:** Instead, the state of Florida should be encouraged to go solar. (**0219-1** [Clay, Cynthia])

**Comment:** Let's invest our money in renewables instead of something that will eventually destroy us. (**0231-2** [Bonilla-Jones, Carmen Elisa])

**Comment:** You need to approve solar and wind power plants not nuclear. (**0231-4** [Bonilla-Jones, Carmen Elisa])

**Comment:** We live in the "Sunshine State" but FPL's commitment to renewable energy has been very weak. FPL under-performs on solar power, generating less than 1/10 of 1% (0.01%) of its electricity through solar power. Given that solar power helps meet peak demand, and power plants are built meet peak demand, meaningful investment in solar would be a step in the correct direction and defer the need for the proposed Turkey Point nuclear reactors, which are very expensive, take a very long time to construct, increase greenhouse gases during construction and are very detrimental to ratepayers. (**0237-1** [Welber, Michael])

Comment: What you need is to switch to solar power, please!!!. (0238-2 [Padilla, Dora])

**Comment:** On a final note - this investment of more than 20 billion dollars of the rate-payers money makes no logical sense. Solar power was not considered a viable alternative by the NRC reviewers - even though no state in the eastern half of the U.S. has the solar potential of Florida

- also known as the Sunshine State. And in spite of all the advertising they do on the topic -FPL's actual solar production of less than 1/10th of 1 percent of its "energy portfolio" leaves much to be desired. With initiatives like third party rooftop solar coming online soon (and more about the "Floridians for Solar Choice" project in a future email), FPL should drop this risky project and instead embrace a solar alternative that the company knows its customers want. Solar contains virtually none of the risk of its proposed Turkey Point expansion and will contribute to both the ecological and economic sustainability of our region. (0240-13 [Commenters, Multiple])

**Comment:** That money can empower so many Florida homes with solar power as well as businesses public buildings etc. (0241-2 [Portuondo, Pilar])

**Comment:** I am opposed to granting FPL permission to build two new reactors at Turkey Point. Now is the time to look at sustainable energy, not to endanger or future. (**0242-1** [Colby, Helen])

**Comment:** There are other choices for clean, safe energy, without dangerous toxic waste that will be present for years. (**0243-3** [Duran-Pinzon, Jaime])

Comment: Say yes to solar energy. (0243-5 [Duran-Pinzon, Jaime])

**Comment:** Say no to expansion into nuclear energy...look to solar expansion for the sunshine state (**0248-1** [Kadis, Patricia])

**Comment:** I would suggest to you that Florida, the Sunshine State, follow the lead of Spain and Germany whose solar energy is world renown and they are not located in a subtropical country where there is an abundance of sunshine. (**0250-5** [Fulks, Anna Louise])

**Comment:** Solar roofs would feed residential and commercial needs, with peak power occurring with peak demand, when the heat of the day increases air conditioning loads. Current generators could be installed off Miami Beach, providing for the demands of resorts, hotels and restaurants. The party never stops? No problem, the Gulf Stream flows 24/7. Why are these solutions not being implemented? FPL has virtually blocked residential rooftop solar by manipulating regulatory mechanisms of government. (**0252-16** [Van Leer, Sam])

**Comment:** This public money will be used to expand Turkey Point. Instead, the money should be either refunded to the people who paid it, or used by others to research or install alternative energy. (**0252-18** [Van Leer, Sam])

**Comment:** We have wind and solar power that are environmentally safe and will not kill people. (0256-2 [Myers, B. J.])

**Comment:** And it is shocking that the powers that be never even considered alternative energy such as Solar! It is long past time to make he Sunshine State the Solar Power State! (0259-5 [Lettieri, Tammy])

**Comment:** Solar power should be first considered as a viable alternative by the NRC reviewers. Solar contains virtually none of the risk of the proposed Turkey Point expansion and solar will contribute to both the ecological and economic sustainability of our region for years to come. Florida has huge solar potential - known as the Sunshine State. FPL's actual solar production of less than 1/10th of 1 percent of its energy portfolio & leaves much to be desired.

With initiatives like third party rooftop solar, FPL should drop this risky project and instead embrace a solar alternative that the company knows its customers want. (**0260-1** [Ferro, Colleen])

**Comment:** With the advent of viable, lower cost, and benign alternative power generating technologies such as wind and solar, the risks associated with the expansion of Nuclear Power in South Florida far outweigh any possible benefits that may be derived from the proposed Nuclear Power Plants at Turkey Point. As the world moves toward ecologically sound and renewable alternative power technologies, I believe it is essential that FP&L follow such established examples of viable and safe utility scale energy production. Times have changed and technologies have advanced since the inception of the Turkey Point facility. The changes and advancements in viable power generating technologies have been even more dramatic within the 9 years that FP&L has pursued this goal of expanding the nuclear facilities at Turkey Point. FP&L should not resist change, but embrace it. It is in the interest of FP&L's shareholders, customers, the residents of Miami-Dade County, the residents of the State of Florida, and a healthier, safer world, to do so. (**0263-5** [Orzechowicz, Holly])

**Comment:** Solar power was not considered a viable alternative by the NRC reviewers - even though no state in the eastern half of the U.S. has the solar potential of Florida - also known as the Sunshine State. And in spite of all the advertising they do on the topic - FPL's actual solar production of less than 1/10th of 1 percent of its "energy portfolio" leaves much to be desired. With initiatives like third party rooftop solar coming online soon (and more about the "Floridians for Solar Choice" project in a future email), FPL should drop this risky project and instead embrace a solar alternative that the company knows its customers want. Solar contains virtually none of the risk of its proposed Turkey Point expansion and will contribute to both the ecological and economic sustainability of our region for years to come. (**0264-6** [Dwyer, John P.])

**Comment:** Have you checked out solar? Prices are way down. Using solar during the day time peak-use periods would absorb enough load to make the existing facilities more than adequate. Battery storage is getting cheaper, too, although not cheap enough to go 100% solar this year. (Maybe in five to ten years...) The maintenance expenses for solar are minimal, the safety factor is high, and decommissioning a solar plant, should that happen, is not dangerous or expensive. (**0265-2** [Bennett, Robbie])

**Comment:** It is beyond me how it is obvious that our best source of power is solar. SUNSHINE STATE. It is a no brainier that investing in solar power technologies would take us into the future and the forefront of implementing the use of solar power in our state. I am sure FPL can absolutely afford to take this on and spend the \$ on this totally renewable and clean energy resource.I support use of Solar Power. (**0268-1** [Inguanzo, Maria])

**Comment:** Other methods of energy generation need to be explored and developed as well as more energy conservation awareness and education. (**0269-2** [Gomez, Christian])

**Comment:** CLEAN ENERGY production options for South Florida such as SOLAR ENERGY should take priority over more risky options. We appreciate the attention given to our citizen's concerns about energy producing options. (**0272-3** [Zuniga, Family])

**Comment:** This utility is victimizing Miami residents in the following ways:--blocking attempts by entrepreneurs to produce cost effective solar power. (**0283-3** [Compel, Jr., Joseph])

**Comment:** It is ridiculous that one of the sunniest states in the United States is far behind states with less solar availability in the development of renewable solar energy. (**0283-5** [Compel, Jr., Joseph])

**Comment:** If Florida Power & Light Company is as technically proficient as it advertises, it should be required to develop more solar energy[.] (**0283-6** [Compel, Jr., Joseph])

**Comment:** Because of time and stark changes to the climate, the nuclear era on Biscayne Bay and in Florida is nearing its end. Solar, which accounts for one tenth of a percent of Florida's power, is ripe for massive expansion. FPL has indicated its intent to increase its solar generation and can easily produce enough power through this lower cost, safe and renewable technology to meet the needs of residents and businesses. (**0288-10** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** The \$20 billion or more investment in two new reactors would be better spent developing lower cost solar energy. Compared to other forms of power generation, solar photovoltaic (PV) power is leading the cost decline, with solar PV module costs falling 75% since the end of 2009 and the cost of electricity from utility-scale solar PV falling 50% since 2010. (Source: International Renewable Energy Agency,

http://www.irena.org/DocumentDownloads/Publications/IRENA\_RE\_Power\_Costs\_2014\_report. pdf) (**0288-13** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** Instead of wasting tens of billions of dollars on an unviable Turkey Point project, it's time for FPL to focus on a far more viable, economical technology in the Sunshine State: solar. (**0288-16** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** We need a focus on green energy, not high risk nuclear energy. (**0294-1** [Howell, Carol])

**Comment:** WE NEED TO GO TO WIND, SOLAR, GEOTHERMAL and other RENEWABLE sources of energy (**0302-1** [Jezierski, Elisabeth])

**Comment:** I wish to express my concern over the expansion of the Turkey Point Nuclear Power Station. I don't agree with the reasons for the expansion and I feel we should begin moving in a more positive direction with solar, wind and water generated renewable energy sources. (0313-1 [Fecteau, Lynn])

**Comment:** Now is the time move toward green energy! Invest your exspnsion in solar!! Novel idea?? This is 2015! Move forward!!! (0315-1 [Johnson, Kay])

**Comment:** Inexplicabley, our state legislature and our governor have been creating obstacles to solar power instead of encouraging its use. (0317-1 [Detrick, Mary])

**Comment:** The sunshine state is burgeoning with solar and wind energy!!! (0322-1 [Smith, Leigh Emerson])

**Comment:** Please look more closely at energy efficiency and renewables to meet the projected need for our state. The Sunshine state can, and must, do better than expanding risky, water intensive, expensive nuclear energy. (**0323-4** [Jennings, Cara])

Comment: Go wind and solar!!!!!!!! (0325-1 [Hollister, David])

**Comment:** [T]here are other safer options available for generating power. (**0329-4** [Baumwall, Douglas])

**Comment:** The owners and operators of Turkey Point have no right whatever to hold the million people of this metropolitan area hostage and to cause them to live in a state of perpetual fear for the owners' business profit, particularly as there are a number of perfectly safe alternatives to nuclear. I believe a referendum is in order that asks the question, "Would you prefer to decommission the Turkey Point nuclear plant and replace it with a plant that utilizes a non-nuclear power source?" (0332-2 [Ross, Sherwood])

**Comment:** We need alternatives ... and the Nuclear option shouldn't be one of them: especially not with the issues they are having today with only two (and the poor way in which they are dealing with it.) (**0334-5** [Crystal, Chris])

**Comment:** Solar or wind is the only way to in this future and FPL should be concentrating heavily on offering the public real options to this renewable energy in our SUNSHINE state. (0340-7 [Tweeton, Tanya])

**Comment:** I find it even more troubling that the same utility company that is hoping to expand the size and extend the life of this aging nuclear power plant, FPL is behind lobbying efforts to keep domestic rooftop solar power from competing in Florida. We should examine this entire picture and think carefully about the consequences. (**0342-3** [Merleaux, Derek])

**Comment:** I live and work full-time in the Florida Keys. The irony of this controversial nuclear initiative is that we live in 'The Sunshine State.' We are being out-flanked by many other nations in sustainable energy production. This is wrong and is not permissable in a civilized world. Choose wisely and don't make us shut you down. Switch to solar and your company will have a future in our fast-growing green economy. Otherwise, Turkey Point, you will be left behind. (0344-1 [Hull, Meagan])

Comment: We have to much solar to use and never ends. (0348-2 [Ward, Richard])

**Comment:** Aside from the absolutely unacceptable, (and I would say immoral) risks to human and natural ecosystem health, nuclear plants are not competitive with alternate forms of energy, including renewable ones. (0355-2 [Thomas, Bill])

**Comment:** Safe home energy generation via technologies such as those developed by the Tesla Corp. will reduce the need for power generation from utility company plants. (**0356-16** [Shlackman, Jed])

**Comment:** With rapid advances in technology and possible release of previously suppressed methods of clean energy generation, adding additional nuclear facilities seems foolish and shortsighted. (**0356-4** [Shlackman, Jed])

**Comment:** We have lots of sunlight going unused. (0357-2 [Shapiro, Eugene])

**Comment:** This is the Sunshine State. -focus on developing solar energy. (**0359-4** [LoBiondo, Roana and Michael])

**Comment:** By TAKING and USING more and more without considering sustainability of our planet we will inevitably run out of resources to take. Being responsible for our actions by treating nature and our precious resources that sustain us with respect will allow ecosystems to react and recover to development which has ALREADY encroached the area. (**0362-5** [Hurley, Paula])

**Comment:** There are so many methods of renewable energy production that are clean, environmentally friendly, and affordable for our infrastructure. (**0363-2** [Peters, Emily])

**Comment:** FPL should be focusing on solar energy, rather than more nuclear reactors. We live in The Sunshine State, and yet our State is behind Georgia in the implementation of solar energy. (**0365-9** [Fischer, Antoinette])

**Comment:** [Commenter included Attachment: The 1st Millennium Renewable and Sustainable World Energy Prognosis - supporting TurboGreenTM Energy and Advanced Technology Industries Inc.- several pages supporting alternative energy] (**0369-2** [Polk, J. D.])

**Comment:** We need to be developing Solar and other forms of renewable energy. (0371-5 [Haffmans, Edmund])

**Comment:** When are we going to start putting what's right in front of what's financially more lucrative? FPL could invest more in solar energy if it really wanted to, but it's not as lucrative. (0372-3 [Ortiz, Natalia])

**Comment:** FPL does not take solar power seriously. I would like panels on my house. I am sure lots of others would too. (0373-7 [Lee, Nancy])

**Comment:** [T]he NRC must look more closely at energy efficiency and renewables to meet the projected need. (0379-5 [Commenters, Multiple])

**Comment:** Whatever happened to solar and wind power? You can't make enough money on that? (0390-1 [Passmore, Judith])

**Comment:** With the recent developments in wind and solar energy, additional nuclear reactors are unnecessary. (0400-2 [Eckert, Brenda])

**Comment:** We, the U.S., should be promoting cleaner, renewable forms of energy! We should be global leaders. We have the technology, but lack the insight and support to make it happen in a timely manner. We should no longer be using dirty and dangerous fossil fuels and/or nukes. No form of energy use is perfect, but there are certain forms that are much less damaging. If the govt had supported these forms as they have funded fossil fuels and nukes for the past one or two decades, we would be in a much better position on Earth today! No one cried for wagon makers when the car replaced wagons. The economy will right itself--we need to give it that chance! (0425-1 [Wingerd, Mala])

**Comment:** Instead, we should be wroking on converting our energy production to sustainable, environmentally safe GREEN energy solutions. (**0441-2** [Bender, Kae])

**Comment:** Stop any kind of energy production that isn't from renewable resources. (0442-2 [Mosca-Clark, Vivianne])

**Comment:** As an American I am watching as destructive policies like these destroy our environment. Spend the money on renewable solar? Jeez! (**0445-1** [Maida, Cecilia])

**Comment:** Nuclear is out. Solar, wind and thermal are in. Don't waste money on this dangerous form of energy. (**0446-1** [Hill, Michael])

**Comment:** It is time to move on to more solar energy --European countries can show us the way. (**0450-1** [Richards, Margie])

**Comment:** ... need to look into other source of energy that wouldn't be so unstable. (0455-3 [Hardin, Lillian])

**Comment:** It is time for The Sunshine State's utility companies to join the 21st century and focus on producing energy from clean, sustainable sources such as solar. (**0463-8** [Gross, Cheryl A.])

**Comment:** You have a variety of expert testimony, some in favor, some opposed, I'll make my reasons simple. As custodians of this earth and energy users, most desire and are prepared for the responsibility of better alternatives than nuclear. We are ready for solar exploration explosion and ready to put our dollars to this initiative. There are additional energy alternatives but as a Floridian this is particularly attractive as a clean and safe alternative. I and thousands of fellow citizens are willing to put the billions that FPL would spend on nuclear into solar, wind and additional options for energy needs. Our federal EPA does not agree with the current proposal, the costs have skyrocketed from \$13.7 billion to \$20 billion, and the support of your residents is not behind a massive nuclear addition to the energy challenge. (0472-2 [Ball, Cheri])

Comment: We need SOLAR, not nukes. (0473-1 [Shepherd, James])

**Comment:** [I]n lieu [of nuclear power] establish natural renewable energy sources that are safe such as solar, wind and water power. (**0481-3** [Szabo, Liz])

**Comment:** Or alternative energy development, which the world is begging for. (**0484-2** [Speno, Charlie])

**Comment:** Many of us live close enough to this power plant to be frustrated that it is not winding down, but that some people want to expand it. Our homes, our lives, our parks are endangered unnecessarily, since solar power is easily available, cheaper, and safer. (0495-2 [Mazzarella, Rebecca])

**Comment:** Nuclear power is the dirty past, we don't need to promote it any more, we need to move into clean renewables. (**0501-1** [Zimmermann, John])

**Comment:** We should put this money and effort into solar and wind production of energy. (0514-1 [Massey, Linda])

**Comment:** There are ways to generate electricity, some of which are explored in the DEIS, that do not create these problems. (**0515-4** [Regalado, Tomas])

**Comment:** Living in the Sunshine State, we should be moving toward solar energy. (0517-1 [Keim, Mary])

**Comment:** Florida being an excellent location for alternative energy sources such as solar power, FPL needs to drop this project and focus instead on safer and more sustainable planning for the future of this beautiful area we all share for our home. (**0523-2** [Mitzkewich, Yuri])

**Comment:** Please! The insanity must stop somewhere! All the phenomenal amounts of money spent by large corporations to secure permission to operate against all logic or public preference would be far better spent developing safe, clean, and sustainable energy sources. Solar and wind come to mind. (**0525-1** [Bailey, Evelyn])

**Comment:** The People shouldn't have to keep telling you corporate bullies the same thing over and over....find other solutions to the energy problem. (**0532-1** [Raab, Frances])

**Comment:** I'd like to know why solar power, in the sunshine state, is not being considered as an alternative. (**0537-6** [Anonymous, Judi])

Comment: Solar is a far better solution and it creates jobs! (0543-2 [Ryan, Jim])

**Comment:** FPL needs to invest heavily and seriously in safer forms of energy such as wind and solar; not double down on dangerous or dirty methods in a heavily populated area encompassing and adjacent to delicate ecosystems that are supposed to be being restored not further endangered. (0544-2 [Ehrenfried, Jennifer])

**Comment:** Florida should be focusing its efforts towards alternative clean energy. Solar Energy is the ONLY choice for the future of Florida. (**0548-3** [Scott, Ruth])

**Comment:** Please consider investing in sustainable power such as solar and providing financial incentives to homeowners and businesses to become more enegy efficient. (0552-2 [Deutsch, Steven])

Comment: We should be using clean, renewable energy. (0558-2 [Barnes, Janice])

**Comment:** We should be moving toward more renewable resources, not building more power plants that can harm the environment. (**0563-1** [Ramsey, Betty])

Comment: SO MANY ALTERNATIVES EXIST (0564-3 [Dimondstein, Carla])

**Comment:** Florida - the Sunshine State - offers no incentives whatsoever for conservation or solar power - largely due to the influence of FP&L and its desire to expand its nuclear facilities and have them forced into the rate base without a proper discussion of alternatives. Respectfully, adding new nuclear facilities in such a place at such a time is not the right way to go. Please force a consideration of alternatives. (**0573-4** [Trauner, Keith])

**Comment:** Instead of expanding a plant that is vulnerable to hurricanes and is presently situated in Biscayne National Park, a pristine natural area, Florida Power and Light (FPL), should be expanding its solar energy capabilities. We are the "Sunshine State", but you wouldn't know that by FPL's poor record of involvement and commitment to solar energy. (0579-2 [Schwab, Roy])

Comment: I say expand solar energy[.] (0579-5 [Schwab, Roy])

**Comment:** It is ironic that Florida's license plates proclaim us as the sunshine state and yet solar energy development is an major underused resource. (**0590-1** [Johnson, Diane])

**Comment:** FPL has a once a year solar grant program for FPL customers. The grants are all taken in the first few minutes customers are allowed to sign into the site and fill out the application. I have been trying to get a solar grant for two year and I can never fill out the form in time to submit. It is my understanding that literally 10,000's of customers try for these grants. Wouldn't it be smarter to expand that program than to spend billions on a two more nuclear reactors. Why not give solar a chance in the sunshine state? (**0591-1** [Lange, Barbara])

**Comment:** 9 out of 10 Americans, including Republicans, Democrats and Independents, want more solar and wind power installed rather than using natural gas, coal, oil and nuclear power. According to a comprehensive 12-year Harvard survey as of 1/1/15, 90% of all Americans, including Republicans, Democrats and Independents, said that they wanted solar and wind energy to increase and 80% of all Americans said that they wanted solar and wind energy to "increase a lot". It is at <u>http://www.forbes.com/sites/jeffmcmahon/2015/01/01/americans-want-america-to-run-on-solar-and-wind/</u>. The Harvard study found that all Americans overwhelmingly prefer solar and wind power, rather than natural gas, coal, oil and nuclear power, because solar and wind power provide the least local pollution and health risk. (0592-2 [Brexel, Sr., Charles])

**Comment:** In addition, the market price evidence is overwhelmingly clear and compelling-nuclear power is an extremely more expensive energy solution. The US energy market continues to move, faster and faster, toward an extremely better value energy future, reliant on solar and wind, not extremely expensive and risky nuclear power. (**0592-3** [Brexel, Sr., Charles])

**Comment:** Solar and wind power are clearly the most innovative and newest technologies. Solar and wind power are, overwhelmingly, the energies of the present and future. Solar and wind power are where the overwhelming innovations and development are rapidly occurring. (**0592-5** [Brexel, Sr., Charles])

**Comment:** As of 5/29/15, for the year so far, 84.1% of all new power installations at utility companies were solar power, wind power and other renewables. Natural gas power supplied the rest of the new power installations. It is at <u>http://safeenergy.org/2015/05/29/checking-in-on-the-energy-transition/</u>. Germany and Sweden continue to very rapidly decommission all of their nuclear power plants and to very rapidly transition to solar and wind power. France is also rapidly cutting down its amount of nuclear power and is also rapidly transitioning to solar and wind power. California has only one, very old nuclear power plant left in operation and California is continuing to very rapidly transition to solar and wind power. On 1/7/15, Governor Brown of CA called for increasing the state renewable portfolio standard (RPS) to 50% by 2030, reducing petroleum use in cars and trucks in California by 50%, and doubling building energy efficiency, all by 2030. Legislative bills will be decided on later in 2015. It is at

http://www.lawofrenewableenergy.com/2015/04/articles/renewable/governor-brown-announcesnew-2030-greenhouse-gas-reduction-target-for-california/. Since 2014 and earlier, Southern California Edison, Arizona Public Service, Tucson Electric Power, HECO, NRG Energy, Duke Energy, Southern Company, Georgia Power, and many other US electric power utility companies have all been quickly and massively ramping up their installations of zero carbon emission, clean energy such as solar and wind power. It is at

<u>http://www.utilitydive.com/news/grid-edge-live-2015-the-trends-behind-the-explosion-in-</u> <u>distributed-resourc/401417/</u>. As of 6/11/15, Vermont has a law for electric utilities to be at 75% renewables by 2032 and at 55% renewables by 2017. It is at

<u>http://www.utilitydive.com/news/new-vermont-law-mandates-75-renewables-by-2032-targets-residential-emissi/400777/</u> and <u>http://www.eia.gov/todayinenergy/detail.cfm?id=21852</u>. As of 6/29/15, Governor Cuomo of NY presented an energy plan under NY's REV plan to be at 50% renewable energy by 2030. The Assembly has already passed a bill for the plan and the Senate

bill is awaiting a vote. It is at <u>http://www.governorswindenergycoalition.org/?p=13551</u> and <u>file:///C:/Users/Charles/Downloads/2015-overview.pdf</u> and

http://energyplan.ny.gov/Plans/2014.aspx. Effective 7/1/15, it is the law in Hawaii that 100% of its electricity come from renewables by 2045, with 30% by 2020, 40% by 2030 and 70% by 2040 as interim targets. It is at http://www.utilitydive.com/news/100-renewables-by-2045-is-nowthe-law-in-hawaii/400495/ and http://www.eia.gov/todayinenergy/detail.cfm?id=21852. Nuclear power is clearly in rapid decline in use in the US and throughout the world, while solar and wind power are clearly and compellingly experiencing exponential growth for the next 25 years and longer. It will be even harder and even more expensive to get parts, operation, maintenance, support and engineering services for nuclear power as the decline in the use of nuclear power plants continues to accelerate over the next couple of decades. As of 7/5/15, it has already been costing our manufacturing industry, our businesses and our homeowners much less to buy solar power than natural gas, coal, oil, timber, biomass or nuclear power. And, it is expected to continue to cost them typically another 20% less per year for, at the least, the next few years. It is at http://www.usatoday.com/story/money/markets/2015/07/05/motley-fool-solarenergy/29583021/. As of 7/5/15, all bids for selling power from solar power utility-scale projects are now in the 4 cents to 5 cents per kWh range -- this is much less than what it costs you to build a natural gas, coal, oil, timber, biomass or nuclear power plant. It is at http://www.usatoday.com/story/money/markets/2015/07/05/motley-fool-solar-energy/29583021/. As of 7/9/15, two bids for selling power from solar power utility-scale projects have now come in below 4 cents per kWh, with one bid coming in below 3.9 cents per kWh -- this is much less than what it costs you to build a natural gas, coal, oil, timber, biomass or nuclear power plant. It is at http://www.utilitydive.com/news/nv-energy-buys-utility-scale-solar-at-record-low-priceunder-4-centskwh/401989/. As of 6/23/15, the price of wholesale solar power has been forecasted by independent analysts at Bloomberg New Energy Finance to continue to decrease. at the least, for the next 25 years. It is at http://www.bloomberg.com/news/articles/2015-06-23/renewables-to-beat-fossil-fuels-with-3-7-trillion-solar-boom. As of 7/5/15, according to GTM Research, the cost of utility-scale solar projects has fallen 67% in the past five years, and is expected to fall another 44% in the next couple of years. As of 7/5/15, "Since solar costs are beating those of competing energy sources, there are expectations of a boom in demand--and it's going to be a global solar boom. GTM Research predicts that solar installations will triple to 135 GW annually by 2020." On 7/5/15, financial analyst Travis Hoium of The Motley Fool said: "We're past the point of no return --solar energy will be the biggest new energy source in the future." (0592-6 [Brexel, Sr., Charles])

**Comment:** As of 8/22/14, US wind power hit an all-time national average low purchase price of 2.5 cents per kWh -- this is much less than what it costs you to build a natural gas, coal, oil, timber, biomass or nuclear power plant. It is at http://www.theenergycollective.com/ericwesoff/468266/price-us-wind-power-all-time-low-25-cents-kilowatt-hour. As of 5/31/15, lawyers for Wal-Mart, a hospital group and a coalition of other ratepayers found that Florida utilities were buying Oklahoma wind power for just 2 cents per kilowatt hour: "Henry and the lawyers for OG&E's corporate customers formed a kind of tag team, taking turns blasting the company for refusing to even study new wind power. They repeatedly pointed out that in-state competitors as well as Florida and New Mexico utilities were buying Oklahoma wind for just 2 cents per kilowatt hour, even cheaper than coal without pollution controls, while OG&E hadn't purchased new wind in four years--even though its ads boasted about its commitment to wind. When its witnesses claimed their transmission lines were too congested to add new wind, Henry produced internal documents suggesting the congestion could be fixed for about 3 percent of the cost of the new coal scrubbers." http://www.politico.com/agenda/story/2015/05/inside-waron-coal-000002. As of 3/12/15, the price of wholesale wind power will continue to decrease, at the least, for the next 10 years according to a Department of Energy report. It is at

http://www.bloomberg.com/news/articles/2015-03-12/wind-energy-without-subsidy-will-becheaper-than-gas-in-a-decade. On 8/8/14, Amory Lovins, a physicist and chief scientist at the Rocky Mountain Institute, found that "Wind and solar become the most economical options while gas and nuclear become the least economical". It is at http://www.theenergycollective.com/eric-wesoff/468266/price-us-wind-power-all-time-low-25cents-kilowatt-hour. Further, FPL's proposed power from new nuclear reactors can more costeffectively be met with demand side management programs. In meeting demand, energy efficiency measures meet demand at less than 3 cents per kilowatt hour (kWh)1, while the proposed Turkey Point nuclear reactors will meet demand at a cost of more than 15 cents per kWh. (0592-7 [Brexel, Sr., Charles])

**Comment:** Why you don't come to terms with solar? And wind power using the tubed fans? Those resources are all free. You can still kickback your investors also. (**0593-1** [Family, Manzi])

**Comment:** Florida should be investing in more renewable forms of energy that don't have such negative impacts on the environment. I just returned from Hawaii where solar installations are increasing for home and business use. Florida is sadly lagging behind. (**0594-5** [Rapuano, Shannon])

**Comment:** FPL has done nothing but discourage solar power on individuals' rooftops, while saying they are working on solar throughout the state. Their small solar initiative pales in comparison to what could be done by individual homeowners and businesses. But they wouldn't make any money that way. (**0596-2** [Sorenson, Katy])

**Comment:** We need to be concentrating on conservation and renewables – not more nuclear power. (0596-4 [Sorenson, Katy])

**Comment:** Why is solar power so unused in a state with more sun than most! (**0600-2** [Edwards, Suzi])

**Comment:** Shame on you if you allow this boondoggle on Florida ratepayers and the environment. There are many better alternatives for Florida's energy supply that are cheaper with less environmental impact and you know it. Pleas do the the right thing instead of the most "PROFITABLE" thing. (**0601-1** [Quillen, Carter])

**Comment:** In the face of global climate change, we need resilient solutions today. Clean, safe, and affordable renewable energy along with energy efficiency and conservation will preserve our health, environment, and future (**0602-2** [Colson, Clay G.])

**Comment:** Turkey Point is the PAST -- lets put the future of 'GREEN" energy on the front burner. (**0608-1** [Anderson, Vaughn])

**Comment:** SOLAR AND WIND ENERGY ARE CHEAP, RENEWABLE AND HARMLESS TO THE ENVIRONMENT. (0609-2 [Khajeh-Noori, Jeri])

**Comment:** Living in the 'sunshine state' would it not make more sense to invest a fraction of the cost of a nuclear plant to develop solar power and other renewable sources? Costa Rica, a very small country but also with fewer economic resources than the U.S, just enjoyed one month without the need of power generated by fossil fuels. They are experimenting with renewable sources. Is there a lesson for us to learn? (**0613-2** [Icaza, Alejo])

**Comment:** Another way these plants could be abandoned is by the advance of solar and battery technology. The Gemasol solar plant in Spain already operates 24 hours a day thanks to molten salt energy storage and has done so since 2013. Just this week, the New York Times carried a story about Tesla's deployment of 400 home solar storage batteries which allow their owners to run solar electricity at night, including installations at Wal-Mart stores. The company announced that its next solar storage product will be a utility grade battery. With 2417 solar generation and home solar energy storage by batteries already a reality, it is inconceivable that Florida would need baseload nuclear energy at the time of the plant's projected opening 15 years from the start of construction. In fact, it's more likely that Florida would suffer from a glut of electricity produced off the grid, causing FPL to move away from their costly investments in nuclear and fossil fuel plants. (0615-1-14 [Bethune, David])

**Comment:** The agency's alternative energy "expert" said that solar wasn't viable because the sun went away at night, an appalling revelation of the agency's ignorance of modern salt storage and battery technologies for solar. The NRC staff member was unaware of the 24/7 baseload solar power plant in Spain and was totally ignorant of Florida efforts at rooftop solar, off-the-grid local power generation, and home battery storage. The extent of his understanding of current US progress in solar energy was revealed when he said that he "thought there might be some research [about solar] in California." (0615-1-3 [Bethune, David])

**Comment:** Please stop! Look at the big picture. I am certain you will find an alternative solution. Thank you. (**0616-2** [Puchades, Mary])

**Comment:** Shift the funding for these plants to solar infrastructure development. (**0621-3** [Datz, Amy])

Comment: No to more cancer machines, let's go solar from now on! (0624-4 [Galles, Camilla])

**Comment:** FPL should be investing in solar power, rather than nuclear power, where the risk and payoff make far more sense. (0625-4 [Felinski, Julee])

**Comment:** We should be moving completely to renewable energy, wind and solar. (**0627-1** [Dolben, Hollis])

**Comment:** We don't need to install new reactors, we need to use those funds to start installing solar, wind[.] (**0630-1** [Montalvo, Stephanie])

**Comment:** There is no need for more nuclear plants if we would finally understand that photovoltaic systems on 50 % of all the roofs in Florida and connected to the grid -same as in so many parts of this country, even far more north, where they have only half the sunny hours compared to "The Sunshine State". (**0632-1** [Moll, Wolfgang])

**Comment:** I suggest that we build our use of solar energy which is safer, cleaner, and does not detract from the land. (0635-5 [Seiman, Rhonda])

**Comment:** Let us learn from the mistakes we as a human race have made. This fragile one of a kind Eco system is irreplaceable. It is time to transform to ways that are in harmony with earth. Why can we not choose to build a solar plant or a solution in alignment that would be much less harmful when a disaster occurs. (**0638-2** [Anonymous, Charity])

**Comment:** Now is the time to turn this turkey around and plant solar panels instead of nuclear plants. (0639-4 [Haselhurst, Richard])

**Comment:** At this time we should be looking for alternative sources of energy such as solar and wind power. In the state of SUNNY Florida we really should not have a great problem generating power with the use of solar energy. (**0642-3** [Rawlins, Steve])

**Comment:** We need to do more for alternative energy production. I have a design for a device that will use solar and/or wind to produce electrical power. I have even started a company--Pernetic Generator Group LLC to promote my design and bring it to market. (**0650-1** [Kristy, Joseph])

**Comment:** We must go to renewal energyLike solar and wind (**0660-2** [Sanchez, Sergio and Irma])

**Comment:** I'm for eliminating fossil and nuclear energy sources and transition to solar and wind energy sources in Florida, where we have plenty of both. (**0662-2** [Anonymous, Elena])

**Comment:** Instead I would support taking the construction money and building more renewable energy facilities; solar and wind. (**0666-3** [Jens-Rochow, Steve])

**Comment:** The alternative is renewable energy. If we installed small renewable energy systems at all of the 65,000 new homes and buildings that are constructed in Florida every year and each system generated \$20 a month in power x 12 months= \$240 annually, this would create \$15.6 million annually in free electricity. This free power would increase by an additional \$15.6 million each year when 65,000 new homes and building are constructed in Florida annually. Another important benefit promoting this concept is that the manufacturing and installation businesses in Florida will always know how many renewable energy systems will be purchased and installed every year. The U.S. spends \$2.5 billion annually in solar energy rebates for 250,000 existing structures and the cost to install one million renewable energy systems at all of the new homes and buildings constructed in the U.S. annually at \$2500 each would be \$2.5 billion. This is also the same amount of money FP&L intends to spend every year in building the two nuclear reactors with money raised by increasing utility rates. The average amount of free power generated at one million new homes and buildings would be \$20 a month x 12 months= \$240 x 1,000,000 = \$240 million. This will increase by an additional \$240 million each year as one million new structures are built annually. After ten years, the systems will collectively generate \$2.4 billion each year in free power which is 200% more power produced annually than the two reactors that FP&L wants to build near Miami. These systems will start producing power as soon as they are installed and nuclear plants will not generate power for at least ten years. Investing \$1 in renewable energy at homes and buildings will create \$2-\$4 in free power for consumers and every \$1 invested in nuclear power will require consumers to spend \$5-\$6 more to purchase the power, maintain the plants, disassemble them in the future, and dispose of the nuclear waste. We can expect that within ten years the renewable energy systems will become 100% more efficient and their costs will decline by 50%. At this time we can begin installing ten million systems each year in existing homes and buildings. We should start in low income neighborhoods and train local unemployed workers to install the systems. (0671-1-3 [Post, Patrick])

**Comment:** If renewable energy is developed properly, it can help save the world by eliminating all use of nuclear power. This is a major goal of our project! (**0671-2-1** [Post, Patrick])

**Comment:** We have a proposal for FP&L if they want to help the citizens of South Florida to have access to stable, inexpensive, and environmentally friendly electricity. They should use all of the money that they have collected to construct the two new \$25 billion nuclear power reactors and instead use the funds to begin installing solar and renewable energy equipment on all of the 4.5 million homes and buildings that are FP&L utility customers. This effort would be an infinitely better use of our money which FP&L is collecting by raising utility rates. All of the power would be free, clean, and unlimited because it will come from the sun and wind. FP&L could start first with new homes and buildings and we would welcome the opportunity to discuss our proposals with them at any time. (0671-2-3 [Post, Patrick])

**Comment:** This proposed investment of more than 20 billion dollars for each of the reactors (of the rate-payers' money) makes no logical sense to anyone except business marketers. Solar power was not considered a viable alternative by the NRC reviewers, even though no state in the eastern half of the U.S. has the solar potential of Florida. And in spite of all the advertising they do on the topic, FPL's actual solar production of less than 1/10th of 1 percent of its energy portfolio is wholly inadequate. Solar contains none of the risk of its proposed Turkey Point expansion and will contribute to both the ecological and economic sustainability of our region for years to come. (0673-6 [Dwyer, John P.])

**Comment:** On a final note, this investment of more than 20 billion dollars of the rate-payers money makes no logical sense. Solar power was not considered a viable alternative by the NRC reviewers -even though no state in the eastern half of the U.S. has the solar potential of Florida. FPL should drop this risky project and instead embrace a solar alternative that the company knows its customers want. Solar contains virtually none of the risk of its proposed Turkey Point expansion and will contribute to both the ecological and economic sustainability of our region for years to come. (0674-7 [Dwyer, Karen])

**Comment:** FPLs project commits us to expensive nuclear power for the next 60 years without fairly evaluating more cost-effective energy that does not require local storage of radioactive waste. The cheapest, cleanest and safest way to meet our energy needs is through energy conservation and efficiency. Conservation is one-fifth the cost of nuclear generation, yet FPL opposes conservation standards and presses for nuclear, the most expensive and risky investment available. (**0675-3** [Rodriguez, Jose Javier])

**Comment:** I really do not understand Florida's love affair with nuclear energy. We have so many roof tops that would be prime real estate for solar collectors. either it is a stupid decision or a decision based on greed not to use our greatest resource. (**0700-1** [O'Meara, Patrick])

**Comment:** We need to put funding into developing more renewable resources -not spending \$ on trying to clean up disasters which are inevitable in situations like this. (**0704-2** [Ferry, Lisa])

**Comment:** Florida is known as the SUNSHINE state. Florida, of all places, should be powered with Renewable Energy. Go to www.thesolutionsproject.org to see how every state can be powered ENTIRELY with Renewable Energy. (0706-1 [Anonymous, Anonymous])

**Comment:** We are the Sunshine State and should use the sun and other clean sources of energy for our beautiful state and lead the rest of the nation by example. (**0712-2** [Almer, Anessa])

**Comment:** Instead of building large power plants, the Florida government should focus on harnessing solar energy. Unlike this nuclear power plant, solar panels do not require any

valuable water or expensive infrastructure. They also do not create waste product and do not require the electricity to be transported. (0713-3 [Heiney, Jamie])

**Comment:** [S]unshine state should go all solar and built electric storage, not cancerous reactors. (0715-3 [Anonymous, Anonymous])

**Comment:** This seems like a foolish expenditure when FPL could help put solar on every roof, fund LED lighting everywhere, start talks about turning off downtown highrise office lights which are left on all night. foam spray the rafters of every home and building in Miami Dade county. (0718-2 [Buechler, Jerry])

**Comment:** Solar power was not even considered a viable alternative by the NRC reviewers even though no state in the eastern half of the U.S. has the solar potential of Florida -also known as the Sunshine State. And in spite of all the advertising FPL do on the topic -FPL's actual solar production of less than 1/10th of 1 percent of its "energy portfolio" leaves much to be desired. With initiatives like third party rooftop solar coming online soon (and "Floridians for Solar Choice" project), FPL should drop this risky project and instead embrace a solar alternative that the company knows its customers want and it's a no brainer when it comes to humanity and real care of the environment we actually live in. Solar contains virtually none of the risk of its proposed Turkey Point expansion and will contribute to both the ecological and economic sustainability of our region for years to come. (0720-2 [Bastidas, Mauricio])

**Comment:** And I think what's really interesting to me is that the parent company of FP&L acquired Hawaii Electric Industries, who has had a lot of success in taking a very different route to generation and distribution, a lot of which has to do with solar. And so I sort of take that as a tacit acknowledgment that there is another future for us possibly in energy that we are exploring. We don't know what that answer is, but why cut it off before we're there. (**0721-1-10** [Rodriguez, Jose Javier])

**Comment:** So one of the things I wanted to share, and I do have copies to leave with you, is that the Everglades Coalition 2015 Legislative priorities included, and this is representing 6 million environmental members of the Everglades Coalition. Collectively our 57 organizations make up that many people. And our priorities talk about minimizing fresh water waste, salt water intrusion, and flooding through expanded use of renewable and smart energy sources. So what does that mean? That means we have to move toward energy sources that do not use water. Nuclear isn't right for Florida because we don't have the fresh water resources. (0721-10-3 [Reynolds, Laura])

**Comment:** We have --our solar panels don't demand any water. Of course this is all postconstruction, I admit. The nuclear power plant is constructed, it takes energy, it takes water, it takes whatever. So solar panels are manufactured, but we call it even when they're built. Once they're in operation I'm not using any water, I'm not releasing any toxins, I'm not transporting fuel or waste products anywhere, I don't have to store anything. (0721-11-8 [Roff, Rhonda])

**Comment:** Talking about FPL and -- I'm sorry -talking about solar power. We were talking about France's -- or China just had it about the same capacity as France's capacity in solar. To clear up that number, China added about 5 gigawatts of solar power. France has about 5 gigawatts of solar power. France's total output is about 50 gigawatts, 45 gigawatts of which is about -- is produced from nuclear power. And consistently France ranks amongst one of the top countries for air quality. (0721-15-2 [Kuraza, Devon])

**Comment:** So let's talk about nuclear power and let's talk about wind and solar. Show of hands, how many of you are in favor of wind and solar as a source of power generation? Okay. And how many of you are against nuclear power? Show of hands. Okay. (0721-15-4 [Kuraza, Devon])

**Comment:** So I wanted to mention also to my friends from FPL that there are alternatives in nuclear power. (0721-16-2 [Rifkind, David])

**Comment:** So, for instance, when I built my house three years ago I installed a 5 kilowatt array on the roof, and I installed it for \$3.00 a watt. So as I understand it, even if we were able to build -- if FPL was able to build these two reactors, and it would be the first time in human history that reactors would actually be built on budget, it would still cost about \$9.00 a watt, and as I understand, that's three times what I paid for my rooftop solar array, so I'm kind of wondering, have you really thought about the economics of what it costs to build a nuclear reactor. (0721-16-3 [Rifkind, David])

**Comment:** And the other thing that I wanted to mention too, is that, again it's come up, and I know that the NRC has its rules. But I would say that as far as the rule regarding the need to constantly generate power, keep in mind that you guys have all got telephones in your pocket, they've all got batteries. The technology for storing electricity, when the sun's not shining, is not magical, and these are things that can be overcome. The other thing I would mention too is, that even if FPL was able to be the first utility in America to ever build a nuclear reactor on time, it would still be 12 years before these units come online, and in that time we could easily install the 22,000 megawatts of capacity, or the equivalent of that, using solar and other renewable energy sources that don't require -well, don't require any use of water for cooling, don't require any kind of mitigation for radiation and so on. (0721-16-4 [Rifkind, David])

**Comment:** So I would just say, again, my own experience from powering my house with solar panels, it shows me that we can do it so much more efficiently, so much more economically, so much more rapidly, and so much more safely, than resorting to nuclear power. (**0721-16-6** [Rifkind, David])

**Comment:** Solar is right. You can feel that in your gut. Wind energy is right. And there's research. (0721-18-3 [Bernabei, Catharina])

**Comment:** People of FPL, if you were to have solar panels, half of Miami, half of South Florida, you have enough. But maybe if it becomes more affordable. My daughter and her husband will pay off in seven years, and they have a child, and that will be her college fund; that it's paid off and then they hardly have to pay any electricity. We collect it through the grid. It goes back to FPL, the excess of sun, of solar energy, will benefit FPL. What are you thinking? You will benefit from all those homes when you see an air -- when you look out of the plane and look at Miami, wow, couldn't you imagine, solar panels here and here, everywhere. It will be sufficient. (0721-18-4 [Bernabei, Catharina])

**Comment:** We need solar. Florida, South Florida especially has more solar potential than any place in the continental United States. The EIS looked at solar and they compared this plant to a solar farm. We need rooftop solar. We have millions of acres in Florida of rooftops that are not being used. FP&L --just coming here somebody mentioned that. I heard one of their solar commercials. In terms of their portfolio, 0.06 percent. Not even 1/10th of 1 percent of their portfolio is produced by solar. One way they can do it, don't compare it to solar farms, compare it to rooftop solar and use the model that DishTV came up with. You don't have to create your

own satellite in space. Let FP&L put the solar panels on people's houses. Let them own it, the same way as Dish. You want solar, you call up, they come out, they put the panels. 24 hour, they say we can't do it because it's not 24 hour. That's nonsense. Peak electricity is during the day. That's when we're burning the electricity. We can go to other forms of electricity when we're not using solar. Let FP&L get into that business, installing solar panels on people's houses so people don't have to shell out \$20,000, \$30,000. That's what the solar initiative coming up right now is all about, getting competition in there. FP&L I don't think is in favor of that. (0721-22-18 [Schwartz, Matthew])

**Comment:** With so many truly clean, safe, renewable and sustainable technologies now available and in development, there is no reason to build new nuclear plants. This will only drain much-needed resources from full development of better, safer, technologies. This is the Sunshine State. We should be leading the nation, the world, in solar development. Instead, we rank 13th in total installed solar in the country and 20th in solar installed in 2014. It's time to end the use of all nuclear power and put all, all of our resources into truly safe, clean, and sustainable technologies, like conservation, solar, wind, geothermal and others which absolutely can and will supply all the energy the State and the world needs without destroying the world in the process. (0721-28-11 [Wilansky, Laura Sue])

**Comment:** FP&L is developing solar power too, but they're doing a teeny, tiny fraction of what they could be doing. While 95 percent or more of their advertising and PR is devoted to promoting how much solar development they're doing, they're actually generating less than 1/10th of 1 percent, as has been mentioned, .01 percent of their electricity through solar power. I'm a customer, I know, I get the brochures every month in my bills. I brought the brochure that came with my February 2015 bill, if you want to see it in their own words in black and white, .01 percent solar. In black and white, or rather, green and white. But printing the information in green doesn't make what FP&L is doing, green, unless the green you're talking about is cash. (0721-28-12 [Wilansky, Laura Sue])

**Comment:** The answer is solar. FP&L knows this, and at .01 percent we are woefully low for the Sunshine State. (0721-30-10 [Ullman, John])

**Comment:** And I just want to emphasize the whole point is that why not invest in solar energy. I mean that's just a much more cleaner, safer form of energy. I mean other countries, even Germany, which has less sunshine than us, has 20 percent of energy from solar energy. So I don't know why Florida, being the Sunshine States doesn't, you know, really, you know, live by its own nickname or name, whatever, and try to embrace that and try to have, you know, solar panels at everyone's house. And so instead of doing the FP&L, oh, pay now and get screwed over plan, how about we give the money to us and just we'll put in our own solar panels and save everyone money. We can give the electricity back to FP&L. I think that makes way more sense than, oh, let's give lots of money now, rip me off now, and then, you know, not even come through with a promise. (0721-31-10 [Almirola, Alejandro])

**Comment:** It's just, you know, I think we could be smarter and actually pick something that works for everyone. (0721-31-14 [Almirola, Alejandro])

**Comment:** By now Florida and the United States should've transitioned to solar and other renewable resources rather than this inherently dangerous power source. (**0721-32-1** [Schlackman, Mara])

**Comment:** Try it and use solar panel. And why the Florida Power and Light they no make the solar panel and sell it to everybody at good price. And they got a lot of jobs right there to work in the solar panel, to sell it out. Only he looking for money. Money and money. They don't care about the life of the people. So, to me it's the best way, make a solar farm. (**0721-33-4** [Herrera, Luis])

**Comment:** So when I step away and say I'm an advocate, yeah, I'm an advocate, and yeah, I'm conflicted. But I look at this now and say, you guys from FPL to everybody, I supply Solar City. You guys want to do some special work with Solar City? I'll work with you guys on creating a rack system; cash on hand. You know, we'll put money in front. We'll make this worth your while, whatever you -- let's get creative. (0721-34-2 [Gomez, Albert])

**Comment:** I think there's a better way. A gentleman earlier referred to it in terms of renewable energy. The same way if we built this reactor, which I think we should to do. By the time we built this we'd have new renewable energy sources, which would be cheaper and more efficient. (0721-7-7 [Edmond, Gabriel])

**Comment:** Additionally, FP&L generates less than 1/10th of 1 percent of its electricity from solar power. Given that solar helps meet peak demand and power plants are built to meet peak demand, meaningful investment in solar could help defer the need for the proposed reactors. Yet, FP&L assigns solar power a zero value in avoiding capacity additions in its resource planning process. And if you make a plug for the ballot petition, if you want to see rooftop solar increased in Florida, please sign the Floridian For Solar Choice ballot petition. (0721-8-7 [Cavros, George])

**Comment:** I can tell you after working many years in front of the Public Service Commission on behalf of Clean Energy Advocates, that description simply does not fit the planning process in Florida. There are three disjointed components; the State planning process in Florida, a tenyear site plan, and new determination in conservation goal setting. A ten year site plan is simply a summary planning document that PSC cannot require the utility to change it. The power company cannot change it --or can change it, rather, at any time on its own accord, and there is no open stakeholder process that provides meaningful participation in the utility's long-term planning process. Moreover, energy efficiency and renewable energy are never placed on a level playing field in the Florida planning process, nor considered comprehensively, and we will provide more detailed written comments on the State's disjointed planning process. Suffice to say that the NRC should not rely on it and must take a hard look at energy efficiency and renewables to meet the projected need. (0721-8-9 [Cavros, George])

**Comment:** Well, I'd suggest that there's alternatives that they haven't considered because they are biased in the direction of heavy capital investment, continuing the same game they've been playing. You know, they have right now .06 percent of all the mega-wattage that they want in the State of Florida is solar. I think that's an embarrassment. This is the Sunshine State. (0723-12-5 [Henry, Jim])

**Comment:** ...but the idea that less than one percent of your installed base is generated by solar energy is just -- I mean, I think it's hard to explain. (0723-12-6 [Henry, Jim])

**Comment:** You really need to think about that very long and very hard before you put this puppy to bed. This is a very important time to think about that. And if you need jobs down here it should be in solar. (0723-3-3 [Star, Priscilla])

Comment: [Y]ou all deserve jobs provided by FPL in solar. (0723-3-5 [Star, Priscilla])

**Comment:** In general, we also feel that the needs, future needs of the State of Florida for electrical power could be met by alternative energy sources and conservation. (0723-5-4 [Teas, Jim])

**Comment:** NEPA requires an evaluation of a reasonable range of alternatives as part of the keystone to it. The alternative that I mentioned which is distributed solar on rooftops providing the baseload during the day, peak time, when we're using the energy, the air conditioners, that's when we're using most of it, combined with traditional fossil fuel in the evening. That's a combination that apparently was not evaluated. It's missing from the EIS. It's got to go in there. The technology is there, it was not evaluated. It's missing. Solar economy. This is things we want to add a little bit because we are in Homestead, and this is kind of a company town. (0723-9-2 [Schwartz, Matthew])

Comment: There's so much out there for solar technology. (0723-9-3 [Schwartz, Matthew])

**Comment:** I understand this gentleman is running the nuclear plant but you folks could let -your children could also learn to run solar, not plants, but distributed solar on every house, every building, every store. FPL is always advertising their new solar technology. Look at their numbers, though. Google FPL energy portfolio, 0.06 percent. Not even one-tenth of one percent solar. So the technology is there. (0723-9-5 [Schwartz, Matthew])

**Response:** The NRC does not promote any particular form of energy generation, including nuclear. However, the NRC does examine energy alternatives as part of its NEPA responsibilities. The staff's evaluation of renewable alternative energy sources, including wind, solar, geothermal, fuel cells, and biomass, in Section 9.2 of the EIS describes potential impacts from these sources in comparison with the proposed action. In Section 9.2 the review team determined that none of these renewable energy sources could, by themselves, meet the purpose and need of the proposed action; to provide a target of 2200 MW(e) of baseload power. Alternatives not requiring new generating capacity, including conservation and demandside management, are discussed in Section 9.2.1 of the EIS. The staff concluded in the EIS that these technologies also did not represent reasonable alternatives to a large baseload power plant located at the Turkey Point site because they could not meet the purpose and need of the project. The staff concluded in Section 9.2 of the EIS that none of the feasible alternative energy options were environmentally preferable to the proposed action. The cost of energy alternatives was not considered in the EIS because the options were either not capable of meeting the purpose and need, or were not environmentally preferable. No change was made to the EIS as a result of these comments.

**Comment:** The NRC Failed to Consider Natural Gas Energy Alternatives: As a matter of public record -the cost of natural gas is at an all time low due to vast amounts of natural gas production (harvesting) from numerous sources. Clearly, FPL customers would benefit economically from a natural gas fired power plant -rather than a <u>extensively more costly nuclear power plant</u>. Notably, the regulatory cost of constructing and operating a nuclear power plant far exceeds a comparable natural gas fired power plant. Indeed, even after a nuclear power plant is decommissioned -there remain very extensive costs related to that activity which are passed on to the customers. (**0010-5** [Saporito, Thomas])

**Comment:** We are NOT in favor of any gas plants or the fracking that goes with them. I know that, at this time, gas would be less expensive, but I see it harming our environment at a much greater cost. (**0070-2** [Lamb, Deborah S.])

**Comment:** Given the operating cost vs that of a gas fired powerplant this just seems like someone's nuclear wet dream. (**0249-3** [Mosher, Paul])

**Response:** In Section 9.2.2, the staff concluded that natural gas was a feasible alternative to the proposed action. However, in Section 9.2.5 the staff concluded that natural gas was not environmentally preferable to the proposed action, and the air-quality impacts from the natural gas plant emissions, including greenhouse gas emissions, are a key difference. The cost of natural gas was not considered in the EIS because it was not environmentally preferable. No change was made to the EIS as a result of these comments.

**Comment:** the winds have shifted in energy supplies and natural gas is much more affordable and doesnt have to be built along the coast. also, solar and wind and thermal have now become competitive to nuclear, in fact, cheaper than nuclear (considering nuclear plants have a federal subsidy) (**0055-4** [Roedel, Kitty])

**Comment:** Our area may need more electricity, but there is no present or foreseeable crisis that exists. Therefore, a better thought out and ecologically sensitive plan for electricity should be on the drawing boards for our area including, but not limited to: solar, wind, water currents, etc. (0073-2 [Commenters, Multiple])

**Comment:** We know that we have growing demands for electricity. But our land and our drinking water are limited resources. It's time we look to more sustainable, less environmentally impactful energy solutions to fulfill our growing community. (**0076-6** [Daly, Meg])

**Comment:** 2. While I can see that our area may in the future need more electricity, right now there is no current or foreseeable crisis that exists. A better thought out and ecologically sensitive plan to obtain more electricity should be planned to include but not be limited to solar, wind, water currents, etc. (0077-2 [de Armas, Maria Cristina])

**Comment:** As a Florida resident I beg of you to find a more suitable way or place to increase electricity production here in our beautiful state. (**0084-2** [Phillips, Monica D.])

**Comment:** Don't give FPL green light to build more nuclear towers, please explore other source of energy. (**0088-1** [Lange, Alexandra])

**Comment:** Smaller, more numerous natural-gas fired facilities could decentralize electric power production here. The consequence would be that smaller transmission lines could be used to distribute the energy so produced, and networks properly designed, could cover a loss of one or two in any natural disaster. Our nation has such plentiful natural-gas supplies that we are exporting it already. Let's use the resources we have here for our own safety and economy. Also, the use of SOLAR power in this Sunshine State has barely begun here as well, and should be exploited fully before resorting to the construction of added nuclear facilities. (0213-4 [Hyams, Charles])

**Comment:** The NRC... including Florida Power and Light... need to return to the draft board to come up with a better solution for Florida's energy needs. (**0250-7** [Fulks, Anna Louise])

**Comment:** I will like to conclude by praising the positive aspects of renewable technologies (surprising from the tone of the article, I know). Renewable technologies coupled with battery storage have great potential to make our grid more stable. Having small distributed power-storage stations that are powered with wind and solar would be a great way to deal with

localized energy-demand spikes, which would replace the need for gas-fired peaking stations. Renewables could literally outshine and outperform fossil fuels in providing peaking power when it is built upon nuclear baseload power. However, if we do not allow the construction of nuclear units at Turkey Point 6&7--and at other locations--the use of fossil fuels will continue unabated to supply the necessary amount of energy to put food on our tables and power our economy. It is critical to approve Turkey Point 6&7 because without these units we will miss not only on the benefits of nuclear power, but also the benefits of renewables. (0378-7 [Macher, Nathan])

**Response:** The NRC does not promote any particular form of energy generation, including nuclear. However, the NRC does examine energy alternatives as part of its NEPA responsibilities. In Section 9.2.2 the staff concluded that natural gas was a feasible alternative to the proposed action. However, in Section 9.2.5 the staff concluded that natural gas was not environmentally preferable to the proposed action, and the air-quality impacts from the natural gas plant emissions, including greenhouse gas emissions, are a key difference. The staff's evaluation of renewable alternative energy sources, including wind, solar, geothermal, fuel cells, and biomass, in Section 9.2 of the EIS describes potential impacts from these sources in comparison with the proposed action. In Section 9.2 the review team determined that none of these renewable energy sources could, by themselves, meet the purpose and need of the proposed action; to provide a large baseload power source. Alternatives not requiring new generating capacity, including conservation and demandside management, are discussed in Section 9.2.1 of the EIS. The staff concluded in the EIS that these technologies did not represent reasonable alternatives to meet the need for 2200 MW(e) of baseload power in the FPL service territory because they are incapable of generating baseload power, or (for alternatives such as biomass) 2200 MW(e) of baseload power. The staff concluded in Section 9.2 of the EIS that none of the feasible alternative energy options were environmentally preferable to the proposed action because the environmental impacts of the alternatives were either similar to, or worse than, those of the proposed action. The cost of energy alternatives was not considered in the EIS because the options were either not feasible, or were not environmentally preferable. No change was made to the EIS as a result of these comments.

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[s]olar and wind although options are very costly and not as efficient as nuclear so those options cant be relied on. (**0015-15** [Goldmeier, Barry])

**Comment:** Nuclear fission is a technology that we have today and doesn't require the development of another technology, like battery storage; A technology that has not yet reached mass commercial viability. If the world is lucky enough to develop commercial battery storage, then nuclear power will work even better. In contrast, renewable energies merely depend completely on the development of battery storage. Instead of straining our economy with renewables by stretching the technology just to get back to the "volume" of electricity generated today with fossil fuels, we can revamp and transform our economy with abundant nuclear energy. (0378-2 [Macher, Nathan])

**Response:** The NRC acknowledges the commenter's support for new nuclear power. The NRC does not promote any particular form of energy generation, including nuclear. However, the NRC does examine energy alternatives as part of its responsibilities under the National Environmental Policy Act (NEPA). The staff concluded in Section 9.2.5 of the EIS that none of the feasible alternative energy options were environmentally preferable to the proposed action because the environmental impacts of the alternatives were either similar to, or worse than, those of the proposed action. The cost of energy alternatives was not considered in the EIS

because the options were either not feasible, or were not environmentally preferable. No change was made to the EIS as a result of these comments.

**Comment:** We should also be harnessing the ocean currents for hydro electric power. Burning fossil fuels, and creating nuclear waste have been proven to be detrimental to our "mother earth". It's time we use our ingenuity as mankind to create sustainable and safe energy production. We only have one earth, one planet. It has to last for many generations to come. (0146-6 [Grant, Randy])

**Comment:** If only there was a viable alternative to nuclear power... Oh, that's right, there are many alternatives. Now, we must also consider the alternatives that exist, and FPL's role in preventing their implementation. We are the sunshine state, and Solar infrastructure gets cheaper every year, yet we have minimal Solar PV Power (cloudy Germany is shutting down coal and nuclear plants). We have the Gulf Stream right off shore, yet we're only beginning to "study" current and wave power generation (while Brazil, Holland and Australia have installed operational power plants). We have no shortage of wind (and wind farms are sprouting up in many parts of the USA). (0252-14 [Van Leer, Sam])

**Comment:** It is also my very strong opinion, that Florida Power and Light cares more about generating money than it does about the people who rely on its services. For all its glossy, warm and fuzzy flyers about how it is generating environmentally safe and economic power, there is inadequate proof that these claims are true. If they were, all the money we have been charged for "future development" would be showing up in wind, sun, and tide generated power -NOT additional hazardous nuclear plants on the edge of a rising ocean. (0337-6 [Philips, Sally B.])

**Comment:** We want clean, renewable energy sources -solar, wind, water. These energy sources are CHEAP and SAFE. Nuclear is neither! (**0381-1** [Khajeh-Noori, Jeri])

**Comment:** I beg you to go back to the drawing board. We have free and abundant energy sources like water, sun and wind. This is where we need to be headed. (**0633-3** [Cornely, Tina])

**Comment:** Additionally, the community would be better served by using the projected \$20 Billion in cost by exploring power generation of electricity by solar, wind, or wave means. (**0653-2** [Hickey, Alan])

**Comment:** LETS INVEST IN WATER TURBINE AND SOLAR ENERGY. (0656-2 [Zhivelev, Leon])

**Comment:** There are so many ways to produce energy. From the sun, wind, tides, hydrogen, etc. but we have not invested in them. Rather we elect to make energy the old ways with the accompanying horrible ecological consequences. We don't correct our mistakes since how we make energy now is expedient, corporatized, and highly profitable. (**0657-1** [Hartmann, Donald])

**Comment:** If we were making better use of renewable energy (solar, wind, tide, etc.) at the neighborhood level, we could start to envision a state that doesn't need nuclear plants and their associated nuclear waste. Other nations around the world are already working on a new paradigm, so we need to focus our efforts on catching up to leading edge technology instead of continuing with an obsolete model. (0677-5 [Chiszar, Benjamin J.] [Jacobs, Lee] [Klopfer, Carol])

**Comment:** Our area may need more electricity, but there is no present or foreseeable crisis that exists. Also a good thought out and ecologically sensitive plan for electricity should be on

the drawing boards for our area including, but not limited to: solar, wind, water currents, etc. (**0685-1** [Batista, Carlos])

**Comment:** There exists alternative means to generate electricity in a cheaper moire sustainable manner in South Florida through solar, tidal, and other alternative energy sources. Florida should exhaust all other alternatives before building more reactors. (0710-4 [Platt, George Seth])

**Comment:** So it's much better putting solar energy in. We can do the solar panels, put solar farms and combination. I don't see why we can't do that and put wind energy, you know, put windmills on our house. I don't care. I mean, add a new addition or whatever. Maybe even a Gulfstream current, we can put maybe geothermal energy there or somehow harness the energy of the Gulfstream. (0721-31-12 [Almirola, Alejandro])

**Comment:** Therefore, a better thought out and ecologically sensitive plan for electricity should be on the drawing boards for an area including but not limited to solar, wind, water currents, et cetera. (0721-31-5 [Almirola, Alejandro])

Response: The NRC does not promote any particular form of energy generation, including nuclear. However, the NRC does examine energy alternatives as part of its responsibilities under the National Environmental Policy Act (NEPA). The staff's evaluation of renewable alternative energy sources, including wind, solar, water-driven, geothermal, fuel cells, and biomass, in Section 9.2 of the EIS describes potential impacts from these sources in comparison with the proposed action. In Section 9.2 the review team determined that none of these renewable energy sources could, by themselves, meet the purpose and need of the proposed action; to provide a target of 2,200 MW(e) of baseload power because they are incapable of generating baseload power, or (for alternatives such as biomass) 2,200 MW(e) of baseload power. Alternatives not requiring new generating capacity, including conservation and demandside management, are discussed in Section 9.2.1 of the EIS. The staff concluded in the EIS that these technologies did not represent reasonable alternatives because they also could not meet the need for 2,200 MW(e) of baseload power in the FPL service territory. The staff concluded in Section 9.2 of the EIS that none of the feasible alternative energy options were environmentally preferable to the proposed action because the environmental impacts of the alternatives were either similar to, or worse than, those of the proposed action. The cost of energy alternatives was not considered in the EIS because the options were either not feasible, or were not environmentally preferable.

Ocean and tidal technologies were evaluated in Section 9.2.3.4 and the NRC staff noted that both are being developed but are in their infancy and have not been used at utility scale. Therefore, the staff concluded that these technologies are not feasible alternatives within the FPL region of interest to the construction of a new nuclear power-generation facility that can generate 2,200 MW(e) of baseload power at the proposed site.

The comments did not provide any information that would change the review team's conclusions. Therefore, no changes to the EIS were made as a result of these comments.

**Comment:** If any nuclear power generation of electricity is approved, then please approve breeder reactors for their small waste footprint, and require the use of closed steam systems, like a USN nuc sub, where no steam is wasted, steam is cooled and recycled. If land nuc plants did that then less water would be wasted for cooling. And for fossil fuel burning plants with

recycled steam, no Mercury or nox, sox, or COx would be contributing to poor air quality, health and global environmental health of the climate. (0311-1 [Hunt, Jim])

**Response:** There are not any current plans in the United States to build breeder reactors. There are no breeder reactor designs submitted to the NRC for review. Regarding Navy submarine cooling systems, they use an open-cycle cooling system, heating the water they draw in and then discharging the hotter water back into the ocean. Under current EPA regulations, it is unlikely such a system could be approved for a land-based nuclear power plant. Finally, the comment regarding emissions from fossil-fueled plants is unclear. All such plants emit numerous pollutants that affect air quality. No changes were made to the EIS as a result of this comment.

**Comment: Comment 16: The final Environmental Impact Statement should include** distributive models of energy generation in its review. FPL has stated that "without the proposed action, nuclear power generation would decline to 16% of its portfolio by 2021 and cause FPL to rely on natural gas power generation for up to 75% of its power generation." DEIS at 8-7. This statement assumes that natural gas, or even centralized energy generation, is the only alternative to a nuclear power plant. In contrast, the final Environmental Impact Statement should assess distributive, or "rooftop," solar power generation options. Although the DEIS assess solar farms, it does not include an assessment of distributive options. With this in mind, the City of Miami used data from the Florida Solar Energy Center at the University of Central Florida to compare the output of a limited distributive generation scenario with nuclear power. For simplicity's sake, the City focused only on solar water heaters. Solar water heaters use solar energy to heat water and hold that hot water in reserve for consumer use. This brief analysis showed that the same energy needs can be met more efficiently with less power output. Not only is solar hot water heating a reasonable renewable energy option, it is also more efficient than traditional electricity generation for the purposes of heating water. Other economic considerations must be incorporated in this analysis, however, the City of Miami believes that if a simple change such as adopting widespread use of solar hot water heaters can result in such an impact in energy demand, this type of scenario should be considered in the final Environmental Impact Statement's analysis of the determination of need for Turkey Point Nuclear Plant Units 6 & 7. Equations, Variables, & Givens.  $P_kw = E_{kwh} \div t_{hr}$ , P = Power in kilowatts; E = Energy in kilowatt hours; t = Time in hours; Hours in a year = 8, 765.81 hours. For a family of four, typical hot water usage is 25,550 gal/yr at 3,990 kwh/yr to heat electrically. Solar hot water heaters save between 50 - 85% of energy expenditure. For the purposes of a conservative analysis, the City assumed that solar hot water heaters use 1,995 kwh/yr (or, 50% of 3,990 kwh/yr). FPL has 4.7 million customers. Of these, the average number of rural and residential customers is 4,230,063. See FPL 10 year site plan. Comparison Point A: Calculating Yearly Power from One Solar Hot Water Heater. Pkw = 1,995 kwh ÷ 8, 765.81 hours = .227 kw; .227 kw = 227 w; 227 w/hr × 24 hours/day = 5,448 w/day; 5,448 w/day × 365 days/yr = 1,988,520 w/yr;  $1,988,520 \text{ w/yr} \times (1.0 \times 10^{-6}) \text{ MW/w} = 1.98852 \text{ MW/yr}$ ; 1.98852MW/yr = power from one solar hot water heater. **Comparison Point B: Calculating Yearly** Power from Turkey Point Nuclear Plant Units 6 & 7. FPL's Target Capacity for Proposed Units 6 & 7 = 2,200 MW/hr; 2,200 MW/hr × 24 hr/day = 52,800 MW/day; 52,800 MW/day × 365 days/yr = 19,272,000 MW/yr; 19,272,000 MW/yr = total projected power generated from Units 6 & 7. Conclusion Based on a Limited Population of Adopting Ratepayers: Amount of Power Produced from Solar Hot Water Heaters from FPL Rural and Residential Customers. If one solar water heater produces 1.98852 MW/yr of power, then: 1.98852 MW/yr × 4,230,063 rural and residential customers = 8,411,565.88 MW/yr; 8,411,565.88 MW/yr = Amount of power produced in one year if FPL rural and residential customers were required to have a solar hot water heater. Conclusion Based on Adopting by All Ratepayers: Amount

of Power Produced from Solar Hot Water Heaters from all FPL customers. If one solar water heater produces 1.98852 MW/yr of power, then: 1.98852 MW/yr × 4,700,000 total customers = 9,346,044 MW/yr; 9,346,044 MW/yr = Amount of power produced in one year if all of FPL customers were required to have a solar hot water heater. Based on this scenario, the City found that almost half of the projected power output of the new reactors can be generated using a distributive power generation model even under conservative circumstances. Moreover, the final Environmental Impact Statement should assess whether the energy needs anticipated by FPL can be met more efficiently with less power output. (0456-23 [Miami, City])

Comment: Comment 17: The final Environmental Impact Statement should include distributive models of energy generation in its review. FPL has stated that "without the proposed action, nuclear power generation would decline to 16% of its portfolio by 2021 and cause FPL to rely on natural gas power generation for up to 75% of its power generation." DEIS at 8-7. This statement assumes that natural gas, or even centralized energy generation, is the only alternative to a nuclear power plant. In contrast, the final Environmental Impact Statement should assess distributive power generation options such as "rooftop" solar. Although the DEIS considers solar farms, it does not include an assessment of distributive options. With this in mind, the City of Miami used data from the Florida Solar Energy Center at the University of Central Florida to compare the efficacy of a limited distributive generation scenario against nuclear power. For simplicity's sake, the City focused only on solar water heaters. Solar water heaters use solar energy to heat water and hold that hot water in reserve for consumer use. This brief analysis showed that the same energy needs can be met more efficiently with less power output. Not only is solar hot water heating a reasonable renewable energy option, it is also more efficient than traditional electricity generation for the purposes of heating water. Other economic considerations must be incorporated in this analysis, however, the City of Miami believes that if a simple change such as adopting widespread use of solar hot water heaters can result in such an impact in energy demand, this type of scenario should be considered in the final Environmental Impact Statement's analysis of the determination of need for Turkey Point Nuclear Plant Units 6 & 7. Equations, Variables, & Givens. Pkw = Ekwh ÷ thr P = Power in kilowatts, E = Energy in kilowatt hours, t = Time in hours. The reactors will operate at 93% capacity; each one generating 8,148 hours/yr (8,760 hours in a year x .93 = 8,148). See DEIS at 5-69. 8,148 hours ÷ 24 hrs/day = approx. 340 days. For a family of four, typical hot water usage is 25,550 gal/yr at 3,990 kwh/yr to heat electrically. Solar hot water heaters save between 50 -85% of energy expenditure. For the purposes of a conservative analysis, the City assumed that solar hot water heaters use 1,995 kwh/yr (or 50% of 3,990 kwh/yr). FPL has 4.7 million customers. Of these, the average number of rural and residential customers is 4,230,063. See FPL 10 year site plan. Comparison Point A: Calculating Yearly Power from One Solar Hot Water Heater Pkw = 1,995 kwh ÷ 8, 760 hours = .227 kw; .227 kw = 227 w; 227 w/hr × 24 hours/day = 5,448 w/day; 5,448 w/day × 365 days/yr = 1,988,520 w/yr; 1,988,520 w/yr × (1.0 × 10-6) MW/w = 1.98852 MW/yr; 1.98852 MW/yr = power from one solar hot water heater. Comparison Point B: Calculating Yearly Power from Turkey Point Nuclear Plant Units 6 & 7, FPL's Target Capacity for Proposed Units 6 & 7 = 2,200 MW(e), 2,200 MW/hr × 24 hr/day = 52,800 MW/day, 52,800 MW/day × 340 days/yr = 17,952,000 MW/yr, 17,952,000 MW/yr = total projected power generated from Units 6 & 7. Conclusion Based on a Limited Population of Adopting Ratepayers: Amount of Power Produced from Solar Hot Water Heaters from FPL Rural and Residential Customers. If one solar water heater produces 1.98852 MW/yr of power, then: 1.98852 MW/yr × 4,230,063 rural and residential customers = 8,411,565.88 MW/yr, 8,411,565.88 MW/yr = Amount of power produced in one year if FPL rural and residential customers were required to have a solar hot water heater.

Conclusion Based on Adopting by All Ratepayers: Amount of Power Produced from Solar Hot Water Heaters from all FPL customers. If one solar water heater produces 1.98852 MW/yr of power, then: 1.98852 MW/yr × 4,700,000 total customers = 9,346,044 MW/yr, 9,346,044 MW/yr = Amount of power produced in one year if all of FPL customers were required to have a solar hot water heater. Based on this scenario, almost half of the projected output of the new reactors can be generated using a distributive generation model even under conservative circumstances. Florida electric capacity from distributive methods has increased about 33% since 2014. http://tinyurl.com/FPSCrenewables. The final Environmental Impact Statement cannot meet the "hard look" standard required by NEPA without analyzing distributive energy generation models. **Expand Consideration of Transmission Line Impacts.** The DEIS notes that "[t]ransmission-line construction would fragment habitat and permanently affect pine rocklands that are designated as critical habitat for listed species." DEIS at 10-5. However, the impacts of FPL's proposed transmission lines are not limited to construction-related disruptions. (**0611-16** [Haber, Matthew S.])

**Comment:** There is an attempt to greatly increase solar power in the state of Florida. In the past solar water heaters were common. Florida could return to the days of using more solar power. Energy efficiency could be increased. Florida has not made a significant effort to improve energy efficiency. It ranks behind many states on energy efficiency and does not even have a state policy on increasing renewable energy. (**0641-9** [Martin, Drew])

**Comment:** So I know personally it is possible to do distributed generation instead of central power plants to do distributed generation. And I think about it all the time. I think about -- and I love my solar panels and I love my solar hot water heater, and the solar hot water heater has paid for itself many times over already. The solar panels, not quite, and it will take a while to do that. But when a hurricane comes and the grid is down, I'm up, I'm running. We have batteries. I listened to a Tesla Board of Directors conference call the other day. Tesla, that makes that car, the electric car. They have a proposal to build a new whole house battery. How exciting. A whole house battery that can keep the house up and running when the sun is not shining or the wind is not blowing. (0721-11-4 [Roff, Rhonda])

**Comment:** So we've got existing technology that will not have any of these impacts I'm talking about. The company has not evaluated that reasonable alternative. (**0723-9-20** [Schwartz, Matthew])

**Response:** Any alternative energy source must be able to meet the purpose and need of the action (i.e., production of 2,200 MW(e) of baseload power to supply the future needs of FPL's service territory). In Section 9.2.1 of the EIS, the review team discussed conservation and demand site management (DSM) programs (under which residential solar water haters would likely fall). The review team pointed out that the FPSC had already approved those conservation and DSM programs that it found to be cost-effective. In addition, the FPSC stated that there are no additional conservation measures that could effectively mitigate the need for the addition of the proposed FPL Units 6 and 7 (FPSC 2008-TN735). Thus, implementation of conservation and DSM programs, including domestic solar water heating, is not a reasonable alternative for providing baseload power-generating capacity. The review team considered solar photovoltaic (PV) power as an alternative in Section 9.2.3.3 of the EIS. The review team concluded that the capacity factor of solar PV is too low to be used as a baseload power generation source and that it was not a reasonable alternative to the proposed action. Considering the relative capacity factors of nuclear and solar PV, to obtain the same annual output as nuclear would require almost 10,000 MW of solar panels and energy storage on a scale that has not been contemplated in any State. The review team also included solar

PV and conservation and DSM as components of the combination of energy alternatives in Section 9.2.4. However, the review team concluded in Section 9.2.5 that the combination of energy alternatives was not environmentally preferable to the proposed action because the environmental impacts of this alternative were similar to those of the proposed action. No changes were made to the EIS in response to these comments.

**Comment:** The Executive Summary (pg. xxxvi) states that the NRC staff eliminated several energy sources (e.g., wind, solar, geothermal, and biomass) from full consideration because they are not capable of meeting the need of the project. The EPA would prefer that the NRC evaluation consider the combining of renewable energy sources, such as wind and solar, as an alternative to meet the needs of the project. (**0617-4-12** [Mueller, Heinz J.])

**Comment:** I think we all share a common goal, more than we want to admit, and that is the elimination of CO2 gasses, or at least a drastic reduction. And a combined mixture of wind, solar and nuclear is definitely the way to go. Reliable base power and reliable solar and wind, especially in the Sunshine State. I've heard the discussion about rooftop solar and solar powered -- solar water heaters, and, yes, those are viable options. (**0721-15-7** [Kuraza, Devon])

**Response:** The review team evaluated wind and solar energy as alternatives to the proposed reactors in Sections 9.2.3.2 and 9.2.3.3 of the EIS, respectively, and found neither to be a feasible discrete alternative to the proposed reactor. The review team identified a combination alternative involving natural gas-fired combined-cycle turbines, energy efficiency, and contributions from wind and solar as a technically feasible alternative to the proposed FPL Units 6 and 7. The review team evaluated the environmental and socioeconomic impacts of such a combination alternative, summarizing the projected impacts in Table 9-5. In Table 9-6, the review team compared the projected impacts of the proposed reactor with all of the alternatives that the team found to be technically feasible. The review team applied objective criteria in its evaluation of all the options that were considered to be technically feasible and practically available alternatives to the proposed reactor for satisfaction of the stated purpose and need to provide 2200 MW(e) of baseload power in the FPL service territory, and concluded that the combination of energy alternatives was not environmentally preferable to the proposed action because the environmental impacts of this alternative were similar to those of the proposed action. The comments did not provide any information that would change the review team's conclusions. Therefore, no changes to the EIS were made as a result of these comments.

**Comment:** In early 2015, FPL announced the change of the commercial operation dates (CODs) for Units 6 & 7 from 2022 and 2023 to 2027 and 2028, respectively. A new and significant information review was conducted by FPL where it was concluded that there would not be an impact to any significance level or conclusion drawn in the ER with respect to the change in CODs. There are instances in the DEIS, however, where references to CODs differ from the newly announced CODs. Instances in the DEIS include:...DEIS Section 9.2, Page 9-3, Lines 4-12: In DEIS Section 9.2, the in-service dates, along with the impact of extending those dates, are mentioned: "The review team's analysis is based on an in-service date for Unit 6 of 2022 and Unit 7 of 2023 based on FPL's 2014 Ten-Year Plan (FPL 2014-TN3360). Even if the actual in-service date were to slip by a few years, the NRC staff would not expect such a change to affect the overall conclusions regarding energy alternatives for two reasons. First, the projections by FPL and by the U.S. Department of Energy, Energy Information Administration (DOE/EIA) that the NRC staff has used in its analyses do not change appreciably in the later years and are generally consistent with the data used for 2023. Second, the environmental impacts of the feasible alternatives are not likely to change appreciably, so the NRC staff's

conclusions regarding environmental preferability are unlikely to change." (**0619-1-7** [Maher, William])

**Response:** The EIS text in the Alternative Energy subsection of Section 9.2 was corrected to reflect the noted inconsistency with the referenced material.

**Comment:** By building massive power plants at one spot, FPL must then distribute that power. They want to build massive transmission lines through the Everglades, and along Miami's iconic South Dixie Highway. As I understand it, the towers for these lines are not capable of surviving a Cat 5, much less the tornadoes that we might also expect. If the power plants are being put in to serve public, yet transmission is unsafe, who does this really serve? (**0252-12** [Van Leer, Sam])

**Comment:** By having power generation distributed near points of demand, massive transmission lines are not needed. (**0252-15** [Van Leer, Sam])

**Comment:** Start to take stake in the distributed grid reality, take stake in it, get value from it and own your customers. Because if there's another utility that pops up via some co-op or something that's going to take your client business away, you had those clients because you set them up. (0721-34-5 [Gomez, Albert])

**Comment:** But the elephant in the hallway is the utility company that says, we won't buy your power or we won't take it off-grid. We will not allow independent power generators, they're not allowed in the State of Florida. You've got a monopoly here. And you know that's what holding up the jobs. (0723-12-7 [Henry, Jim])

**Response:** These comments argue for distributed power generation, an approach that would rely on the types of energy alternatives that the review team considered in Section 9.2 of the EIS. The alternative energy resources considered in the EIS must be able to meet the purpose and need of the action (i.e., production of 2,000 MW(e) of baseload power to supply the future needs of FPL's service territory), in order to be considered feasible. While the use of renewable energy resources for distributed power generation is growing rapidly in some parts of the United States, in Section 9.2 the review team determined that none of these renewable energy sources could, by themselves, meet the purpose and need of the proposed action; to provide a large baseload power source. No changes were made to the EIS in response to this comment.

**Comment:** FPL is pushing for this expansion because it will benefit their bottom line and rate payers are stuck with the bill. There are cheaper ways to increase our generation capacity and reduce our electrical consumption with energy efficiency upgrades which have been opposed by FPL because it would obviously take away from the kWh charged to customers. (**0119-2** [de Azevedo, Ricardo])

**Comment:** This project is a waste of taxpayer dollars, which would be more efficiently (and safely!) spent on energy efficiency projects. (**0661-2** [Segal-Wright, Nicholas])

**Comment:** Look, it's been well established that energy efficiency is the lowest cost resource in meeting electricity demand. It can meet demand with an investment of less than 3 cents per kilowatt hour, a fraction of the levelized cost of the proposed reactors which is over 15 cents per kilowatt hour. Yet, FPL's past efforts in helping customers reduce energy use and save money on their bills through energy efficiency programs, quite frankly, has been abysmal, capturing a mere 2/10ths of 1 percent of annual energy sales through energy efficiency programs. However, even at these very low levels, had FP&L continued the conservation programs that it had in

place in 2013, it would capture over 1,520 megawatts of capacity, about 70 percent of what it needs in the 2027/2028, the time frame for the proposed reactors. (**0721-8-3** [Cavros, George])

**Comment:** [U]nfortunately, the people that are hardest hit by these almost non-existent energy efficiency programs are folks on fixed incomes and customers like the working poor that may not have information or the resources to make their homes more energy efficient. (0721-8-5 [Cavros, George])

**Response:** Neither the NRC or the USACE establish public policy regarding electric power supply alternatives, nor do they promote the use of nuclear power as a preferred energy alternative. Decisions regarding which generation sources and alternatives (including energy efficiency, conservation, and DSM portfolios) to deploy are made by the applicant and have to be confirmed by regulatory bodies such as the FPSC. Energy efficiency and DSM programs were reviewed by the FPSC as part of the hearing record, as discussed in Chapter 8 of the EIS. In Section 9.2.1 of the EIS, the review team discussed conservation and DSM programs. The review team pointed out that the FPSC had already approved those conservation and DSM programs that it found to be cost-effective. In addition, the FPSC stated that there are no additional conservation measures that could effectively mitigate the need for the addition of the proposed FPL Units 6 and 7 (FPSC 2008-TN735). Thus, implementation of conservation and DSM programs is not a reasonable alternative for providing baseload power-generating capacity.

Chapter 9 of the EIS included discussion of energy efficiency and DSM as part of the no-action alternative, and the combination of alternatives. No changes were made to the EIS as a result of these comments.

## E.2.25 Comments Concerning Alternatives - System Design

**Comment:** They said in the EIS they considered all alternatives, but you might be surprised to learn that 40 percent of the nuclear plants on the planet and 20 percent in the United States use once-through sea water to cool their reactors. Some will say there's a problem of entrainment with that. If you check you will see that their technology has reduced that to a manageable level. All of the reactors in Britain, I think in South Korea, and a few other cities, use once-through sea water, and just think of the problems that that eliminates. You put pipes out as far as you have to, into the Gulfstream if you have to. You bring in water, it goes through the reactor once, [and] it goes back out into the Gulfstream; done, finished. All these problems we're talking about go away. (0721-12-12 [White, Barry J.])

**Response:** Alternative heat dissipation systems are addressed in Section 9.4.1 of this EIS, which includes consideration of the type of cooling system described in the comment. None of the systems and/or designs that were evaluated were found to be environmentally preferable to the system design that is proposed for the Turkey Point site. Because this comment did not offer any new or significant information about environmental impacts, it did not result in any changes to the EIS.

## E.2.26 Comments Concerning Alternatives - Sites

**Comment:** Can this not be erected/expanded in Central or Northern Florida? There are municipalities going completely off grid and Costa Rica has been running on Hydropower for more than a month. Yet Florida is adding on to a run-down nuclear reactor? (**0008-9** [Finver, Jody])

**Comment:** We can not believe that there is not a remote place (still many in Florida) to build these things. (**0040-2** [Pareto, Rolando and Marlene])

**Comment:** I am not against nuclear power per se. I just think it should be located away from populated areas. When I first moved to South Florida from Rhode Island, I was not aware that such a plant would be essentially in my backyard. (**0061-3** [Lague, Victoria])

**Comment:** There are significantly large, low population sites on the eastern Florida shoreline that could be used for a modern nuclear facility. It is simply irresponsible to increase the already inflicted damage and the threat to our vulnerable area. (**0083-2** [Birsh, Arthur and Joan])

**Comment:** FPL has petitioned NRC to expand the nuclear power plant at Turkey Point. This location was chosen because of the existence of multiple power plants at the same site, including two currently operating nuclear reactors. The convenience and logistical advantages for this site are counterbalanced by the detrimental effect the existing plants are having on the ecology and water supply for Miami-Dade. (0172-1 [Cava, Daniella Levine])

**Comment:** We are not against nuclear power, but feel that rural North Florida would be a better location since fewer people would be affected in the event of a system problem. (**0212-3** [Ross, Robert and Teresa])

**Comment:** Isn't there a more acceptable place for a nuclear reactor besides next to TWO national parks? (**0220-1** [Spigel, Sue])

**Comment:** I was shocked to learn that the reactor had been allowed in the first place. The Nuclear Regulatory Commission's regulations state, "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." Within six miles of the proposed expansion site there are two national parks, an aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. (0295-2 [Dietrich, Chris OMeara])

Comment: There are better locations for this. (0305-1 [Poese, David])

Comment: That's not the smartest choice to place nuclear reactors. (0347-1 [Petersen, John])

**Comment:** I question the thinking behind this without much thought or regard for the location it is in. (0349-2 [Oliva, Vivian])

**Comment:** It is dangerous to have nuclear plants in populated, hurricane-prone areas. (0359-1 [LoBiondo, Roana and Michael])

**Comment:** Follow your own regulations and say NO Expandition. Case Closed, find a new loaction Turkey Point.. (0392-2 [Greer, Tom])

**Comment:** There must certainly be better sites to build this power plant. Why not inland on the east coast of FL? This is where there is more demand. (**0452-1** [Karsten, Annetta])

**Comment:** I ask. Where is the conscience of those proposing this project. It's likely true that no one wants this stuff in their back yard. But, there must be a better place than this for the monstrosity[.] (**0484-1** [Speno, Charlie])

**Comment:** I have visited friends who lived a few blocks from Tampa Bay and thought it an extremely risky place to be. (0492-2 [Mckee, Sarah])

**Comment:** It would seem to an intelligent person that your regulations would forbid you from undertaking an expansion in this area. (**0526-1** [Kimball, Larry])

Comment: Get real and build these energy plants somewhere else. (0538-1 [Willett, Greg])

**Comment:** The draft EIS completely omits these important considerations of the proposed siting and the resulting hazards they present to the environment and public health. (**0615-2-24** [Bethune, David])

Comment: Please don't build the plants in Homestead. (0686-1 [Sachs, Jean])

**Comment:** What this really is all about is, is this the place that you want to put a nuclear power plant, and the answer is resoundingly no. (0721-30-7 [Ullman, John])

**Response:** FPL conducted a site-selection study and chose the proposed site at Turkey Point based on that study. Included in the FPL study was a site-by-site comparison of alternative sites with the Turkey Point site. The NRC staff evaluated the FPL process in Section 9.3.1 of the EIS and concluded that it was reasonable and consistent with the NRC guidance for site selection (e.g., NUREG-1555). For example, as discussed in Section 9.3.1.1, FPL used its service territory as the region of interest, consistent with NUREG-1555. In addition, the NRC staff independently compared the alternative sites to the proposed site to determine if any of the alternative sites were environmentally preferable to the proposed site. In Section 9.3.6 of the EIS, the NRC staff concluded that none of the alternative sites was environmentally preferable to the proposed site. In Section 9.3.6 of the EIS, the NRC staff concluded that none of the alternative sites was environmentally preferable to the proposed site. In Section 9.3.6 of the EIS, the NRC staff concluded that none of the alternative sites was environmentally preferable to the proposed site. In Section 9.3.6 of the EIS, the NRC staff concluded that none of the alternative sites was environmentally preferable to the proposed Turkey Point site. In addition, the NRC staff would determine whether building and operating the proposed units at the Turkey Point site would meet all of the safety requirements in the NRC regulations. The results of this review will be documented in a safety evaluation report and those results, along with the EIS, will be considered in the NRC's decision about whether or not to issue the COLs for proposed Units 6 and 7. No change was made to the EIS as a result of these comments.

**Comment:** Given the proximity of Turkey Point to the major population centers of South Florida, its location close to the environmentally sensitive, irreplaceable, Florida Everglades, Everglades National Park and Biscayne National Park, the Turkey Point Nuclear Power Plant exposes the population and environment of South Florida to unintended, but nevertheless, extraordinary risk. (**0039-3** [Violich, Francesca])

**Comment:** Given the proximity of Turkey Point to the major population centers of South Florida, its location immediately contiguous to the environmentally sensitive, fragile and irreplaceable, Florida Everglades, Everglades National Park, Biscayne National Park, and the Florida Keys Marine Sanctuary, the Turkey Point Nuclear Power Plant exposes the population and natural environment of South Florida to unintended, but nevertheless, extraordinary risk. The conditions that were present when The Turkey Point facility was originally sited and constructed in the early 1970s are not the same conditions that exist today. Those original conditions and considerations that may have made Turkey Point a viable location for a Nuclear Power Generating Plant have changed dramatically in the ensuing years. (**0044-3** [Commenters, Multiple])

**Comment:** The two fold increase in the population density of Miami-Dade County over the last 40 years to approximately 2,500,000.people, coupled with the growing recognition of the value and need for preservation and protection of the fragile and irreplaceable natural resources that surround the plant, require serious reconsideration of this location for Nuclear Power generation. (**0044-5** [Commenters, Multiple])

**Comment:** Turkey Point's neighborhood includes Biscayne National Park, and four other parks, wildlife and nature preserves, habitats and refuges. This is an extremely sensitive, irreplaceable and biodiverse area which could be devastated by even small amounts of the Uranium 235 fuel, Plutonium and other deadly toxic substances used in and generated by nuclear plants. (**0078-8** [Wilansky, Laura Sue])

**Comment:** Like so many Americans, I am committed to protecting the National Park System, which preserves our country's incredible array of landscapes, waters, wildlife, and opportunities for exploration. Biscayne National Park is an irreplaceable national treasure that safeguards precious natural resources and recreational opportunities. According to the Nuclear Regulatory Commission's own regulations, "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." Within six miles of the proposed expansion site, there are two national parks, an aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. In following the NRC's own guidelines, the expansion of Turkey Point could have unacceptable and irreversible impacts on these treasured sites. (0102-4 [Commenters, Multiple])

**Comment:** Like so many Americans, I love our national parks, which preserve our country's incredible landscapes and waters, wildlife and opportunities for exploration. Biscayne National Park is one of these irreplaceable national treasures. According to the Nuclear Regulatory Commission's own rules, "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." How then can this project proceed when there are two national parks, an aquatic preserve, a wetland preserve and a national wildlife refuge within six miles of the proposed expansion site? (0103-4 [Commenters, Multiple])

**Comment:** The proposed action threatens nearby Biscayne and Everglades National Parks and the goals and activities of the Comprehensive Everglades Restoration Plan (CERP). (**0113-1-3** [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** Finally, the draft EIS fails to properly and fully consider the superior rated alternate sites for the placement of the two new plants, sites which are located in areas significantly less vulnerable to sea level rise, storm surge and a location of Turkey Point with highly dense urban populations that would compete for water. It is clear that the site selection process was overly biased in favor of building on an existing FPL power plant site, and completely ignored the over stressed current conditions under which Turkey Point is currently operating on a temporary management plan to avert a crisis shut down. It is not clear, or substantiated, how that would factor into the determination that the Turkey Point site could possibly remain the superior site for two new plants rather than the proposed alternate sites that do not currently operate under crisis conditions. The determination of alternate sites is highly subjective, and the statement fails to adequately provide fact specific comparative analysis on the rationale for excluding the alternate sites as environmentally preferable. Neither of those sites are located on as vulnerable a coastal location, neither are located in the middle of two National parks, and neither would impact the sole drinking source for more than four million Floridians. (0145-13 [Lerner, Cindy])

**Comment:** The Biscayne and Everglades National Parks are should not be stressed by this ill conceived project. They will be forever changed by this in ways we cannot even begin to imagine. (0159-2 [Bazzone, Barbara])

**Comment:** We have a duty to protect our National Parks and if this situation doesn't warrant protecting I don't know what is. (0176-1 [Sheridan, Michelle])

**Comment:** The fact that the existing plant is on the shore of the largest marine park in the National Park System makes it doubly foolish. (**0181-2** [Bremen, Gary])

**Comment:** This is an area I lived near for many years. It is indeed treasured for its wildlife and beauty. What a shame to jeopardize all this. (**0185-1** [Balog, Nancy])

**Comment:** This site was never an acceptable location for the Turkey Point facility there today and many decades later it has only become an even more unacceptable location[.] (**0192-5** [Lebatard, David])

**Comment:** Our national parks protect some of our nation's most treasured natural and historical sites. The protection of these parks and their wildlife should be a priority in order that they may remain as they are for future generations. (**0198-1** [Tokunaga, Barb])

**Comment:** Further, we are concerned by the wide-ranging environmental impacts to Biscayne National Park, wildlife, and adjacent wetlands. (**0208-2** [Ritz, David])

**Comment:** The proposed action threatens nearby Biscayne National Parks and the goals of the Comprehensive Everglades Restoration Plan (CERP). (**0208-5** [Ritz, David])

**Comment:** Turkey Point is located within six miles of two biologically rich natural parks, a state aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. Everglades National Park is recognized as a UNESCO World Heritage Site and an International Biosphere Reserve and supports a unique array of ecosystems and wildlife. Biscayne National Park, located directly adjacent to Turkey Point, is one of our largest marine national parks, and home to incredible biodiversity and important marine and wetland habitat. These natural areas offer critical protection to sensitive ecological areas, wildlife, and unique habitat and support the local economy through recreational opportunities, tourism and the provision of ecological goods and services. Biscayne and Everglades National Parks alone generate nearly \$137 million in local revenue from 1.6 million annual visitors. According to the standards of the Nuclear Regulatory Commission ("NRC"), "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural--- resource---oriented areas."<sup>1</sup> According the NRC's own standards, Turkey Point should not be expanded due to the potential for unacceptable impacts to the ecological health and economic viability of surrounding protected areas. (**0210-2** [Sharp, Andrea Heuson])

**Comment:** Like so many Americans, I am committed to protecting the National Park System, which preserves our country's incredible array of landscapes, waters, wildlife, and opportunities for exploration. Biscayne National Park is an irreplaceable national treasure that safeguards precious natural resources and recreational opportunities. According to the Nuclear Regulatory Commission's own regulations, "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." Within six miles of the proposed expansion site, there are two national parks, an aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. In

following the NRC's own guidelines, Turkey Point's expansion would have unacceptable and irreversible impacts on these treasured sites. (**0228-4** [Yeager, Jerry])

**Comment:** It [nuclear energy] should also not be located at such low sea level and next to two National Parks. Let's make intelligent choices. How many millions are we investing to restore the Everglades? Let's plan with vision and make sound decisions! (**0235-2** [Bofill, Beatriz])

**Comment:** Two of South Florida's most important public lands and wildlife habitats - Biscayne and Everglades National Parks - will be put at risk and be forever changed by a project of this scale. Wherever you happen to live - South Florida or not - these special places (hotspots for our planet's biodiversity) are a part of your natural heritage. (0240-2 [Commenters, Multiple])

**Comment:** Please have some deep thoughts to safeguard the wildlife and also the livelihood of ALL living beings in Biscayne & Everglades National Park. Your project will forever be harmful to the environment. Our Nation Heritage must be well looked after. Wise people like you know that this project is harmful. So Please, Please have a serious thought before it is too late. A project like this should be carried out at a different location. (**0247-1** [Govindasamy, Rani])

**Comment:** Comes now the NRC drafting two new reactors located off Biscayne and Everglades National Parks. . . what are they thinking? (**0250-2** [Fulks, Anna Louise])

Comment: Everglades National Park is just a few miles away. (0252-7 [Van Leer, Sam])

**Comment:** Turkey Point is located within six miles of two biologically rich natural parks, a state aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. Everglades National Park is recognized as a UNESCO World Heritage Site and an International Biosphere Reserve and supports a unique array of ecosystems and wildlife. Biscavne National Park, located directly adjacent to Turkey Point, is one of our largest marine national parks, and home to incredible biodiversity and important marine and wetland habitat. These natural areas offer critical protection to sensitive ecosystems, wildlife, and unique habitat and support the local economy through recreational opportunities, tourism and the provision of ecological goods and services. Biscayne and Everglades National Parks alone generate nearly \$200 million of economic output from 1.6 million annual visitors. According to the standards of the Nuclear Regulatory Commission ("NRC"), "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural resource-oriented areas."1 [Footnote 1: U.S. Nuclear Regulatory Commission, Regulatory Guide 4.7- General Site Suitability Criteria for Nuclear Power Stations, Revision 2, 1998, Section C.] According the NRC's own standards, Turkey Point should not be expanded due to the potential for unacceptable impacts to the ecological health and economic viability of surrounding protected areas. (0253-2 [Bloom, Justin] [Campbell, Cara] [Causey, Charlie] [Cavros, George] [Chenoweth, Mike] [Daly, Meg] [England, Margaret] [Fuller, Manley] [Jones, George L.] [Keller, Alan] [Martin, Drew] [McLaughlin, Caroline] [Reynolds, Laura] [Silverstein, Rachel] [White, Paton] [Williams, Elinor])

**Comment:** Turkey Point is located directly on the shores of Biscayne National Park, one of our country's largest marine national parks, and home to incredible biodiversity and important marine and wetland habitat. The plant is located within six miles of two national parks, a state aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. Biscayne and Everglades National Parks alone generate close to \$137 million in local revenue due to 1.6 million visitors per year, as of 2014. According to the standards of the Nuclear Regulatory Commission (NRC), "sites adjacent to lands devoted to public use may be considered

unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to naturalresource-oriented areas."<sup>1</sup> [Footnote<sup>1</sup> Text: U.S. Nuclear Regulatory Commission, Regulatory Guide 4.7- General Site Suitability Criteria for Nuclear Power Stations, Revision 2, 1998, Section C.] In following the NRC's own standards, we advise against moving forward with the project as proposed due to the potential for unacceptable impacts on the ecological integrity and economic viability of the surrounding protected natural areas. (**0254-2** [Dudley, Dwight] [Lerner, Cindy] [Regalado, Tomas] [Stoddard, Philip K.])

**Comment:** Please choose to protect Biscayne National Park's incredible wetland and marine habitats from the threat of nuclear expansion. Expanding a nuclear power plant directly on the shores of Biscayne National Park--in an area vulnerable to sea level rise--will have serious environmental consequences! The NRC and the Corps must ensure that future plans for Turkey Point protect our national parks, water supply, and public health. (**0258-5** [Field, Fran])

**Comment:** THE PROPOSED EXPANSION IS NOT JUST IMPRUDENT FOR THE PARK AND HENCE THE PEOPLE OF THE COUNTRY AS A WHOLE, IT IS SIMPLY ANOTHER GREED-INSPIRED ATTEMPT AT DEVELOPING AN AREA WHICH IS CRUCIAL TO THE SURVIVAL OF MANY ENDANGERED SPECIES. (**0261-1** [Chirillo, James])

**Comment:** The two fold increase in the population density of Miami-Dade County over the last 40 years to approximately 2,500,000. people, coupled with the growing recognition of the value and need for preservation and protection of the fragile and irreplaceable natural resources that surround the plant, require serious reconsideration of this location for Nuclear Power generation. (**0263-3** [Orzechowicz, Holly])

**Comment:** According to the Nuclear Regulatory Commission's own regulations, "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." Within six miles of the proposed expansion site, there are two national parks, an aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. In following the NRC's own guidelines, the expansion of Turkey Point could have unacceptable and irreversible impacts on these treasured sites. (0277-1 [Mendelsohn, Alex])

**Comment:** This is the exact definition of being "adjacent to lands devoted to public use," making the site unsuitable, and "adjacent to natural-resource-oriented areas," making the impacts of the expansion of Turkey Point, which could well be irreversible, unacceptable. (0278-1 [Fass, Amy])

**Comment:** Perhaps nuclear power plants should be taken elsewhere away from our U.S. National Parks. An idea for relocation is Antarctica or the Arctic Circle. (**0300-1** [Van Pelt, Jason])

**Comment:** Nuclear expansion can and should be viewed positively as something we can harness for the good of humankind. Nonetheless anything nuclear must be kept far away from National Parks of The United States of America. (0300-3 [Van Pelt, Jason])

**Comment:** This goes far beyond the discussion of whether nuclear power is the right or wrong choice at this point in time, said Matthew Schwartz, executive director at South Florida Wildlands Association. Biodiversity in the ecosystem surrounding the existing Turkey Point plant is second to none. This is absolutely the wrong location for a massive new engineering project of this scale. (0349-3 [Oliva, Vivian])

**Comment:** The Everglades and Biscayne Bay are one of only one place like this all over the world. Though I realize the importance of the power needed I do think the Commission needs to look at the overall picture. (0352-1 [Tingle, Peggy])

**Comment:** why would FPL need to expand a nuclear plant at all in such a sensitive marine park and eco zone? There is a state-managed aquatic preserve, expansive wetland habitat preserve, two national parks and a national wildlife refuge all within six miles of the proposed site. (**0353-2** [Royce, M.])

**Comment:** Marine parks and huge nuclear plants simply dont go together. Important natural resources would be in serious jeopardy. I'll let the experts explain further the dangers to wildlife and the population, as well as ecotourism. (0353-6 [Royce, M.])

**Comment:** There are a state-managed aquatic preserve, expansive wetland habitat preserve, two national parks and a national wildlife refuge all within six miles of the proposed site. (**0356-13** [Shlackman, Jed])

**Comment:** This goes far beyond the discussion of whether nuclear power is the right or wrong choice at this point in time, said Matthew Schwartz, executive director at South Florida Wildlands Association. Biodiversity in the ecosystem surrounding the existing Turkey Point plant is second to none. This is absolutely the wrong location for a massive new engineering project of this scale. (0356-7 [Shlackman, Jed])

**Comment:** Turkey Point is on the shoreline and adjacent to Biscayne National Park, one of the nations largest marine parks famous as an ecotourism destination and teeming with wildlife, said Jaclyn Lopez, Florida director at the Center for Biological Diversity. But with two new reactors, Turkey Point would become one of the largest nuclear facilities in the country. Marine parks and huge nuclear plants simply dont go together. Important natural resources would be in serious jeopardy. (**0356-8** [Shlackman, Jed])

**Comment:** I strongly oppose the building of any new nuclear reactors in or near Biscayne Bay. (**0360-1** [Palmer, Majorie])

**Comment:** The two nuclear plants are poorly placed because the massive new reactors are adjacent to Biscayne National Park-one of the nation's largest marine parks. (**0366-2** [Griffith, Ed and Harriet])

**Comment:** Within just six miles of the proposed site there are a state-managed aquatic preserve, expansive wetland habitat preserve, two national parks and a national wildlife refuge. (**0366-6** [Griffith, Ed and Harriet])

**Comment:** There are a state-managed aquatic preserve, expansive wetland habitat preserve, two national parks and a national wildlife refuge all within six miles of the proposed site. (0370-12 [Vayu, Satya])

**Comment:** But building reactors in a place like this is even more outrageous. Biodiversity in the ecosystem surrounding the existing Turkey Point plant is second to none. This is absolutely the wrong location for any massive new engineering project of this scale. Turkey Point is on the shoreline and adjacent to Biscayne National Park, one of the nations largest marine parks famous as an ecotourism destination and teeming with wildlife. Marine parks and huge nuclear plants simply dont go together. (0370-6 [Vayu, Satya])

**Comment:** So what do they suggest instead-let's do more environmental harm to south Florida & the Everglades, because Tallahassee says we can. Miami-Dade, Coral Gables & Pinecrest governments all disapprove of this, the residents disapprove of this, and somehow that doesn't matter. (0372-4 [Ortiz, Natalia])

**Comment:** I have just read my email about the proposed Nuclear site near Biscayne Bay and Florida Everglades. I am not sure where the decision making is, but that is totally the wrong site. We in Florida have been fighting the preservation of both our National Parks here in South Florida for years. I am asking you to please choose another site, This operation will totally ruin those Parks . Both Parks are a lifeline for our coastal and freshwater birds and animals, which certainly will suffer as will our tourism. Florida has been fighting for years to save our "River of Grass" Please reconsider your choice. (0376-1 [Headley, Linda])

**Comment:** Within six miles of the proposed expansion site, there are two national parks, the Everglades and Biscayne, an aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. This area is also extremely vulnerable to sea level rise and the impacts of climate change. Turkey Point was never a "good" site to develop an expansive power plant; decades later it is only more clear that this is a wholly unacceptable location. (**0379-3** [Commenters, Multiple])

**Comment:** ABSOLUTELY NO NUCLEAR PLANTS, OLD OR NEW, NEAR NATIONAL PARKS IN USA!!! (0396-1 [Melby, George M.])

**Comment:** I am astonished and appalled that a nuclear plant would be put in a National Park. This is an OUTRAGE and is UNacceptable!! (0405-1 [Macy, Michelle])

**Comment:** Within six miles of the proposed expansion site, there are two national parks, an aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. In following the NRC's own guidelines, the expansion of Turkey Point will have unacceptable and irreversible impacts on these treasured sites. (0413-3 [Cobb, Tanya])

**Comment:** I am all for building more nuclear power plants, but not in this location due both to its proximity to the Biscayne National Park and susceptibility to rising water and flooding. (0418-1 [Goldstein, Louis])

**Comment:** When are people going to realize that public lands are not meant for private for profit companies, especially at the cost of the environment. (**0420-1** [Revord, Michael])

**Comment:** I also approve of the use of clean renewable energy resources and have nothing against Nuclean Power per se; however, additional nuclear power plants in the sensitive area of Turkey Point is not a good idea. It may even be a very dangerous idea. Think about this. (0421-1 [Malpass, Betsy])

**Comment:** According to the Nuclear Regulatory Commission's own regulations, "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." Which part of these regulations are considered unimportant? Why are they unimportant? (**0437-1** [Livingston, C. J.])

**Comment:** Clarify Rationale for Selecting Turkey Point as the New Reactor Site. The DEIS outlines the legal framework for the alternative site selection process and describes some of the criteria used in selecting the final site for the new reactors. The site selection criteria included: •Avoidance of high-population areas, •Avoidance of ecologically sensitive and special

designation areas, •Avoidance of special dedicated land uses (e.g., national parks), •Proximity to target transmission/load centers, •A minimum size of 5,000 acres, etc. At first glance, the Turkey Point site does not rate highly on these measures. The site itself is within 25 miles of Miami, the densest population center in Florida and the second most populous city in the state. Likewise, the site is sandwiched between two national parks and sits atop the Biscayne Aquifer, the sole source of drinking water for most of Miami-Dade and Broward Counties. Instead, the text of the DEIS suggests that Turkey Point was chosen as the site for the new reactors primarily to satisfy the company's business objectives. The DEIS states: Of the original 21 potential sites FPL selected the top 8 ranked sites, and **even though they ranked below these 8 sites**, FPL also retained the Turkey Point and St. Lucie sites "based on the fact that they are existing, operating nuclear power plant sites within the ROI," and FPL's determination that the sites fall within "the special case (described above) for licensed nuclear power plant sites." DEIS at 9-39. The DEIS goes on to conclude that "FPL selected the Turkey Point site as its proposed site based on this ranking and its determination that the site was the preferred site for meeting FPL's overall business objectives." DEIS at 9-40. (**0456-3** [Miami, City])

**Comment: Comment 1: The final Environmental Impact Statement should clarify the Nuclear Regulatory Commission's assessment of the site selection analysis conducted by FPL.** Tables 9.3-5 and 9.3-6 of FPL's Environmental Report compare Turkey Point with the alternate sites across a range of criteria. As noted above, the DEIS describes some of these criteria. Within Table 9.3-6, entitled "Candidate Site Rankings," the Technical Analysis Composite Rating/Score for each candidate site is compared against several categories, all of which appear to be given equal weight. These categories included land acquisition, site layout, public acceptance, and political considerations. However, the score that matters most within this framework, the reliability of electrical generation, is also the metric on which Turkey Point scored the lowest compared to all alternative sites. Generating additional and reliable baseload power is the primary motivation for constructing the additional reactors. Hence, the final Environmental Impact Statement, as a decision-making tool, should clarify the rationale for proceeding with the Turkey Point site despite the low score on reliability of electrical generation. (0456-4 [Miami, City])

**Comment:** Comment 2: The final Environmental Impact Statement should expand its discussion of the criteria that make Turkey Point a suitable site in comparison to the alternatives considered by FPL. As noted above, the Turkey Point site does not appear to rate highly on many of the site selection criteria specifically mentioned in the DEIS. From the City's perspective, Turkey Point is a poor site for the placement of two nuclear reactors that will presumably operate for the majority of the 21st Century. Turkey Point's proximity to large population centers, two national parks, the comparably few evacuation routes available to nearby residents, its location atop a single source aquifer, and the site's vulnerability to extreme storm surges are only the most obvious reasons to question FPL's choice. (0456-5 [Miami, City])

**Comment:** In contrast, the Glades alternative site is: Located further from major population centers, Would experience fewer impacts from sea-level rise or extreme storm surge, Near only a small portion of Big Cypress National Preserve, Could draw its cooling water from a groundwater source that is generally not used for other purposes due to the salinity of that water. DEIS at 9-57. The primary drawbacks to placing the reactors at this site appear to be that it would impact unique farmland and it would require a variance from the local comprehensive plan. DEIS at 9-53 and 9-55. Compared to the problems presented by operating additional reactors near the critical and protected ecosystems at Turkey Point, these issues seem minor. Therefore, the final Environmental Impact Statement would benefit from an expanded

discussion of the criteria that led to Turkey Point's selection as the final site for the new reactors. (0456-7 [Miami, City])

**Comment:** Comment 3: The final Environmental Impact Statement should expand the site selection scoring criteria to include sea-level rise resilience. Extreme storm surges made possible by sea-level rise and intense storms can affect saltwater intrusion into groundwater resources, thereby affecting the regional availability of freshwater. There are obvious safety implications for storm surges near the reactor site as well. For these reasons, resilience against problems associated with sea-level rise should be incorporated into the site selection scoring criteria. (0456-9 [Miami, City])

**Comment:** All questions of whether or not we should have more nuclear power aside, why by Biscayne National Park. Just tell them no. (0471-1 [Manter, Larry])

**Comment:** As retirees, Jan and I travel frequently, and our interest centers on national parks and historic sites. The site proposed for expansion is located directly on the shores of Biscayne National Park in an area that is extremely susceptible to sea level rise and the impacts of climate change. (0485-1 [Blair, Dan])

**Comment:** Certainly there is a better place to put this (or not put it anywhere) where precious wildlife, the environment and humans won't be affected. (**0486-1** [Douglas, Carolyn])

**Comment:** I am not against nuclear power. However, construction of nuclear power plants next to National Parks is not good policy. (**0512-1** [Grill, Brock])

**Comment:** I live across the street from the Everglades National park and moved here for the beauty and naturalness of this place. I grow organic like many of my neighbors and do not support nuclear power in a place like this for obvious reasons. Whether I live here or not, I care about the earth, and you should too! Waters, wildlife and opportunities for exploration. (**0519-1** [Togati, Joanne])

**Comment:** I frequent and enjoy our national parks; they preserve our country's incredible landscapes and waters, wildlife and opportunities for exploration. (**0522-1** [Routh, Jeffrey])

**Comment:** Two of South Florida's most important public lands and wildlife habitats -Biscayne and Everglades National Parks -will be put at risk and be forever changed by a project of this scale. (**0537-2** [Anonymous, Judi])

**Comment:** We need to stop and think about the consequences of our actions on our delicate environment here in South Florida. (**0537-7** [Anonymous, Judi])

**Comment:** Like so many Americans, I am committed to protecting the National Park System, which preserves our country's incredible array of landscapes, waters, wildlife, and opportunities for exploration. Biscayne National Park is an irreplaceable national treasure that safeguards precious natural resources and recreational opportunities. According to the Nuclear Regulatory Commission's own regulations, "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." Within six miles of the proposed expansion site, there are two national parks, an aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. In following the NRC's own guidelines, the expansion of Turkey Point could have unacceptable

and irreversible impacts on these treasured sites. \*\*\*Take note of your own regulations and adhere to them Now!!! (0540-3 [Burge, Laura])

**Comment:** I am against building a nuclear plant in Biscayne Bay! I think it could destroy habitat and fish and wildlife and maybe people. I understand FPL is trying to update but let's not kill my favorite park! (0549-1 [Allison, Noreen])

**Comment:** Like so many Americans, I am committed to protecting the National Park System, which preserves our country's incredible array of landscapes, waters, wildlife, and opportunities for exploration. Biscayne National Park is an irreplaceable national treasure that safeguards precious natural resources and recreational opportunities. According to the Nuclear Regulatory Commission's own regulations, "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." Within six miles of the proposed expansion site, there are two national parks, an aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. In following the Nuclear Regulatory Commission's own guidelines, the expansion of Turkey Point could have unacceptable and irreversible impacts on these treasured sites. "Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish--indeed, all the living creatures of prairie and woodland and seashore--from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement." -- Theodore Roosevelt (0555-2 [Lish, Christopher])

Comment: Save the parks. (0587-1 [Glasshof, Wendy])

**Comment:** Because the site designated for this expansion is on the shores of Biscayne National Park, this seems an unwise location for a nuclear operation. (**0588-2** [Hanna, Jane])

**Comment:** I treasure our National Parks and am grateful for the wisdom of past leaders who insured these special areas would be here for generations to come. The very suggestion that the Biscayne National Park would be put at risk by the expansion of Turkey Point doesn't make any sense. We must not continue to supply our power by nuclear means and certainly not in ecologically sensitive and incredibly special ecological areas. (**0588-3** [Hanna, Jane])

**Comment:** In adjacent areas are other sites that need protection, another res;possible reason that the Turkey Point site be closed rather than expanded. For far too numerous reasons this plan would threaten many environmentally sensitive areas, this expansion must be prevented. I urge your support for my concerns. Once an area is destroyed, it cannot be resurrected. (0588-4 [Hanna, Jane])

**Comment:** We have serious concerns that the proposed expansion of FPL's Turkey Point could significantly impact and degrade the health of our national parks, sensitive ecological areas including extensive wetlands, federally listed threatened and endangered wildlife, and the quality and quantity of limited fresh water resources. We request that both agencies support the "No Action" alternative in reference to Docket ID: NRC-2009-0337. (**0592-12** [Brexel, Sr., Charles])

**Comment:** There are many reasons why Turkey Point is a terrible location. There are sensitive national parks (Everglades and Biscayne), a wildlife refuge and sensitive wetland habitats very close to the site. (**0594-1** [Rapuano, Shannon])

**Comment:** It is of course rather unusual to have a nuclear power plant right on the border of a national park. But as I understand it, the plant was there first, and it was necessary to work with the existing situation when establishing Biscayne National Park. Because of this, there is no justification in using the existing plant as a justification for adding more nuclear plants. (**0605-1** [Mundhenk, Norm])

Comment: Glades, Martin, Okeechobee, and St. Lucie were evaluated as alternative sites for nuclear stations. The NRC staff concluded that all of these alternative sites were generally comparable, and that it would be difficult to state that one site is preferable to another, from an environmental perspective. The DEIS then concludes that the Turkey Point site prevailed because "none of the alternatives is environmentally preferable to the proposed site, " (page xxxvii). We also note that the proposed islands for Units 6 and 7 would be elevated 20-25 feet. in order to decrease the risk of flooding from hurricanes and other weather events that are prone to occur in this area. *Recommendations:* Given the environmental concerns at the Turkey Point site, particularly regarding the Biscayne sole source aguifer, public drinking water supply well concerns, hypersalinity and radionuclide migration issues, proximity of two national parks, Biscayne Bay Aquatic Preserve, and the issues described in EPA's Section 404 CWA comment letters in addition to the other issues detailed above, the reason for the environmental preference for the Turkey Point site is unclear. The FEIS states that the alternative locations are generally comparable. Therefore, it is unclear why the Turkey Point site is preferred. The FEIS should further clarify and document the rationale that was used, particularly regarding evaluation of viewshed issues and operational analyses. (0617-4-14 [Mueller, Heinz J.])

**Comment:** Our legislators delegate hundreds of millions of dollars to help recover the Everglades. This project of adding new nukes could set the recovery effort back substantially. Floridians don't want more pollution for the Everglades and Biscayne Bay area. (**0621-2** [Datz, Amy])

**Comment:** Future plans for Turkey Point must protect our national parks, water supply, and public health. (0629-1 [Borie, Edith])

**Comment:** Two of South Florida's most important public lands and wildlife habitats are Biscayne and Everglades National Parks. i urge you not to allow this project in this particular location to go forward. (0637-1 [Smoller, Merry Sue])

**Comment:** An increase of these two reactors will negatively impact these two national parks. Siting of these two new reactors violates the requirement that National Park proximity be taken into account during this evaluation. (**0641-11** [Martin, Drew])

**Comment:** This project is too close to Biscayne Bay and Biscayne National Park. It is also too close to the Everglades, another incredibly unique place that is a national treasure. (**0654-2** [Guy, Sharon])

**Comment:** Please review your plans and ensure the future of this area as a natural as mother nature can provide. (**0668-1** [Garey, Jenne])

**Comment:** This goes far beyond the discussion of whether nuclear power is the right or wrong choice at this point in time, said Matthew Schwartz, executive director at South Florida Wildlands Association. Biodiversity in the ecosystem surrounding the existing Turkey Point plant is second to none. This is absolutely the wrong location for a massive new engineering project of this scale. Turkey Point is on the shoreline and adjacent to Biscayne National Park, one of

the nations largest marine parks famous as an ecotourism destination and teeming with wildlife, said Jaclyn Lopez, Florida director at the Center for Biological Diversity. But with two new reactors, Turkey Point would become one of the largest nuclear facilities in the country. Marine parks and huge nuclear plants simply dont go together. Important natural resources would be in serious jeopardy. (0676-4 [Kassel, Kerul])

**Comment:** There are a state-managed aquatic preserve, expansive wetland habitat preserve, two national parks and a national wildlife refuge all within six miles of the proposed site. (**0676-9** [Kassel, Kerul])

**Comment:** Nuclear power plants do not belong adjacent to ANY Natioonal Park! (0681-1 [Whitehorn, C.])

**Comment:** Please, let's have some areas that are wild and safe from human destruction. Let's not put toxic nasty stuff near our national parks. (**0682-1** [Neff, Victoria])

**Comment:** Florida does need to cut its dependence on fossil fuels, but nuclear power plants are not the correct alternative for us, particularly not in such proximity to natural parks and the relatively wild land and wildlife they shelter. (**0693-4** [Dorn, Kathryn])

**Comment:** This project is slated for one of the most environmentally delicate areas in FL. (0704-1 [Ferry, Lisa])

**Comment:** No additional reactor next to Biscayne Bay! One is enough!! (**0711-1** [Anonymous, Anonymous])

**Comment:** Two of South Florida's most important public lands and wildlife habitats -Biscayne and Everglades National Parks -will be put at risk and be forever changed by a project of this scale. (0712-4 [Almer, Anessa])

**Comment:** One must really question the wisdom of a corporation, a federal agency or a process that would allow for the construction of two nuclear reactors here: [FIGURE - Turkey Point aerial] (0716-8 [Riccio, Jim])

**Comment:** I want to agree with Caroline McLaughlin of the MPCA, in which she said about the location. Although I'm not anxious to see it move to a different location, I do think that part of the requirement of the EIS is to look at the location as the two national parks. So I do think that that needs to be considered. (0721-13-3 [Martin, Drew])

**Comment:** One of the elected officials spoke earlier said, this is just the wrong place. This is not the place to be building this type of a way of generating electricity. (0721-22-17 [Schwartz, Matthew])

**Comment:** Turkey Point's neighborhood includes the Biscayne National Park, and four other parks, wildlife, and nature preserves, habitats and refuges. This is an extremely sensitive, irreplaceable, and bio-diverse area which could be devastated by even tiny amounts of Uranium 235 fuel, Plutonium, and other deadly toxic substances used in and generated by nuclear plants. (0721-28-8 [Wilansky, Laura Sue])

**Comment:** Finally, the EIS fails to seriously consider the superior rated alternate sites for the placement of the two new plants. Sites which were located in areas significantly less vulnerable to sea level rise, storm surge, as the location of Turkey Point is, and with nowhere near the

dense urban population. In fact, they are mostly rural areas. There would be no competition for the water as we are currently facing it. The determination of the alternate sites appears to be highly subjective. The Statement fails to adequately provide facts specific comparative analysis on the rationale for excluding the alternate sites as environmentally preferable. Neither of those sites are located in the vulnerable coastal location. Neither are located in the middle of two national parks, and neither would impact a sole drinking source for more than 4 million Floridians. (0721-3-4 [Lerner, Cindy])

**Comment:** [These issues are dwarfed by] placement between two national parks and in proximity to other vital public lands and aquatic areas[.] (0721-32-5 [Schlackman, Mara])

**Comment:** Upgrades in other nuclear plant locations would jive better next to interior lakes than next to the ocean or the Bay, like in Turkey Point. Serious consideration really needs to be given to alternate sites based on location alone. (0721-5-5 [Mendez, Victoria])

**Comment:** First of all, I think my major message here is, I believe this is the wrong location for this. It's the wrong location. Number one, environmental concerns. This is going to be located between Biscayne National Park and Everglades National Park. These are two jewels in our National Park Service. If somebody thought about placing a nuclear reactor next to the Statue of Liberty or Lincoln Memorial, people would all say, put it somewhere else, this is not where you want to put it. Well, in terms of National Parks, the Everglades and Biscayne National Parks are the same thing. It's the wrong location. We shouldn't even be discussing this. It's just not the place to put this. (0721-7-1 [Edmond, Gabriel])

**Comment:** And, again, this is the wrong place to put this reactor. It's not the right place to put this. (0721-7-5 [Edmond, Gabriel])

**Comment:** [It's] located in one of the nation's most vulnerable areas to sea level rise, on the shores of Biscayne National Park. Biscayne is our nation's largest marine park and a home to incredible bio-diversity, important wetland and marine habitats, and countless opportunities for recreational and educational opportunities. (0721-9-2 [McLaughlin, Caroline])

**Comment:** According to the NRC's own regulations, locating a nuclear power plant next to public lands designed to protect valuable wildlife and habitat can have unacceptable impacts. There is a State aquatic preserve, two national parks, a wetland habitat preserve and one national wildlife refuge, located within six miles of the proposed site. One would be hard pressed to find a worse location to build two new nuclear units, especially considering that the construction and the operation of the proposed reactors could have serious impacts on these sensitive ecological areas. (0721-9-3 [McLaughlin, Caroline])

**Comment:** According to the NRC's own regulations, locating a nuclear power plant next to public lands that are designed to protect valuable wildlife habitat can have unacceptable impacts. There is a State aquatic preserve, two national parks, a wetland habitat preserve and one national wildlife refuge located within six miles of the proposed site. We would be hard pressed to find a worse place to build two nuclear units, especially considering the severe potential impacts that this could have on these fragile ecological areas. (0723-4-4 [McLaughlin, Caroline])

**Response:** Regarding the proposed site's proximity to National Parks and other public use features, commenters noted language from NRCs Site Suitability guidelines "Sites adjacent to lands devoted to public use may be considered unsuitable...{emphasis added}". The NRC's

regulations applicable to an applicant's site screening process, 10 CFR Part 100, "Reactor Site Criteria," do not require that such a consideration be applied as an exclusionary screening criterion. Regulatory Guide 4.7 also notes that the context for evaluating impacts must be considered. However, the acceptability of sites for nuclear power stations at some future time in these areas would depend on the existing impacts from industrial, commercial, and other developments.

The NRC's consideration of Everglades and Biscayne National Parks, National Wildlife Refuges, aquatic preserves, and their associated ecosystems, and recreational users involved two basic steps. Using guidance in the Environmental Standard Review Plan (NUREG-1555), Section 9.3, the NRC first independently evaluated FPL's screening process to determine whether the screening process adequately implemented the site suitability requirements for nuclear power stations as defined in 10 CFR Part 100, "Reactor Site Criteria". Next the NRC considered the cumulative impacts that would occur at the Turkey Point site and compared those cumulative impacts to those that would result from construction and operation of two nuclear units at the alternative sites.

In its screening process from the region of interest to candidate areas, FPL excluded from consideration areas within (1) the boundaries of critical habitats for endangered species, (2) dedicated lands such as National Parks and Recreation Areas, (3) census block groups with population density > 300 persons per square mile, and (4) areas too distant from available cooling water. In subsequent screening steps, FPL applied additional environmental, population, and engineering criteria to its site selection process to narrow the range of alternatives sites to a suite of sites that were representative of the licensable alternatives within FPL's service territory. As documented in Section 9.3.1.7 of the EIS, the NRC staff evaluated the methodology used by FPL and concluded that the process was reasonable and consistent with the applicable regulations and guidelines. FPL conducted an adequate site selection study and chose Turkey Point as its proposed site. The review team found that the systematic alternative siting analysis demonstrated a logical selection process and application of screening and exclusionary siting criteria. The analysis enabled the evaluation of the likely environmental impacts associated with the respective sites, including the evaluation of suitability criteria, identified reasonable alternative sites, and clearly provided the mechanism for selection of the final proposed site.

Following its review of this site screening determination, the NRC -- in its independent review, as documented in Section 9.3 of this EIS – first assessed the cumulative impacts that would occur at each of the alternative sites. The cumulative impact analyses combine the impacts of a proposed action with those that have already occurred in the past and present, or may occur in the foreseeable future. As discussed in Section 9.3, these cumulative impact analyses considered impacts such as, but not limited to, land use, surface and ground-water, terrestrial and aquatic ecology, threatened or endangered species and their associated critical habitats, wetlands, recreational, visual, historic and cultural resources, and social and economic impacts.

As a part of the evaluation of cumulative impacts, Appendix I of the EIS documents the review team's consideration of the potential changes in impacts that may occur as a result of the changes in the environment resulting from global climate change including sea-level rise. The changes that were considered include potential changes in temperature, rainfall, and occurrence of severe weather events. The effects of sea-level rise were also considered in this analysis. The potential effects of climate change on resource areas including water and ecology are presented in the appropriate sections of Chapter 5 and the cumulative impacts in Chapter

7. In addition, in its evaluation of alternative sites, the NRC staff would only consider sites that appear to be licensable; i.e., sites for which it appears to be reasonable to expect that the applicant could obtain the necessary licenses and permits from the NRC and other agencies. The safety of the proposed site (including consideration of sea-level rise, storm surge, etc.) will be addressed in the staff's safety evaluation report. The site would not be licensed by the NRC unless the staff determines that it meets the NRC's safety requirements.

As documented in Section 9.3.6, and in Table 9-28, the NRC then undertook a site-by-site comparison of the cumulative impacts at the alternative sites with the cumulative impacts at the Turkey Point site to determine if any of the alternative sites were environmentally preferable to the proposed site. The NRC's review process used reconnaissance-level information to determine whether there were environmentally preferable sites among the alternative sites; however, none of the alternative sites proved to be environmentally preferable to the proposed Turkey Point site. No change was made to the EIS as a result of these comments.

**Comment:** DEIS Subsection 9.3.1.3, Page 9-37, Lines 2-3: The DEIS states: "...an internal FPL team was canvassed to identify known available sites **within the 16 candidate areas**." ER Subsection 9.3.2.3.1 states: "Functionally, the canvassing was conducted at an August 2006 meeting...The committee was polled to identify the full spectrum of known existing and available sites **"within or near the FPL service territory**." (emphasis added) (**0619-5-14** [Maher, William])

**Comment:** DEIS Subsection 9.3.1.5, Page 9-39, Lines 18-28: The DEIS section title is "Selection of **Alternative Sites**". Further, the DEIS states: "The resulting five **alternative sites** proposed by FPL..." In both instances, the term "Alternative Sites" should be changed to "**Candidate Sites**" consistent with ER Subsection 9.3.2.5, Identification of Candidate Sites, and terminology in NUREG-1555 where candidate sites include the proposed and alternative sites. (emphasis added) (0619-5-16 [Maher, William])

**Comment:** DEIS Subsection 9.3.4.5, Page 9-179, Lines 5-7: The DEIS states, "... after widening of **SR-710**." "SR-710" should be changed to "**SR 70**" consistent with ER Subsection 9.3.3.3.6.5 which states: "To facilitate the additional traffic, a portion of SR 70 could be widened to a four-lane highway..." (emphasis added) (**0619-5-18** [Maher, William])

**Response:** The text in the Alternative Sites subsection of Section 9.3 was corrected to reflect the noted inconsistency with the referenced material.

**Comment:** DEIS Subsection 9.3.1.4, Page 9-38, Line 3 and DEIS Subsection 9.3.1.4, Page 9-39, Lines 6-7: On page 9-38 of the DEIS, the DEIS section title is "Selection of Candidate Sites". On page 9-39, the DEIS states: "The resulting 10 **candidate sites** were: ..." In both instances, the term "Candidate Sites" should be changed to "**Primary Sites**" consistent with ER Subsection 9.3.2.4, Identification of Primary Sites. (emphasis added) (**0619-5-15** [Maher, William])

**Response:** The text was revised to be consistent with the terminology as defined in Regulatory Guide 4.2.

**Comment:** DEIS Section 1.4, Page 1-10, Lines 27-28: The DEIS states: "Using this process, FPL reviewed multiple sites and identified **23 candidate sites**...from which the alternative sites were selected." This is not consistent with page 9-37 of the DEIS, Subsection 9.3.1.3, **Selection of Potential Sites**, which states: "Through this process, FPL identified 6 additional greenfield sites to consider as potential sites for a total of **21 potential sites** as identified on Figure 9-4." In both instances, the DEIS cites FPL 2014-TN4058, FPL's ER. The evaluation in FPL's ER is

based on the reference: Florida Power & Light Company Turkey Point 6 & 7, New Nuclear Power Generation (Formerly Project Bluegrass) Augmented Site Selection Study Report, August 2011. Section 4.0, Identification of Potential Sites, of this reference, states: "Cumulatively, a total of **21 potential sites** were identified". (emphasis added) (**0619-3-2** [Maher, William])

**Response:** The text in the Alternative Sites subsection of Section 1.4 was corrected to reflect the noted inconsistency with the referenced material.

## E.2.27 Comments Concerning Benefit-Cost Balance

**Comment:** FPL should be denied a license for Turkey Point expansion for many reasons:...3. Bad Deal. Nuclear Cost Recovery law makes ratepayers bear the cost and risk while FPL reaps profit (**0022-3** [Read, Alice Gray])

**Comment:** Is this a matter of jeopardizing the public's safety due to economic savings on FPL part? If so, pass it on to the customers. (0333-5 [Anonymous, Anonymous])

**Comment:** The estimated cost to build the two reactors is \$25 billion. That comes out to \$5500 for each FP&L utility customer, which will be paid by raising utility rates. In 2014, the State of Florida approved FP&L to begin charging utility customers for the reactors which are in the design stage. They also passed legislation saying if the reactors are not finished FP&L doesn't have to pay back the money. FP&L has said they can construct the nuclear reactors and start generating power in ten years. After the plants begin producing electricity, FP&L will charge an average of \$1.25 billion each year to their 4.5 million utility customers. This amount factors in shut downs for maintenance and refueling every 18-24 months. The \$1.25 billion annual charges will continue for 40 years which is the average lifespan of the reactors, equaling \$50 billion. That comes out to an additional \$11,000 for each FP&L customer. This of course does not include the future costs for disassembling the equipment and disposing of the nuclear waste once the reactors are too old to be repaired. (0671-1-2 [Post, Patrick])

**Comment:** The economics are too costly and the burden will fall on ratepayers to foot the bill with increased rates. (0710-5 [Platt, George Seth])

**Comment:** Now, the proposed nuclear reactors are already raising monthly customer utility rates by virtue of a State law passed in 2006 that Representative Rodriguez alluded to. That law essentially shifts a financial risk of constructing the plants from the company's shareholders to the company's customers, and the customers are paying in advance for this project. It should also be noted that the net cumulative fuel savings of the project, extolled by FP&L as the prime benefit for this project, will not be realized by customers until 25 to 36 years from today, assuming the project is built at all. So this practically means that a 70-year old FPL customer today may not break even on the project, if at all, until the customer is 106 years old. (0721-8-6 [Cavros, George])

**Response:** The purpose of the EIS is to disclose the potential environmental impacts of constructing and operating the proposed Units 6 and 7, and the associated costs and benefits related to those impacts. Setting retail power rates is outside the NRC's regulatory purview; those determinations are the responsibility of the FPSC. The EIS was not modified as a result of these comments.

**Comment:** fp&I does its customers and more importantly its shareholders a disservice by proposing such an expensive proposition. (**0055-5** [Roedel, Kitty])

**Comment:** When the Turkey Point expansion was first proposed, the projected cost was about \$7 billion. The latest projections are \$20 billion. Nuclear expansion might make sense for FPL's shareholders but it doesn't for us. That's right. (**0088-5** [Lange, Alexandra])

**Comment:** We are totally opposed to the expansion of nuclear generated energy at Turkey Point -- for the following reasons.....2) Too expensive (**0129-2** [Mayer, Doug])

**Comment:** We do not know how much money has been collected already and how much more is needed. Who will pay for this? Miami, Miami-Dade County, some cities, the State? What will it cost? What is the construction timetable? 2 years or more? US1 is a MAJOR thoroughfare with many businesses on it. Who benefits? What is the benefit to us? Who does it serve? Who is going to make money on this? In what other cities in Florida, the United States, the world is this existing? What did it cost? Who paid for it? Has research been done and if so share it.! (0149-10 [Nelson, Joyce E.])

**Comment:** The extra expenses associated with nuclear safety and waste handling are making this option less practical, even if it wasn't risking "nuking" the local environment, so to speak. (**0265-1** [Bennett, Robbie])

**Comment:** Stop pushing dangerous nuclear energy solutions that cost billions of dollars and are a catastrophe waiting to happen. (**0291-2** [Vorachek, Mary])

**Comment:** It will also be a tremendous economic cost to FPL's ratepayers, who must bear the cost in the form of advance payments (since the capital markets will not finance new nuclear reactors) with little or no benefits (example: the Crystal River nuclear plant fiasco). (**0599-1** [Rock, Andrew])

**Comment:** Thanks to Florida law, FPL is already charging ratepayers for planning and licensing Turkey Point 6 and 7 and the company will continue to do so up until the moment construction is abandoned, at which point FPL keeps any remaining funds they've collected and passes them to their shareholders. For the United States Nuclear Regulatory Commission to participate in such a con job, or even appear to be associated with it, is unconscionable. (**0615-1-15** [Bethune, David])

**Comment:** I realize that South Florida has an ever-increasing appetite for energy and that nuclear may seem like an immediate solution to the problem, but we need to take a broader view of the costs involved. (0626-3 [Miller, Nyana])

**Comment:** Nuclear energy is NOT carbon free, requiring huge amounts of fossil fuels for mining, processing, construction, transportation, and disposal. Nuclear energy is far more costly than any other energy source, and would not be considered even, without massive federal subsidies. (**0647-2** [Burns, Terry])

**Comment:** Why is profit more important than our environment and our very lives? This investment of more than 20 billion dollars of the rate-payers money makes no logical sense and it's far from being mindful of our future. (**0720-1** [Bastidas, Mauricio])

**Comment:** I'm here tonight standing with many of my constituents and my Mayors in opposition to the current plan and the application that was submitted. In terms of why, and the reason it just being it's just way too costly for us. (0721-1-1 [Rodriguez, Jose Javier])

**Response:** These comments reflect concern about the potentially high costs of plant construction or nuclear power plants in general. The costs and benefits of construction and operation of the proposed Units 6 and 7 are summarized in Chapter 10 of the EIS using the best information available to the review team. In Chapter 9, the EIS provides an analysis of the potential for alternative non-nuclear technologies to provide the electricity that could be generated by the proposed plant and the environmental impacts of those alternatives. Neither the NRC nor the USACE has the authority or responsibility by law or regulation to ensure that the proposed plant is the least costly alternative for providing energy services under any particular set of assumptions concerning future circumstances. The NRC is not involved in establishing energy policy. Rather, it regulates the nuclear industry to protect the public health and safety and the environment within existing policy. Therefore, comments regarding the potential effect of a particular nuclear power investment on the future development and implementation of alternative technologies, subsidies for nuclear power, and characterization of financial risks associated with such projects are not within the scope of this environmental review. No changes were made to the EIS as a result of these comments.

**Comment:** When is big business more important than a community? (0149-13 [Nelson, Joyce E.])

**Comment:** HERE IN CONNECTICUT WE WERE SOLD NUCLEAR POWER AS A WAY TO REDUCE OUR ENERGY COSTS WITH CLEAN ENERGY. MAY I REMIND YOU THAT CONNECTICUT CONTINUES TO HAVE ONE OF THE HIGHEST ENERGY RATES IN THE COUNTRY. WE WERE SOLD A BILL OF GOODS SO THAT THE NUCLEAR CORPORATIONS COULD MAKE MONEY. IN RESPONSE TO THE CLAIM THAT THE INDUSTRY MAKES THAT NUCLEAR POWER IS SAFE, I WOULD ASK WHY THE INDUSTRY DOESN'T SHARE MORE OF THE FINANCIAL RISK IN THE EVENT OF A DISASTER. IT IS THE AMERICAN TAXPAYER WHO IS BURDENED WITH THE MAJORITY OF THE RISK. (0164-4 [Chrissos, H. L. Chris])

**Comment:** Our investments should be enacted with long-term vision of the future and not based on a project manager's timeline for getting their annual bonus. (**0207-7** [Cleland, Noel])

**Comment:** Also the cost of the plant the regulations that must be met will ensure that this plant will not come on line for decades. (**0249-2** [Mosher, Paul])

**Comment:** How many of these plants actually make money? Probably none. The money is in the cleanup after a shutdown or accident (see info on Vermont Yankee). (**0336-2** [Anonymous, Anonymous])

**Comment:** I believe that this expansion of the reactors at turkey point are a waste of customers dollars[.] (0494-1 [Tamargo, Jorge J.])

**Comment:** Ultimately, I fear that Miami residents will be left to shoulder the costs of this project and its long-term consequences. Securing new supplies of drinking water and protecting coastal lands will be an expensive and difficult task. (0515-6 [Regalado, Tomas])

**Comment:** In summary, FPL's allowed profits are based upon a percentage return on total assets(ROI). This still applies even when rate payers pay for those assets upfront(proposed TP)

units 6 and 7), Florida statute 366.93. Turkey Points units 6 and 7 are designed to be overpriced white elephants, designed to extract maximum funds from the ratepayers and nothing else. FPL has every incentive to build overpriced capacity, and to discourage outside investment in alternative renewable energy sources. (**0545-7** [Keating, Tim])

**Comment:** PLEASE DO NOT EVISCERATE ANOTHER SACRED PLACE AND ALL ITS INHABITANTS FOR THE SAKE OF PROFIT AND PERPETUATING A DENIAL SO DELUSIONAL IT'S STUNNING. NUCLEAR POWER MUST NOT BE A WELFARE RECIPIENT, SUBSIDIZED BY MY TAXES, WILLING TO PUT US ALL IN HARM'S WAY. (0564-2 [Dimondstein, Carla])

**Comment:** I realize corporations have their bottom line to consider and often have no idea or perhaps money is more important than damaging our country, our natural resources and peoples lives. Projects are always written to protect them from damages caused by their projects and American citizens, e.g.. taxpayers are left with the damages both in physical and monetary terms. (**0569-1** [Lane, N. Jo])

**Comment:** It appears that a few will be able to profit off this project at the demise of far more people, animals and plant life. Now does that seem like a logical balanced decision. The way it appears it does not really seem to matter what the majority of people or animals that call this amazing place home seem to think, feel or want in this matter. (**0638-3** [Anonymous, Charity])

**Comment:** THESE ARE STRICTLY PROFIT-MAKING attempts. They have nothing to do with benefiting us. (**0649-1** [Harrison, Norma J. F.])

**Comment:** WHAT DO THEY SAY? [concerning reopening Nuclear Cost Recovery docket 150009 that governs the amount of money FPL may recover before it constructs the 2 nuclear reactor units and transmission lines] (**0685-11** [Batista, Carlos])

**Comment:** Selfish. People want the benefits, but let someone else carry the burden. (**0685-6** [Batista, Carlos])

**Comment:** This is not a worthwhile investment for the people of Florida. If the public was properly informed about the construction they would be against it. (0713-2 [Heiney, Jamie])

**Comment:** Let a bank -invester bank roll the reactor, if it is a good investment, get real insurance for it, not taxpayer bailouts. (0715-2 [Anonymous, Anonymous])

**Comment:** So I'm talking about the advanced nuclear cost recovery statute. So since 2006 ratepayers bear the cost of siting, licensing, design, construction, or operation of nuclear power plants. So to summarize, basically the costs that FP&L has in pursuing this license, we pay for it. So this year it's going to be over 14 million, last year over 43 million, and in 2013 it was over \$151 million that ratepayers paid toward this. And the irony is that everyone here who is objecting to this application in some form or another, if you're in the FP&L rate paying region, which I guarantee you are, businesses, organizations, people, you are paying for the cost of FP&L to pursue this license, and that is a deep irony. And some of us in the Legislature have been fighting for a while to try to get that statute repealed. Just yesterday, along with some of my colleagues in the Tampa Bay area, I led an effort to try to force a vote. We got a vote on the House floor on this issue. We weren't successful, but we have been making progress on getting support for removing this perverse incentive. And I just want to say that, you know, in terms of the comments that you're going to hear, in terms of why these -- why I say the costs are so high.

You know, one is that from the information that I have it's not just that nuclear is the most capital intensive and expensive way to generate, but since the '70s we've learned that it's even more expensive than we imagined. (0721-1-4 [Rodriguez, Jose Javier])

**Response:** These comments express general opposition to the costs of power plant construction or raise societal issues that are not within the purview of NRC or USACE to address as part of the environmental review process. They did not provide new information related to the environmental effects of the proposed action. Therefore, no changes were made to the EIS as a result of these comments.

**Comment:** FP&L believes locating TWO NEW Nuclear Power Plants here at Turkey Point is in the best interests of FP&L and its shareholders.. a business decision, pure and simple. FP&L will not compensate you for any losses you may incur due to their business decisions. Your Insurance Company does not cover your home or businesses in the event of a Nuclear "incident". Your insurance company will not compensate you for any losses you may incur. That is a business decision pure and simple. You will still be obligated to pay your Mortgage even if you must abandon your home. The Banks will not forgive your loans. The Government, whether local or Federal, will not compensate you either. SO....If a nuclear "incident" forces me to abandon my home, my property becomes worthless overnight and I lose almost everything I have. How much money will YOU lose if the value of your home drops to \$0 overnight? How much money will YOU lose if the value of your business drops to \$0 overnight? How much money will YOU lose if your job disappears overnight? How much money will YOU lose if you can NEVER reclaim your property or reopen your business? How and where will you live without assets, without income without ......anything? In the blink of an eye, Nuclear Power Generation at Turkey Point has the potential to wipe out every penny of value and income in South Florida. Nuclear Power at Turkey Point has the potential to destroy, in a virtual instant, everything you have spent your life working for. Are you willing to take this financial risk? Are you willing to let FP&L gamble with your money and your life? (0071-1 [Stanley, Gael])

**Comment:** If the commercial nuclear industry can't support itself after 50 years - and it can't - US taxpayers and ratepayers should not be required to support it with our tax dollars and massive CWIP (Construction Work In Progress) rate increases for plants that may never even be built or completed. (**0078-3** [Wilansky, Laura Sue])

**Comment:** Instead of promoting more environmentally-friendly energy sources, the government seems to be pandering to a company that's main goal is to make money - a goal which does not include caring about the people or environment of Florida. Why, then, are we allowing them so much power in the decision of our energy future? Since Florida is the "Sunshine State," I was shocked when I came to Miami and hardly any houses had been outfitted with solar panels. In fact, FPL is actively campaigning against solar power because they know that it provides cleaner and cheaper energy to the consumer. (0214-2 [Zerulla, Tanja])

**Comment:** This utility is victimizing Miami residents in the following ways: --charging in advance for nuclear facilities it may never build. (**0283-2** [Compel, Jr., Joseph])

**Comment:** Without federal insurance guarantees no necular plant could be insured or build in a cost effective way. Other sources such as wind turbines require less investment. (**0461-1** [Dickinson, Robert])

**Comment:** Additional treatment of wastewater and/or provision of best available technology emission controls would add prohibitively to the already extremely high costs of nuclear plant construction. If history serves correctly, estimated project costs will suffer severe over-runs, making it likely that taxpayer and ratepayer dollars will be required to pay for the excessive costs of a project most financial institutions are too wise to fund. (**0463-2** [Gross, Cheryl A.])

**Comment:** The best way to stop nuclear power construction in Florida and throughout the U.S. is to require the electric utility companies to pay 100% of all costs for building the plants. These companies and their shareholders will never accept these terms because it is not cost-effective for them to be financially involved in these immense long-term nuclear projects. It is only cost-effective for them if their utility customers and U.S. taxpayers pay all of the costs. The question is why do we allow for-profit utilities and their stockholders such as FP&L to retain 100% ownership of the nuclear reactors, giving them a \$25 billion asset, when FP&L is not paying any of the costs to build them? (0671-2-4 [Post, Patrick])

**Comment:** And I'm going to limit my remarks to the question of why. Why is it that FP&L is pursuing this application so vigorously? And the reason for that is, you know, I'm not a technical expert. I'm sure you'll hear from a lot of technical experts, but I just wanted to kind of offer the indication of giving significant scrutiny to the information that you are getting from the utility in this process. And the reason why, and the way that I believe that I come to the answer of why it's being pursued so much, it's because of the nuclear fee that we have here in the State of Florida that I think distorts FP&L's incentives significantly. (0721-1-2 [Rodriguez, Jose Javier])

**Comment:** But it makes economic sense for Florida Power and Light to propose things, even if they never build it. And I hope everybody understands that. That even if a nuclear power plant is not built they still get to recoup the costs that they incur on an annual basis in advance, and they don't have to return it if they decide to change their mind. That's the really sort of simplistic overview of it. But the ratepayers pay it and the shareholders profit and the company profits. So that's why we're here. That's what we're talking about. (0721-11-3 [Roff, Rhonda])

**Comment:** I have a problem with Florida Power and Light as far as shareholders versus ratepayers who's on the hook for this. Capital projects need to be done by shareholders and stockholders. That's what stock's for. If you want to build something you sell stock. People take risk. If it works out, great. If it doesn't, you're on the hook, not the ratepayers. Florida Public Service Commission. Our State Reps need to come up with a different way of appointing these folks. The Commission is broken. It too favors the power plants. They've got some big issues with Duke Energy up in the Northwest part of the State. So we need to get on our elected reps to change the way that these PSC people are appointed. I don't know publicly elect them is the way to go, but there needs to be discussion on it because the current PSC is broken and I feel it's corrupt. The process doesn't come out in our favor. We always seem to come out on the short end. (0721-24-2 [Eastman, John])

**Comment:** If the commercial nuclear industry can't support itself after 50 years, and it can't, U.S. taxpayers and ratepayers should not be required to support it with our taxes dollars and massive construction work in progress, rate increases, for plants that may never even be built or completed. (0721-28-4 [Wilansky, Laura Sue])

**Comment:** Moreover, FPL shareholders will earn a 10-1/2 percent rate of return on the money invested in the nuclear plant while FPL customers shoulder all the financial risk. It's a sweet deal for FPL shareholders but not so much for customers. (**0721-8-11** [Cavros, George])

**Comment:** And furthermore, they're allowed since 2006 to bill customers in advance of any of these costs for the full cost of what they spend, even before they decide, as they haven't yet decided, to build. So it's going into the rate base. Consumers like me who are paying electrical bills in Juno are already paying for the cost of the planning process and, you know, I think that's biasing FPL toward wanting to make these projections. (**0723-12-3** [Henry, Jim])

**Response:** These comments express concerns about cost-related issues outside the scope of NRC and USACE purview, including perceptions about energy policies, tax burdens, or industry subsidies. The principal costs and benefits of the proposed action are summarized in Section 10.6 of the EIS. The summary is derived from careful assessment of impacts across the principal environmental interfaces affected by the action during construction (Chapter 4) and during operations (Chapter 5). In addition, the cumulative environmental impacts of the action are presented in Chapter 7. These impact discussions frame the assessment of overall project benefits and costs that are within the Review Team's scope to assess. The comments did not present any new or relevant information. No changes to the EIS were made as a result of these comments.

# E.2.28 Comments Concerning Climate Change

**Comment:** Given the overwhelming research and consensus of scientific opinion on climate change, South Florida should not be considered for such a project. Just because there is a minority of climate change deniers with politically driven motives does nothing to mitigate the risks of building more reactors at this location. (**0009-2** [Rose, Simon])

**Comment:** We are in the 21st Century and this proposed expansion was planned before the reality of climate change was confirmed by scientists. (**0086-3** [Lawrence, Diane])

**Comment:** For example, extreme flooding due to climate change will significantly affect the regional water management system. This system was initially designed to protect 2 million people and now serves a population of more than 7.5 million. If flooding were to reach new extremes, the water management system currently in place may not be adequate to provide the necessary levels of flood protection. *See Climate Change and Water Management in South Florida: Interdepartmental Climate Change Group,* SOUTH FLORIDA WATER MANAGEMENT DISTRICT (Nov. 2009). The water management structures' lack of capacity makes flooding more likely and may compromise access to the plant site. Similarly, the final Environmental Impact Statement should include a discussion of the level of flooding that will impact plant safety and the corresponding rainfall return period. (0611-15 [Haber, Matthew S.])

**Comment:** EPA recommends that this impact analysis also consider extended periods of drought, characteristic of the southeast U.S. (**0617-4-16** [Mueller, Heinz J.])

**Comment:** You mentioned climate change. Having looked at a great deal of research and having heard from both sides of the issue, Karen, my family and I are convinced that there is no such thing as climate change or global warming. As the great professor, Richard Lindzen of MIT said, "Global warming is the biggest hoax in the history of science." (**0680-2** [Hubbard, Stanley S.])

**Comment:** I would like to echo George Cavros' comments regarding -- and some of the others' comments regarding what we're doing here, why we are even talking about a nuclear power plant in this location or really in any location in Florida, given that the entire peninsula of Florida is Ground Zero for the impacts of climate change. So we have to worry about increasing severity of droughts, storms, lack of water, water for restoration, water for agriculture, water for

people. We have a lot of people in Florida and supposedly it's growing. People are moving to Florida like crazy. So we really don't have that kind of water to feed these power plants. (0721-11-2 [Roff, Rhonda])

**Comment:** I think that sea level rise needs to be looked at in more detail. I don't think the current estimates are adequate. I think that sea level rise will be greater. I think we need to look at that and factor in storm surge, because when we talk about the level of sea level, when we talk about storm surge, that will be on top of the existing sea level rise. So if sea level rise were to be greater, and since this plan -- the life of this plan is in 60 years, and we don't know what's going to happen, that's a particular concern. (0721-13-4 [Martin, Drew])

**Comment:** The reality is, we are at the very beginning of a very serious rise in sea level. (0721-6-3 [Harris, Walter])

**Comment:** As some of my colleagues have mentioned, in terms of sea level rise. This is a major issue in terms of sea level rise, and as we look at the models the sea level is rising quicker than the models have even shown. (0721-7-2 [Edmond, Gabriel])

**Comment:** South Florida, Miami-Dade County is Ground Zero in the world in terms of sea level rise. We already see Miami Beach flooding. (0721-7-4 [Edmond, Gabriel])

**Comment:** Finally, Biscayne Bay and South Florida are extremely susceptible to climate change, and Turkey Point in particular is vulnerable to sea level rise, storm surge, and other types of flooding. FP&L's application only accounts for a 1 foot rise in sea levels during the reactor's lifetime. In contrast, NOAA recommends the power plant's account for between 3 to 5 feet of sea level rise during that same time period. By the Federal Government's own recommendations the plan to expand Turkey Point should not be considered safe. Today the President of the United States came to Everglades National Park to discuss the need to prepare South Florida and the nation for the impacts of climate change. I suggest we follow his leadership here and work together towards a more resilient, sustainable and adaptive South Florida. (0721-9-7 [McLaughlin, Caroline])

**Comment:** But something else that just was part of the museum was just showing how the shape of Florida naturally changed. Forget climate change and how everyone gets too sensitive about whether we're even doing it or not. Because even if we aren't, the reality is the earth is not so stable. We are in the most unique period in the earth's history of stability and we've gotten used to it. But you know what, 40 years is nothing. (0723-11-4 [Berendsohn, Catherine])

**Comment:** ...it was on the second story of the historic house where I had my office, we had a marker of the sixteen and a half foot tall storm surge that went up to the second floor. It was even always still flood there, and I am -- I didn't even realize that your plan only accounts for one foot of water change? That's not even the case when I was four years old. That's the most disturbing thing I've heard in a long time. (0723-11-5 [Berendsohn, Catherine])

**Comment:** We -- the Everglades is the only Everglades the world has ever had and it may never be able to return once Florida floods. (0723-11-7 [Berendsohn, Catherine])

**Comment:** ...the sea level rise projection of one foot and everybody, including the latest projections in, you know, the scientific community are talking, in the University of Miami, about three to five feet through this time period. We have to look more carefully at those projections. (0723-12-13 [Henry, Jim])

**Comment:** If expanded, Turkey Point will become one of the largest nuclear generating facilities in the entire country located in one of the nation's most vulnerable areas to sea level rise and directly on the shores of Biscayne National Park. (0723-4-2 [McLaughlin, Caroline])

**Comment:** Finally, Biscayne Bay and South Florida are extremely susceptible to the effects of climate change. At Turkey Point in particular is susceptible to sea level rise, storm surge and other types of flooding. FPL's application only accounts for a one-foot rise in sea levels during the reactors' lifetime. In contrast, NOAA recommends that the power plants account for between three and five feet of sea level rise over the same period. By the Federal government's own recommendation, the expansion at Turkey Point should not be considered safe. (0723-4-8 [McLaughlin, Caroline])

**Comment:** The President of the United States came to the Everglades yesterday on Earth Day to discuss the need to prepare this nation for the effects of climate change, particularly here in South Florida. (0723-4-9 [McLaughlin, Caroline])

**Response:** These comments are related to climate change and sea level rise. The review team's evaluation of climate change and sea level rise is discussed in Appendix I. Based on these comments, Appendix I was modified to: clarify the role of the NRC safety review; describe the conformance of Appendix I to CEQ guidance; mention groundwater modeling analysis discussed in Appendix G; describe several reasonably foreseeable adaptations to sea level rise; and mention localized sea level rise changes.

## E.2.29 General Comments in Support of the Licensing Action

**Comment:** I believe that that COLs should be issued for Turkey Point Units 6 & 7. The site is adjacent to FPL's existing reactors, so it should not impact the environment in any additionally detrimental ways. In fact the NRC's environmental review found no environmentally preferable or superior sites. (**0002-1** [Hamilton, Brent])

**Comment:** Good for them. I think it is great idea especially as growth in South Florida is uncontrolled. (**0011-1** [Rowe, James])

Comment: Please approve the project quickly. (0013-2 [Christie, Grazie])

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[a]s for those who are opposed to nuclear power for philosophical reasons, that closed minded fearful thinking has to be weighed against people like myself who for philosophical reasons are opposed to importing foreign oil which supports the despots that use the income from oil sales to oppress people and because they have the revenue from oil sales make the world a more dangerous place to live. (**0015-10** [Goldmeier, Barry])

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[f]rom a geopolitical point of view, why would the US assist Iran in building a "safe civilian" nuclear program which could turn into something else while not doing so on US soil. FPL is not Iran by any stretch of the imagination. (**0015-14** [Goldmeier, Barry])

**Comment:** I AM IN FAVOUR OF BUILDING TWO OTHER NUCLEAR PLANTS THEY ARE MORE EFFICIRNT, AND WE NEED TO BE READY FOR THE INCREASE IN POPULATION IN SOUTH FLORIDA. (**0016-1** [Slonim, Roberta]) **Comment:** I am in favor of the Turkey Point expansion of two nuclear units. (**0035-1** [Larrabee, Laura])

**Comment:** Doubt if we can attend hearings but definitely feel the advantages to our area far exceed the risks. (**0038-1** [Hudak, Jill])

**Comment:** I would like to put my two cents in on the future expansion of Turkey Point's two new nuke plants. Myself and my husband are native Miamians and have had our roots in this area for three generations now. We were here before FPL built their first two nuclear reactors in the 70s and remember all that went into building them. It took some time before FPL could flip the switch on those two. It will take time to build these as well and I am just hoping that the two existing reactors can handle the load until then, since our "esteemed" local politicians don't seem to know how to say "no" to any development, regardless of the crowding or stresses it puts on our infrastructure and resources. We are STRONGLY IN FAVOR of FPL building the two new nuclear plants. (0070-1 [Lamb, Deborah S.])

**Comment:** I support the expansion of Turkey Point and oppose the "No Action" alternative. (0286-1 [Jackson, Donald L.])

**Comment:** I support the proposed expansion of FPL's Turkey Point. (0286-3 [Jackson, Donald L.])

**Comment:** To the NRC under Docket ID NRC-2009-0337 Activists are telling people to voice their concerns about proposed nuclear power plants Turkey Point 6&7. Their supporters are urged to say they want clean, safe, and affordable renewable energy.

Taking these demands apart:

Clean: Nuclear power has a cleaner record than natural gas, which is the only alternative that could make up for more than a fraction of the energy that the proposed units would generate.

Safe: American nuclear power plants undergo the most stringent regulatory review of any sources of electric power.

No civilian injury, or radiation sickness has ever been found to be associated with operation of the plants that have supplied 20% of our nations electricity for the past several decades. The same goes for plant workers.

Nuclear plant and laboratory workers have been studied and their excellent health has been explained in medical literature by a healthy worker effect.

Three Mile Island: Total number of civilian or worker health effects: ZERO.

From handling and disposal of radioactive wastes: ZERO.

In Japan, due to the tsunami disaster at the Fukushima nuclear power plants: Radiation cancers detected or predicted in the future: ZERO. (Predicted by real qualified medical experts rather than discredited activists like Helen Caldicott.) Dead and missing from the tsunami, 17,000 to 20,000 persons.

Affordable: Once built, power from nuclear plants has consistently been the higher economic choice on utility systems.

Plant construction costs are high, demonstrably higher than they should have been had not regulatory delays and demands of activists not been allowed to delay and interfere with construction plans. On utility systems, nuclear and coal plants provide the base load 24-7 power alongside of which solar and wind contributions can be successfully utilized. The NRC must remind activists who attend the Turkey Point public meetings that NRC decisions must be based on factual scientific evidence and not on slogans of people who do not study the scientific evidence or learn to understand the importance of adequate, dependable electric energy to the people of Florida, the United States and the rest of the worlds populations. Every nuclear power plant in the U.S. is licensed, which required a complete Environment Impact Statement in addition to its detailed Safety Analysis Report. Licensing proceedings were held in public in the most transparent and extensive process of any and all energy sources. Claims like those of SACE were all debated and dismissed hundreds of times. Those of us who took part in these processes are appalled to see the same kind of opportunistic groups demand a rehash of proven evidence. It takes time to write this statement, which obviously has become lengthy. SACE can tell its supporters to send bales of meaningless words to take up your reading time. with no more effort than just hitting the CUT and PASTE keys. It is up to you to make your findings based on facts. (0345-1 [Rossin, A. David])

**Comment:** Florida has had a long and very successful history with nuclear energy and the plans for new plants in the state (Turkey Point Units # 6 and 7) are based on that history of successful and safe nuclear operation by Florida Power and Light. (0375-1 [Tulenko, James])

**Comment:** The State of Florida ranks 6th in carbon dioxide (CO2) emissions among the 50 states. More carbon free energy sources are badly needed. The two new units will provide 2,200 Megawatts of clean, reliable power, which is enough to power more than 1 million homes. This energy output avoids approximately 418 million tons of carbon dioxide emissions over 60 years (equivalent to removing 88 million cars from the road) and will create approximately 3,500 jobs during construction and 800 permanent high-paying jobs in operation. Certainly these plants carbon free output along with FP&L operating experience provides the positive environmental impact needed for approval. (0375-2 [Tulenko, James])

**Comment:** In the face of climate change, we need real solutions now. Clean, safe, and affordable nuclear power will put us on the path of obtaining improved public health, a better conserved, protected natural environment, and a more vibrant, creative economy. Approving the application for Turkey Point 6&7 will simply lead to a better future. (**0378-1** [Macher, Nathan])

**Comment:** This email is to voice my support for the two additional units at the Turkey Point power generation station. (**0575-1** [Roberts, Kenneth])

**Comment:** I am sorry that you are upset about the proposed expansion of the Turkey Point Nuclear Plant. I'm sorry that Karen and I don't share your concern. (**0680-1** [Hubbard, Stanley S.])

**Comment:** THE TIME TO OBJECT AND VOICE YOUR SUPPORT FOR THIS IS NOW BEFORE IT IS TOO LATE. (0685-10 [Batista, Carlos])

**Comment:** Please do confirm FP&L's request to build new nuclear reactors and certainly do allow placement of these huge high voltage lines in the Miami Roads neighborhood (in or adjacent to any other residential neighborhood). (**0685-4** [Batista, Carlos])

**Comment:** 2. This flyer doesn't represent what the majority thinks. 3. Info here is incomplete and misleading. (**0685-7** [Batista, Carlos])

Comment: WE DON'T OBJECT! (0685-9 [Batista, Carlos])

**Comment:** I am writing in reference to Docket ID: NRC-2009-0337 to express my support to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0694-1** [Carpenter, Rory])

**Comment:** I support the expansion of Turkey Point providing proper designs are in place. (0694-4 [Carpenter, Rory])

**Comment:** PLEASE APPROVE the Turkey Point license for two new nuclear plants! (0707-1 [Pheil, Edward])

**Comment:** On behalf of our 18,000 members we are requesting that you adopt the recommendations of the final order of certification to certify Turkey Point Units 6 and 7. (0721-19-1 [Riley, Bill])

**Comment:** We are convinced that this is an important project which has a strong positive benefit for our entire State, with a very strong environmental partnership with Florida Power and Light, and we urge you to approve this project. (**0721-19-4** [Riley, Bill])

**Comment:** I represent the Pipefitters Local [Union] 725 of Miami. I am one of 18,000 members of the South Florida Traders Council. As a representative of the 18,000 members I ask that you adopt and recommend the final certification of Turkey Point Units 6&7. (0721-20-1 [Garcia, Javier])

**Comment:** I'm here tonight to support the construction of Turkey Point Nuclear Units 6 and 7. (0721-27-4 [Rodriguez, Manuel J.])

**Comment:** We're pleased with that and would encourage the NRC and the appropriate governing bodies to allow the nuclear units to be built. (**0722-1-3** [Porter, Jeff])

**Comment:** To our friend Captain Dan who spoke earlier, as a shareholder, you must have some idea of what the degree of difficulty would be in trying to site a new nuclear facility.

(Recording briefly inaudible.)

-- requires additional electric capacity, it requires it here in Miami Dade County and it requires it at Turkey Point. And we urge the NRC to proceed with the application. (**0722-10-4** [England, Peter])

**Comment:** [W]e really strongly need and encourage this expansion for the jobs and the economic revitalization of our community. (**0722-11-2** [Knowles, Yvonne])

**Comment:** [W]e [Redland Market Village] need safe, clean, affordable energy. So that's the reason we are supporting, and please approve the 6 and 7. (**0722-12-2** [Infante, Jose Renee])

**Comment:** I'd like to speak strongly in support of adding the two nuclear units at Turkey Point. (0722-13-2 [Duquette, Bill])

Comment: Anyway, so I would like to just lend you our support. (0722-13-9 [Duquette, Bill])

**Comment:** This is a position I took on to promote nuclear science and technology and I, along with my fellow students, understand the importance of energy security in our State as much as

anyone. This is why we're here today to support the development of Turkey Point 6 and 7. (0722-4-1 [Moo, Patrick])

**Comment:** And after reading through a portion of the EIS we have no qualms about any of the recommendations made by the NRC or the Army Corps of Engineers. The statements made in their assessment fully fulfills our understanding of the Units 6 and 7 and the impact it would have on the surrounding areas. So we recommend that they move forward and go Gator's, go nuclear. (0722-6-1 [Martin, Allan])

**Comment:** On behalf of 1,800 of our members we would like to request that you adopt the recommended final order of certificate and certify the Turkey Point Units 6 and 7. (0722-9-1 [Riley, Bill])

Comment: [W]e hope very much that you will support this application. (0722-9-12 [Riley, Bill])

**Comment:** We are convinced that the --this important project will be a strong positive benefit for our entire State in South Florida. (0722-9-5 [Riley, Bill])

Comment: [W]e strongly urge you to approve this project. (0722-9-7 [Riley, Bill])

**Comment:** So I'm not afraid to have this facility in my back yard. I think it's -- any time change comes about there are some necessary elements of it. And I think that the United States has always shown an ability to meet the needs of its community with oversight and the cost -- well, not always cost efficient, I'm not going to tell that lie. (Laughter.) But in a safe way. So after a lot of review, my community supports this project, my council supports this project with the proper oversight, with the proper safety mechanisms in place. And again, when we think about our environment, think about the whole environment. That includes, you, me too. (0723-1-8 [Wallace, Otis])

**Comment:** In addition we, as the Chamber of Commerce, looked at the report when we went to the last meeting and are confident that everyone here that has specific knowledge and education has taken sufficient caution and measures to look at all the data, do your analysis, and you are making a report that I think we, as the population of people that live in this area should feel confident that we know, I guess, that you're not lying. You are giving us scientific fact, you've analyzed, so again we thank you for that. (0723-10-3 [Brito, Rosa])

**Comment:** We're looking forward to another 40 years of the two new plants. (0723-10-6 [Brito, Rosa])

**Comment:** And what I'm concerned about the most is that this project won't be developed. I'm in total favor for the development of this project. This is something that's important to the city, it's important to us as residents for power supply. There's just so many benefits that go along with this project. (0723-13-1 [Simpson, Chris])

**Comment:** So as a resident, I just want to express that I fully support the development of this project. (0723-13-3 [Simpson, Chris])

**Comment:** On behalf of our 18,000 members we are requesting that you adopt the recommended final order of certification and certify Turkey Point's Units 6 and 7 project. (0723-14-1 [Riley, Bill])

**Comment:** We strongly recommend that you approve and adopt this project. (**0723-14-5** [Riley, Bill])

**Comment:** And one more thing I wanted to say, there is a word, acronym called NIMBY. And I think that "not in my back yard" attitude has probably done more damage than has helped in this country. I think it's important to realize that having the attitude that we want to have power plants but we don't want to have them in our back yard just displaces the convenience, if that makes sense, for people who just want to see something go away and go somewhere else. (0723-7-5 [Boling, Steve])

Comment: I do approve of the sites being constructed, (0723-8-7 [McDuffie, Stephen])

**Response:** These comments express support for the addition of new nuclear units at the Turkey Point Nuclear Power Plant site. They do not provide any specific information related to the environmental effects of the proposed action. No change was made to the EIS as a result of these comments.

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...Turnkey Pint along with its infrastructure is already there so it is far better and less intrusive to expand it than locating new generating capacity in Turkey Point than siting any type of power generation facility anywhere else. (0015-17 [Goldmeier, Barry])

**Comment:** Like so many Americans, I am committed to protecting the National Park System, which preserves our country's incredible array of landscapes, waters, wildlife, and opportunities for exploration. Biscayne National Park is an irreplaceable national treasure that safeguards precious natural resources and recreational opportunities. I am told that there are, within six miles of the proposed expansion site, there are two national parks, an aquatic preserve, a national wildlife refuge, and a wetland habitat preserve. Sufficient data should exist today to provide design direction and upgrade from existing two reactors. (0694-2 [Carpenter, Rory])

**Response:** The NRC acknowledges the commenter's support for new nuclear power. The review team independently compared the alternative sites to the proposed site to determine if any of the alternative sites were environmentally preferable to the proposed site in Section 9.3. The review team concluded that none of the alternative sites was environmentally preferable to the proposed Turkey Point site in Section 9.3. In addition, the NRC staff will determine whether building and operating the proposed units at the Turkey Point site will meet all of the safety requirements in the NRC regulations. The results of this review will be documented in a safety evaluation report and those results, along with the EIS, will be considered in the NRC's decision about whether to issue the COLs for proposed Units 6 and 7. No change was made to the EIS as a result of these comments.

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[t]he lessons from past accidents and knowledge of sea level rise will be incorporated into the design making the planned facility more dependable in the long term than even the facilities FPL has in place. (**0015-16** [Goldmeier, Barry])

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[m]odern science has learned a great deal in the past 50 years since the existing nuclear facility at Turkey Point was built. Since there has been no major issues with the Miami-dade or Hutchinson Island facilities FPL has run safely for

decades I see no real risk from expanding the existing nuclear capacity of Turkey Point. (0015-9 [Goldmeier, Barry])

**Comment:** Provided that the two new reactors are of the latest generation, and hence are much safer than the old ones, I am convinced that this is a great way to generate electricity with very low environmental impact. (**0018-1** [Massa, Arturo])

**Comment:** I believe that the proposed plants would be a great boost to the economy here and provide economical electricity for business and residential. The latest designs are much more safer than those 50 year old designs of current use. (**0041-2** [Williams, Paul])

**Comment:** Please accept my support for the proposed new Nuclear Power units at Turkey Point. As Florida population continues to grow, we will need reasonably priced electricity to support that growth. The design of the new generation of nuclear power plants are a great improvement over the old design. (**0069-1** [Williams, Paul])

**Comment:** So I hope, I really wish, or I hope that I can convince you that the nuclear option is definitely the best option for us right now. It's the best option that we can bring together to the table to going forward into the future to eliminate our dependence on any type of fuel source that produces CO2 emissions. And I hope there's no doubt about that. 6 and 7 is the right choice. Build Unit 6 and 7. (0721-15-14 [Kuraza, Devon])

**Response:** The comments express support for the proposed units at the Turkey Point site. They do not provide any specific information related to the environmental effects of the proposed action. No changes were made to the EIS as a result of these comments.

### E.2.30 General Comments in Support of the Licensing Process

**Comment:** I'd like to thank the NRC for holding these hearings. I'd like to thank all of you for coming out and showing your interest because this is an extremely important subject. (0722-10-1 [England, Peter])

**Comment:** [T]hank you for giving us the opportunity to address the Commission today. (0722-13-1 [Duquette, Bill])

**Comment:** I appreciate the forum to come out and speak to you guys today. I just want to express my gratitude to you guys, having you come out and speak today. Appreciate your time[.] (0722-3-2 [Chatterton, Andrew])

**Comment:** There is something I am proud of as an American citizen and something that I think stood out was the idea of the system of checks and balances here. (**0723-11-1** [Berendsohn, Catherine])

**Comment:** But I do appreciate that the NRC is giving this as public. (**0723-8-5** [McDuffie, Stephen])

**Comment:** I like the way that this project was done or the way this evaluation was done. (0723-9-1 [Schwartz, Matthew])

**Response:** This comment provides general information in support of the NRC COL process. Because it did not provide any specific information related to the environmental effects of the proposed action, no changes were made to the EIS as a result of this comment.

## E.2.31 General Comments in Support of Nuclear Power

**Comment:** Nuclear Power is safe and environmentally friendly. And cost effective. (0013-1 [Christie, Grazie])

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[t]here already is a nuclear reactor there so anyone who is opposed to that source of power should have no argument[.] (**0015-3** [Goldmeier, Barry])

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...[n]uclear generates fewer environmental greenhouse gasses than does gas or oil as a source of electric power[.] (**0015-6** [Goldmeier, Barry])

**Comment:** Nuclear energy is good and I believe it is an important our past and future energy needs in America. In fact at Merrill Lynch in the early 1970's I help raise the original capital to build Turkey Point. (0075-1 [Streit, Christopher V.])

**Comment:** The commenter submitted an article on radiological health effects that states that support for the nuclear energy industry has been largely predicated upon three fallacies: 1. That there is a safe level of exposure to radiation, below which it does no harm. (**0111-1** [Glynn, Simon])

**Comment:** The commenter submitted an article on radiological health effects that states that support for the nuclear energy industry has been largely predicated upon three fallacies: 2. That in any event the radiation emanating from nuclear power production is only a small proportion of the total level of radiation, from all sources, to which we are exposed, and thus produces a similarly small proportion of the health effects resulting therefrom. (**0111-2** [Glynn, Simon])

**Comment:** The commenter submitted an article on radiological health effects that states that support for the nuclear energy industry has been largely predicated upon three fallacies: 3. That so long as we monitor radiation levels to insure they do not exceed permitted maximums, expansion of the industry may proceed without producing intolerable health costs. (0111-3 [Glynn, Simon])

**Comment:** Solar power is expensive and produces little energy. Expansion of nuclear power plants is the best option. (0123-1 [Mulet, Tomas])

**Comment:** Nuclear energy continues to be safer, cheaper, and cleaner than fossil fuel alternatives. (**0286-2** [Jackson, Donald L.])

**Comment:** Nuclear power will transform our economy because generating electricity through nuclear power can be done at a more inexpensive price point than coal. (**0378-3** [Macher, Nathan])

**Comment:** A nuclear powered economy will improve public health and help protect the environment. Ventures like indoor vertical farming will put fresh food on tables nationwide. This fresh food will be produced without pesticides or even dirt. Think of all the forests we can save if forests don't have to be cleared for farmland. (0378-5 [Macher, Nathan])

**Comment:** Also, nuclear power can scale up to completely displace fossil fuels: France generates 80% of its electricity with nuclear power. Replacing fossil fuels would remove from the environment air pollutants that today kill thousands--if not tens of thousands--of people every decade in North America. In some situations, the intermittent nature of renewables leads to more fossil fuels being burned, which creates more air pollution. As someone who has a couple of family members with asthma, I can tell you that depending on renewables to generate more power than the technology is capable of does not help my family members breathe any easier. (0378-6 [Macher, Nathan])

**Comment:** America needs the energy and nuclear energy is the friendliest form to the planet. (0575-2 [Roberts, Kenneth])

**Comment:** They will also improve the human habitat and reduce center deaths and health costs caused by air pollution from the alternative fossil fuels. (0707-3 [Pheil, Edward])

**Comment:** Nuclear has a proven BEST safety record both for any energy production method already, and new plants will further improve the safety record, while also saving people money by reduced electricity and Healthcare costs. (**0707-5** [Pheil, Edward])

**Comment:** I know there's a lot of -- there's a negative cloud over nuclear power, particularly in the wake of the Fukushima accident, I understand that. And I think the only way that we can try to reassure the public that we are looking out for their best interest is basically to talk about it and talk about what we did and what we learned from those events. (0721-15-11 [Kuraza, Devon])

**Comment:** Another point that was brought up that I wanted to address. Oh, I heard a number about 10 to 15 cents a kilowatt for current nuclear power generation. Closest numbers I could find online about 2.7 cents per kilowatt is the current cost of power generation from a nuclear source. (0721-15-3 [Kuraza, Devon])

**Comment:** There's a lot of misconceptions about nuclear power and about what we do and how we do it, and I always say that those in the industry have nobody else to blame but ourselves for not coming out and trying to educate the public about what we do and how we do it. (0721-15-5 [Kuraza, Devon])

**Comment:** A lot of people think that because we are pro-nuclear we are somehow against other forms of power generation. That's simply not true. I think the most hard-line advocate in here for nuclear power would tell you that we need a diverse fuel mixture and that includes wind, solar, and of course nuclear. (0721-15-6 [Kuraza, Devon])

**Comment:** I, myself, live in an apartment building. I don't have that option, so I need the next best thing, something that is both clean, good for the environment[.] (**0721-15-8** [Kuraza, Devon])

**Comment:** I want to underscore the significant value the nuclear plants bring to the State of Florida in the form of carbon free energy, jobs, and reliability. Florida's four operating nuclear reactors currently generate 12 percent of the State's electricity while emitting no greenhouse gases, accounting for a full 98 percent of the State's emission free electricity. If the power from even one nuclear reactor were to be taken offline, it would significantly affect the State's emission free energy supply. So it's important to recognize that nuclear power is a critical asset, especially when thinking about standards such as the EPA's Clean Power Plant. (0721-21-1 [Martin, Patrick])

**Comment:** Nuclear plants are also unmatched in their reliability. The facilities of Florida operate around the clock, even at times of extreme temperatures and weather to generate 12 percent of the State's total energy mix. They can be counted on the keep the lights on for Florida's businesses and for Florida's residents. I am pleased and honored to be able to offer these supportive comments on behalf of Nuclear Matters and I very much appreciate your time this evening. (0721-21-3 [Martin, Patrick])

**Comment:** We work out there, we take pride in where we work and we want our surrounding communities to have the support and the opportunity to understand the growth of the new plants being built are going to be, and that's what we're trying to do with our community outreach. So we want more people that want to come to work at nuclear power plants and we want them to be excited to come and work there and not scared.

So back to my final thing and that's, we're the stewards of this industry and it's my job as a member of the staff out there to make sure that the community and the surrounding neighborhoods understand that it is clean, it is safe, you know. It's Captain Dan's points, the rising sea levels, you know, I appreciate that, I love the water. But we're also the cleanest and the least impactful on the environment that have anything to do with that. (0722-3-1 [Chatterton, Andrew])

**Comment:** [W]ith nuclear power you get clean, emission-free energy that's reliable and stable and runs virtually 24/7, so you always have power when you need it. On top of that, the energy that's being produced is also very economic. It will provide many customer savings. And to, you know, be specific, it's also -- within the first year of operations customers will save about \$644 million from fossil fuel costs and then projected to 40 years you'll be saving about \$64 billion. And for the course of 60 years you'll be saving \$173 billion on fossil fuels. I think that these units are economically practical and provide a lot of future support for many generations to come in South Florida. (0722-5-3 [Silva, Nicolas])

**Comment:** The question of whether the nuclear option was the best option, I've come to believe it's the most cost efficient and sensible way to approach the problem. (**0723-1-2** [Wallace, Otis])

**Comment:** Because of the relatively low production cost, nuclear power operations helps us maintain the lowest bills in our State. This is also very important for small businesses who have to account for spending on healthcare, taxes and their utilities. (0723-10-5 [Brito, Rosa])

**Comment:** I'd just like to mention a couple articles that was in the paper and I went through them briefly this afternoon. The "Miami Herald" of -- let's see, February 17th, it was written by -- let's see here, Whitman. She used to be the Chairman of the board of H&P, Hewlett and Packard. But she wrote a nice article that covered a lot of the facts about nuclear power and how it was. But a couple of things, it was really motivating, I thought. It was "moreover, nuclear energy provides 98 percent of Florida's carbon-free electricity. Because nuclear plants production process emits no greenhouse gases, Florida reactors have officially offset 15 million of carbon emissions each year, equivalent of removing three million cars from our roadways." And then there was another article that was written by the ex-governor of New Jersey. The -- it was the "Sun Sentinel." "Florida's nuclear energy is exceptionally important as it provides about 12 percent of the State's electric but it accounts for a full 98 percent of our emission-free electricity for Florida." And I think those two statements are very -- are very, very important. (**0723-14-3** [Riley, Bill])

**Comment:** And whereas nuclear power has been meeting the needs of our citizens of Miami Dade County for nearly 40 years, (0723-2-3 [Trowbridge, Mark])

**Comment:** They'll talk about fuel diversity. For myself I was always -- it didn't quite make sense to me, I've only worked in nuclear power. But fuel diversity, right, is where do you get your electricity from? What's the source of your electricity? That is one of those things, having that fuel diversity helps us control the cost of our electric bills. And every single one of us in this room get an electric bill every month. None of us like paying it but we all get it and we have to pay it, right? So you have fuel diversity that helps drive the cost down because natural gas prices move around a lot over the course of a year or five years, ten years. And adding additional nuclear power helps maintain that cost down as long as possible. And that pays for everyone, right. (0723-6-1 [Murphy, Mike])

**Comment:** I do know that my family worked at Plant Hatch and how nuclear power has benefited it. But I also do know some of the downsides to nuclear. There's not many that I know of with the nuclear regulations that we have in today's society. (0723-8-1 [McDuffie, Stephen])

**Response:** These comments express support for nuclear power in general. These comments do not provide any specific information related to the environmental effects of the proposed action. No changes were made to the EIS as a result of these comments.

**Comment:** Nuclear power is clean, it's carbon free, and therefore it doesn't contribute to climate change. It's safe, it has a very safe record. They talk about Three Mile Island, everything that could go wrong went wrong and nothing happened, so it's a safe industry with a proven track record. It reduces our dependence on foreign oil. It's a win-win for everybody[.] (0721-27-3 [Rodriguez, Manuel J.])

**Comment:** [T]he cleanliness of the nuclear energy, the lack of emissions and the carbon footprint that is not being produced because of nuclear energy. I have a new grandson, I look forward to him and his children and his grandchildren having affordable, clean energy for their generations to come, for them and their generations to come. (0722-13-6 [Duquette, Bill])

**Comment:** Nuclear power plants typically operate at capacity factors above 90 percent making them the highest among all forms of energy. Nuclear power is also the only emission-free baseload energy for grids, large grids like those in South Florida. This is critical to Florida since we are a State that relies on clean air and beautiful beaches. (0722-4-2 [Moo, Patrick])

**Comment:** Turkey Point 6 and 7 would avoid more than 265 million tons of CO2 emissions in the first 40 years of operation. This is an amount that's equal to the annual equivalent of removing 56 million cars from the road. By providing clean and affordable energy that these plants would produce we would help ensure that Florida remains one of the best states to visit and reside in. (0722-4-3 [Moo, Patrick])

**Response:** These comments express support for nuclear power based on avoidance of  $CO_2$  emissions. The calculation of the expected greenhouse gas emissions for a reference reactor is given in Appendix J. The effects of climate change on the environment are discussed in Appendix I. No changes were made to the EIS as a result of these comments.

### E.2.32 General Comments in Support of the Existing Plant or the Applicant

**Comment:** Taken with FPL's history of stewardship of the environment and their technical expertise in operating world class nuclear plants, I can see no reason for any objections to this project. (0002-2 [Hamilton, Brent])

**Comment:** I am strongly in favor of the addition of 2 more nuclear reactors to the current Turkey Point facility for the following reasons:...To date Turkey Point has been well run and dependable which add up to safety and dependability[.] (**0015-2** [Goldmeier, Barry])

**Comment:** I have worked with FP&L at both the Point Beach NP in Two Rivers, WI, and the Turkey Point NP in Florida City, FL with Bechtel in the Safety Departments and have full confidence in the team to manage these plants safely. (**0035-2** [Larrabee, Laura])

Comment: IN SUPPORT OF FPL. (0685-5 [Batista, Carlos])

**Comment:** I've worked on and off for Turkey Point, for Florida Power and Light at Turkey Point since 1988 as biologist that specializes in crocodiles. Over that time we have marked --I have marked over 5,000 hatchling crocodiles and from 500 nests. The cooling canal system is super saline, however, what a lot of people don't realize is within that super saline system are fresh water ponds and less saline ponds which, back in the '80s -- by the way there was only 220 American Crocodiles in South Florida, plus or minus 78. So let's just say 150 to 300. As a result of this cooling canal being built -- and I know they didn't build it for crocodiles. Anyway, as a result of that the numbers of crocodiles have increased to a point where in April of 2007 the U.S. Fish and Wildlife Service down-listed American Crocodiles from Federally Endangered animal to a threatened species. So, again, a lot of that has to do with the management of Florida Power and Light. And I'm talking from my heart and I'm talking from what I see firsthand, and what I've seen for 25 years. Florida Power and Light is a steward for the environment, not only with the crocodiles but with a number of other wildlife species I see out there. What I've learned in working in all of these underprivileged countries that I work, and here in the United States, is that because of the state of the world today, it being Earth Day, the way the population is increasing, the need for power, the need for all of these amenities that we want, that industry and the environment can coexist. And somehow there has to be negotiations throughout all of this, and I just feel good about the job FPL is doing with the Crocodile Program and other wildlife species. (0721-14-1 [Wasilewski, Joe])

**Comment:** I heard someone talking about the once-through design for the cooling of the canals using sea water to go through the reactor, through the condensers for cooling, and back out to the sea. The initial design of Turkey Point was something similar to that, or basically a once-through design. Once we started realizing the impacts of the hotter water coming out of the condensers on the local ecosystem we went to the closed canal system. This closed canal system, of course, ended up attracting a lot of the wildlife Joe talked about, American Crocodile in particular. And that success story is now history. It's a great success story, and I think Joe put it best. It's a great way where the environment and a corporation can exist. (0721-15-1 [Kuraza, Devon])

**Comment:** And one last point I forgot to talk about as far as the canal water. I know some people talked about the elevated salinity and the algae bloom. The algae bloom was a recent event that occurred. We have been taking corrective actions and we've used an approach that has been tried and proven in the industry. So it's -- it wasn't FPL just going outside of their

normal operation, it was something that we've seen in the industry, we talked about it and then we implemented it. (0721-15-13 [Kuraza, Devon])

**Comment:** The South Florida community has benefitted tremendously from Florida Power and Light's investment in nuclear energy and nuclear power for the past 40 years. We built that plant 40 years ago with the Building Trades Council and the Building Trades members. The Turkey Point plant has not only benefit providing Florida Power and Light customers with clean -- clean, reliable energy, but has also been very supportive of our local environment, economy, in creating jobs in the process. (0721-19-2 [Riley, Bill])

**Comment:** Economic impact on our city is a very large key to the success of Homestead and from the perspective of the City Council we've been very comfortable with their track record as far as safety is concerned, their ability to respond appropriately to whatever may happen. (0722-1-2 [Porter, Jeff])

**Comment:** The plant is operated well, it's operated safely for over 40 years. (0722-10-3 [England, Peter])

**Comment:** FPL is --and I should mention that FPL will provide and continues to provide significant tax, property tax revenues not only to Miami Dade County but also helping the school board. FPL is a great corporate citizen, the employees and the administration of Turkey Point are active in many, many events in our community. They provide a lot of money to United Way, for everything. We have Relay for Life at the hospital campus this weekend, they'll be out there. They're very into community activities and being good community citizens. (0722-13-5 [Duquette, Bill])

**Comment:** FPL, Turkey Point has been a great environmental advocate. The cooling canals, I don't know if you guys have been over there, I welcome you to -- I would suggest you go over there. They've done a lot environmentally to make sure that all the species and everything is maintained. Plus they have a unit onsite to look at environmental issues. (0722-13-8 [Duquette, Bill])

**Comment:** I was offered an opportunity to move to Alabama, very lucrative opportunity, and FPL kept me here. They're very good to work with, I see no evidence of environmental impact, and I support the expansion. (0722-18-1 [Berzowski, Bill])

**Comment:** So I think Florida Power and Light is doing a great job. I think that they are without a doubt as much concerned about the environment as anybody in this room[.] (**0722-9-11** [Riley, Bill])

**Comment:** The South Florida community has benefited tremendously from Florida Power and Light's investment in nuclear power over the last 40 years. Turkey Point has not only been providing Florida Power and Light customers with clean, very clean, reliable energy but has also been very supportive of our local environmental issues along with the South Florida economy while creating jobs in the process. (0722-9-2 [Riley, Bill])

**Comment:** Along with a very strong environmental partner like Florida Power and Light we do and think that we can even do better, create random things for the communities and for the environment. (0722-9-6 [Riley, Bill])

**Comment:** But the most important issue of all for me was safety for obvious reasons. Florida City is very close to the proposed expansion area and again, given FPL's efforts in the area of safety being the vanguard of best practices for our safety[.] (0723-1-3 [Wallace, Otis])

**Comment:** Also I had the opportunity to visit Turkey Point and see the site, and I'm confident that everyone there takes all the necessary cautions to run a safe operation. (0723-10-2 [Brito, Rosa])

**Comment:** The Turkey Point plant has not only been providing Florida Power and Light customers with clean -- and I think the word "clean" here has been mentioned several times tonight -- it's clean, very clean, reliable energy. It has also been very supportive of our local environmental issues along with the South Florida economy which creates good paying jobs. (0723-14-2 [Riley, Bill])

**Comment:** And so I'm here to talk a little bit about FPL Turkey Point's environmental stewardship. You know, many people don't realize but back in the '60's our then president, McGregor Smith had a vision. It wasn't only just fossil fuel and nuclear fuel providing all the energy needs for humanity but also an interactive communal station for the community to come out and enjoy. We had Boy and Girl Scout camps, we had the deer and duck pond. We had, you know, canoeing and all kinds of activities for the community to go to. And as a child, you got to experience that. (0723-15-1 [Bertelson, Bob])

**Comment:** But getting back to, you know, what the original focus, the communal effort, the interactive community coming to us, well that really isn't possible because of 9-11. That affected all of us. However, we don't necessarily have -- I do have a group coming out to us tomorrow for education about our stewardship but we also go out to the community. We reach out. We travel to the Deering Estates. We travel to schools all around to spread the good word of what we do. So it's been rewarding for me, I can tell you. If somebody had said, 35 years from now what would you be doing, I wouldn't have come close to this. And I really thank FPL for that and I also thank you for listening to me. (0723-15-4 [Bertelson, Bob])

**Comment:** Whereas, the Coral Gables Chamber of Commerce, one of the community's leading business development organizations recognizes the critical role that Florida Power and Light Company plays in providing electrical generation in our community while serving as a tremendously generous corporate citizen, (**0723-2-1** [Trowbridge, Mark])

**Comment:** [W]e just want to reiterate our support and let you know that we are very pleased with the corporate support that FPL provides in communities as great citizens, and the things that they do to bring jobs to our community. (0723-2-10 [Trowbridge, Mark])

**Comment:** ...clean, safe and reliable generation at the Turkey Point facility. (0723-2-4 [Trowbridge, Mark])

**Comment:** The last thing I want to say is, you know, there's a lot of talk about safety and I would say information that maybe is given to us from the NRC or from Florida Power and Light or what have you. Just remember that everyone works out at Turkey Point. Everyone who is involved with the nuclear industry, we all have families. We all have kids. We all have kids and wives and husbands who all live in this area. So we all take the responsibility that we have for running a nuclear reactor with absolute seriousness because we do understand the impact it can have and we do understand what we have -- the safeguards we have to have in place so accidents do not happen. We take it very seriously. There's a large number of guys from work

and -- guys and gals from work here. You can ask any one of them, we take it very seriously because we understand the impact it could have. (**0723-6-4** [Murphy, Mike])

**Comment:** FPL I can say from experience, it's a trustworthy company. And integrity is our most highly prized value, we talk about it a lot, take it seriously. And we have a way of talking about doing things where we say that we leave things better than we found them, down to the kitchen at work, the coffeepot, the stairwell. Leave it better than you found it. And we have that as kind of a motto of operating in our lives and in our work. And that seems to work out well in nuclear power especially. And so I have also as a matter of appreciation for FPL. (0723-7-1 [Boling, Steve])

**Comment:** And all those things somehow work together to create what I believe to be the safest industry in the United States. And I think I could prove that if I had any opportunity and needed to. I don't think I need to. (0723-7-4 [Boling, Steve])

**Comment:** And to all the workers that work out at Turkey Point, we do appreciate everything you do for us. (0723-8-6 [McDuffie, Stephen])

**Response:** These comments express support either for the Applicant or the existing reactor units at the Turkey Point site. They do not provide any specific information related to the environmental effects of the proposed action. No changes were made to the EIS as a result of these comments.

### E.2.33 General Comments in Opposition to the Licensing Action

**Comment:** As a homeowner in the area, I want to express that I do not feel that any more reactors be built in the Miami area. (**0006-1** [Faber, Davenie])

**Comment:** I am opposed to the building of two new nuclear power plants at Turkey Point in Homestead, Florida. (**0007-1** [Johnson, Nadine])

**Comment:** I oppose the expansion. (0008-12 [Finver, Jody])

**Comment:** I am writing to express my firm opposition to FPL's request for permission to construct two new nuclear reactors at Turkey Point. (**0009-1** [Rose, Simon])

**Comment:** Saprodani Associates herein submits the following comments regarding the EIS and <u>urges the NRC and the NRC Commission to deny FPL's construction license and/or operational licenses accordingly</u>. To the extent that the NRC has already granted the aforementioned license(s) - Saprodani Associates <u>requests that the NRC and/or the NRC Commission revoke said licenses accordingly</u>. (0010-1 [Saporito, Thomas])

**Comment:** Saprodani Associates has reviewed the NRC EIS extensively and has determined that the NRC has made unreliable <u>conclusions related to the harm to the environment that</u> <u>will result from the construction and operation of FPL's Turkey Point Nuclear Units 6 & 7</u>. Notably, the NRC appears to have made unsupported assumptions with respect to the environmental harm -and compensated said environment harm and impact -by offsetting -the same -with <u>economic considerations for the licensee FPL</u>. (0010-2 [Saporito, Thomas])

**Comment:** I am writing in reference to Docket ID: NRC-2009-0337 to express my opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0028-1** [Clapp, Linda])

**Comment:** I am not in favor of the nuclear reactors to be set in place a turkey point. (**0030-1** [Gomez, Lissett])

**Comment:** My husband and I, tax paying residents of Miami, are strongly opposed to the expansion of the Turkey Point Nuclear Power Plant. (**0031-1** [Hawkes, Holly Forrester])

**Comment:** As with many residents of Miami, I would like to express my strong opposition to expanding Turkey Point. (**0032-1** [Vinciguerra, Anthony])

**Comment:** Members as a resident of the City of Miami I am deeply concerned about the proposal to add two (2) additional reactors in Turkey Point. (**0034-1** [Rodriguez, Barbara])

**Comment:** This note is to inform you of my opposition to the construction of the Two New Nuclear Power Reactors- 6 & 7- at Florida Power and Light's Turkey Point facility. (**0039-1** [Violich, Francesca])

**Comment:** I urge the NRC, and FP&L, to reconsider this ill conceived plan. (**0039-5** [Violich, Francesca])

**Comment:** My husband and I are totally opposed to FP&L's plans to build TWO NEW NUCLEAR REACTORS at Turkey Point. (**0040-5** [Pareto, Rolando and Marlene])

**Comment:** This letter is to inform you of my opposition to the construction of the two proposed Nuclear Power Reactors - 6 & 7- at Florida Power and Light's Turkey Point facility. (**0044-1** [Commenters, Multiple])

**Comment:** Please be advised by this e-mail that I am <u>strongly</u> opposed to the construction of the two proposed Nuclear Power Reactors, 6 & 7 at Florida Power and Light's Turkey Point facility. (**0045-1** [Johannsen, Christian])

**Comment:** There are quite a few other reasons why these reactors are a bad idea but I hope the ones I listed will be enough to help you make a decision that is in the best interests of the citizens of South Florida. (**0048-4** [Wegner, Geri])

**Comment:** Please consider my dissent and that of so many other South Floridians who say NO to more nuclear reactors at Turkey Point. (**0052-3** [Roos, Monica])

**Comment:** i am appalled that the NRC would even consider expanding Turkey Point at all, much less adding two new reactors! (**0055-1** [Roedel, Kitty])

Comment: the NRC needs to do the right thing here. (0055-7 [Roedel, Kitty])

**Comment:** pls deny the addition of the two additional nuclear reactors at turkey point. it is a poorly conveived boondoggle by fp&I that the NRC should not entertain in this day and age! (**0055-9** [Roedel, Kitty])

**Comment:** As a Miami native I protest this expansion of nuclear power at Turkey point reactor, (0056-1 [McCall, Eric])

**Comment:** I strongly oppose the construction of the two proposed Nuclear Power Reactors - 6 & 7 - at Florida Power and Light's Turkey Point facility[.] (**0057-1** [Neway, Roberta])

**Comment:** In short, please do not approve these reactors. Consider history, current conditions at Turkey Point, and the lives of the people of Miami-Dade County and the health of our ecosystem. (0057-5 [Neway, Roberta])

**Comment:** The NRC and FPL must NOT expand nuclear power generation at Turkey Point. (0058-1 [Imbesi, Nan])

**Comment:** This letter is to inform you that my husband and I share the opposition to the construction of the two proposed Nuclear Power Reactors - 6 & 7 - at Florida Power and Light's Turkey Point facility. (**0060-1** [Beckman, Yvonne and Douglas])

**Comment:** As a Homestead, FL, resident and a concerned citizen, I am completely against any expansion at Turkey Point Nuclear Power Plant. (**0061-1** [Lague, Victoria])

**Comment:** As a resident, living a few miles from Turkey Point, I'm opposed to any expansion of the nuclear facility. (**0062-1** [Raits, Eric])

**Comment:** Please stop more reactors at turkey point. (0063-1 [Smay, Betty])

**Comment:** I am greatly opposed to the nuclear expansion of Turkey Point. (**0066-1** [Wong, Christina])

**Comment:** My childhood home is within the danger zone if something catastrophic were to occur. I grew up with that very real fear, which is still a reality. (**0066-2** [Wong, Christina])

**Comment:** I am greatly opposed to this expansion. (0066-4 [Wong, Christina])

**Comment:** I object to Florida Power and Light's plan to expand Nuclear Power Generation at Turkey Point. (**0067-1** [Commenters, Multiple])

**Comment:** I strongly recommend that Turkey Point 6&7 nuclear reactors be reconsidered. (0076-4 [Daly, Meg])

**Comment:** Please say NO to the two new nuclear plants at Turkey Point! (**0078-14** [Wilansky, Laura Sue])

**Comment:** I beg you to deny the FPL request for the expansion of the Turkey Point Nuclear Power Plant expansion. (**0081-7** [Benson, Mary] [Skove, Ellen H.] [Tompkins, Constance])

**Comment:** As a voter I will be unable to support anyone sponsoring this proposal. (**0084-3** [Phillips, Monica D.])

**Comment:** I am writing to object to the building of more nuclear reactors at Turkey Point and their attendant transmission lines. (**0086-1** [Lawrence, Diane])

**Comment:** Please do not approve the building of these reactors and the transmission lines. (**0086-4** [Lawrence, Diane])

**Comment:** It is with grave concern that i write to you in reference to Florida Power and Light request for approval into adding 2 new Nuclear Reactors to their plant in Turkey Point Florida. (0087-1 [Lange, Alexandra])

**Comment:** I have read the plan in detail and i am astonished to see that they are still moving forward with a plan that Floridians and Miamians do not want. Their plan fails to guarantee any type of safety to our citizens (**0087-2** [Lange, Alexandra])

**Comment:** If granted, I for one would move my manufacturing and marketing facilities out of south Florida. (**0091-4** [Boyce, Sheila])

**Comment:** I would like to strenuously oppose Florida Power & Light's proposed expansion of nuclear facilities at Turkey Point. (**0093-1** [DuPriest, William Robert])

**Comment:** Turkey Point Nuclear Not a good alternative!!!!!! (0095-1 [Hubler, Gina Marie])

**Comment:** Please deny the application for the expansion of Turkey Point Nuclear Power Plant. (**0096-4** [Roberts, Linda])

**Comment:** I oppose the expansion of nuclear power at Turkey point. (0097-1 [Geary, Craig W.])

**Comment:** I am writing to express my concern and oppose to this project being approved. (0101-1 [Gomez, Gustavo])

**Comment:** I am writing in reference to Docket ID: NRC-2009-0337 to express my opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0102-1** [Commenters, Multiple])

**Comment:** I am writing in opposition to the proposed expansion of Turkey Point Power Plant in Homestead, Florida. (0103-1 [Commenters, Multiple])

**Comment:** I urge you to deny the proposed expansion at Turkey Point and protect the region's people and unparalleled natural resources. (**0103-8** [Commenters, Multiple])

**Comment:** I strongly oppose the expansion of Turkey Point and support the "No Action" alternative. (0104-6 [Commenters, Multiple])

**Comment:** I am writing in reference to Docket ID: NRC-2009-0337 to express my opposition to the proposed expansion of Turkey Point Power Plant. (**0109-1** [Platt, David])

Comment: Please do not expand the Turkey Point Power Plant. (0109-3 [Platt, David])

**Comment:** We firmly believe that, due to the deficiencies in the information and analysis provided in the DEIS and the multitude of negative environmental impacts on the surrounding environment, the NRC should not issue COLs for Turkey Point Units 6 & 7. (0113-2-15 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** I object to Turkey Point power plant's request to build new reactors. (0114-1 [Cunningham, Sue])

**Comment:** I am very much opposed to this action, as is the majority of the populace in South Florida! (0115-1 [Trencher, Ruth])

**Comment:** Please send FPL back to the drawing board to come up with a solution that serves the community not its shareholders. (0117-4 [Robertson, Alyce])

Comment: This is a bad idea. ... No (0118-1 [Zakon, Allan])

**Comment:** I am an electrical engineering graduate student at FIU and I want to express my disapproval of the expansion of Turkey Point's Nuclear Generation. (0119-1 [de Azevedo, Ricardo])

Comment: Do NOT approve FPL's request to build two new reactors. (0121-1 [Reyneri, Juan])

**Comment:** I am against the expansion of the Turkey Point nuclear power plant. (0122-1 [Meyer, Paul])

**Comment:** Please do not approve FPL's application for new nuclear facilities at Turkey Point. (0124-3 [Colby, Helen])

**Comment:** I am completely opposed to the expansion of FPL's Turkey Point expansion project. (0125-1 [Colls, Ana])

**Comment:** This is my testimony against FPL's plan of expansion. I feel FPL does not understand the extent of their actions, and they will be too late in realizing their mistakes. (0127-1 [Cusidor, Teresa])

**Comment:** I wholeheartedly protest this expansion and every plan associated with it. FPL is an energy company monopoly. It's presence is already cancerous enough, do not make fasten our termination anymore. (0127-6 [Cusidor, Teresa])

Comment: I am adamantly against having FPL's nuclear power plant. (0128-1 [Bach, Lili])

**Comment:** Based on what I've read and heard about the environmental impact of the proposed new reactors (and the impact of the existing reactors), I am 100% opposed to the project. (0130-1 [Jones, Diane])

Comment: I am concerned that expansion may not be the solution. (0132-3 [Mauri, Tom])

**Comment:** As a resident of Coral Gables, Florida, I find it disturbing that the NRC would even consider approving such an irresponsible and short sighted proposal as the one being put forth by Florida Power and Light for expansion of the nuclear facility at Turkey Point. (0133-1 [Corral, Oscar])

**Comment:** Please listen to the people and decline the FPL proposal for Turkey Point. (0133-5 [Corral, Oscar])

**Comment:** Please do not let this happen, (0135-3 [Thiel, Markus])

**Comment:** I respectfully request that the US Nuclear Regulatory Commission deny FPL's request for two new nuclear reactors at Turkey Point. (**0136-5** [Levy, Morgan I.])

**Comment:** I urge you to reject this FP&L proposal and as a 45 year resident and taxpayer, I vehemently object to FPL's project as proposed. Many thanks for your support regarding this vital decision! (0138-1 [Miller, Howard R.])

Comment: You also need NOT to approve this disastrous plan. (0140-4 [Rhodes, Karen])

**Comment:** there is no reason to support the licensing of these proposed reactors. I strongly oppose the expansion of Turkey Point and support the "No Action" alternative. (**0141-5** [Lucas, Carmen])

Comment: I would like to voice my complete opposition to this project. (0146-1 [Grant, Randy])

**Comment:** We are against any change to Turkey Point. (0147-1 [Jones, Joan and Robert])

**Comment:** I oppose FPL's proposal to build two more nuclear reactors at their Turkey Point site in South Florida. (0148-1 [Brinn, Ira])

**Comment:** I am writing to oppose the proposed 2 new nuclear reactors at Turkey Point. I attended the April 22, 2015 meeting at FIU to educate myself on this project. There were over 200 people there to oppose it. I heard nothing to change my opinion only to make this project seem more ridiculous than ever. The U.S. Environmental Protection Agency (EPA) has stated that "the permit for the project should not be approved as currently proposed, because it may result in substantial and unacceptable impacts" to the local environment. (**0149-1** [Nelson, Joyce E.])

**Comment:** 'PROGRESS ONLY FOR PROFIT' IS NOT WISE. THIS IS NOT SAFE. STOP (0154-1 [Allen, Maureen])

**Comment:** I am against this project and it should not be allowed to go forward. (0159-1 [Bazzone, Barbara])

**Comment:** Please reject this expansion. It is in the wrong place, wrong time, wrong idea! (0163-3 [Cook, Cherie])

**Comment:** I believe the proposed FPL expansion should be rejected as it brings along a plethora of both seen and unpredictable consequences. I hope that the Nuclear Regulatory Commission values safety over profit. (0171-2 [Oria, Jordan])

Comment: I live near Turkey Point and am not happy about this. (0175-1 [Sockloff, Judith])

**Comment:** Thus, I vehemently implore you to unequivocally deny this expansion. (0177-1 [McVicker, Micah])

**Comment:** As a lifelong resident of Miami and the Roads Neighborhood, only 25 miles north of Turkey Point, I vehemently oppose the construction and further expansion of this nuclear plant with two more reactors. (0178-1 [Almirola, Alejandro])

Comment: Please deny this request...plln and simple. (0181-3 [Bremen, Gary])

**Comment:** I am strongly in agreement with the arguments stated below [opposing the proposed action]. (0184-2 [Perez, Danica])

**Comment:** Please do the right thing and do not allow this project to proceed. (0187-6 [Meyer-Steele, Shawn])

**Comment:** I strongly oppose the expansion of Turkey Point and support the "No Action" alternative. (0192-7 [Lebatard, David])

**Comment:** Please do not allow this project. It isn't good for Florida's environment. (0193-3 [Shipe, Kathleen])

**Comment:** MUST WE ALWAYS PUT PROFIT FRIST. IN THIS CASE PEOPLE MUST COME FRIST!!! (0196-1 [Hart, Barbara])

**Comment:** I believe this project is not in the best interest of the citizens of Miami Dade. I believe the future is better served by using solar energy and energy conservation and efficiency. As the articles states, FPL's plan is regressive and harmful. I hearby state my OBJECTION to this project. We need to protect the environment for future generations. We need to be wise! (0204-1 [Cooper, Fran])

**Comment:** Although this decision may be a means to enrich the shareholders of Florida Power and Light, it places the entire population of South Florida in jeopardy. I hearby request that you deny the construction and operating license for the proposed facilities at Turkey Point. (**0206-3** [White, Holly])

**Comment:** My children and grand-children live in South Florida, and I want to preserve for them the beauty and natural wonder that I grew up with. (**0207-8** [Cleland, Noel])

**Comment:** I'm a South Florida resident and I am expressing my opposition to expanding the Turkey Point nuclear plant any further. This project is the wrong project for this location and the permit to add more nuclear reactors should be denied. (**0209-1** [Umpierre, Diana])

**Comment:** A Sick Dream. That is what adding reactors at Turkey Point is. How do you even consider such madness? (**0216-1** [Osborne, Martin])

**Comment:** Please look to our children and their future and not to those who try to influence you to ignore what is best for the environment. (**0217-1** [Fitzpatrick, Deirdre])

**Comment:** I am writing in reference to Docket ID: NRC-2009-0337 to express my opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0221-1** [Sophia, Tristan])

Comment: This is a terrible idea--don't do it! (0222-2 [Glass, Rachel])

**Comment:** I attended the evening public comment session at FIU. Although, I did not write this letter. It says everything that I would have said and I'm very concerned about each of the issues. (0223-1 [Robbin, Valerie])

**Comment:** I oppose the proposed expansion of Turkey Point Power, (0228-1 [Yeager, Jerry])

**Comment:** As voters, taxpayers, business owners and grandparents in Fort Lauderdale, we ask you to please prevent the nuclear expansion at Turkey Point. We don't need to list the many reasons why this ill-advised project should be stopped -- you have already heard them -- but please add our names to those who strongly oppose this project. (**0233-1** [Purdy, Shyam and Mohini])

**Comment:** Not everything in this world is just about money, or getting it by making horrendous and greedy choices which will affect all of us. Please make a difference in this world, doing the right thing!!! I know YOU CAN. (0238-3 [Padilla, Dora])

**Comment:** Please do not do this! I don't see how you can collect money from your customers without them knowing where its all going. Not to mention the dangers of this. Is this really necessary? What is wrong with the nuclear power plants we already have? I do not want my money going to this. (**0239-1** [Anonymous, Anonymous])

**Comment:** As a resident in South Florida I am opposed to the plans for two new nuclear plants at Turkey Point[.] (0240-1 [Commenters, Multiple])

Comment: No more power plants please. (0241-3 [Portuondo, Pilar])

Comment: Terrible idea. Do what is right! (0242-2 [Colby, Helen])

**Comment:** Their is no logical reason for building these two nuclear reactors. (**0243-1** [Duran-Pinzon, Jaime])

**Comment:** Do not allow this travesty. Say no to the new nuclear reactors. (**0243-4** [Duran-Pinzon, Jaime])

**Comment:** Please do not approve the expansion of the nuclear power plant at Turkey Point. (0244-1 [Haber, Rochelle])

**Comment:** I believe you should do the right thing and not approve the Turkey Point plant expansion. (0244-3 [Haber, Rochelle])

**Comment:** I am writing to express my opposition to the proposed expansion. (**0245-1** [Lindsey, Jerrie])

Comment: Do NOT approve this expansion! (0245-7 [Lindsey, Jerrie])

**Comment:** The impacts mentioned above are by no means the only adverse impacts from the addition of two new nuclear reactor units. I hope the NRC will take my comments into consideration and reject FPL's application. (**0246-7** [Shlackman, Mara])

Comment: I live too close to Miami to allow this to happen (0248-2 [Kadis, Patricia])

**Comment:** This is a totally irresponsible idea given the potential environmental impact. (**0249-1** [Mosher, Paul])

**Comment:** I strongly agree with the views expressed by the Mayors of Pinecrest, Palmetto Bay, & South Miami that the expansion of the nuclear facility at Turkey Point by FPL should NOT BE ALLOWED under any circumstances. (**0251-1** [Whitfield, Isabelle])

**Comment:** As a taxpayer I want the NRC not to approve FPLs proposal for two new reactors. (**0257-1** [Padron-Delgado, Blanca])

**Comment:** Your recent decision to give tentative approval for two new reactors along the shores of Biscayne Bay via their Draft Environmental Impact Statement is Reprehensible! (0259-3 [Lettieri, Tammy])

**Comment:** I urge the NRC, and FP&L, to abandon this ill-conceived plan to expand nuclear power generation at Turkey Point. (**0263-6** [Orzechowicz, Holly])

**Comment:** In reference to Docket ID: NRC-2009-0337 the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida NONO NO NO NO NO NO NO NO NO NO NONONOT NO NO NO NO NO NO NO (0266-1 [Defoggi, Virginia])

**Comment:** This is insane! (0267-1 [September, P. J.])

**Comment:** Turkey Point Nuclear Reactor Plant is all ready ENOUGH A TREAT for us in the vescinity. Me and my Family STRONGLY OPPOSE to permitting of new developments of NUCLEAR POWER PLANT projects in this area we have called home for over 5 decades. Please take our concern to the highest level of descition making management for such unwanted projects. (0272-2 [Zuniga, Family])

**Comment:** It is illogical and inconceivable to me hat you'd be striving to expand Turkey Point Power Plant in Homestead, Florida. Just a few years ago we were forced to mobilize against development of an international airport at Homestead AFB which would have severely impaired Biscayne and Everglades National Parks. (0274-1 [Peterman, Andy])

**Comment:** Do you think we can ever get a grip on what makes sense for our region and country so the few citizens that are awake don't have to keep resisting these noxious proposals ? (0274-2 [Peterman, Andy])

**Comment:** Please follow your own guidelines in this matter and deny this request for expansion. (0275-1 [Hayes, Linda])

**Comment:** As a lifelong Dade County resident, I oppose Florida Power & Light Company's attempt to build additional nuclear generators at its Turkey Point facility. (**0283-1** [Compel, Jr., Joseph])

**Comment:** I am writing in opposition to the proposed expansion of Turkey Point Power Plant in Homestead, Florida. (0285-1 [Miller, Melissa])

**Comment:** We do not want you to approve construction of 2 new nuclear power plants at Turkey Point. (**0287-1** [Beiriger, Mary])

**Comment:** The undersigned urge you to reject the application and choose the **No Action alternative**. (**0288-1** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

Comment: So here is my message to you: JUST SAY NO!! (0290-1 [Wry, Ellen])

Comment: This is not the place for another power plant. (0290-2 [Wry, Ellen])

**Comment:** Our eco system is so sensitive, how can this even be considered? (0292-1 [Rothstein, Debbie])

**Comment:** In reference to Docket ID: NRC-2009-0337, I stand strongly opposed to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0295-1** [Dietrich, Chris OMeara])

**Comment:** I strongly oppose the expansion of Turkey Point as proposed in Docket NRC-2009-0337. (0299-5 [Salatino, Freda])

**Comment:** I Oppose the Proposed Expansion of Turkey Point, Docket ID: NRC-2009-0337. (0300-4 [Van Pelt, Jason])

**Comment:** The only real pressure You will feel is in not protecting your fellow citizens and the environment in which they live. Please do not knuckle under to the Fear of Politics and pressure. You are the one that looks into that mirror every morning. (**0301-1** [Jimenz, Lawrence])

**Comment:** Although FP&L does a good job in managing as much as possible, expansion would tip the scales too strongly. (**0308-2** [Wallington, Victoria])

**Comment:** The following paragraphs tell me and I would think would also tell you why it should not be permitted. (**0319-1** [Dent, William])

**Comment:** To expand upon on already ill-placed power plant is a horrible idea. (0323-2 [Jennings, Cara])

**Comment:** Stop this now before there are horrendous repercussions. (**0326-2** [Earnshaw, Shinann])

**Comment:** The application should be denied. (0329-1 [Baumwall, Douglas])

**Comment:** I, as a resident of Palmetto Bay, FL, do not want another nuclear reactor built at the Turkey Point faculty. (0330-1 [McCarthy, Dawn])

**Comment:** I live in and my children attend school in Palmetto Bay, and I already feel a constant threat of a nuclear accident. The last thing I want is for further endangerment of our community. (0330-2 [McCarthy, Dawn])

Comment: Don't let FP&L do it! (0334-1 [Crystal, Chris])

Comment: I am against any additional nuclear power generation in Florida. (0335-1 [K., Jeff])

**Comment:** Accordingly, we respectfully request that you reject the application for additional nuclear facilities at Turkey Point. (0338-2 [Kavanaugh, Daniel])

**Comment:** We cannot urge you strongly enough to deny this license. The dangers to the environment, as well as to human life, inherent in such a project are beyond doubt. (**0341-1** [Daniels, Bonnie])

**Comment:** The disastrous effects of a potential weather event - a hurricane being a highly likely risk in this area - are undeniably real and have been well illustrated by Fukushima. We lived through Hurricane Andrew, and our home is only a few miles from Turkey Point; we do not want, nor see the need for, the risks this project entails in our own backyard. (**0341-4** [Daniels, Bonnie])

**Comment:** With reference to the upcoming meetings concerning the approvals for a nuclear facility at Turkey point, please note I DO NOT think the project is necessary. (**0343-1** [Cardona, Alfredo])

**Comment:** Quite to the contrary, I feel that its proximity to a major urban area and its location in a place subject to hurricanes suggests that the permits should be DENIED. (**0343-2** [Cardona, Alfredo])

Comment: I do not approve. (0347-2 [Petersen, John])

**Comment:** Please reconsider this project. (0349-4 [Oliva, Vivian])

**Comment:** Though I am sure your researchers truly believe the plants will not harm anything I think in the overall picture from generations to come, even they don't have all the answers. Please consider the impacts carefully and make a choice that is right for people and the environment and not for power companies and profits (**0352-3** [Tingle, Peggy])

**Comment:** This is a terrible idea and I am thoroughly against it. (**0354-1** [Anonymous, Anonymous])

Comment: Please scratch this idea once and for all. (0355-3 [Thomas, Bill])

**Comment:** It's time for FPL to face the future rather than fight it, and for public officials to promote the public interest rather than short term corporate financial interests. (0356-17 [Shlackman, Jed])

**Comment:** I object to Florida Power and Light's plan to expand Nuclear Power Generation at Turkey Point. (0358-1 [Norman, Ronald])

**Comment:** I simply am not willing to take the necessary personal and financial risk to further FP&L's business objectives. I hereby request that you deny the construction and operating license for the proposed facilities at Turkey Point. (0358-5 [Norman, Ronald])

Comment: I oppose this plan. (0361-1 [Berndgen, Michelle])

**Comment:** Please don't approve this short sighted plan. (0361-4 [Berndgen, Michelle])

**Comment:** I urge you to not build and expand Turkey Point Nuclear Plant. (**0362-1** [Hurley, Paula])

**Comment:** I urge you to consider the ENORMOUS effect of the HIGH risks of expanding Turkey Point power plant. Have you ever relaxed and recharged in nature? Please think of your children, grandchildren or others only being able to hear I stories of what beauty was and not being able to experience it themselves. (**0362-6** [Hurley, Paula])

**Comment:** I am speaking out against the expansion of the Nuclear power plant at Turkey Point. I don't believe it is in South Florida's best interest, nor in the best interest of the world. (**0363-1** [Peters, Emily])

**Comment:** There is very serious cause for concern regarding the negative environmental impacts of Turkey Point Nuclear Power Plant. The addition of 2 more nuclear reactors will exacerbate the existing problems to a crisis level. (**0365-1** [Fischer, Antoinette])

**Comment:** Am strongly opposed to granting the licenses for Turkey Point. (**0368-3** [Casey, Sr., Robert J.])

**Comment:** Building two new nuclear reactors at Turkey Point, an incredibly sensitive natural ecosystem, is a truly terrible idea. (0370-1 [Vayu, Satya])

**Comment:** Please do not allow new nuclear reactors to be built at Turkey Point. (0370-14 [Vayu, Satya])

**Comment:** Building additional reactor units at Turkey point is a really bad idea. (0371-1 [Haffmans, Edmund])

Comment: Please say NO to Turkey Point 6 & 7. (0371-6 [Haffmans, Edmund])

**Comment:** I've lived in this area for over 30 years. I have 2 young kids. As a parent I'm trying to teach my kids about the importance of recycling and respecting our environment. I am sad, disappointed and scared that FPL was able to get this far in the process. When are we, as adults, going to start practicing what we preach to our kids? (0372-2 [Ortiz, Natalia])

**Comment:** None of this makes any sense. I hope and pray that you will do what's right. That you will object to this and show FPL and Tallahassee that money doesn't trump safety. (**0372-5** [Ortiz, Natalia])

Comment: Do not License this application, no way, no how. (0373-1 [Lee, Nancy])

**Comment:** In reference to Docket ID: NRC-2009-0337, I oppose FPL's proposal to build two more nuclear reactors at their Turkey Point site in South Florida. (0379-1 [Commenters, Multiple])

**Comment:** The Turkey Point 6 & 7 Expansion only adds to a BAD situation. (**0380-1** [Anderson, Vaughn])

**Comment:** Seriously, some chucklehead must lose his payday over this and it's not a bad idea to lose his/her supervision, as well. Whatever were you thinking? (**0384-3** [Franzmann, Paul])

**Comment:** THIS IS EXTREMELY IMPORTANT! LIFE DEPENDS ON THIS! (0385-1 [Greenwald, Ken])

**Comment:** To think that the expandition in the area, turns my stomack. What is the management thinking. It seems that theydon't think anything about our ecology. We are poisoning our water and killing fist by the thhousands is some parts of the world. (**0392-1** [Greer, Tom])

**Comment:** My personal feeling is that this is a Very Bad Idea. Weather, potential water levels and other factors make this facility not worth the risk. (**0395-1** [Fishman, Zelma])

**Comment:** As a Georgia resident, we spend quite a bit of time in Florida. As a mom, I ensure that my children understand the necessity of our role as humans to protect land and water. Therefore, I am writing in reference to Docket ID: NRC-2009-0337 to express my opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (0397-1 [Blanck, Heidi])

**Comment:** The expansion would be a huge mistake from any perspective for South Florida. (0402-1 [Dunn, Elmo])

**Comment:** PLEASE TAKE THE RIGHT, FAIR, JUST, HUMANE AND HEALTHY ACTION AND OPPOSE THE PROPOSED EXPANSION OF TURKEY POINT. (0403-1 [Graffagnino, Mary Ann and Frank])

**Comment:** A family tradition for 25 years has been "head to Florida to recover from winter and enjoy parks, beach, water and baseball". Homestead is an important location for access to those goals! (0407-1 [Kaye, Jackie])

**Comment:** I propose you have enough grid feeds in Florida to supply everybody. If ya need more juice then build another unit at St. Lucie County. I don't live near Miami but I do know what the Biscayne park is as I ride my bicycle there with my bike club...NO is the answer. (**0410-1** [Quinn, George])

**Comment:** With or without, we face a barren world without animal life and soon without human life and so I am writing in reference to Docket ID: NRC-2009-0337 to express my opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (0411-1 [Kern, Madeleine Fisher])

**Comment:** In reference to Docket ID: NRC-2009-0337, I oppose the proposed expansion of Turkey Point Power Plant located in Homestead, Florida. (**0413-1** [Cobb, Tanya])

Comment: Quit destroying the environment----we only have one. (0416-1 [Underwood, John])

**Comment:** Please oppose expansion of Turkey Point Power Plant. (0417-1 [Beattie, Jane])

**Comment:** Surely you cannot be considering this! (0422-1 [Yount, Madeline])

**Comment:** I am a supporter of nuclear power, and believe that it should be a key component of any future energy plan as we transition to an era of less dependance of fossil fuel. However, the expansion of the Turkey Point Power Plant is unacceptable. (0423-1 [Peterson, Ted])

**Comment:** Please, this is extremely important not just for our area, or for the entire State of Florida, but for our nation. I am writing in reference to Docket ID: NRC-2009-0337 to express my opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (0428-1 [Leo, Carlos])

**Comment:** Biven the points made above, the proposed expansion would be the wrong thing to do. (0433-1 [Vermeulen, Mary])

Comment: This place should be closed, not expanded. (0435-2 [West, Eric])

**Comment:** There is time and place for everything, but this is neither the time or place. (0436-1 [Boone, Jim])

**Comment:** We are APPALLED AND OUTRAGED that our own government would propose the expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0440-1** [Hoyle, Lester and Judy])

**Comment:** The site proposed for expansion is located RIGHT NEXT TO MIAMI[.] (0440-5 [Hoyle, Lester and Judy])

**Comment:** SIMPLY ANOTHER ATTEMPT BY CORPORATE ENTITIES TO EXPAND THEIR PROFITS WITH NO REGARD FOR PUBLIC AND PLANETARY HEALTH!!! WE HAVE HAD FAR, FAR TOO MUCH OF THIS CRAP!!! PLEASE DO THE RIGHT THING: SAY ABSOLUTELY NOT!!!!!!!!! (0444-1 [Bodiford, Loretta]) **Comment:** Having lived within "blowing up" distance of Indian Point, NY and read about their current problems, we really don't need more expansion, particularly near a national park that is near sea level. (0450-2 [Richards, Margie])

**Comment:** As the voting constituents of your administration, we strongly oppose the expansion of nuclear power generating facilities, specially at Turkey Point. (**0451-1** [Durieux, P.])

**Comment:** In conclusion, the City reiterates its belief that the Turkey Point Nuclear Plant Units 6 & 7 application should not be approved as currently proposed. (**0456-25** [Miami, City])

**Comment:** Actions that were considered safe during the 1900s, are no longer. The dangers are too great because actions to repair are never enough. (**0466-1** [Kirschbaum, Saran])

Comment: It is not the way to go. (0469-2 [Weber, Zorina])

**Comment:** It is a terribly bad idea, a fools' errand. (0470-3 [Lenz, Andrew])

**Comment:** This is a bad plan anyway. Even the existing structure poses a potential threat. Why make it even worse? Bucks for someone and other people are just collateral damage? (0471-2 [Manter, Larry])

**Comment:** As a resident of Florida, I get a voice in the discussion about the proposed new nuclear reactors at Turkey Point and I say NO to the proposed project. (0472-1 [Ball, Cheri])

**Comment:** Please do NOT move forward with the proposed nuclear initiative as FPL has proposed. (0472-3 [Ball, Cheri])

Comment: NO to Nuclear Expansion! (0475-1 [Mayer, Karen])

**Comment:** Please come to your senses. Help your children and grandchildren inherit a world that's worth living in !!! Show them our generation's concern for the rest of the world doesn't end at the tip of our noses !!! (0478-1 [Svensson, Bo])

**Comment:** Couldn't believe what I was reading when I saw this. As a former Miamian, and someone who has witnessed the savging of Florida's once-rich resources, this proposal at first seemed like a fundraising ploy - or a bad joke. Even without the inevitable rise in ocean levels, it is a demented and dangerous idea. (0479-1 [Pearce, J. B.])

Comment: No. Simply NO. (0480-1 [Simmerman, Scott])

**Comment:** Send them back to the drawing board. And PLEASE, do not succumb to the probable greedy interests behind this approach to problem solving. (**0484-3** [Speno, Charlie])

**Comment:** Someone's corporate greed and profits are probably at stake here but they will live without this. (**0486-2** [Douglas, Carolyn])

Comment: Too close for comfort! This is not a smart move! (0489-1 [Galbreath, Jerry])

**Comment:** EXPANDING THE NUCLEAR FACILITY WILL DO HARM TO THE ENVIRONMENT. PLEASE DO NOT APPROVE THIS PROJECT. THANK YOU! (0490-1 [Jurczewski, Carol]) **Comment:** Saving this beautiful place forever should be a priority. It is very important to sustaining the clean water supply for Florida as well as environment for the wildlife. Please do not destroy anymore habitat at this location. (**0504-1** [Gomez, Toni Thoman])

**Comment:** This is true information and I think the fact that they kept this out of the news may be good ammunition for you to use to Stop enlarging Turkey Point Nuclear Reactor Now ?? !! (0505-3 [Buyea, Thomas])

**Comment:** In reference to Docket ID: NRC-2009-0337, I oppose FPL's proposal to build two more nuclear reactors at their Turkey Point site in South Florida. (**0508-1** [Harrison, J. M. M.])

**Comment:** The location is vulnerable to Hurricanes, sea level rise and terrorist attack. By all measures this proposal should be rejected. (**0509-3** [Otto, Peter])

**Comment:** The concerns and objections to this project were succinctly expressed in the following article: <u>http://www.miamiherald.com/opinion/op-ed/article20380647.html</u>. Please add my objection to this enormously impactful and dangerous project. (**0510-2** [Langlieb Greer, Evelyn])

**Comment:** Please accept and review my letter in opposition to nuclear reactors at Turkey Point. (**0511-1** [Draper, Lonnie M.])

**Comment:** I am asking you to do everything in your power to protect Miami from these risks. (0515-8 [Regalado, Tomas])

**Comment:** Please deny permits for the proposed expansion of the Turkey Point Power Plant in Homestead, Florida. (0518-1 [Weiss, Arwen])

**Comment:** IF people were truly smart they would recognize the basic concept of carrying capacity and realize the solution is fewer people. So please stop empowering stupidity and help make people be responsible for their actions. Please do not support this project. (**0520-1** [Bernatis, Jenn])

**Comment:** As a South Florida resident and a citizen concerned about the protection of our local nature, wildlife, and the future risks to everyone who resides near to this project, it is my duty to tell you that i believe strongly the risks inherent in this expansion outweigh the benefits of constructing extra nuclear capacity. (**0523-1** [Mitzkewich, Yuri])

**Comment:** Thank you for considering my request. According to the NRC's own guidelines this expansion is prohibited! Why is it even being suggested? Tell them "NO!" and be done with it! (**0531-1** [Slaton, Marina])

**Comment:** This proposal is in violation of the NRC's own guidelines. Why is it under consideration? (0535-1 [Bump, Deborah])

**Comment:** NO EXPANSION OF NUCLEAR PLANT AT TURKEY POINT!!!! (0536-1 [Mikan, Edward])

**Comment:** It surely doesn't seem that expanding Turtle Point is a good idea. (**0539-2** [Malone, Peggy])

**Comment:** It is essential that you stop it now, no new plans for Turkey Point!!! (**0540-4** [Burge, Laura])

**Comment:** I am very opposed to more reactors at Turkey Point. This is wrong for a large variety of reasons: Environmental, safety, visual (tourist and locals viewing the power lines), impedes Everglades restoration, financial (nuclear has been an expensive boondoggle). I can go on at length. As a taxpayer and user of electricity from FPL I object to having to pay for this. (0543-1 [Ryan, Jim])

**Comment:** This is a ridiculous waste and FPL and the NRC are on the wrong side of history. Wake up! (**0543-3** [Ryan, Jim])

**Comment:** Expanding a nuclear power plant in ths area makes no sense to me. It is in Hurricane Alley, it's at ground zero for sea level rise in the US, it is a beautiful tourist attraction, it is a delicate ecosystem, and the area is already suffering from salt water intrusion that will presumably only be excerbated by these new units. (**0544-1** [Ehrenfried, Jennifer])

**Comment:** I request that you deny FPL's request to spend in excess of 18 Billion dollars in order to construct two new AP-1000 reactors at Turkey point and operate them mid 2020's onwards to 2090's. (**0545-1** [Keating, Tim])

**Comment:** I am against the proposed new reactors at Turkey Point and agree with the comments made by the South Florida Wildlands Assn. (**0546-1** [Hoffmeyer, Lisa])

**Comment:** I am against any nuclear power plants operating in areas that are prone to natural disasters which could cause long-term power outages, flooding, wildfires, or seismic activity. Look at what has happened and continues to happen at Fukushima. Can you fathom the situation if that type of accident were to occur in a deensly populated area in the US? (**0547-1** [F\*\*\*\*SH, Peter])

Comment: Please stop the madness! (0550-5 [H., Pat])

**Comment:** Please do not approve this project, there are way too many health and environmental risks involved. (0553-1 [Punnett, Daniela])

**Comment:** I am leaving Miami if this project goes through, in order to protect my family and two children. It is outrageous that this is even being considered. (**0553-3** [Punnett, Daniela])

**Comment:** Having spent 31 years in the USMC and travelling the world I clearly understand both perspectives. However, the take away for me is once we destroy what nature has provided, there is no going back! Look at the lessons the world has learned, but can't undo, don't make this another mistake we, and more importantly our children live to regret! (**0557-1** [Smythe, Ana])

**Comment:** In reference to Docket ID: NRC-2009-0337, our right to clean water, land and air, essential to life liberty and the pursuit of happiness, trumps their right to build a plant and pollute our environment with radioactive waste and discharge, and a possible meltdown, especially in the path of major hurricanes. Have we learned anything from the Fukushima Disaster? Why isnt there a major effort to make the Sunshine State the Solar Powered State? Hence, I vehemently oppose FPL's proposal to build two more nuclear reactors at their Turkey Point site in South Florida. (0559-1 [Lettieri, Tammy])

**Comment:** As a retired Bechtel employee involved in nuclear power plants, I am very familiar with plant design and its impacts. (**0562-1** [Hardie, Daniel])

**Comment:** OUTRAGE AND OPPOSITION TO THE PROPOSED INSANITY OF EXPANDING TURKEY POINT POWER PLANT (**0564-1** [Dimondstein, Carla])

**Comment:** This is comparable to the Indian Point Nuclear Facility in NY which is now threatening residents in a very wide circle!!!!! (**0566-1** [Rosenfeld, Alice])

**Comment:** I am writing as a citizen and a physicist in reference to Docket ID: NRC-2009-0337 to express my opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0567-1** [Cohen, Howard])

**Comment:** I am writing in reference to Docket ID: NRC-2009-0337 to express my opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0568-2** [Goldberg, Laura])

**Comment:** As a citizen of Miami-Dade county for my entire life, I am deeply concerned by the actions FPL is trying to take with regard to nuclear expansion. While I understand that our cities and counties have growing needs for energy, I do not believe this is the right route to take. (**0570-1** [Martinez, Orlando A.])

**Comment:** For these reasons, and others highlighted here: <u>http://www.miamiherald.com/opinion/op-ed/article20380647.html</u> I ask that you NOT grant FPL permission to move forward with it's proposal. (**0570-5** [Martinez, Orlando A.])

**Comment:** This proposed expansion is a real turkey! It poses danger to our lives, nothing less. Please do not allow expansion. (**0572-1** [Mcintyre, Frances])

**Comment:** As a member of the local community (living in unincorporated Miami-Dade County only a few miles from Turkey Point), I urge the commission NOT to approve the FPL application. (0573-1 [Trauner, Keith])

**Comment:** I'm against this project, this doesn't benefit the HEALTH or ENVIRONMENT. (0574-1 [Fuentes, Mariana])

**Comment:** I am opposed to the expansion of the Turkey Point nuclear power plant. (0579-1 [Schwab, Roy])

Comment: [Do] not allow this expansion to go through. (0579-6 [Schwab, Roy])

**Comment:** Are you people crazy??? This scheam is deviant and devoid of any rational thought ! DO NOT DO THIS!!! (0580-1 [Lawrence, Theresa])

Comment: Think! This is a hideous idea; STOP THIS !!! (0580-3 [Lawrence, Theresa])

**Comment:** In my estimation it is time pull the plug on this ill thought out endeavor. (0585-1 [Hilderbrandt, Todd])

**Comment:** Having learned about the proposed expansion of the Turkey Point Power Plant that is in Homestead, Florida, I write to urge that this not be approved. (**0588-1** [Hanna, Jane])

**Comment:** I am an ordinary citizen of Florida and a concerned citizen of the United States. It is so common for we humans to put off until tomorrow what we can do today. With regard to the environment and to clean energy we have put off action so long we really have to STOP doing

business as usual now. Please do not approve FPL's request to build two additional nuclear reactors at Turkey point. (**0595-1** [Ghosh, Susan])

Comment: I object to the new reactors. (0596-1 [Sorenson, Katy])

**Comment:** Bad idea! Think that more creativity is needed to solve energy needs without endangering, plant, animal and human life. (**0600-1** [Edwards, Suzi])

**Comment:** The Point Is: they can't be trusted to do the right thing as only PROFIT drives them!! (0604-2 [Courliss, William])

Comment: This is irresponsible. (0606-1 [Metje, Melodie])

**Comment:** As a SCUBA diver, I can appreciate further environmental issues from nuclear expansion. (**0614-1** [Dauerty, Barbara])

**Comment:** To put it succinctly, there is no way that the NRC can claim to meet its legal obligations to public health and environmental safety in licensing the construction of these plants in South Florida. The combination of the AP1000's new and untested "passive safety" features and the particular meteorological, hydrological, and population density characteristics of the area preclude the legal licensing of Turkey Point 6 and 7. (**0615-1-12** [Bethune, David])

**Comment:** Given now the incontrovertible evidence that the applicant's COL for Turkey Point 6 and 7 presents unacceptable risks to human health and the environment, I demand that the NRC swiftly and conclusively terminate these licensing proceedings. (**0615-3-12** [Bethune, David])

**Comment:** The two new proposed nuclear reactors at Turkey Point are not only dangerous for the environment, but dangerous for the community in a fragile location. (**0625-1** [Felinski, Julee])

Comment: Stop this development at Turkey Point, before it's too late! (0625-5 [Felinski, Julee])

**Comment:** Shame on you for even considering this. You're a public menace and this needs to STOP! Oh, but what YOU are doing will be "safe"? Get real! Stop these plans right now!! (**0628-3** [Anonymous, Anonymous])

**Comment:** Please do not approve this expansion at Turkey Point. (0631-1 [Griswold, Dave])

**Comment:** Please reconsider these projects. (0633-1 [Cornely, Tina])

**Comment:** The habitat for wildlife cannot-be replaced if there is an accident and I believe the risks are too great to warrant going forward with the Nuclear Power Plant. (**0635-2** [Seiman, Rhonda])

**Comment:** Please deny the application for more nuclear plants in south Florida. (0635-4 [Seiman, Rhonda])

**Comment:** I am writing in opposition to FPL's request for two new nuclear reactors at their Turkey Point location. (0642-1 [Rawlins, Steve])

**Comment:** I urge the Nuclear Regulatory Commission to deny approval to the Florida Power and Light company to build two more reactors. Let us start to behave in a way that is safe and environmentally sound. (**0642-6** [Rawlins, Steve])

**Comment:** But at a minimum, please don't add to the problem! (0643-4 [Joannou, Jr., Benjamin])

**Comment:** Please don't add any new nuclear reactors! (0643-6 [Joannou, Jr., Benjamin])

Comment: I say no. No, no No! (0644-1 [Anonymous, Anonymous])

**Comment:** This is absolutely irrational unless you have a vested interest. And you are a sociopath and are devoid of empathy of any kind. (**0644-5** [Anonymous, Anonymous])

**Comment:** The Homestead/Miami area is also at a high statistical risk for hurricane hits. We all know that Homestead was devastated in August, 1992 by hurricane Andrew. We should take this risk seriously, and admit, that for this reason alone, expansion at Turkey Point Power Plant is a very poor idea. (**0646-1** [Pattison, Janet])

**Comment:** As a matter of fact I strongly feel it would be absolutely stupid and absurd to expand this plant. (**0651-1** [Young, Kim])

Comment: This expansion should ABSOLUTELY NEVER HAPPEN!!!!!!! (0651-3 [Young, Kim])

**Comment:** PLEASE DO NOT ALLOW THIS TO HAPPEN, WE DO NOT NEED A BIGGER PLANT!!! (0651-5 [Young, Kim])

**Comment:** I do not support the construction and subsequent operation of Units 6 & 7 at Turkey Point. I believe the potential negative environmental impact creates too much additional risk for the area. (0653-1 [Hickey, Alan])

**Comment:** I am one hundred percent opposed to building/expanding Turkey Point Nuclear Plant. (0662-1 [Anonymous, Elena])

Comment: bad idea.. (0664-1 [Alvarez, Chad])

**Comment:** I vehemently oppose the proposed expansion of nuclear reactors at turkey point. Please, for once, think of the health of the citizens of Miami and their families. Not to mention the environmental impacts could be catastrophic. Please don't let this plan pass, it is a mistake and a tragedy. Miami is vulnerable enough to climate change, let's make a good example of Miami as a leader in environmental protection and human health--oppose these reactors!!! (**0665-1** [Castro, Alyssa Tomasi])

**Comment:** I am opposed to the building of two additional nuclear reactors at Turkey Point. If they were built the damage to the environment would be huge. (**0666-1** [Jens-Rochow, Steve])

Comment: The building of these reactors is an abomination (0667-1 [Brown, Bradford])

Comment: No to the two planned nuclear reactors. PLEASE! (0672-1 [Barnidge, Virginia])

Comment: I urge you to deny the permit for building reactors #6 and #7. (0674-8 [Dwyer, Karen])

**Comment:** Don't put our beautiful peninsula in jeopardy by approving more nuclear reactors. (0677-7 [Chiszar, Benjamin J.] [Jacobs, Lee] [Klopfer, Carol])

**Comment:** Don't commit our children to this fiasco! It's good for FPL, not the public! (0679-1 [Jacobs, Lee])

**Comment:** Please treat our neighborhood as if you were living here. (0684-1 [Scherr, Matthew])

**Comment:** How else can the government screw up our natural resources, it goes on and on, and we seem helpless to stop it!!!! (0690-1 [Egan, June])

**Comment:** We do NOT need to expand this facility, especially in such a vulnerable area. (0692-2 [Nickerson, Nancy])

Comment: This project is just a really bad idea. (0693-2 [Dorn, Kathryn])

**Comment:** We simply do not need any more nuclear facilities. (0696-1 [Johnson, Rheta])

**Comment:** Please, please, please listen. This issue is vitally important to each and every one of us--worldwide. We are writing in reference to Docket ID: NRC-2009-0337 to express our opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0698-1** [O'Donahoo, Gayle] [O'Donahoo, Roger])

**Comment:** The risk of nuclear contamination in this delicate environment is far too great. If we allow this project to move forward we will never be able to turn back again. (**0709-1** [Cummings, Frank])

**Comment:** The construction of a new power plant is a very bad investment for the people of Florida and should not be carried out. (0713-4 [Heiney, Jamie])

**Comment:** Have we gone insane, suicidal or are we just stupid!? (0718-3 [Buechler, Jerry])

**Comment:** Please be mindful and recognize this is a choice that comes from greed. We are all one and we are the environment. By taking care of our present, we take care of our future. Please don't let this happen ... It's time for change. (**0720-3** [Bastidas, Mauricio])

**Comment:** So I'll just conclude it by just saying that, again, I'm not a technical expert, but from my vantage point working in State policy, just asking you to understand that the artificial incentive to pursue this application on the part of our electric utility is because we're being forced to pay for it by State law. And that's the reason why I believe that in their application and in their zeal they can ignore the cost on our economy, they can ignore the cost on our community, on safety, and our environment, and on behalf of my constituents, I ask that you not do the same. (0721-1-11 [Rodriguez, Jose Javier])

**Comment:** So what would the environmental impact of building 6 and 7 be? It will compound the disaster which has already occurred at Turkey Point, possibly the worst place to produce energy on the planet. (0721-12-8 [White, Barry J.])

**Comment:** So for all of these reasons I encourage all of you to go research some of these things and write in and let's oppose this and stop this plant from being built here. (0721-23-9 [Bethune, David])

**Comment:** The many objections from residents like me are outlined in the form letter sent to you. (0721-26-4 [Koenigsberg, Linda])

**Comment:** I would suspect that the executives of FP&L, the architects of these reactors, the stockholders who will profit from their construction, and many other amoral participants who will benefit from this insane project, are full of optimism about how safe it is, how environmental,

how necessary. Except that it is none of those things. It is a time bomb being placed in our State, our neighborhood, where the residents are being forced to give up their peace of mind, future safety and property values to satisfy the greed of FP&L and all those who support this highly dangerous endeavor. There were other locations that assumed there was no problem like this. Three Mile Island, Chernobyl, Fukushima. But unlike Chernobyl we're not a remote community that can be isolated in the event of a disaster. We are a major American city and placing us in even the most unlikely danger is a terrible, terrible idea. (0721-26-7 [Koenigsberg, Linda])

**Comment:** Please say no to the two new nuclear plants at Turkey Point. (0721-28-12 [Wilansky, Laura Sue])

**Comment:** There is just no way that I think anybody can justify expanding nuclear energy in South Florida. (0721-29-3 [Yovel, Ephrat])

**Comment:** First of all I just want to say that the Sierra Club opposes the expansion of FP&L Turkey Point at 6 and 7. (0721-30-1 [Ullman, John])

**Comment:** This plant is in the wrong place. Just because we had the plant, this plant was -- the first two plants, nuclear reactors were built starting in 1967, that doesn't mean we should continue to build two new reactors there today. (**0721-30-5** [Ullman, John])

**Comment:** I think in the -- when I was an attorney in the legal world we call what FP&L's proposing, or what the ratepayers are screwed under a statute under, as an illusory promise. What does that mean? It is a promise that doesn't have to be kept. It's like, oh yeah, oh, I can do that. But there's no obligation for them to do that. So, yeah, sure, they can make all the promises they want but they're not bound by it. So you can give them the money now, they charge -- can jack up their rates. And then, oh, midway through a project, no, we don't need to finish it but we'll keep the money. So it just seems like a really bad idea, just, you know, out of common sense that we should never support such a bad idea. (0721-31-11 [Almirola, Alejandro])

**Comment:** I ask that the NRC reject this application. (0721-32-10 [Schlackman, Mara])

**Comment:** Now, you can see right here how many seat do they have. Florida Power and Light he mention problematic. One of you mention problematic. It's everybody. They no put it in the news. Why they not put it in the news? This room ain't going to be full. So he wants on the people only they can be in favor of the plan. I'm against it. (**0721-33-1** [Herrera, Luis])

Comment: And I think everybody they got to be against this. (0721-33-3 [Herrera, Luis])

**Comment:** But to just say that -- I see this and from a quality management perspective there's too many flaws in this. And this is from me being involved for 25 years in manufacturing, and being a supplier to you. I'm telling you right now, this is not the best course of action. There are other ways to make money. (**0721-34-3** [Gomez, Albert])

**Comment:** I'm the Vice-Mayor of South Miami, and I assure you, everybody in that City is against the additional nuclear reactors. And I would say everybody throughout most of Dade County who is aware of this, is against it. (0721-6-5 [Harris, Walter])

Comment: I hope the Commission does not build this. (0721-7-8 [Edmond, Gabriel])

**Comment:** I'm here to express our serious concerns regarding this project. FP&L has proposed installing two new nuclear reactors at Turkey Point. If expanded, Turkey Point will become one of the largest nuclear generating facilities in the country. (0721-9-1 [McLaughlin, Caroline])

**Comment:** I'm representing a large number of students at UM who oppose the expansion of the Turkey Point Power Plant for a couple of reasons. There are many potential risks to public health associated with this project as well as stress to the environment. (**0722-14-1** [Kaul, Devika])

**Comment:** I just wanted to say we do not support the expansion of Turkey Point. (0722-14-6 [Kaul, Devika])

**Comment:** I want jobs, too, but I want to survive and I don't want to lose my heritage which I'm watching disappear. Even my own mother's house, I realize this is -- the trees, I didn't think I would ever have to become such a tree hugger but I'm seeing them all disappear. (0723-11-9 [Berendsohn, Catherine])

**Comment:** I'm here tonight on behalf of our nearly one million members and supporters nationwide including over 18,500 members here in Florida alone to express our serious concerns around this project. (0723-4-1 [McLaughlin, Caroline])

**Comment:** PROTECT OUR NATIONAL TREASURES...NO NUCLEAR EXPANSION! (0730-1 [Smith, Pamela])

Comment: This plan is absolutely unacceptable. (0733-1 [Colby, Helen])

**Comment:** Are you kidding? The proposed expansion of Turkey Point Power Plant is a disaster waiting to happen! (**0734-1** [Johnston, Judy])

**Comment:** As a former resident of Miami where two of my children were born I am completely opposed to any further expansion of the Power Plant with future concerns for unborn children in the future. (**0735-1** [Houghton, Francis])

**Response:** These comments express opposition to the licensing of new nuclear reactors at the Turkey Point site. The NRC carefully reviewed the application against its regulations that are intended to protect public health and safety and the environment. These comments do not provide specific information related to the environmental effects of the proposed action, and no changes were made to the EIS as a result of these comments.

**Comment:** We live in Miami and are opposed to this. This is an opportunity for us to invest in energy that isn't going to be more harmful to the environment as well as the residents in Miami. Please think about the long term impact. (**0003-1** [Ortiz, Natalia])

**Comment:** Please, as a parent, as a Miami resident, I beg you to do what's right and vote against this. Put yourself in our shoes, would you want this project in your backyard? We want to teach our kids about saving our planet and be green, but as adults we continue to make decisions that go against what we teach. (**0003-3** [Ortiz, Natalia])

**Comment:** This project is unsafe for the environment and it is unsafe for the citizens who will be impacted by it! (**0007-3** [Johnson, Nadine])

**Comment:** We have sufficient risk and power. We do not need any additional of any. Especially RISK. (**0019-1** [Bejarano, Antonio])

**Comment:** Please, either reject this project or require FPL to propose a better proposal to safeguard our health and quality of live. (**0024-3** [Roque, Julio])

**Comment:** I urge both the Commission and the State of Florida to prevent the expansion of the Turkey Point nuclear plant in Homestead, FL and invest in renewable energy instead. (**0033-1** [Van Thienen, Mateo])

**Comment:** With all due respect to all involved in the decision making for the Turkey Point Nuclear Expansion, why do you have to put two more reactors in such close proximity to neighborhoods, schools, hospitals etc? (**0040-1** [Pareto, Rolando and Marlene])

**Comment:** I understand that FPL and Turkey Point wants to build an additional (2) nuclear reactors at the site......I live about 5 miles from Turkey Point and I am totally against the proposed plan......First of all, you will be subjecting us to possible inherent risks in building these 2 nuclear reactors......We live in an environmentally sensitive location where one mistake could be catastrophic to South Florida......and to everyone that lives anywhere near this plant.

I, for one, do not want these nuclear reactors built, we have seen other catastrophe's that have happened around the world when something goes wrong at these reactor sites......It would change So. Florida forever. Quite sure you can find some other alternative plan to harness electricity...... (0042-1 [Tambussi-Brechon, Linda])

**Comment:** I am opposed to the building of any more nuclear reactors at Turkey Point, in South Florida, and elsewhere within the State of Florida. As I am sure you are aware history has shown that the potential exists for unplanned "incidents" to occur at or within nuclear power plants. The most recent of these, of course, was Fukushima. The best of intentions can go wrong and do go wrong. As we have seen, the results of such an unplanned "incident" can be catastrophic and long lasting. We are still experiencing "fall out" from Fukushima; in the Pacific Ocean, in sea life, in the lives of the people of Japan and the wasteland surrounding Fukushima. They are still having difficulty containing the radiated material from the reactor "incident." Given the proximity of Turkey Point to the major population centers of South Florida, its close location to the unique and environmentally sensitive Everglades and its coastal location potentially exposing it to the effects of rising sea levels, the Turkey Point Nuclear Power Plant exposes the population and natural environment of South Florida to unintended, but nevertheless, extraordinary risk. One serious nuclear power plant "incident" and South Florida would be forever changed. Large numbers of citizens, as well as animal and sea life, could be sickened by such an "incident". The fact that the Power Plant is located right on the coastline, would also impact the Atlantic Ocean not just in South Florida but, via the jet stream, the coastline of the eastern United States and coastlines of our European neighbors. It is my understanding that the new nuclear reactors would be providing power for northern Florida as well as the lower south eastern States. At what expense to humankind? (0043-1 [Grill, Helen])

**Comment:** I urge the NRC, and FP&L, to abandon this ill-conceived plan to expand nuclear power generation at Turkey Point. (**0044-9** [Commenters, Multiple])

**Comment:** I had been notified about those dangerous 2 plants that FPL is planning in building in Turkey point FL. I urge not to approve this plan because it is a threat to the public and the all living creatures around. (**0047-1** [Bazzi, Noell])

**Comment:** Given the advent of viable, lower cost, and benign alternative power generating technologies such as wind and solar, the risks associated with the expansion of Nuclear Power

in South Florida far outweigh any possible benefits that may be derived. (**0049-3** [Kowalski, Kathleen S.])

**Comment:** I am very much against the expansion of 2 additional nuclear power plants as part of the Turkey Point FPL power system. I am also against the 80 ft tall power poles planned for going along US1 in Miami-Dade County. The risks to the area by having such additional power plants from rising sea levels and the probability of a risk from more power plants are unacceptable. The Greater Miami area is one of the few economic power houses in this part of Florida and it would come to a complete standstill if there were a mishap. (**0050-1** [Simon, Gary P.])

**Comment:** Simply stated, approve this plan at our peril on the basis of one corporations greed, or follow science, reason, and your duty as a public servant, and deny any expansion of Turkey Point. Please do not let a handful of billionaires give my family radiation poisoning, so that they can make a little more money. (**0051-4** [Smith, David W.])

**Comment:** This letter is to inform you of my opposition to the construction of the two proposed Nuclear Power Reactors - 6 & 7- at Florida Power and Light's Turkey Point facility. I will not bore you with tales about the dangers of nuclear accidents. Those are already well known. (**0053-1** [Sasiadek, Alfred])

**Comment:** Well please protect my family, friends and neighbors Please employ some decency, dignity and integrity (that's where you do the right thing when nobody is looking) It matters a great deal. Let this plan be set in motion and it will reduce the entire population of South Florida to just something else they'll give odds on in Las Vegas. below is the standard protest letter but I wanted you to know I love my home and I hope you read this and plays to you as sincere, (**0056-4** [McCall, Eric])

**Comment:** I urge the NRC, and FP&L, to abandon this ill-conceived plan to expand nuclear power generation at Turkey Point. I sincerely agree with this estimation of probability, (**0056-5** [McCall, Eric])

**Comment:** The question of whether nuclear power is good or bad is not the main issue here. Rather, the issue is whether this project in this particular location should be allowed to go forward. South Florida Wildlands thinks it should not, and so do I! I will not support this endeavor. (**0059-1** [Holland, Karen])

**Comment:** Numerous respectable South Floridians have provided valid and scientific back -up to confirm that these nuclear plants should not be build down here. (**0060-2** [Beckman, Yvonne and Douglas])

**Comment:** This letter is to express my negative to the construction of a nuclear central in Turkey Point. We have the right and the duty of take care of our lives and our security. I say NOT to this project because is dangerous. (**0064-1** [Fernandez, Maria Cristina])

**Comment:** I simply am not willing to take the necessary personal and financial risk to further FP&L's business objectives. I hereby request that you deny and the construction and operating license for the proposed facilities at Turkey Point. (**0067-4** [Commenters, Multiple])

## Comment: I am not. This is a pure and simple business decision. NUCLEAR POWER IS BAD BUSINESS. BAD FOR ME, BAD FOR YOU BAD FOR EVERYONE IN SOUTH

FLORIDA PLEASE SEND A LETTER TO THE NRC BEFORE MAY 22, expressing your opposition to the nuclear expansion of Turkey Point. (0071-2 [Stanley, Gael])

**Comment:** I am very much against any plans for adding 2 nuclear towers to the Turkey Pt. Power Plant. I am a resident of the Ocean Reef Club in Key Largo, FL. We understand the impact that this could and probably will have not only on our waters but also the protected wildlife plus hundreds of species of birds that migrate through this area.... To add insult to injury - this is energy being sold to Georgia!! This <u>is our precious environment that we must take care</u> <u>of for the sake of all of our children and their children</u>...It is my hope and prayer that this project is dropped. (**0074-1** [Streit, Didi])

**Comment:** Now FPL want to build two more nuclear plants at Turkey Point. The plants that already exist, and the new ones proposed, as well as ALL that nuclear waste at Turkey Point, WILL be underwater in the foreseeable future. To me, that one fact is sufficient reason not to build these new plants. Game over! But if that's not reason enough for you, there are plenty of other compelling reasons. (**0078-4** [Wilansky, Laura Sue])

**Comment:** It [FPL's expansion] would spend billions of dollars that could be better spent on power conservation and alternative energy projects. Its design does not take into consideration the reality of climate change; in fact it puts Florida's power grid at risk. This expansion plan is poorly conceived, inadequately designed, and environmentally harmful. As a resident of Miami-Dade County, Florida, I urge you NOT to approve two new nuclear reactors at Turkey Point. (**0079-2** [Cathey, Turner])

**Comment:** This is a political and financial dark and ugly play. Take an afternoon and ask your six year old child, grandchild, or neighbor what is important. All we really need to know we learned in kindergarden. LISTEN, LEARN and LOVE. (**0089-3** [Hubler, Gina Marie])

**Comment:** It is with grave concern that i write to you in reference to Florida Power and Light request for approval into adding 2 new Nuclear Reactors to their plant in Turkey Point Florida. I have read the plan in detail and i am dumbfounded to see that they are still moving forward with a plan that Floridians and Miamians do not want. Their plan fails to guarantee any type of safety to our citizens. It's not cost effective for us and it poses a mayor catastrophic risk in the event a big hurricane hits us or with the rise in sea levels. I can go on stating many other reasons, but I will refrain due to the lack of time you have. I want this letter to be clear and strong statement that I strongly oppose the expansion of Turkey Point with this new reactors. (**0092-1** [Merino, Miriam])

**Comment:** I am writing in opposition to the proposed expansion of Turkey Point Power Plant in Homestead, Florida. I know that nuclear plants aren't always that dangerous, but national parks are created to protect species. Doesn't that counterproductive? (**0105-1** [Tucker, Lauren])

**Comment:** I hope the you & your colleagues are un-biased & have enough integrity & complete enough with your science to come to the stronger conclusions against FPL wanting 6 & 7 Nuclear Reactors, because you have also factored in, along with Global Warming flooding where Turkey Point resulting in even greater damage to people's health & tourism, that: When FPL (& the nuclear power industry) claims they are either 'Green' or Carbon Free or Low Carbon Foot Print they are lying, (0120-1 [Shark, Jason])

**Comment:** As a lifelong resident of S. Florida (I was born in Miami in 1961 and have lived here ever since) I am asking that we NOT build any more nuclear power plants in South Florida. The

risks are just too great. Our potential for solar energy has hardly been tapped. Please heed the warning of Fukushima, and don't build any more nuclear power plants on coastal sites, so vulnerable to hurricanes, rising sea levels, and more. Thanks for your consideration. (0142-1 [Dronsky, Rick])

Comment: NO NUKE EXPANSION. (0144-1 [Warzalla, Jim])

**Comment:** The risks are entirely too great for this to take place. Please reconsider. (0147-3 [Jones, Joan and Robert])

**Comment:** The Miami-Dade County area is highly populated and functioning nuclear reactors within the county would represent a constant threat to the lives of the residents. (**0148-3** [Brinn, Ira])

**Comment:** Nuclear might have its place--but not in Southern Florida. (0150-4 [Otis, Martha])

**Comment:** Please vote NO on any expansion. Have you not heard of Fukushima? (0158-3 [Carlson, John])

**Comment:** Will our children, grandchildren and other future generations some day ask us, "Why did you do it? Were we not worth saving our environment?" (**0159-7** [Bazzone, Barbara])

**Comment:** I am shocked to learn of this project that is clearly out of the question. It is totally unacceptable in this fragile coastal area with incredible biodiversity of plants, fish, birds, and animals. It is frightening to think of all the destruction, and damage you will cause if you are allowed to go through with this project. You are putting humans, wildlife and an irreplaceable landscape and habitat at risk. How dare you even consider such a project that puts us all, not just humans, but all of God's Creations in danger. What you are doing will have far reaching consequences that must not happen. None of us wants to see Florida having to deal with an experience the horrors Japan endured, and that is exactly what you are bringing upon all of us, and I do not think you have the right to sacrifice us for your greed. We do not need or want your Nuclear Reactors, that have the potential to take away the Future Generations and cause pain and suffering, and destroy our Waters. I could go on, and on, speaking about the water you will use for your cooling systems, nuclear waste, spent fuels rods, and all the other science based problems, but I know many have already done this, to obviously blind and deaf individuals who are suppose to care about our well-being and safety. Florida will hold all of you responsible for even the slightest accident! Do not destroy us. Do not do this project. The risks are tod great. (0160-1 [Larsen, Shannon])

**Comment:** No more nuclear in Florida PLEASE enough already (**0161-1** [Anonymous, Lynn])

**Comment:** The recent fire and explosion at the Indian Point Nuclear reactor outside New York City on the Hudson River is a further example of the potential danger of such plants. The Turkey Point nuclear expansion is "an accident waiting to happen." The NRC should use it's powers to prevent such accidents from happening. (0184-3 [Perez, Danica])

Comment: Please think twice before destroying innocent lives. (0188-2 [Frederickson, Kelly])

**Comment:** The proposed expansion of the Turkey Point Nuclear Power Plant has the potential to destroy, in an instant, everything I have spent my life working for. With this fact in mind I would like to object to the plan to expand the Nuclear Power Generators at Turkey Point. (0206-1 [White, Holly])

**Comment:** I am extremely concerned about the proposal to add more nuclear reactors to the FP&L Turkey Point Site. I consider this option to be extremely irresponsible to the people who live in South Florida and to the rest of the planet for that matter. (**0207-1** [Cleland, Noel])

**Comment:** How the expansion of this Nuclear Power Plant can be under consideration is inconceivable! Have we not learned enough from recent history that shows the danger and potential for catastrophic loss of life and damage to the ecosystem! The time to shut down any plans for more nuclear power generation is now! (**0225-1** [Lawson, Ken])

**Comment:** Please think about the future of your and our families and every living creature. We don't need another threat around us. We all deserve to live in peace and to be safe. (**0238-1** [Padilla, Dora])

**Comment:** Please invest your dollars in safe energy, public and environmentally responsible energy resources, not two new nuclear power plants. Why are you putting us at risk. I'd rather light a candle. (**0241-1** [Portuondo, Pilar])

**Comment:** In the final analysis: Expanding the Turkey Point Nukes serves only FPL's corporate shareholders. It exposes the surrounding communities to a mind-numbing level of risk. We are literally paying the price to endanger our whole future. Please don't approve expansion. (**0252-20** [Van Leer, Sam])

**Comment:** I hope you have the courage to do the right thing for the people and our planet. (0257-3 [Padron-Delgado, Blanca])

**Comment:** I do not support nuclear power, and I certainly do not support expanding a facility! Why don't you all move to Fukushima and call it quits... (**0271-1** [Thomas, Gina])

**Comment:** Haven't you learned enough of a lesson seeing the tragedies that have taken place in the world with nuclear power plants? Please deny this project. (**0287-2** [Beiriger, Mary])

**Comment:** I grew up near the Turkey Point Nuclear power plant and could see it on the horizon from my neighborhood. I lived in fear of a disaster every time a hurricane approached South Florida. Please do not expand this facility--we should be creating renewable power facilities in this country-not nuclear facilities. (0316-1 [Parker, Richard])

**Comment:** Many countries are closing down their Nuclear Power plants, one by one. It is inexcusable for you to consider expanding operations at Turkey Point. (**0331-1** [Anonymous, Anonymous])

**Comment:** There were other locations that assumed there was no problem with projects like this: Three Mile Island, Chernobyl, and Fukushima. But unlike Chernobyl, we are not a remote community that can be isolated in the event of a disaster. We are a major American city, and placing us in even the most unlikely danger is a terrible, terrible idea. (0339-5 [Provost, Allan])

**Comment:** For all the above identified concerns, I absolutely oppose more nuclear reactors to be built in our back yards. (**0340-6** [Tweeton, Tanya])

**Comment:** As a citizen and current resident of South Florida, I am totally opposed to any expansion of nuclear plants, particularly at Turkey Point. (**0353-7** [Royce, M.])

**Comment:** Please do NOT allow further nuclear development in South Florida! It is unsafe (remember Fukishima!) and unnecessary. (**0357-1** [Shapiro, Eugene])

**Comment:** Locating a Nuclear Power Generating Facility in close proximity to a densely populated metropolitan area of more than 2,500,000 people, is an ill conceived notion at best. Although this decision may be a means to enrich the shareholders of FP&L, it places the entire population of South Florida in extreme jeopardy. (**0358-4** [Norman, Ronald])

**Comment:** Florida Power and Light Company is applying to obtain site certifications and operating licenses to construct and operate two nuclear reactors of 1,117-MWe each at its Turkey Point nuclear power generating facility on Biscayne Bay. Although nuclear power produces less CO2 than fossil alternatives, nuclear power is not affordable, or clean with currently available technology, and there are safety concerns with the new plants being on the coast, and within 10 miles of large population centers. (**0364-1** [Mahoney, Robert S.])

**Comment:** Let's make it easy for you: No Water, Sea Level Rise, Stupid Idea, Old Technology, Too Much Salinity, Too many people. JAPAN. (0373-15 [Lee, Nancy])

**Comment:** Approval should NOT be granted for this project, an expansion of the Turkey Point reactor. the public should be encouraged ... even compelled ... to reduce its overuse of power, especially via nuclear power plants. Stop FPL from further filling its coffers with public money to produce these unwanted plants. (0374-1 [Livingston, Catherine])

**Comment:** Do not do evil. Do not do 'dumb'. Our nation is more valuable than to make such an out-of-date decision. (0439-1 [Hansen, Yvonne])

**Comment:** I urge you to deny the proposed expansion at Turkey Point and protect the area's people, natural resources, environment and national treasures from this inappropriate plan and dangerous, incredibly expensive and outmoded type of energy system. (**0463-6** [Gross, Cheryl A.])

**Comment:** The expansion of Turkey Point could have serious environmental impacts on sensitive ecological habitat and the health and sustainability of limited freshwater resources. Just think of what happened this past week at Indian Point. Did New York City narrowly escape nuclear disaster? (0492-1 [Mckee, Sarah])

**Comment:** Florida has so much sunshine! Do we really need to continue to expand nuclear power plants? Please veto the proposed expansion of Turkey Point Power Plant in Homestead, Florida. (0495-1 [Mazzarella, Rebecca])

**Comment:** I am writing to publicly comment on the plans for new nuclear reactors in Turkey Point. My family and I live in Miami, and we have several properties in the area. I am also an Environmental Scientist. After reading about the plans, I am completely against any new nuclear power in south Florida and hope the NRC will prevent FPL from going through with their plans. (0499-1 [Pinto, Theresa])

**Comment:** Please do not expand the nuclear power facilities here in south Florida. Currently the nuclear reactors are located in an environmentally sensitive area directly adjacent to an amazing National Park. They are just above sea level, use more water that is available and there is a huge issue with cooling ponds as it stands today. There is amble opportunities to create power from the sun here in Florida and it is a huge short sighted mistake to try to continue with nuclear at the present location. (**0507-1** [Bryan, David])

**Comment:** Unlike some, I am not opposed to nuclear power--precisely because I care so much about the threats posed by global warming and ocean acidification. But it is an energy source that must be handled with the greatest of care, and the proposed expansion of Turkey Point illustrates how NOT to do it. Hasn't anybody learned from the horrible example of Fukushima? (**0534-1** [Suda, Maryska])

**Comment:** We are in a hurricane prone location which can easily damage a nuclear reactor and in an area which will most likely see rising sea levels in the not too distant future. After what happened at Fukushima, I can't believe that we are considering adding nuclear power plants at this location. (**0537-4** [Anonymous, Judi])

**Comment:** NO to two new proposed nuclear power plants on Biscayne Bay. We barely survived Turkey Point taking a direct hit from Hurricane Andrew. (**0542-1** [Odierna, Cynthia])

**Comment:** NO, NO, NO .. stop expanding.!!! Dismantle and find alternatives for energy. I'll do my part, I'll use less lights, less air cond. Less everything that requires FPL energy.PLEASE stop. (0556-1 [Shelley, Cynthia])

**Comment:** Put the plant somewhere safer or use a renewable source of energy. We are killing ourselves with this. (0578-1 [Ramankutty, Vishnu])

**Comment:** The NRC's slogan points out that the sole purpose of the Nuclear Regulatory Commission is "protecting people and the environment." Licensing of the AP1000 design at Turkey Point would represent a catastrophic failing on the agency's part on both counts. It would shatter what little public confidence in the agency might exist and, should an accident ensue, would mean the end of nuclear power in the United States forever. As the agency charged with protecting the people of this community, you must reject these unsafe reactors as if you and your loved ones lived nearby, for I and 5 million other people do just that. (**0615-3-11** [Bethune, David])

Comment: No more poison machines! (0624-1 [Galles, Camilla])

**Comment:** As a South Dade resident, I am alarmed at the prospect of having a nuclear plant near such a densely populated area in a hurricane zone. (**0626-1** [Miller, Nyana])

**Comment:** The safety of my family and my community is not worth sacrificing at the alter of a quick fix. I urge you to deny this proposal and seek safer forms of energy. (**0626-4** [Miller, Nyana])

**Comment:** The truth is we do not want this close to our homes or in our environment period! It's toxic and deadly to life! We want to live healthy while we are here on this beautiful planet. Please honor life and the planet give back with sustainable non toxic solutions to the environment and all living beings. (**0638-4** [Anonymous, Charity])

**Comment:** Please deny the license application. I am a full-time resident of Florida and I am opposed to any additional nuclear reactors in Florida. (**0654-1** [Guy, Sharon])

**Comment:** I guess you forgot that this is FLORIDA! Nuclear plants and hurricanes DO NOT MIX. No matter what they tell you about how safe they are, they are NOT. VOTE NO! (**0658-1** [Willett, Bett])

**Comment:** No absolute NO. We don't need 2 more Nuclear Plants on Byscaine Bay. It will be a danger to South Florida. (0660-1 [Sanchez, Sergio and Irma])

**Comment:** ALL OF THE CURRENT NUCLEAR REACTORS ARE LEAKING AND CONTAMINATING THE SURROUNDING SOILS AND WATER: WHY WOULD ANY REASONABLE PERSON CONSIDER ADDING TO THESE ENVIRONMENTAL AND HEALTH DISASTERS? (0669-1 [Malyon, Hilary])

**Comment:** Florida Power & Light argues that its new nuclear project is environmentally friendly, that it will benefit us economically, and that its future plans at Turkey Point are safe. Unfortunately, none of these claims are accurate. FPLs project would reduce the availability of fresh water for our communities, it would commit South Florida to antiquated and expensive nuclear technology from the last century, and it would render our electric system vulnerable to storm surges from rising seas. (0675-1 [Rodriguez, Jose Javier])

**Comment:** I am extremely concerned about the proposal to add more nuclear reactors to the FP&L Turkey Point Site. There are much less risky solutions for meeting the energy needs of the area. (0677-1 [Chiszar, Benjamin J.] [Jacobs, Lee] [Klopfer, Carol])

**Comment:** I am extremely concerned about the proposal to add more nuclear reactors to the FP&L Turkey Point Site. My main personal concerns are: (1) need to focus on sustainable energy sources such as <u>solar</u> and (2) insufficient evacuation zones and other security issues. (0678-1 [Klopfer, Carol])

**Comment:** I am totally opposed to any nuclear plant constructed anywhere in our beautiful state of Florida. (0709-3 [Cummings, Frank])

**Comment:** New Reactors at Turkey Point should be turned down for a variety of reasons. The current reactors have had many functional and operational issues in the last few years with little public oversight or accountability. (0710-1 [Platt, George Seth])

**Comment:** I am opposed to building a new reactor at Turkey Point since it will require a vast amount of water which is a very valuable resources. It will also be very expensive to construct and could be dangerous in the case of a hurricane. (0713-1 [Heiney, Jamie])

**Comment:** Do not allow the building of 2 additional units to the Turkey Point Nuclear Plant. They represent a threat to the lives of a massive number of residents of this country. It is a threat to that we can live without. If you allow this; there will be an extremely high political price to pay for all those involved in the decision. (**0717-1** [Nieto, Victor])

**Comment:** And until those issues are fixed and corporate responsibility is maintained and it's cleaned up, then two more nuclear reactors cannot be on the table. It's wrong for Florida. (0721-10-5 [Reynolds, Laura])

**Comment:** I do want to say that not only are we living in one of the global bio-diversity --the most important bio-diversity areas in the world, this is also an incredibly urban area. And building one of the largest nuclear facilities in an area where FPL has not proven to be a good manager of their existing facilities is reckless and dangerous. (0721-29-1 [Yovel, Ephrat])

**Comment:** I echo the sentiments of everyone who's against this proposed nuclear bomb or factory or plant. It's just a bad idea waiting to happen. I mean it's just another -- Turkey Point's going to be a new Fukushima or any other disaster you want to put in the blank, and it's a bad idea waiting to happen. (**0721-31-1** [Almirola, Alejandro])

**Comment:** I think that would be you know, make more sense than putting another, you know, nuclear reactor, creating two nuclear bombs and having a Homer Simpson-like character blowing it up, you know, because of negligence or any other foreseeable disaster. I just think that it's a bad idea. (**0721-31-13** [Almirola, Alejandro])

**Comment:** Sierra Club opposes licensing, construction and operation of new nuclear power reactors utilizing the fission process... (0723-5-1 [Teas, Jim])

**Response:** These comments provide general information in opposition to the proposed Turkey Point Units 6 and 7 based on opposition to nuclear power. They do not provide any specific information related to the environmental effects of the proposed action. No changes were made to the EIS as a result of these comments.

**Comment:** The location of Turkey Point Nuclear Plant is too sensitive to expand it. (**0004-1** [Engelberg, Jodi])

**Comment:** When Turkey Point was originally developed in the early 1970s, the conditions that existed then are NOT the same as they are today. Those original conditions have changed dramatically in the ensuing years, making Turkey Point a totally unsuitable location for continued operation, much less expansion. Locating a new facility in close proximity to a densely populated metropolitan area, contiguous to natural resources, within a historically proven High Velocity (Wind)-Hurricane Zone, and defenseless against terrorism threats by not only water but air, seems at best to be an ill-conceived plan. (**0045-3** [Johannsen, Christian])

**Comment:** As Florida residents, we are very concerned about the ecological and social damage from the proposed expansion at TurkeyPoint. We are opposed to this expansion and ask the commission to look for alternatives. (**0068-1** [Prugue, Jorge and Paloma])

**Comment:** [W]hat has been proposed for the expansion of the existing Turkey Point Facility is an egregious mistake. Card Sound is a small and shallow body of water in a warm environment. An expansion of the existing plant, which is already taxing our fragile environment would be devastating in the long term. The only advantage would be to the shareholders and management by selling electricity to other parts of North America for profit at the expense of our local environment. If this expansion is approved I will sell all my FLP shares and encourage all those intuitions who hold shares to do the same. Please reconsider. (**0075-2** [Streit, Christopher V.])

**Comment:** I am writing today because you are about to make judgement on a request in my area that will potentially have terrible irreparable ecological consequences if it goes forward. As you know, FPL is attempting to gain approval on a major expansion to the Turkey Point nuclear plant in South Dade Florida. While I am not an opponent of nuclear energy, I believe it is your responsibility to protect our National Parks when a selection process is initiated. (**0081-1** [Benson, Mary] [Skove, Ellen H.] [Tompkins, Constance])

**Comment:** I feel that extensive study should be performed before any approval of this project be granted in order to guarantee that our National Parks and surrounding habitats will not be harmed. I have seen no evidence that any such studies have been performed. All I see is the plan to clear thousands of acres of natural bay front habitat bordering our National Park and the creation of a facility that will fit the business plan and line the pockets of a major corporation. (**0081-6** [Benson, Mary] [Skove, Ellen H.] [Tompkins, Constance])

**Comment:** Based on what I've read and heard about the environmental impact of the proposed new reactors (and the impact of the existing reactors), I am 100% opposed to the project. Given the sensitivity of our coastal waters, including the only living coral reef in the US, I am shocked that we are considering the addition to the environmental burden. Of course, beyond the daily addition of heated waters and waste, the potential disaster related to weather or other operational failure looms large. We might think we've engineered the plant properly, but as Fukishima showed us, Mother Nature has a way of overwhelming man made systems. As a resident of Key Largo, I am hopeful that you will reconsider the proposed expansion and begin thinking about decommissioning the plant as it's useful life reaches its limits. (**0082-1** [Jones, Michael E.])

**Comment:** We support necessary nuclear energy but certainly not expanding the initial error of placing such a facility in a location exposed to violent storms and surrounded by irreplaceable, fragile National Parks. (**0083-1** [Birsh, Arthur and Joan])

**Comment:** Please listen to the people who live here in Miami, Florida. We want a healthier environment for our kids and families. (**0088-8** [Lange, Alexandra])

**Comment:** This article was published in the Miami Herald today, reflecting our elected officials perspective on the nuclear facility being considered. It seems that we are in a time of our planet's future which every decision which is being made for infrastructure and environmental use needs to be monitored and proceeded with an open heart, and mind. This would require ALL to consider the ramifications which we are flirting with in a very serious light. I would implore you and those with whom you work with to look at the situation we are in, not from merely a financial standpoint but also a ecological and humanitarian. (**0089-1** [Hubler, Gina Marie])

**Comment:** I have no doubt that you will consider FPL's application carefully and can only hope that you come to the same conclusion as myself and countless others who feel that the building of two new reactors would be folly and ultimately harmful to all living things here in South Florida. The damage done to our water supply, our parks and most importantly, the Everglades is immeasurable. Please cast your vote to decline this application. (**0090-1** [Avers, Pamela Dee])

**Comment:** Increasing the size of the power plant does not make sense as it already impacts the habitat of the area. (**0096-2** [Roberts, Linda])

**Comment:** I find today's Miami Herald Op-Ed by Mayor Tomas Regalado, Mayor Cindy Lerner and Mayor Philip Stoddard along with State Representative Jose Javier Rodriguez to be most informative about plans for expansion of a Florida energy source. This news is disturbing on many levels. I feel the information that it will reduce safe drinking water and disruptive the tender ecology of the area to be a huge negative for placing nuclear reactors in Miami-Dade County. "FPL's project would reduce the availability of fresh water for our communities, it would commit South Florida to antiquated and expensive nuclear technology from last century, and it would render our electric system vulnerable to storm surges from rising seas. FPL ignores these difficult facts." (0098-1 [Gavel, Deborah])

**Comment:** Please consider the harm done to the environment and the shared habitat to sea life and land animals, to the birds as well as the human life forms on this planet. FPL's nuclear-power plan regressive, harmful[.] (0098-3 [Gavel, Deborah])

**Comment:** I am a long time proponent of nuclear power and I have never considered myself to be particularly an environmentalist, but I strongly urge the denial of FPL's expansion of the

Turkey Point facility. Having spent time trying to understand the pros and cons of the planned expansion, it seems clear to me that the extensive environmental damage significantly outweighs the gains from the expansion. I have come to this conclusion in spite of being an investor in public utilities and generally having a bias toward FPL. (**0099-1** [Hudson, Harold J.])

**Comment:** I strongly oppose the expansion of Turkey Point as proposed due to the project's potentially widespread negative environmental and public health and safety impacts and the serious threats it poses to Biscayne National Park. (0102-8 [Commenters, Multiple])

**Comment:** I have serious concerns that the proposed expansion of FPL's Turkey Point could significantly impact and degrade the health of our national parks, sensitive ecological areas including extensive wetlands, federally listed threatened and endangered wildlife, and the quality and quantity of limited fresh water resources. (**0104-1** [Commenters, Multiple])

**Comment:** Our comments demonstrate that there are more affordable, less water-intensive ways for FPL to meet energy demand while protecting the environment and addressing global climate change. As such, there is no purpose and need for the two reactors. If pursued by FPL, the expansion of Turkey Point could have profound and unacceptable environmental impacts to regional water resources, Biscayne and Everglades National Parks, wildlife, wetlands and threaten public health and safety. SACE believes that the DEIS fails to adequately discuss and analyze these potentially adverse impacts and includes insufficient proposals for mitigation. We do not support the issuance of COLs for Turkey Point reactor Units 6 and 7. Instead, we recommend that the NRC and USACE support the "No Action" alternative. (0112-10 [Barczak, Sara])

**Comment:** According to the standards of the Nuclear Regulatory Commission (NRC), "sites adjacent to lands devoted to public use may be considered unsuitable," and unacceptable impacts are "most apt to arise in areas adjacent to natural-resource-oriented areas." [Footnote 8: United States Nuclear Regulatory Commission, Regulatory Guide 4.7-General Site Suitability Criteria for Nuclear Power Stations, Revision 2, 1998, Section C.] In following the NRC's own standards, we advise against moving forward with the project as proposed due to the potential for unacceptable impacts on the ecological integrity and economic viability of the surrounding national parks. (0113-1-14 [Lopez, Jaclyn] [McLaughlin, Caroline] [Reynolds, Laura] [Schwartz, Matthew] [Silverstein, Rachel])

**Comment:** Please do not increase the drain on our limited water supply by allowing FPL to create two new reactors. (0115-3 [Trencher, Ruth])

**Comment:** I am alarmed by the nuclear expansion plans that FPL proposes for South Florida, especially considering our vulnerable water supply. (**0116-1** [Garcia, Ruslan])

**Comment:** When Turkey Point was first built in 1972, Earth Day was 2 years old and Biscayne National Park didn't exist, and there was no wellfield protection ordinance, you can excuse the environmental degradation it caused because we didn't understand then what we do now. We know what fresh water releases do to Biscayne Bay. We know that sea level rise is happening. We know that there are nuclear accidents like, Three Mile Island, Chernobyl, and Fukushima Daiichi happen. To expand Turkey Point in an environmentally sensitive and flood prone area, claim more water from the Biscayne Aquifer, expand a industrial use at the edge of a national park, is just dumb. (0117-1 [Robertson, Alyce])

**Comment:** Regarding FPL's proposed nuclear energy plan, What is there to say other than we, as a state, are currently ignoring just about every warning we've received from every scientist in the world telling us that in a matter of years, we will run out of fresh drinking water. We will be flooded. We will die. This is not an over dramatization, it's simply true. And yet, the only thing worse than doing NOTHING about our current problems is doing something that makes them HORRIBLY WORSE. Teach us how to be better. Save our state. Don't allow corporations to place money over humanity. (0137-1 [Manuel, Becky Randel])

**Comment:** I have serious concerns that the proposed expansion of FPL's Turkey Point could significantly impact and degrade the health of our national parks, sensitive ecological areas including extensive wetlands, federally listed threatened and endangered wildlife, and the quality and quantity of limited fresh water resources. I request that both agencies support the "No Action" alternative in reference to Docket ID: NRC-2009-0337. (0141-1 [Lucas, Carmen])

**Comment:** Clearly, South Florida is highly vulnerable to sea level rise and the impacts of climate change. This site was never an acceptable location for the Turkey Point facility there today and many decades later it has only become an even more unacceptable location. (0141-3 [Lucas, Carmen])

**Comment:** If you drive away wild life and fry our way of living, there really is no need to expand production. Pay some attention to the Aztec civilization and in more modern times the "streets" of Venice. There is a time when life is more precious than the dollar. (**0143-1** [Shepard, J.])

**Comment:** Please stop this project for the safety of the environment, wildlife, our 2 National Parks, the economy in South Florida, and do what is right. (**0149-14** [Nelson, Joyce E.])

**Comment:** I am writing to express my grave concerns regarding the expansion of Turkey Point nuclear facility, and any such project bordering the delicate wetlands and fragile aquifers in Southern Florida. This expansion will negatively affect water quality, species survival, wildlife habitat health (including our coral reefs, arguably the reason for an entire state's tourist economy), human health and safety, and even state finances for decades and more in the future[.] (0150-1 [Otis, Martha])

**Comment:** Please consider these facts before locating the nuclear reactors in the Biscayne and Everglades National Parks. (0153-3 [Goldman, Emanuel])

**Comment:** I am a conerned citizen of Florida and am pleading with you to reconsider your plans for the proposed nuclear reactors for the shores of Biscayne Bay and Everglades National Parks. (0153-5 [Goldman, Emanuel])

**Comment:** Turkey Point should never have had a power plant in the first place. Do not further damage the environment and Florida's fresh waters by expanding it now! (**0156-1** [Newman, Donna])

**Comment:** This asinine proposal is one driven by greed and if not ignorance, at least environmental apathy. Expanding this already marginal operation would only further compromise the area, it's waters both fresh and salt, it's creatures, air, health threats to all, on and on. For someone's profit. Inevitably, to the park's and sentient beings' detriment, it can only cause problems that are impossible to correct. (**0163-1** [Cook, Cherie])

**Comment:** This statement, written by members of the National Parks Conservation Association, reflects my opinions and beliefs. NPCA speaks for me, and many others concerned with the future of our planet. (**0165-1** [Cooper, Joe])

**Comment:** This park does not belong to the energy producers, it belongs to citizens of the United States. keep your killing of animals and plants with reactor water away from the places that are sanctuaries for them. (**0166-1** [Freel, Susan])

**Comment:** Also, it's ludicrous to expand this power plant with such ecologically sensitive ecosystems nearby plus the huge drain on our water supply that would inevitably result from the expansion. (0178-4 [Almirola, Alejandro])

**Comment:** It is against any and all sense to place this plant in a dangerous and unstable area. (0182-1 [Polifroni, Josephine])

**Comment:** Please do not expand this already ill-conceived location to include any expansion. (0183-1 [Piper, Cynthia])

**Comment:** Please protect freshwater and other natural treasures of Biscayne National Park which are threatened by nuclear expansion. (**0186-1** [Macraith, Bonnie])

**Comment:** I have serious concerns that the proposed expansion of FPL's Turkey Point could significantly impact and degrade the health of our national parks, sensitive ecological areas including extensive wetlands, federally listed threatened and endangered wildlife, and the quality and quantity of limited fresh water resources. (**0192-1** [Lebatard, David])

**Comment:** Our nation's significant environmental heritage sites should not be sacrificed to industrial planning. (**0195-1** [Harden, Ronald])

**Comment:** On behalf of the undersigned environmental organization representing hundreds of thousands of citizens throughout the country, we submit these comments in opposition to the proposed Turkey Point Power Plant expansion. Our groups and members are deeply committed to protecting the environmental health of South Florida and our precious freshwater supply. We have serious concerns that the proposed expansion of Turkey Point could significantly impact the health of our national parks, sensitive ecological areas, federally listed threatened and endangered wildlife, and the quality and quantity of our water resources. (**0210-1** [Sharp, Andrea Heuson])

**Comment:** In the interest of protecting the health and integrity of our valuable natural resources and limited water supplies we strongly recommend that you do not permit the proposed Turkey Point Power Plant expansion. (**0210-7** [Sharp, Andrea Heuson])

**Comment:** As residents of Key Largo, we oppose the expansion of the Turkey Point nuclear plant. We are within 15 miles of the facility, but we oppose the expansion for other reasons. The existing cooling canals exceeded the 100 degree limit many times last summer. We do not feel that the plan to accommodate 2 additional reactors is adequate and environmental damage is inevitable. (**0212-1** [Ross, Robert and Teresa])

**Comment:** For all these reasons, I urge you to deny the proposed expansion at Turkey Point and protect the region's people and unparalleled natural resources. (**0218-2** [Barlow, Jeffrey])

**Comment:** I grew up in Miami Beach and remember how unspoiled Biscayne Bay was even then. It must remain that way--it's a paradise! (**0224-1** [Rennie, Edwyna])

**Comment:** Although I am a supporter of developing nuclear energy in the United States, I strongly oppose the expansion of Turkey Point as proposed due to the project's potentially widespread negative environmental and public health and safety impacts and the serious threats it poses to Biscayne National Park. (**0226-1** [Karlow, Edwin])

**Comment:** I strongly oppose the expansion of Turkey Point as proposed due to the project's potentially widespread negative environmental and public health and safety impacts and the serious threats it poses to Biscayne National Park. (**0228-8** [Yeager, Jerry])

**Comment:** As one who has visited most of our national parks, I believe such parks are the jewels of our natural heritage. Therefore, I am writing to express my opposition to the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida. (**0229-1** [Elton, Wallace])

**Comment:** Therefore, I oppose the expansion of Turkey Point as proposed due to the project's potentially widespread negative environmental and public health and safety impacts and the serious threats it poses to Biscayne National Park. Please reject this proposal. (**0229-2** [Elton, Wallace])

**Comment:** The question of whether nuclear power is good or bad is not the main issue here. Rather, the issue is whether this project in this particular location should be allowed to go forward. Many citizens concerned about achieving restoration of the Everglades think it should not. (**0232-1** [Fielding, Ed])

**Comment:** I oppose the application for Units 6 and 7 at Turkey Point. While it was an illadvised decision over 40 years ago to locate two nuclear reactors between two national parks, Everglades National Park and Biscayne National Park, which are unique biodiversity hotspots, that decision should not be compounded by adding two additional reactors to the site. (**0246-1** [Shlackman, Mara])

**Comment:** On behalf of the undersigned environmental organizations representing hundreds of thousands of citizens throughout the country, we submit these comments in opposition to the proposed Turkey Point Power Plant expansion. Our groups and members are deeply committed to protecting the environmental health of South Florida and our precious freshwater supply. We have serious concerns that the proposed expansion of Turkey Point could significantly impact the health of our national parks, sensitive ecological areas, federally listed threatened and endangered wildlife, and the quality and quantity of our water resources. (**0253-1** [Bloom, Justin] [Campbell, Cara] [Causey, Charlie] [Cavros, George] [Chenoweth, Mike] [Daly, Meg] [England, Margaret] [Fuller, Manley] [Jones, George L.] [Keller, Alan] [Martin, Drew] [McLaughlin, Caroline] [Reynolds, Laura] [Silverstein, Rachel] [White, Paton] [Williams, Elinor])

**Comment:** In the interest of protecting the health and integrity of our valuable natural resources and limited water supplies we strongly recommend that you do not permit the proposed Turkey Point Power Plant expansion. (**0253-6** [Bloom, Justin] [Campbell, Cara] [Causey, Charlie] [Cavros, George] [Chenoweth, Mike] [Daly, Meg] [England, Margaret] [Fuller, Manley] [Jones, George L.] [Keller, Alan] [Martin, Drew] [McLaughlin, Caroline] [Reynolds, Laura] [Silverstein, Rachel] [White, Paton] [Williams, Elinor])

**Comment:** We, the undersigned elected representatives of the citizens of Florida, write to you united in our opposition to the proposed plan to expand Turkey Point Power Plant, located in

Homestead, Florida. We are dedicated to ensuring the health of South Florida's environment and the integrity of our precious freshwater supply. We are concerned that the expansion of Turkey Point, as proposed, could have serious impacts on our national parks, sensitive ecological areas and the quality and quantity of our water resources, and critical economic drivers that support our communities. (**0254-1** [Dudley, Dwight] [Lerner, Cindy] [Regalado, Tomas] [Stoddard, Philip K.])

**Comment:** We recommend that, in the interest of protecting the integrity of our valuable natural resources, limited water supplies and a healthy local economy, plans to expand Turkey Point Power Plant do not proceed as proposed. (**0254-7** [Dudley, Dwight] [Lerner, Cindy] [Regalado, Tomas] [Stoddard, Philip K.])

**Comment:** Turkey Point Power Plant is a nuclear power facility located directly on the shores of Biscayne National Park, one of our country's largest marine national parks. A for-profit utility wants to expand Turkey Point by constructing two new nuclear reactors. Expanding a nuclear power plant in the sensitive ecosystem surrounding Biscayne National Park is unacceptable! (0258-1 [Field, Fran])

**Comment:** It is unconscionable for you to waste our hard earned taxpayer dollars on toxic nuclear next to not just a precious ecosystem, Biscayne Bay and the Everglades, but an urban area where millions reside in an area prone to catastrophic damage from monstrous hurricanes! (0259-4 [Lettieri, Tammy])

**Comment:** I am writing in reference to Docket ID: NRC-2009-0337. I am opposed to the expansion of Turkey Point Power located in Homestead, Florida. The site is right on the shores of Biscayne National Park and very susceptible to climate changes. Turkey Point will surely have negative impact on the environment. (**0262-1** [Demaria, Karen])

**Comment:** Given the proximity of Turkey Point to the major population centers of South Florida, its location immediately contiguous to the environmentally sensitive, fragile and irreplaceable, Florida Everglades, Everglades National Park, Biscayne National Park, and the Florida Keys Marine Sanctuary, the Turkey Point Nuclear Power Plant exposes the population and natural environment of South Florida to unintended, but nevertheless, extraordinary risk. (**0263-2** [Orzechowicz, Holly])

**Comment:** The conditions that were present when The Turkey Point facility was originally sited and constructed in the early 1970s are not the same conditions that exist today. Those original conditions and considerations that may have made Turkey Point a viable location for a Nuclear Power Generating Plant have changed dramatically in the ensuing years. (**0263-7** [Orzechowicz, Holly])

**Comment:** Biscayne National Park is a treasure in south Florida and expanding this facility with impacts on this ecosystem is unacceptable to me. (**0281-1** [Nye, Janet])

**Comment:** I strongly oppose the expansion of Turkey Point as proposed due to the project's potentially widespread negative environmental and public health and safety impacts and the serious threats it poses to Biscayne National Park. (**0282-1** [Timberlake, Ralph])

**Comment:** Expanding a nuclear power plant in the sensitive ecosystem surrounding Biscayne National Park is unacceptable! (**0284-1** [Lopez, Josie])

**Comment:** Please choose to protect Biscayne National Park's incredible wetland and marine habitats from the threat of nuclear expansion. (**0284-6** [Lopez, Josie])

**Comment:** Expanding a nuclear power plant directly on the shores of Biscayne National Park-in an area vulnerable to sea level rise--will have serious environmental consequences! The NRC and the Corps must ensure that future plans for Turkey Point protect our national parks, water supply, and public health. (**0284-7** [Lopez, Josie])

**Comment:** I urge you to deny the proposed expansion at Turkey Point and protect the region's people and unparalleled natural resources. (**0285-3** [Miller, Melissa])

**Comment:** The ocean level is rising and the coral reef nearby is dying. You have the power to prevent the destruction of this beautiful area. Biscayne National Park is an irreplaceable national treasure that safeguards precious natural resources and recreational opportunities. (**0290-3** [Wry, Ellen])

**Comment:** I strongly oppose the expansion of Turkey Point because of the project's potentially widespread negative environmental and public health and safety impacts as well as the serious threats it poses to Biscayne National Park. (**0295-5** [Dietrich, Chris OMeara])

**Comment:** Why would you allow expansion of a nuclear plant in such a vulnerable area? These decisions affect us far, far into the future and that future is uncertain. (**0297-1** [Strouble, Jackie])

**Comment:** The current administration in that state seems determined to ignore the warnings, but that doesn't mean you have to. Biscayne Bay is also an environmentally sensitive area where further construction is not warranted nor desirable. I urge you to turn down expansion plans in Biscayne Bay! (**0297-3** [Strouble, Jackie])

**Comment:** Know what we ALL know now...these past reactors would HAVE NEVER been built where they are.....WE CAN now MOST CERTAINLY PREVENT any MORE reactors being built there. (0306-1 [Bagwell, Wilson Knox])

**Comment:** The plan to expand nuclear facilities at a location that was not the best idea in the first place, is even stupider. Not just because of the Biscayne National Park, but that is certainly a major reason to deny permission for the expansion but really, when are we going to stop polluting the wetlands and when are we going to face the fact that Florida's coastline is subject to flooding due to climate change (not to mention storms)? (**0310-1** [Stevens, Lisa])

**Comment:** YOUR AGENCY SHOULD BE PROTECTING NATIONAL PARKS, SO YOU SHOULD VIGOROUSLY OPPOSE THE ENVIRONMENTALLY STUPID PROPOSAL. (0321-1 [Anderson, Glen])

**Comment:** I see no benefit to the expansion of the existing Turkey Point plant for the health of South Florida's Biscayne National park and for my family's health. (**0349-1** [Oliva, Vivian])

**Comment:** I am opposed to any expansion of nuclear power in Florida, especially in the Biscayne Bay area. Further expansion would only increase serious risks to our health and the environment. (0350-1 [Shasky, Mike])

**Comment:** I am opposed to any expansion of nuclear power in Florida, especially in the Biscayne Bay area. Further expansion would only increase serious risks to our health and the environment. (0351-1 [Anonymous, Anonymous])

**Comment:** We vote AGAINST the proposed new nuclear reactors in Biscayne National Park. (0359-3 [LoBiondo, Roana and Michael])

**Comment:** The New Progressive Alliance at http://newprogs.org/ urges you to reject Florida Power and Light's plan to build two new nuclear reactors on the shores of Biscayne Bay. The two nuclear plants are poorly placed, are a clear and present danger to the water supply, and are a bad risk in light of over 50 years of history on the use of nuclear power. (**0366-1** [Griffith, Ed and Harriet])

**Comment:** We at the New Progressive Alliance ask you to do the right thing because these two nuclear plants are poorly placed, are a clear and present danger to the water supply, and are a bad risk in light of over 50 years of history on the use of nuclear power. (**0366-12** [Griffith, Ed and Harriet])

**Comment:** We hope to visit Biscayne National Park someday and do not want to find it compromised by an expanded Turkey Point Power Plant! (**0386-1** [Bromage, Joan])

**Comment:** I have not yet been to Biscayne National Park, but I do hope to visit that and others to complete my goal of experiencing all the NPS units. I am sure that Biscayne National Park is a wonderful place. The manatees, flamingos, corals, and sponges do not need an expanded nuclear power plant in or near their habitat. Please protect Biscayne National Park vigorously. (0391-1 [Aronson, Murray])

**Comment:** Please vote on the side of the parks and all the goods things it will distroy in time. Vote No for the parks, people, nature and most of all for that is best for the country. (**0392-3** [Greer, Tom])

Comment: Please do not allow any expansion! (0394-1 [Dougherty, Kate])

**Comment:** Do not expand this plant on the shores of Biscayne National Park. Foolish idea and could be very destructive. (0398-1 [Winters, Gracie])

**Comment:** Please heed our advice and save our National Parks from ruination. (0399-1 [Drew, Virginia])

**Comment:** Please don't let this happen. I'm a scuba diver and have enjoyed diving in Florida. Don't ruin this area of the ocean, not just for me but others to not be able to enjoy in the future. (**0426-1** [Bunker, Diane])

**Comment:** This area is already showing signs of environmental stress. (**0427-1** [Purcell, Douglas])

**Comment:** Please consider how many ways this could become a disaster-from freshwater resources, to plant and animal life, to the very likely saltwater intrusion. Please do the right thing & don't try to expand here! (0429-1 [Schilling, Judy])

**Comment:** Why do American citizens have to continually fight to keep the World's Greatest Park System in tact??? (0430-1 [Yost, Gaylord])

**Comment:** In April, 1991, I visited Biscayne National Park. I enjoyed that trip and would NOT want Turkey Point Power Plant to expand into any of the Park. (**0447-1** [Degges, Frank])

**Comment:** I hope the proposed addition to the Turkey Point Power plant is rejected so there is no further degrading of Biscayne Bay waters or rising sea levels flooding the existing plant plus the addition. (0453-1 [Matheny, Kent])

**Comment:** I PERSONALLY HAVE BEEN TO THE BISCAYNE NATIONAL PARK MANY TIMES AS I HAD RELATIVES WHO LIVED ON KEY BISCAYNE AND IT IS A BEAUTIFUL PARK, SO PLEASE DO NOT LET THIS AREA BE DESTROYED & RUINED BY THIS EXPANSION!!! I DO STRONGLY OPPOSE IT & I PRAY THAT YOU THINK OF THE ENVIRONMENT FIRST!!! IT WILL CAUSE WAY TOO MUCH DAMAGE!!! AGAIN PLEASE DO NOT ALLOW THIS TO HAPPEN!!! (0457-1 [Poole, Diane])

**Comment:** Expanding a nuclear power plant in the sensitive ecosystem surrounding Biscayne National Park is unacceptable! (0491-1 [Halligan, Melody])

**Comment:** The proposed Turkey Point expansion's potentially widespread negative environmental and public health and safety impacts, and the serious threats it poses to Biscayne National Park, mandate its denial. (0492-4 [Mckee, Sarah])

**Comment:** Please oppose the plan to add two nuclear reactors to Florida Power and Light's Turkey Point operation. The reactors would be located between two national parks on fragile wetlands stressed by cooling canals and threatened by rising sea levels. This land is too fragile to support one nuclear reactor - let alone two. (**0506-1** [Fox, Kristi])

**Comment:** Please do not destroy our delicate environment any further! (**0516-2** [Coffey, Rotraud])

**Comment:** Some places should be left untouched by industry and this is a perfect example of one of those places. (**0527-1** [Nagel, Karen])

Comment: I am writing to tell you to stop destroying our parks! (0528-1 [Watson, Fran])

**Comment:** I strongly oppose the expansion of Turkey Point as proposed due to the project's potentially widespread negative environmental and public health and safety impacts and the serious threats it poses to Biscayne National Park. (**0533-2** [Boone, James])

**Comment:** I am writing to say that I am against placing additional nuclear reactors at Biscayne Bay. (**0537-1** [Anonymous, Judi])

**Comment:** I grew up in Kendall, Florida. As a youth, I enjoyed diving in Biscayne National Park and canoing in the Everglades. I am shocked at the short sighted propasal to expand the nuclear facilities at Turkey Point. (0552-1 [Deutsch, Steven])

**Comment:** I strongly oppose the expansion of Turkey Point as proposed due to the project's potentially widespread negative environmental and public health and safety impacts and the serious threats it poses to Biscayne National Park. "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." (0555-3 [Lish, Christopher])

**Comment:** Please do not allow this project to happen and protect our National Parks. (0569-2 [Lane, N. Jo])

**Comment:** With all of the environmental impact of fresh water draws and overheated cooling canals, not to mention potential hurricane impact on the facility, it seems unconscionable that FPL would be allowed to add additional reactors to its Turkey Point facility. The existing is already pushing the limits of sustainability. (**0571-1** [Darden, Colgate])

**Comment:** Please do not approve FPL proposal for two new nuclear reactors. The danger to South Florida's most important public lands and wildlife habitats - Biscayne and Everglades National Parks - will be put at risk and be forever changed if this is approved. (**0581-1** [Tweedy, Mary])

**Comment:** Please oppose the proposed expansion of Turkey Point Power Plant, located in Homestead, Florida near Biscayne National Park. It is close enough to the Gulf of Mexico to be even more fragile. (**0582-1** [Wade, Pat])

**Comment:** I strongly oppose the EIS for FPL's application to build 2 new nuclear reactors at Turkey Point. They will negatively impact the surrounding community and Everglades and Biscayne National Park and threaten local water and land resources, as well as be a health risk. (0597-1 [Cullen, Sarah])

**Comment:** This project that, if built, will impact surrounding communities and sensitive ecological areas such as the Everglades and Biscayne National Park, threaten local water and land resources and increase FPL customers' utility bills. (**0602-1** [Colson, Clay G.])

**Comment:** It is very disappointing that you would think of building reactors on Biscayne Bay or anywhere for that matter. This action along with many approved building on endangered lands here in South Florida that impact our ability to breath and many endangered plants and species ability to survive have negative consequences .. with no preservation and over development here in South Florida -both our LAND AND SEA must be protected to "survive and thrive" for future generations .... and actions like these are not good. (**0634-1** [Jacobs, Leslye])

**Comment:** I am writing to protest the application for the Turkey Point Nuclear Plant. I am a resident of Boca Raton and have frequently enjoyed the Everglades National Park and Biscayne Bay. The area is too fragile, beautiful and important to risk a an action that might jeopardize the natural environment. (**0635-1** [Seiman, Rhonda])

**Comment:** STOP NUCLEAR EXPOSIONS ON BISCAYNE BAY, FLORIDA, THANK YOU. (0636-1 [Sanfilippo, Val])

**Comment:** I am very concerned about the environmental ramifications of the proposed nuclear reactors in Biscayne Bay, not to speak also of the industrial ugliness that would be introduced to the landscape. Please do not allow this! (0640-1 [Dutton, Julene])

**Comment:** I oppose the licencing of two new nuclear reactors at Turkey Point Nuclear Power Plant. This plant is located next to two National Parks. It is negatively impacting Biscayne Bay National Park by drawing surface water from the Biscayne Bay where salinity levels are too high during dry periods. The park area was originally surrounded by natural areas that permitted sheet flow of fresh water into Biscayne Bay. The addition of two new nuclear reactors will increase an already stressed environment. (**0641-1** [Martin, Drew]) **Comment:** Who even considers putting such a potentially destructive plant within range of an INTERNATIONAL treasure like the Everglades? Reconsider!!! For the sake of this generation and those to come! (**0652-1** [Le Cronier, Micki])

Comment: No nuclear reactor at Biscayne Bay! (0661-1 [Segal-Wright, Nicholas])

**Comment:** I move that the Combined License application for Turkey Point Nuclear Plant, Unit Nos. 6 and 7 be denied. Because of the ecological sensitivity of the proposed area and the high human, animal and fish life usage of the waters and land areas of Biscayne Bay and the nearby Everglades Park and aquifer, the proposed nuclear reactors and generators would produce prohibitive amounts of contamination of the waters and land. Therefore, the approval and funding of this proposal needs to be denied due to the Chemical and environmental impacts on life and health within the proposed project areas. (**0663-1** [Turner, William P.])

**Comment:** Please do not approve the application for two new nuclear reactors, Unit Nos. 6 and 7, at the Turkey Point Nuclear Power Plant. This project should not be allowed to move forward, in part, because it will irrevocably change and put at risk two of Floridas most important public lands and wildlife habitats the Biscayne National Park and the Everglades National Park. (0674-1 [Dwyer, Karen])

**Comment:** Florida Power and Light is seeking permission to build two new nuclear reactors at its existing plant next to Biscayne National Park and other natural areas; the project would be highly water-intensive, potentially threatening Biscayne Bay and the Biscayne Aquifer. (0676-1 [Kassel, Kerul])

**Comment:** Please don't let this proposed power plant expansion hasten the death of South Florida's remaining wildlife habitats. (0693-5 [Dorn, Kathryn])

**Comment:** But the era of nuclear energy off of Biscayne National Park is coming to an end and we need to prepare for that because it's coming. (0721-30-12 [Ullman, John])

**Comment:** In the interest of protecting our national parks and maintaining the quality and quantity of South Florida's fresh water supply, the expansion of Turkey Point, as currently proposed, should not move forward. (0721-9-8 [McLaughlin, Caroline])

**Comment:** If this Turkey Point expansion is undertaken Turkey Point will become one of the largest nuclear generating facilities in the country which, in and of itself, is not at all a bad thing. But considering its location, in one of the most --the areas most vulnerable to sea level rise directly adjacent to a national park, a State preserve and some really critical habitat on Biscayne Bay, that does pose a problem. This is a really ecologically and economically important environment. (0722-7-1 [Silverstein, Rachel])

**Comment:** And the three major reasons that I'm going to talk about today that this expansion is not appropriate at this location is, potential contamination of our water supply, excessive withdrawals of water related to this project, the vulnerability of the facility to sea level rise and the inadequate incorporation of that aspect into the Environmental Impact Statement as well as the ecological fragility of the surrounding area. It's already been impacted by the existing nuclear power plant and excessive water withdrawals and the cooling canal issues that are already existing. (0722-7-2 [Silverstein, Rachel])

**Comment:** I suggest that we follow his leadership and work towards a more resilient sustainable South Florida. In the interest of protecting our national parks and maintaining the quality and quantity of South Florida's freshwater supply, the expansion at Turkey Point as proposed should not move forward. (0723-4-10 [McLaughlin, Caroline])

**Response:** These comments identify general concerns about the ecology surrounding the proposed Turkey Point Units 6 and 7. They do not provide any specific information related to the environmental effects of the proposed action. Ecological impacts of building and operating the proposed units are described in Sections 4.3 and 5.3 respectively. No changes were made to the EIS as a result of these comments.

**Comment:** I was quite surprised this plan was going through given the public hearings and continued comments about the facility using outdated data regarding sea level change, the algae bloom issue[.] (**0008-1** [Finver, Jody])

**Comment:** Are you people totally out of touch with whats happening with a warming climate and a rising sea. Stop this foolishness[.] (**0028-2** [Clapp, Linda])

**Comment:** It seems insane to do this in the state the most endangered by climate change through rising sea water, and with our hurricanes. There are other, safer ways to provide the country's energy needs. (0031-2 [Hawkes, Holly Forrester])

**Comment:** It is simply unthinkable that the NRC would consider approval of any changes to Turkey Point Nuclear Power Plant aside from a plan to shut it down. There is no question as to if it will suffer problems, the only questions are when to what degree of severity. The combination of sea level rise, which no legitimate scientist denies, and the regularity with which severe storms, becoming more so each year, strike the Florida coastline, make the site untenable. (**0051-1** [Smith, David W.])

**Comment:** Now that I know, I would not like to see the current plant, especially with sea levels on the rise, located so close to any city. (**0061-4** [Lague, Victoria])

**Comment:** I urge you strongly, as a Florida residence, to deny the nuclear power plant option for FPL. This is irresponsible in light of our local climate and future water shortages. (**0080-1** [Reiter, Ben])

**Comment:** Given the dangers of hurricanes, sea level rise, and the demands on South Florida fresh water needed to cool the existing plant, any expansion is not only foolhardy but a danger and detrimental the the health and welfare of the South Florida human and marine population. (**0091-1** [Boyce, Sheila])

**Comment:** Furthermore, expanding a nuclear power plant in an area that is ground zero for sea level rise threatens the future of South Florida. (**0102-7** [Commenters, Multiple])

**Comment:** This is without even mentioning the environmental effects such an upgrade will do specifically concerning water supply and the danger of sea level rise. (**0119-4** [de Azevedo, Ricardo])

**Comment:** I am not opposed to all nuclear power. However, the site proposed for expansion is located directly on the shores of Biscayne National Park in an area that is extremely susceptible to sea level rise and the impacts of climate change. (**0155-1** [Morgan, Karen])

**Comment:** THIS IS A TERRIBLE, TERRIBLE IDEA: TOO EXPENSIVE, DANGEROUS TO THE GLADES, SHORTSIGHTED IN VIEW OF RISING SEA LEVELS, AND YET ANOTHER POTENTIAL WATER HOG. (0157-1 [Weber, Gae])

**Comment:** This is an ill-conceived, poorly thought out decision and must not move forward. Even in a state that denies the reality of sea level change, like Florida, reality will hit home. and then what will you do with this facility? It's time to give life a chance because money and profit aren't cutting it. (0179-1 [Roseberry, Bill])

**Comment:** Florida is one of the only places in the world where you can see climate change in effect. Why, then, are we building nuclear reactors in an environmentally sensitive location? I haven't forgotten the tsunami that destroyed Fukushima. Recently, a robot sent into that nuclear reactor was destroyed in 10 minutes. Since Florida is an epicentre of hurricanes, tropical storms, and sea level rise, it seems absolutely ridiculous to even consider putting a nuclear reactor here - especially given FPL's outdated and misguided plans. I only foresee disaster within the time that it is here. (0214-3 [Zerulla, Tanja])

**Comment:** In summary, I believe that the proposed installation of nuclear reactors at Turkey Point has not considered current climate change science, alternative energy sources for Florida, and proper safety precautions. (0214-8 [Zerulla, Tanja])

**Comment:** If we have learned anything in Miami from Andrew, we have learned this: Don't plan for the good days, when everything is perfect. Don't plan for the bad days, when the excrement hits the fan and you get a little splattered. Plan for hell on earth, because worst-case scenarios happen, and they are worse than you expect. The reality is that by building nuclear reactors in "Hurricane Alley", under conditions of Sea-Level Rise exposes both the reactors and the surrounding residents to risks that can not be fully anticipated. FPL is essentially playing Russian Roulette with our community's very existence. (0252-13 [Van Leer, Sam])

**Comment:** Please do not approve the expansion of the nuclear power plant at Turkey Point. My biggest concern is that Turkey point, like Fukushima, could be affected by sea level rise. In addition, the existing Turkey point units already have problems with cooling its units. FPL will need to use Florida's natural aquifer to cool its units, should it run out of treated waste water. Neither of these concerns are addressed in the application submitted to your agency. I believe you should do the right thing and not approve the Turkey Point plant expansion. (0270-1 [Sommers, Andrea])

**Comment:** I am an engineer. USF '73. And a rocket scientist. But it doesn't take a rocket scientist to see rising seas by a nuclear reactor by an eco park to know a turkey when we see one. \$\$\$ is not the measuring stick. Leaving a better place than we found is. (**0289-1** [Vance, Richard])

**Comment:** You jest, surely. As sea levels inexorably rise and in a place like Homestead at only 8' above sea level, you want to expand a nuclear power plant. (**0384-1** [Franzmann, Paul])

**Comment:** Already seacoast cities are experiencing periodic flooding and saltwater has already found its way into their water supplies. Use common sense and deny this expansion at Turkey Point. (0438-1 [Hoegler, Jean])

**Comment:** The City believes that the license for the project should not be approved as currently proposed. The Turkey Point Nuclear Plant Units 6 & 7 application should be viewed in

context of a region facing the enormous water quality and land use related challenges imposed by climate change. (0456-1 [Miami, City])

**Comment:** Environmental impacts are too great to allow the expansion, not to mention that the site is one where sea level rise and climate change could have terrible effects. (**0539-1** [Malone, Peggy])

**Comment:** I am all for nuclear power if they are located where they will not have an negative impact on the environment they are located in. With sea levels and eco systems being an issue here I would not allow expansion in this location. (**0541-1** [Zarsky, Terry])

**Comment:** This seems really stupid since sea level rise will wipe it out. (**0565-1** [Ackerman, Frank])

**Comment:** I would just end by begging you guys and the NRC, please, you are our only hope. You've seen what the State Regulators, the so-called Regulators are like. They're really not regulators. I mean I'm a State employee. I'm not even sure if I can use the words "climate" and "change" in the same sentence legally. You know what we're dealing with here and you know that we're dealing with a utility that -- look, they're just doing their jobs. But they get paid whether or not they build this reactor. Unfortunately, we're the ones paying them. You may be the only people who can save us from this fate. So I'm just asking you to do everything in your power to save us from Units 6 and 7. (0721-16-7 [Rifkind, David])

**Comment:** So now FP&L wants to build two more nuclear plants at Turkey Point. The plants that already exist and the new ones proposed, as well as all that nuclear waste at Turkey Point will be under water in the foreseeable future. To me, that one fact is sufficient reason not to build these new plants. Game over. But, if that's not enough reason for you there are plenty compelling reasons and we've got a lot of them. (0721-28-5 [Wilansky, Laura Sue])

**Response:** These comments express opposition to the licensing of new nuclear reactors at the Turkey Point site due to concerns about global climate change and rising sea levels. Appendix I of the EIS documents the review team's consideration of the potential changes in impacts that may occur as a result of the changes to the environment resulting from global climate change including sea-level rise. The changes that were considered include potential changes in temperature, rainfall, and occurrence of severe weather events. The effects of sea-level rise were also considered in this analysis. No changes were made to the EIS in response to these comments.

**Comment:** I would like to register my opposition to the expansion of the Turkey Point Nuclear facility by Florida Power and Light. The location, near dense population centers, adjacent to valuable natural areas, on the edge of ever-increasing sea levels all create too high a level of risk. There are better ways to supply energy to Florida citizens than this. Added to the safety issue is the total disrespect FPL shows to the communities it serves with the stated intent to install huge power poles through the middle of Coral Gables, South Miami and Miami. Please deny FPL permission to build the new reactors. (**0046-1** [Wade, Thomas M.])

**Comment:** Please do not license these 2 additional power plants and do not allow the huge power poles to be located along US 1. (**0050-3** [Simon, Gary P.])

**Comment:** Please do not confirm FP&L's request to build new nuclear reactors and certainly do not allow placement of these huge high voltage lines in the Miami Roads neighborhood (nor in or adjacent to any other residential neighborhood). (**0073-7** [Commenters, Multiple])

**Comment:** 6. Home values will be definitely affected with the close proximity of these proposed lines. For these reasons, I respectfully ask that you consider not confirming FPL's request to build new nuclear reactors and certainly not to allow the placement of high voltage lines in the Miami Roads Neighborhood. (**0077-5** [de Armas, Maria Cristina])

**Comment:** I want this letter to be a clear and strong statement that I strongly oppose the expansion of Turkey Point with this new reactors as well as the installation of the transmission lines through our neighborhoods and or the Everglades. (**0087-4** [Lange, Alexandra])

**Comment:** I strongly oppose Florida Power & Light's (FPL) plan to build two new nuclear reactors and miles of transmission lines through residential and downtown Miami. (**0126-1** [Pontier, Christine Hughes])

**Comment:** US1 is the gateway to one of the most beautiful areas in the State so why make it look like an industrial city. It is historic, the neighborhoods are historic, this is where Miami was first settled, it will destroy our future, and make us an industrial wasteland. (**0149-3** [Nelson, Joyce E.])

**Comment:** I am writing to state my very strong opposition to both the expansion of nuclear power generating capacity at Turkey Point and the installation of the proposed towers along US1. (**0187-1** [Meyer-Steele, Shawn])

**Comment:** I wish to express that I AM TOTALLY AGAINST new nuclear reactor units at Turkey Point as well as miles of oversized transmission lines going down US 1. (0314-1 [Erven, Marlene])

**Comment:** I am writing to express my opposition to the expansion of the Turkey Point expansion plans and to the placing of lines up and down highway U.S.1. (**0409-1** [Portela, Ana C.])

**Comment:** There are issues of sea level rise, salt water intrusion, the potential raiding of freshwater supplies needed for our growing population, nuclear waste, damage to the bay's coral reefs and estuaries and the prospect of dangerous and unsightly poles along US1 and in the Everglades. (**0596-3** [Sorenson, Katy])

**Comment:** I oppose the expansion of Turkey Point nuclear power plant, as well as the new power lines adjacent to Everglades National Park. My reasoning is the same as that put forth by the Miami Group Sierra Club. (0620-1 [Southern, Tom])

**Comment:** Even if this new plant were to operate for its entire lifetime with a 100% safety record, the impact of building and operating such a plant and transmission lines will be catastrophic. (**0639-1** [Haselhurst, Richard])

**Comment:** In the cities near FP&L's nuclear facility south of Miami, there is intense opposition to the building of the two nuclear reactors from mayors, business leaders, and citizens. One part of the opposition comes from the negative impact these reactors will have for decades on the fragile environment of the Everglades, Biscayne National Park, and the Atlantic Ocean which border this nuclear facility. Another part comes from the \$25 billion cost and the intrusive construction and traffic problems the plants will cause for years to the thousands of businesses

and residences in the area. The third part comes from the installation of 100 foot high x 5 feet thick concrete power poles that will be used to transmit the power to Miami and other cities. These massive concrete poles will be placed along major highways and streets and they will be visible for miles. In many cases they will be the tallest and most noticeable structures in the historic neighborhoods along coastal Highway U.S. 1. (0671-2-2 [Post, Patrick])

**Response:** The comments express opposition to the proposed units at the Turkey Point site. They do not provide any specific information related to the environmental effects of the proposed action. No changes were made to the EIS as a result of these comments.

**Comment:** As a 45 year resident of Coral Gables, FL I want to express my opposition to the construction of additional nuclear power plants in South Florida. Rather, the existing nuclear plants at Turkey Point should be phased out and shut down. (**0213-1** [Hyams, Charles])

**Comment:** It wholly benighted to even think of building unit # 6 and #7. What should be thought about is permanently decommissioning Turkey Point. (**0264-8** [Dwyer, John P.])

**Comment:** FPL has spent years developing their PR and campaigns to influence the public and public officials to enable their plan to go forward (often giving false or misleading information to silence safety and environmental concerns), rather than accepting the validity of objections and developing a more progressive and environmentally friendly plan for the future of energy in Florida. (0356-15 [Shlackman, Jed])

**Comment:** Rather than expanding Turkey Point, we should be preparing to close it down. (0463-7 [Gross, Cheryl A.])

**Comment:** Hello Some information that may help Stop Turkey Point Nuclear Plant from being enlarged ? ! I had heard that they want to enlarge Turkey Point ! Which I think is already past it's time of usefulness maximum time use design already ? I was 14 years old when it came on line and I am 68 years old now. And of course just like Fukoshima it is just waiting for a tsunami sitting rite on the Atlantic Ocean ! (**0505-1** [Buyea, Thomas])

**Comment:** In truth, my preference would be to shut down Turkey Point, and you are wanting to add more reactors!!! (0540-2 [Burge, Laura])

**Comment:** We need to be shutting Turkey Point down safely NOT expanding nuclear energy. (**0548-1** [Scott, Ruth])

**Comment:** Then we can work on dismantling the existing nuclear reactors, which is really what we should be doing. (**0643-3** [Joannou, Jr., Benjamin])

**Comment:** It is time to shut down, not expand nuclear plants across the country. (0647-3 [Burns, Terry])

**Comment:** Also I strongly feel that this existing plant should be shut down and dismantled as soon as possible!!! (0651-2 [Young, Kim])

**Comment:** It wholly benighted to even think of building unit# 6 and #7. What should be thought about is permanently decommissioning Turkey Point. (**0673-9** [Dwyer, John P.])

**Comment:** Furthermore, please consider decommissioning Turkey point and transporting the spent fuel rods to a safe storage site. (0674-9 [Dwyer, Karen])

**Comment:** My common sense is telling me that this nuclear power plant should not be enlarged, it should be decommissioned. (**0695-1** [Nappe, Judith])

**Comment:** Given sea level rise and that there is no way of disposing nuclear waste from this site at this time, what we should be discussing is decommissioning this entire plant and coming up with plans for removing all waste from an area that will be underwater within decades. (0714-1 [Gonzalez, Carlos])

**Comment:** You do not need any more power plant. Shut down the plant. (**0721-18-5** [Bernabei, Catharina])

**Response:** These comments express opposition to both the existing units and additional units at the Turkey Point site. They do not provide information related to the environmental review for the proposed action. No changes were made to the EIS as a result of these comments.

## E.2.34 General Comments in Opposition to the Licensing Process

**Comment:** You should not require regular people to read technical 25 megabyte files that take so long to load and are 717 pages long. You could have made this much shorter. (**0373-14** [Lee, Nancy])

**Comment:** The report fails to explain the fact that they have obviously ignored their own criteria; that they've avoided locating a project near a national park. Although that was a significant criteria, they are ignoring it and placing it between two very fragile national parks, both of which have habitual and fragile wildlife, particularly vulnerable to the long term adverse impact of the hydrology, the quality and the quantity of the salt water source. There's one other particular species at highest risk of having to compete with the nuclear plants for water, and that is the 4 million human beings who inhabit South Florida. (0721-3-5 [Lerner, Cindy])

**Response:** The NRC licensing process for nuclear power plants includes a thorough review of the proposed plants' impacts on the environment in accordance with NRC regulations. Documenting the thorough review and the NRC's conclusions results in the large document you describe. In addition to making the document available for download, the NRC provided copies of the document to reading rooms and libraries near the Turkey Point site to facilitate review of the EIS. The EIS is also summarized in a Reader's Guide that is available on the NRC website. No changes were made to EIS as a result of this comment.

**Comment:** I'm going to say what a lot of us are thinking. The Draft EIS is cursory, perfunctory, and biased in favor of the applicant. (0721-12-13 [White, Barry J.])

**Comment:** I am concerned about the probity, the adequacy of the research base that went into this Draft proposal. (0721-17-3 [Breslin, Tom])

**Comment:** So the Turkey Point 6 and 7 Draft Environmental Impact Statement has serious omissions in the analysis that make it impossible to determine the likely effects of plant operations on the environment. (0721-2-1 [Stoddard, Philip K.])

**Comment:** So the one question is, what are the chances of another Hurricane Andrew happening again at this same site? That's for them to answer. That's what the EIS is supposed to look at. That's the hard look. (0721-22-11 [Schwartz, Matthew])

**Comment:** Which brings up a big absurdity here. We keep trying to separate -- the NRC tries to separate safety and environmental concerns. We're talking about radiation. They're the same thing. A radiation release is a safety problem and an environmental problem. So to try to separate those out and say that's a different meeting and the public can't attend the safety meeting -- there is no public comment group like this for the safety meeting, is unconscionable. And it indicates that there is a safety problem that we need to be aware of. (0721-23-2 [Bethune, David])

**Comment:** In looking at the Environmental Impact Statement, I don't think they did a good job in terms of projecting what the future will look like. In order to do this properly we have to see what will happen in 50, 60, 70 years, and I think the models that they use are inaccurate. (0721-7-3 [Edmond, Gabriel])

**Response:** These comments express concern about the NRC's licensing process. Because these comments did not provide new information, no changes were made to the EIS.

## E.2.35 General Comments in Opposition to Nuclear Power

**Comment:** There is no one on earth building new nuclear plants. They are too risky and expensive. No. No. No! (**0004-3** [Engelberg, Jodi])

Comment: No NUCLEAR POWER in the Sunshine State. (0012-1 [Shahsavar, Mehran])

Comment: I Do Not think it's time to invest in nuclear energy. (0014-1 [Westaway, Katharine])

**Comment:** We are opposed to any expansion of nuclear energy. (0020-1 [Smith, Leigh Emerson])

**Comment:** Nothing good has come with the endless tinkering, rape and pillage of the natural world. Nuclear energy is the most dangerous energy created. NO technology will reduce the impact of the fossil fuels that we are using to selfishly serve a dangerously high human population - especially the US population which generates the most pollution and waste proportional to our population. (**0020-3** [Smith, Leigh Emerson])

**Comment:** When you look at the Fukushima disaster in Japan, and you look at the land area that was exposed to radiation, let's assume that would encompass an area from the Palm Beaches to Key West. Can you imagine evacuating that many people from such an area? And can you imagine the decline in property values that would result even if some of those people were convinced that they could return? That kind of thought is abhorrent to me. It is really unimaginable. Yet this is the risk that we take with nuclear power. In my opinion, even though the risks of a disaster are low, the consequences are so high that we really should not be taking the risk at all. We really should be planning for the abandonment of all nuclear reactors. They have the potential to end our civilization. For example, if there were a Coronal Mass Ejection in our Sun, of the magnitude that occurred in the late 1800s, that could cause a global electrical blackout. And in today's society, unlike in the late 1800s, that would be a major event. But the bigger problem would be that all of the control rooms of every nuclear reactor around the world would be rendered inoperable. So we wouldn't even be able to shut down our nuclear reactors. Within a few days, every single nuclear reactor would melt down. I believe the meltdown of every nuclear reactor in the United States would effectively mean the end of our nation. So I hope you see that I firmly believe that we should not be adding to our inventory of nuclear reactors. (0023-1 [Joannou, Jr., Benjamin])

**Comment:** I fear what could happen with more nuclear power nearby, ex explosions, terrorist attacks, and magnitude of damage to nearby population. Would not want to put human life in danger for sake of production, prosperity, or economic gain, not for me or future generations. I do not trust decisions of those who do not have same concerns or values. I say look to another way putting welfare of people first. May God guide your final decision. (**0025-1** [Alvarez, Susana])

**Comment:** My opinion would be to turn the contaminating Nuclear plant and it horrible by product into something that we can live with for future generations. (**0027-2** [Neal, Kevin])

**Comment:** I am asking you to be selfish, think of yourself, think of your family the future of kids or your kids kids, does their future look good, bright? It does!! I know it does. So I ask whats the POINT in Turkey Point to add more reactors? What is the real point? Is it an addicition? I ask this because to me its like smoking cigarettes. You trick yourself into thinking its good. Where is the good when now is fine until later in life you realize you're dying because you thought it was ALL good. Teach the lesson that you learned to your kids and their kids by saying NO to not only more nuclear reactors, say NO to ALL nuclear reactors. We're all dying from cancer, we cant eat fish from the Pacific Coast because of Fukushima. How they doing now? Ask them if theyre happy with their nuclear reactors. Its not if theres going to be a problem its a matter of WHEN. So WHEN are you going to realize that what YOU are doing affects YOU too & your kids. NOw is the time to make the right choice, not when youre dying from the effects. We have control of our fate here. Use this time to tackle the other issues we need to battle. If you need help there just ask, I WILL gladly assist. I am taking care of my kids by writing you because its ALL I can do so I am going back to LOVING & PLAYING..... what are you REALLY doing (**0029-1** [O'Brien, Lance])

**Comment:** I recently became a mother and I do not want my son's generation or the rest of mine to have to deal with the endless amounts of radiation the will affect us and the planet haven't we caused enough damage as it? (**0030-2** [Gomez, Lissett])

**Comment:** As a native resident of south Miami-Dade County with young children and many relatives and friends in this area, I am deeply concerned about the prospect of new nuclear reactors being built at FPL's Turkey Point facility. Turkey Point already makes residents nervous due to its relative proximity to residential areas. (**0052-1** [Roos, Monica])

**Comment:** The very future of life on Earth is threatened by use of this form of energy! One accident, equipment malfunction, operator error, or terrorist attack at a nuclear plant could literally mean the end of life on Earth. If Fukushima didn't convince you, and you still think a disaster like can't happen at Turkey Point, just think about that little O-Ring on the Challenger. Here in Florida we can never forget that. There is no way to guarantee 100% safety when using this technology, and when it comes to materials that remain deadly dangerous for tens of thousands of years, longer than all of human history, anything less than 100% safety cannot be considered safe. We humans are not infallible, and neither is anything we produce. Nor can we control - or predict - the forces of nature, as much as we might pretend we can. This means that nuclear plants cannot, simply cannot be guaranteed to be safe. And when it comes to nuclear materials, anything less than 100% safety is just not good enough. Nuclear plants are so dangerous even Wall Street won't invest in them, and they'll invest in almost anything, no matter how risky! (**0078-2** [Wilansky, Laura Sue])

**Comment:** There are so many reasons to develop a forward thinking plan and reduce waste of our precious water. Nuclear is not the way forward. We need a vision that is not harmful to the

environment and uses sound thinking and heartfelt discion making to find our way forward. (**0098-2** [Gavel, Deborah])

**Comment:** Says it all. Barry [commenter submitted a graphic/picture in original correspondence] (0100-1 [White, Barry])

**Comment:** I am unequivocably opposed to any new nuclear power facilities. We keep looking at wrong-headed solutions that are absolutely fraught with potential danger. The massive use of water is not acceptable and we do not want another Chernobyl or Fukushima. (**0124-1** [Colby, Helen])

**Comment:** [T]he idea of a nuclear power plant terrifies me, and I strongly disagree with this plan on all fronts. (**0128-4** [Bach, Lili])

**Comment:** Nuclear power has been shown, at Three Mile Island and at Chernobyl, to be unsafe, unreliable, and unpredicatble. (**0140-1** [Rhodes, Karen])

Comment: This type of energy production should be outlawed. (0146-2 [Grant, Randy])

**Comment:** INSTEAD OF INCREASING THE FACILITY AT TURKEY POINT, I WOULD HAVE YOU CLOSE THE PLANT ENTIRELY. NUCLEAR POWER IS NOT CLEAN POWER REGARDLESS OF HOW IT IS SOLD. (0164-2 [Chrissos, H. L. Chris])

**Comment:** End this dangerous 20th century technology. (0170-1 [Ercole, Steven])

**Comment:** Finally, I think it's plainly stupid for FP&L and the US NRC to even be thinking about this since we shouldn't be further investing in a "dying" industry that's simply outdated and too expensive to fund with only government subsidies making it somewhat viable. (**0178-3** [Almirola, Alejandro])

**Comment:** Nuclear energy puts ALL OF US AT RISK! Nuclear is OUTDATED & DANGEROUS! There are SAFE slternatives! (**0199-1** [Moore, Linda])

**Comment:** NUCLEAR POWER HAS YET TO CONVINCE US THAT IT IS SAFE (**0201-2** [Reid, Sarah])

**Comment:** PLEASE FOLLOW THE EXAMPLE OF SANE GERMANY, A LEADER FOR A NUCLEAR FREE WORLD. NO MORE NUCLEAR POWER PLANTS !!!!! (0201-4 [Reid, Sarah])

**Comment:** Germany has shuttered all of their nuclear plants. I don't want another Trenoble. (**0203-1** [McDaniel, Diana])

**Comment:** I have lived in Miami my whole life and I consider this area a piece of paradise. So do the millions of tourists that come to visit. As with any place on our fragile planet, there are unforeseen events that could occur that could decimate our area. Some risks, such as hurricanes or sea level rise, are unavoidable. (**0207-2** [Cleland, Noel])

**Comment:** Regardless of how hard we try, we cannot make the risk of nuclear catastrophe to be 0%, because we cannot anticipate every possible contingency for failure modes that no one has considered before. So why take an unnecessary risk when we don't have to, even if it seems small. (**0207-4** [Cleland, Noel])

**Comment:** I was deeply saddened to learn that Florida still relies on antiquated energy solutions. (0214-1 [Zerulla, Tanja])

**Comment:** Every time I think it cannot get worse it does! Nuclear power is not the solution to any of the energy problems of this nation or the world for that matter, especially considering the problem of disposing of the uranium, which will be radioactive and pose a threat for at least 10,000 years! Have you no conscious? Do you even care about the children of tomorrow? (**0231-1** [Bonilla-Jones, Carmen Elisa])

**Comment:** How can you even consider adding more pollution and danger to this nation, which you have sworn to, defend? Is the "Corruption" so ingrained that the very lives of not only all the Country but also your own families mean absolutely nothing? (**0231-3** [Bonilla-Jones, Carmen Elisa])

**Comment:** Just look at the recent nuclear reactor disaster in Japan. Another in a series of nuclear disasters without end, the consequences of which are still being felt, still happening. Now is the time to think about the damage that is caused with this type of energy and the impact it will have on future generations. Will Miami become the next Fukushima? Will south Florida become a radioactive wasteland? To allow this to happen is a disaster, the risk is criminal. (**0243-2** [Duran-Pinzon, Jaime])

**Comment:** Please stop being soooo stupid. Until the technology of fusion is practicable nuclear is just a boondoogle waiting to happen. (**0249-4** [Mosher, Paul])

**Comment:** Nuclear reactors are not the answer especially when there is a liability as noted by the International Atomic Energy Authority Data Summary listed below. (**0250-9** [Fulks, Anna Louise])

**Comment:** Instead of considering expansion of this dysfunctional and dangerous facility, we should be considering how soon the existing reactors can be dismantled. (**0252-1** [Van Leer, Sam])

**Comment:** I have spoken to many in the community, and can say that only one out of hundreds is in favor of more Nukes. In conversations with elected officials, they are unanimous in their opposition. (**0252-19** [Van Leer, Sam])

**Comment:** After the disaster in Japan, I strongly oppose any further expansion of and addition to nuclear energy facilities in this country. (**0256-1** [Myers, B. J.])

**Comment:** It is time we stop using nuclear energy now. We have already caused irreversible damage to our environment and we must protect the people. You must serve the people and not huge corporations. (**0257-2** [Padron-Delgado, Blanca])

**Comment:** Your agency exhibits a blatant disregard for the sanctity of millions of lives and the survival of the planet at large! (0259-2 [Lettieri, Tammy])

**Comment:** it is a matter of GREAT CONCERN to see the further development of extensive Nuclear Power production plants within our home living radius in South Florida. (**0272-1** [Zuniga, Family])

**Comment:** If Florida Power & Light Company is as technically proficient as it advertises ... and not submit its victims to the excessive cost and more inherent safety risks of additional nuclear capacity. (0283-7 [Compel, Jr., Joseph])

**Comment:** We are opposed to all nuclear power expansion in Florida, as it is unsafe and nonrenewable, taxes limited water supplies. It is unworkable, especially in the age of climate change. (**0288-15** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

Comment: Nuclear is a waste of space. (0291-1 [Vorachek, Mary])

**Comment:** Too beautiful and delicate a place to screw around with nuclear crap. (**0293-1** [Hogle, Dick])

**Comment:** GET REAL! NUKES ARE DEAD, EXPENSIVE AND DANGEROUS, HAVE ALREADY IRRADIATED THE EARTH FOREVER, AND HAVE BEEN SUPPLANTED BY RENEWABLES. READ THE NEWSPAPERS! (**0296-1** [Richardson, Don])

**Comment:** TOTALLY PHASE OUT NUCLEAR PLANTS, NOT BUILD NEW ONES. (0302-2 [Jezierski, Elisabeth])

**Comment:** Nuclear power is a technology of the Past, please move on. (**0304-1** [Zimmermann, John])

**Comment:** I concur with the above statement and wish to add that as a oat resident of Long Island during the debate regarding the nuclear power plants at Shorham and as a NYC resident living not too far from Indian point that nuclear power is always a bad idea.... it was then, it is now, for so many reasons, among them the entire nuclear waste issue, the whole issue of the potential danger of even small accidents and the simple fact that, with the advances in renewable energy technology, these albatrosses of the energy industry are no longer needed. (0324-1 [Gibson, David])

**Comment:** Nuclear energy use should be slowed down and eventually eliminated--not increased, especially in a sensitive area next to a national park. (**0326-1** [Earnshaw, Shinann])

**Comment:** nukes are bad idea anywhere just look at fukushima (**0327-2** [Anonymous, Anonymous])

**Comment:** I don't want any more nuclear energy. Nuclear energy is not safe and it's right in our back yard. (0329-2 [Baumwall, Douglas])

**Comment:** No, we don't need any more nuclear power plants. They use too much water and pollute the atmosphere and environment. The long chain of events to provide the fuel pollutes and emits C02 (mining, etc) Cleanup after an accident is paid by taxpayers(what a business plan). (0336-1 [Anonymous, Anonymous])

**Comment:** The NRC cannot be trusted, they do what the money masters tell them. It's all about the money, and a lot of it comes from taxpayers. Result -"electricity too cheap to meter"? No, it was another lie. Higher electricity bills will be the norm, along with more doses of radiation to the kids and grand-kids. (0336-4 [Anonymous, Anonymous])

**Comment:** It is my opinion that these planned nuclear reactors are dangerous. (**0337-1** [Philips, Sally B.])

**Comment:** I will say that nuclear power should not be used anywhere in the United States. And certainly not in Florida, a state that has had more than its share of severe hurricanes. (**0339-3** [Provost, Allan])

Comment: Not in my backyard thank you. (0346-1 [Anonymous, Anonymous])

Comment: No more nuclear plants. (0348-1 [Ward, Richard])

Comment: Not in my backyard. (0349-5 [Oliva, Vivian])

**Comment:** This is such a bad idea on so many levels. First of all, a nuclear power plant is an accident waiting to happen and when it does you can't fix it. Ask the folks in Fukushima -oh that's right, there aren't any folks in Fukushima because the nuclear accident made the town and surrounding areas unsafe to live. That should be enough for anyone with common sense, but greed is blind. (**0353-1** [Royce, M.])

**Comment:** South Florida is a beautiful place that is envied and visited by many around the world. Placing it at increased risk of environmental harm and nuclear disaster is a travesty, and being in denial and telling ourselves a disaster can't happen here is not wise and not necessary. (0356-6 [Shlackman, Jed])

**Comment:** The two nuclear plants are a bad risk in light of over 50 years of history on the use of nuclear power. Over half a century of experience throughout the world indicates nuclear energy is not the answer. It is the most expensive, the most delayed, and dangerous. No nuclear plant has yet been built that is not over budget and behind schedule. It is also carbon intensive in uranium mining, uranium processing where fracking is used just as for natural gas, building the nuclear plant, and transportation of uranium to and used radioactive waste away from the nuclear plant. (0366-10 [Griffith, Ed and Harriet])

**Comment:** No No NO absolutely not...don't you dare add more water destroying elements to this ridiculous Grid ... we need to dismantle to begin with ...We must stop the stupid Idea of Giant Generation and pushing down wires for miles and miles to get to end user and demand you spend the exact same BILLIONS OF DOLLARS on Distributed Generation @ point of use like Edison envisioned to begin with.... (0369-1 [Polk, J. D.])

**Comment:** Nuclear is an outmoded power source that would be economically non viable without massive subsidies. (0371-4 [Haffmans, Edmund])

**Comment:** We should be talking about a planned phase out of all nuclear power reactors NOT expansion. (**0380-2** [Anderson, Vaughn])

**Comment:** Where does it stop? When does it stop? Stop and think, where and when, does it STOP. Does it really have to be when nothing is left? STAND UP. (**0387-1** [Morgan, Carol])

**Comment:** PS before you take this disastrous course of action given the information above, read up on the consequences of nuclear energy gone sour at San Onofre, California. This site is even more vulnerable ! (0388-1 [Andersen, Paul])

Comment: No expanding nuclear power!!!!!!!!! (0393-1 [Bereczki, Patricia])

**Comment:** WHEN WE FIGURE OUT HOW TO SAFELY DISPOSE / DEACTIVATE NUCLEAR MATERIAL SO THAT IT DOESN'T REMAIN TOXIC FOR THOUSANDS OF YEARS, MAYBE THEN NUCLEAR POWER WILL MAKE SENSE. UNTIL THEN--NOTHING! NO NUCLEAR POWER PLANT SHOULD BE COMMISSIONED OR ALLOWED TO CONTINUE TO OPERATE. ANYWHERE IN THE WORLD, LET ALONE THE USA! (0412-1 [Davis, S. K.])

**Comment:** At this point in time, we should be looking at shuttering nuclear power plants, not expanding them. Right here in Illinois, we are seeing Exelon looking for massive bailouts just to keep nuclear energy power plants profitable. Yet they, Exelon, has no clue what to do with our tremendous spent fuel rod stockpile. (0419-1 [Juras, Randy])

**Comment:** Nuclear power has never been safe. How many examples do we need? Chernobyl is a continuing train wreck in progress; TMI was a disaster; and words fail me to describe the horror of Fukushima. If you think that disaster is over, then you most definitely need to do a little research. For humanity's sake don't enlarge the Turkey Point plant, shut it down! (0431-2 [Hicklin, Mary])

**Comment:** I DON'T THINK WE NEED TO BE EXPANDING NUCLEAR POWER PLANTS ANYWHERE. WE SHOULD BE CLOSING DOWN THE ONES WE HAVE. THEY ARE VERY DANGEROUS AND THERE IS NO GOOD SOLUTION WHAT TO DO WITH THE NUCLEAR WASTE WHEN THEY ARE NO LONGER IN USE. (0432-1 [Olson, Diane])

**Comment:** No to any more nuclear anything. We are not having a good time with this 'cool' energy product called nuclear energy. It causes death. It causes pollution that an last for over a quarter of a million years. That is a pipe dream that needs to wake up. (**0442-1** [Mosca-Clark, Vivianne])

**Comment:** Please don't put them here & perhaps no where is really good; (**0455-2** [Hardin, Lillian])

**Comment:** Our country does not need any more nuclear expansions. We have enough to worry about. No more! No more! (0462-1 [Bubb, Ken])

**Comment:** WHY would anyone want to expand nuke power after the Man Made Disaster at Fukushima..?? It is time to stop the nuke power and get to safe alternatives!!! (**0464-1** [Farnsworth, Stu])

Comment: Nuclear power is outdated, why would we want to expand ? (0468-1 [Nelson, Wendy])

**Comment:** Let's push to other sources and conservation. Nuclear power CANNOT be managed for 50 more years, we have no storage now. And the idea that we need another nuclear plant is illogical. (0480-2 [Simmerman, Scott])

**Comment:** According to science; anything radioactive is NO GOOD. According to science; anything radioactive is harmful to everything-be it human, animal, vegetation and even the soil, water and air. There is nothing good about anything radioactive; not even all the profits the few who profit from it. (0481-1 [Szabo, Liz])

**Comment:** Please do not let any further plants be built that will add radioactive harm to the planet. Instead work at phasing out plants that deal with radioactivity[.] (**0481-2** [Szabo, Liz])

**Comment:** Nuclear energy is not a sustainable resource as one day we will run out of raw materials, and it cannot be considered clean energy until a safe disposal method for nuclear waste is implemented. (0482-1 [Campbell, Grant])

**Comment:** Are we really supposed to forget Fukushima? Are we supposed to pretend the ongoing disaster that is Hanford? I'm sorry, but heads in the sand is not acceptable. (**0496-1** [Reed, Jennifer])

**Comment:** We have ample evidence of the danger of nuclear reactors from the disaster in Japan a few years ago. That reactor is still pumping nuclear waste into the ocean. Nuclear power needs to be phased out, not ramped up. In particular, nuclear power reactors need to be kept away from land Americans own in common--our national parks. (0498-1 [Bratcher, Suzanne])

**Comment:** No additional nuclear reactors should be built at Turkey Point and plans should be made to close existing nuclear power generating facilities in order to protect surrounding populations and their progeny. (0511-2 [Draper, Lonnie M.])

**Comment:** There is no safe way to manage nuclear power generation and therefore we must not build more reactors and must dismantle our existing facilities in favor of safe, renewable forms of power production. (**0511-5** [Draper, Lonnie M.])

**Comment:** Those that promote and endorse nuclear fission time-bomb plants are misanthropic psychopaths. Nuclear fission technology is more than insane. It is pure raw evil. It is violation that even Satan would not do. (**0513-2** [Roehl, Richard Ralph])

**Comment:** Stop this ! Nuclear power is proven to be more of a liability than ever thought. Disagree ? Then make them buy private insurance NOT underwritten by Uncle Sugar Daddy. (**0521-1** [Socie, Robert])

Comment: We do not need more nuclear power period. (0530-1 [Mccroskey, Carol])

**Comment:** Nuclear power is not the way towards a sustainable future. (**0553-2** [Punnett, Daniela])

**Comment:** I strongly oppose of the use of nuclear energy due to the inability to dispose of waste. (0558-1 [Barnes, Janice])

**Comment:** NUCLEAR POWER IS POISON and cannot co-exist in the same space with life on earth. (**0561-1** [G., Ambriel])

**Comment:** A total of 17,155,535 people live within 19 miles of a nuclear plant. I guess that's still not enough for you nuclear madmen to reduce earth's population. Documentaries: Into Eternity (A Nuclear Waste World)"Documentary on the idiocy of the Atomic Age and the long term ramifications of storing nuclear waste.

<u>https://www.youtube.com/watch?v=SBrMzwSdSI</u>. The Biggest Nuclear Operators In The United States: <u>http://www.investopedia.com/stockanalysis/2011/the-biggest-nuclear-operators-in-the-united-states-duk-pgn-so-exc-etr-dnee0328.aspx</u>. The Truth about Nuclear Waste Disposal (Full Documentary) <u>https://www.youtube.com/watch?v=5mthzaOyiEO</u>. (**0561-4** [G., Ambriel])

**Comment:** [N]uclear power is too expensive relative to renewable energy sources, and generates wastes that remain lethal for tens of thousands of years and which we have no means of permanent and safe disposal. With these considerations, NO nuclear plant anywhere

makes any sense, beyond the obvious problems with the current site in question. (0567-2 [Cohen, Howard])

**Comment:** After the Fukishima disaster it quite apparent that ALL nuclear power plants should be immediately terminated. Florida is so vulnerable to extreme weather threats. Radiation is increasing day by day on our planet. Alternative forms of power are available and so there is no excuse for not supporting them except the greed of the powers that profit from nuclear power. (0576-1 [Williams, Penelope])

**Comment:** I agree with the general message. I especially don't want another nuclear power plant in this country. they can be very dangerous. (**0586-1** [Stamps, Gail])

Comment: Save humanity. (0587-2 [Glasshof, Wendy])

Comment: NO NUKES! The risks are unacceptable and unnecessary. (0589-1 [Zook, Caryl])

**Comment:** On 9/19/14, a UBS report called nuclear power plants the "the DINOSAUR of the future energy system" and Amory Lovins, a physicist and chief scientist at the Rocky Mountain Institute, said that nuclear power was an "OBSOLETE technology": "Banking giant UBS calls the big, slow, lumpy, expensive coal and nuclear plants "the dinosaur of the future energy system: Too big, too inflexible, not even relevant for backup power in the long run." Such obsolete technologies are less at risk from regulatory mandates than from market defeat by a swarm of agile competitors that their promoters don't even recognize." It is at <a href="http://www.forbes.com/sites/amorylovins/2014/09/19/micropowers-quiet-takeover/2/">http://www.forbes.com/sites/amorylovins/2014/09/19/micropowers-quiet-takeover/2/</a>. Nuclear power is clearly an obsolete and old technology. Nuclear power is clearly an energy of the past. Nuclear power is not where the overwhelming innovation in new energy technology is occurring. (0592-4 [Brexel, Sr., Charles])

**Comment:** Aside from the possible impact to sensitive parks and refuges, I don't think more nuclear reactors is the right solution. (0594-3 [Rapuano, Shannon])

**Comment:** Nuclear energy is NOT carbon-emission-free.Nuclear power plants release 90 140 g of C02 per kwh AND, each nuclear power plant releases massive amounts of Carbon-14 which is CONVERTED TO C02 in the atmosphere! Nuclear energy = Carbon14 = C02 = Climate Change. (**0603-1** [Anonymous, Anonymous])

**Comment:** This said, we should not build any nuclear reactors anywhere ever again. Whoever wants to build more of them should be required to live next to a nuclear waste processing facility and final waste disposal site for the next 250,000 years. (**0607-1** [Veit, Eberhard])

Comment: NO MORE NUCLEAR POWER PLANTS! (0609-1 [Khajeh-Noori, Jeri])

**Comment:** No one has figured out how to make nuclear plants REALLY safe. We don't need them! (0627-3 [Dolben, Hollis])

**Comment:** You are INSANE to build more nuclear power plants!! (0628-1 [Anonymous, Anonymous])

**Comment:** We don't need atomic bombs - nuclear plants will do the job slowly and effectively. (0632-3 [Moll, Wolfgang])

**Comment:** If you care about our earth and this comer of the world and co-creating a safe/healthy future for our children you will reconsider this and say no to building nuclear reactors. (0634-2 [Jacobs, Leslye])

**Comment:** You have the opportunity to at least stop the growth of nuclear power. Please, no more nuclear reactors. (**0643-2** [Joannou, Jr., Benjamin])

**Comment:** No more nuclear power plants. They do harm to the environment and people while being propped up monetarily by taxpayers. It is a big money scam. Nobody benefits except the big money players. And why pass on billions of dollars in cleanup/waste management costs to our grandchildren and great-grandchildren and great-great grandchildren. (**0645-1** [Anonymous, Anonymous])

Comment: Nuclear power is DANGEROUS. (0656-1 [Zhivelev, Leon])

**Comment:** Nuclear energy is incredibly dangerous to our planet. (0657-2 [Hartmann, Donald])

**Comment:** nuclear is dangerous, plus too much nature near by.. (0664-2 [Alvarez, Chad])

**Comment:** The building of the reactors would leave a huge carbon footprint. (**0666-2** [Jens-Rochow, Steve])

**Comment:** Nuclear power comes with a dangerous byproduct, as well as the dangers of operating a nuclear facility. Although the risks have been mitigated with many safety features, the reality is there are still possibilities of a reactor failure due to human error, natural disasters, or even terrorism. (0677-2 [Chiszar, Benjamin J.] [Jacobs, Lee] [Klopfer, Carol])

**Comment:** The \$20 billion investment in two new reactors would be better spent developing a decentralized energy network that would be less prone to the failures associated with nuclear energy generation. (0677-4 [Chiszar, Benjamin J.] [Jacobs, Lee] [Klopfer, Carol])

Comment: Not in our backyard[.] (0677-8 [Chiszar, Benjamin J.] [Jacobs, Lee] [Klopfer, Carol])

Comment: [N]ot in anyone's backyard! (0677-9 [Chiszar, Benjamin J.] [Jacobs, Lee] [Klopfer, Carol])

**Comment:** Use of Nuclear energy is foolish, worse than fossil fuel. We still have no safe way of disposing of the toxic radioactive waste. It is insane to even consider expanding it. (**0683-1** [Thompson, Muhammad])

**Comment:** Any more nuclear facilities in the world are too many. Nuclear reactors should be de-commissioned, not added to. How many more uninhabitable areas of the world must be created before the insanity stops? Nuclear never was nor can it ever be environmentally neutral nor safe. (0697-1 [Dulicai, Linda])

**Comment:** South Florida needs a non-nuclear source that does not pose grave health risks. (0701-1 [Whitlock, Catherine])

**Comment:** Regarding "manmade" "artificial" "nuclear radiation"--A great man once said -->"there is no amount of radiation so small that it has no ill effects at all on anybody. There is actually no such thing as a minimum permissible dose. Perhaps we are talking about only a very small number of individual tragedies the number of atomic age children with cancer, the new victims of leukemia, the damage to skin tissues here and reproductive systems there perhaps these are too small to measure with statistics. But they nevertheless loom very large indeed in human and moral terms.

Radiation, in its simplest terms figuratively, literally and chemically is poison. Nuclear explosions in the atmosphere are slowly but progressively poisoning our air, our earth, our water and our food. And it falls, let us remember, on both sides of the Iron Curtain, on all peoples of all lands, regardless of their political ideology, their way of life, their religion or the color of their skin. Beneath this bombardment of radiation which man has created, all men are indeed equal." ~John F. Kennedy, 2 April 1960, Wisconsin. (0705-1 [Anonymous, Anonymous])

**Comment:** Ongoing TRIPLE MELTDOWNS and the continuous FALLOUT from Fukushima, (4 plus years), should be reason enough to STOP this technology dead in it's tracks before it damages any more of our planet Building more Nuclear Plants is a BAD idea. The overall RISK to all living things is just too great. It's proven, containment is a fallacy. [Commenter followed with a quotation by E.F Schumacher, 1973] (0708-1 [Aha, Chas])

**Comment:** No more nukes they are dirty, making the fuel is dirty, and the is no safe storing the deadly waste. (0715-1 [Anonymous, Anonymous])

**Comment:** Nuclear energy is global warming, should not be in the future. (Nuclear Energy As A Direct Cause Of Global Warming, Acid Rain, Acid Oceans, Extreme Weather, And Super Storms <u>http://agreenroad.blogspot.com/2013/12/nuclear-energy-as-direct-cause-of.html</u>) (0719-1 [Anonymous, Anonymous])

**Comment:** Nuclear energy is expensive, dirty, dangerous and toxic (Nuclear Power; EXPENSIVE, Dirty, Dangerous And Toxic; <u>via@AGreenRoad</u> <u>http://agreenroad.blogspot.com/2012/10fnuclear-power-expensive-dirty-dangerous.html</u>) (0719-2 [Anonymous, Anonymous])

Comment: Not nuclear. (0721-1-3 [Rodriguez, Jose Javier])

**Comment:** I have probably another 30 years to live and I think a lot about things going on on our planet. I am an American citizen since 2000 and I'm very proud to be an American citizen. My county originally was Belgium, and I go back every year to visit my mom, my brothers and sisters. In Belgium we closed all the coal plants 20 years ago. Coal, we all agree, I hope, has to go. We all have morally a carbon footprint. We are stewards for our planet and we are responsible for generations to come. We cannot think about greed and money. In Belgium we don't have as much sun as here. Nuclear power plants are to go. We have to think about the future. We are closing all our power plants. There is only one left near Antwerp, it's going to close. We have solar mushrooming where my brother just told me, he gets money back from his electric company, from his FPL. Not that we request that. (0721-18-1 [Bernabei, Catharina])

**Comment:** What I would like FPL to do, jobs will be there if you really think morally. You know how as a human being we have a gut feeling. Animals have that. We are on the top of the species list. My gut feeling is this is wrong. Nuclear power plants are wrong, all over the world. There's something tremendously wrong. Fukushima is an example, but it's wrong. (0721-18-2 [Bernabei, Catharina])

**Comment:** At the risk of reiterating some of our complaints, I will say that nuclear power should not be used anywhere in the United States and certainly not in Florida, a State that has more than its share of severe hurricanes. (0721-26-5 [Koenigsberg, Linda])

**Comment:** One accident, equipment malfunction, operator error, or terrorist attack at a nuclear plant could literally mean the end of life on earth. And if Fukushima didn't convince you, you still think that a disaster couldn't happen at Turkey Point, think about the little o-ring on the Challenger. We can never forget that here in Florida. There's no way to guarantee 100 percent safety when using this technology. And when it comes to materials that remain deadly dangerous for tens of thousands of years, longer than all of human history, anything less than 100 percent safety cannot be considered safe. We humans are not infallible and neither is anything we produce. See? That proves it. Nor can we control or predict the forces of nature, as much as we might pretend that we can. This means that nuclear plants cannot --simply cannot be guaranteed to be safe. And when it comes to nuclear materials, anything less than 100 percent safety is not good enough. Nuclear plants are so dangerous that even Wall Street won't invest in them, and they'll in invest in anything, no matter how risky. (0721-28-3 [Wilansky, Laura Sue])

**Comment:** We are opposed to nuclear power because it is neither clean nor renewable. (0721-30-2 [Ullman, John])

**Comment:** We also learned that while we want to reduce carbon, and some are claiming that nuclear is the way to do that, falsely. (0721-30-4 [Ullman, John])

**Comment:** I think the nuclear industry is a Neanderthal industry, it's done with. The economy doesn't prove it's the right thing to do at this point. (**0723-3-4** [Star, Priscilla])

**Comment:** You have enough nuclear now. I mean, you've got this dog. It's deadly, it's not clean, it's not safe, it's harming the environment. And if you're told otherwise you're being fed lies. (0723-3-6 [Star, Priscilla])

**Comment:** [D]evelopment of adequate national and global policies to curb energy overuse and unnecessary economic growth. A resolution of significant safety issues inherent in reactor operation, disposal of spent fuels and possible diversion of nuclear materials capable of use in weapons manufacture and establishment of adequate regulatory machinery to guarantee adherence before drawing conclusions. (0723-5-2 [Teas, Jim])

**Comment:** Furthermore, the Sierra Club supports the systemic reduction of society's dependence on nuclear fission as a source of electric power and recommends a phased closure and decommissioning of operating commercial nuclear fission electric power reactors. (0723-5-3 [Teas, Jim])

**Comment:** You think nuclear is something new? The nuclear technology that these guys are going to install and they're running is exactly the same that was designed at the University of Chicago in the 1940s to build an atomic bomb. It's exactly the same. Take U235, split it, you get krypton, barium, cesium, ruthenium, it throws off neutrons. It's a small bomb running off in slow motion. I'm not saying it's going to become an atomic bomb but that's the technology. That's what nuclear is, splitting U235. (0723-9-6 [Schwartz, Matthew])

**Response:** These comments provide general information in opposition to nuclear power. They do not provide any specific information related to the environmental effects of the proposed action. No changes were made to the EIS as a result of these comments.

**Comment:** Already there are issues keeping the reactors cool and until the technology makes these safer for the environment and those that live around the plant, I strongly oppose any more nuclear plant additions. (**0006-2** [Faber, Davenie])

**Comment:** I am against any new development of nuclear plants in South Florida. With the new technologies being developed by Tesla, GE and others there is no need to increase the dangers associated with radiation (ie. Chernobyl and Fukushima, Japan). Also our proximity to Cuba with their ties to Venezuela and Russia make this a verrry bad choice. Please think of our Grandchildren and not corporate profits. How ever much the lobbyists offer you, it can't be worth your reputation. (**0017-1** [Gross, Gary])

**Comment:** Nuclear power plants around the world have caused serious loss of life and permanent injury to millions of people from Chernoble to Fukashima. The waste from these and other nuclear plants is still alive and decaying at a rate to disappear perhaps in a few thousand years or escape into the atmosphere. We must learn our lessons from history. (**0021-1** [Silver, William])

**Comment:** I do not want South Florida to have "antiquated and expensive nuclear technology from last century..". (0127-5 [Cusidor, Teresa])

**Comment:** Just because nuclear power is "clean" doesn't mean it's safe, it's dangerous. Think: Fukushima. (0189-1 [Forbes, J.])

**Comment:** I think we need to take a lesson from the Fukushima disaster and opt for safer forms of energy. (**0626-2** [Miller, Nyana])

**Comment:** With nuclear contamination in Japan as one example of ever cleaning up the mess a nuclear power plant has made. We must look to natural resources for our planet to survive. (0709-2 [Cummings, Frank])

**Response:** These comments and the attached statement provide general information in opposition to nuclear power. Some comments cite the Fukushima accidents as evidence that nuclear power is unsafe. They do not provide any specific information related to the environmental effects of the proposed Turkey Point Units 6 and 7. Issues related to safety are beyond the scope of the environmental review and will be evaluated in the NRC staff's safety evaluation report for the proposed units which is tentatively scheduled for publication November 2016.

**Comment:** Alternative power sources, such a solar, wind and waves, are being successfully used elsewhere. We do not want more nuclear facilities adjacent to our growing urban area. (**0093-3** [DuPriest, William Robert])

**Comment:** We need to be investing in decentralized power. This would provide a much greater level of redundancy, and meet the local power needs. If we were making better use of renewable energy (solar, wind, tide, etc.) at the neighborhood level, we could start to envision a state that doesn't need nuclear plants and their associated nuclear waste (have we found a place to permanently put the waste yet?). Other nations around the world are already working on a new paradigm, so we need to focus our efforts on catching up to leading edge technology instead of continuing with an obsolete model. (**0207-5** [Cleland, Noel])

**Comment:** NUCLEAR POWER PLANTS' IMMORTAL WASTES ARE CAUSING HUGE STORAGE PROBLEMS ALREADY. IT'S INSANE TO BUILD MORE. INSURANCE

COMPANIES WON'T INSURE THESE MONSTROSITIES BECAUSE THEY KNOW THE RISKS. FRESH WATER IS ALREADY AT RISK, SPECIES ARE AT RISK AND THIS POWER PLANT IS IN AN IRREPLACEABLE LOCATION. NOW IS THE TIME TO DEVELOP GREEN ENERGY, NOT PROVIDE ANOTHER OPPORTUNITY FOR A PRIVATE POLLUTING INDUSTRY TO FORGE AHEAD. (0303-1 [Pikus, Barbara])

**Comment:** The time for nuclear power expansion is over. We should no longer permit building of any additional nuclear plants and instead transition to solar and wind and other sustainable systems. (**0309-1** [Lundholm, Mark])

**Comment:** There are plenty of other alternative ways to create energy that are way less risk of severely damaging or completely destroying the environment around it. Please really look into the aspects to keep something like a nuclear plant up and running compared to any alternative energy method & the risk if something catastrophic were to happen, with irreplaceable damage to the environment and the people/inhabitants that will suffer. (**0367-1** [Rosenberry, Casara])

**Comment:** Creating more nuclear power reactors is a bad idea anyway since we don't know how to safely manage radioactive waste, don't know where or how to adequately store it, it creates incredibly dangerous risks from accidents, and we don't need it since efficiency, wind, and solar can meet our energy needs if investment is redirected toward those sensible options. (0370-5 [Vayu, Satya])

**Comment:** I suggest that we may want to consider renewable wind or solar energy before we head down the path of more dangerous nuclear power plants. (**0424-1** [Corey, Sheffield])

**Comment:** Why are we not phasing out nuclear energy and going green? Nuclear is no longer an energy option and must be closed down. (**0529-1** [Brandariz, Anita])

Comment: Stop dragging your feet and move to energy that is safer. (0529-3 [Brandariz, Anita])

**Comment:** We do NOT need more nuclear reactors. We need CLEAN GREEN ENERGY!!!!! (0568-1 [Goldberg, Laura])

**Comment:** No more nuclear plants - close down existing plants and develop solar and wind instead. (0577-1 [Cook, J.])

**Comment:** There are other ways and places to produce energy. Consider carefully what you are doing and do not impose 6 & 7 and its consequences on this and future generations. (**0598-4** [White, Barry J.])

**Comment:** Personally, I would not even want to live near ONE, let alone TWO, nuclear reactors. This is hazardous and LETHAL material to ALL LIFE. Power should be provided by natural, RENEWABLE and, especially, SAFE sources. THIS is what power companies SHOULD be working on, NOT toxic power that will further pollute our Earth. (**0648-1** [Fray, Antje])

**Response:** These comments identify general concerns about alternative energies being used instead of the proposed Turkey Point Units 6 and 7. They do not provide any specific information related to the environmental effects of the proposed action. Alternative energies including wind and solar were evaluated and are described in Section 9.2 (Energy Alternatives) of the EIS. No changes were made to the EIS as a result of these comments.

**Comment:** Attached is a response to the new Turkey Point Nuclear Reactors [Commenter attached a file authored by the Indigenous Elders and Medicine Peoples Council, a statement on Fukushima with file titled "COUNCIL\_FUKUSHIMA\_STATEMENT\_OCT\_2013[1].pdf"]. (0255-1 [Larsen, Shannon])

**Response:** This comment and the attached statement provide general information in opposition to nuclear power. Some comments cite the Fukushima accident as evidence that nuclear power is unsafe. They do not provide any specific information related to the environmental effects of the proposed Turkey Point Units 6 and 7. Issues related to safety are beyond the scope of the environmental review and will be evaluated in the NRC staff's FSER for the proposed units which is tentatively scheduled for publication in November 2016.

## E.2.36 General Comments in Opposition to the Existing Plant or the Applicant

**Comment:** the NRC made a big mistake in allowing FPL to expand its capacity and to allow it to continue in operation after its original design period expired. this has proven to already be catastrophic: the cooling canals now do not work at this increased capacity. and s. Florida will be faced with either 1) black outs in peak demand summer months 2) or letting FP&L use our scarcest resource, more water to cool the expanded facility. already this year, one of the reactors was taken off line for some mysterious reason. (**0055-2** [Roedel, Kitty])

**Comment:** I was at a meeting at audubon house years ago when you told us that if you put gas turbines into turkey point that you would not do any further nuclear. You are liars, something we all knew but now it is plainly obvious. (**0072-1** [Logan, Brian])

**Comment:** As a resident of North Key Largo for 27 years, I am living under the threat of an accident at Turkey Point, whether it be from a hurricane, operating accident or age related. Just the operation of the existing facility has stressed the fresh water supply. The heated water has made a marked affect on marine life. (**0096-1** [Roberts, Linda])

**Comment:** The existing reactors at Turkey Point are aging, and have been questionably managed and maintained. Time and time again, they have bent and outright broken regulations and have put the local community at risk! Their cooling mechanism, a series of manmade waterways, is overgrown with algae or similar organism, causing significant overheating of the water. They have demanded a new ongoing source of water from our local aquifer to reduce the temperature. We are, as the result of their actions, facing a huge plume of salt water intruding into the fresh water supply, contaminating many wells used by other entities for other purposes. We are already facing problems created by the existing nuclear reactors. (**0115-2** [Trencher, Ruth])

**Comment:** Florida Power & Light is a monopoly, but is intended to serve the public. FPL has not been responsive to the needs and concerns of our community, instead, has chosen to bulldoze their way through our community in their effort to maximize their profits at our expense. (0115-9 [Trencher, Ruth])

Comment: Why does FPL dictate all energy power. (0149-5 [Nelson, Joyce E.])

**Comment:** This monopoly has bullied us all. Their only concern is profit, so they buy the influence that guarantees their revenue. FPL and other power monopolies have exerted massive force, using \$millions to ensure that the Public Service Commission (PSC) and other levels of government are populated by those who put corporate profits first, and public safety

and benefit last. FPL has been granted authority by the PSC to impose fees for Nuclear Power on every user account. (**0252-17** [Van Leer, Sam])

**Comment:** I believe that this expansion of the reactors at turkey point.....will increase the risk we all ready have we a plant that has been cited various times every year for the last 10 years for oversight and for defective equipment. (0494-2 [Tamargo, Jorge J.])

**Comment:** I had a friend who worked for FPL and about 25 years ago told me it once almost melted down. They have two large control rooms like we saw in the China Syndrome movie and a third smaller control room, They were doing some work in the room in the radioactive section of the reactor and a crane dropped something heavy on a pipe that had all the wires from the three control rooms to the reactor and shorted out all the wires so they had no control over the reactors and the only thing that saved it from meltdown was a system inside the reactor that when certain things melted it automatically flooded it or something turning it off, But it came very very close to melt down ! But they managed to keep it out of the news completely !! They advertised and hired a lot of one time employees I think they call them jumpers ? Who went into the hot section for only the maximum allowed time of a couple hours wearing radiation suits and did repairs! (0505-2 [Buyea, Thomas])

Comment: No to FPL. (0660-3 [Sanchez, Sergio and Irma])

**Comment:** But I do want to say corporate responsibility. This EIS, if you're not considering the current issues on the ground then what are we talking about? (**0721-10-1** [Reynolds, Laura])

**Comment:** And what I've seen here is that the operational excellence or the operational reality of FPL has not been brought into the EIS. And that's a serious problem. The operational reality is why you want up-rating. And now you're reducing monitoring standards for that because of their operational a/k/a excellence or the reality that they've met the protocols listed out in the 2009 agreement. Implementing an EIS before that and not realizing that there's been quality control issues in the time of the EIS initiation that would have weighted a quality control document in any other industry, whether it be medical -- you know, I've had FDA letters coming out of the ears of customers because they didn't have a voice basket in the right place. And here we are having steam leaks, value fractures, shutdowns. Serious issues here. And those weren't even weighted in the EIS? While they're having an up-rating processing of reducing monitoring standards for GMP, you know, good manufacturing practices. It starts to fall apart in my mind, and I'm looking at it from just a manufacturing quality management standpoint. (**0721-34-1** [Gomez, Albert])

**Response:** These comments express opposition to the existing units at the Turkey Point site or to the applicant. They do not provide information related to the environmental review for the proposed action. No changes were made to the EIS as a result of these comments.

**Comment:** Anyone reading the local paper here in Miami knows that FPL's recent problems concerning reactor cooling water temperatures do not bode well for the future of the existing plant and serve as a strong warning against future nuclear construction in this area. (0057-2 [Neway, Roberta])

**Comment:** The NRC should, through the EIS process, identify opportunities to limit or remove environmental damage already being caused by the presence of Turkey Point 3 & 4. Clearly the 1960's "technology" of thousands of miles of cooling canals is no longer a pragmatic or functional solution to the demands of the existing power plants and has been shown to have

significant deleterious impacts on the immediate environment and is damaging the ecological health of Biscayne National Park. Even if two years of water diverted from the National Park temporarily cools the Turkey Point canal system, it is evident that the hyper-saline conditions were present before the recent uprate and are largely responsible for accelerating salt water intrusion into the Biscayne Aquifer -Miami-Dade's only drinking water source. That same water source that is being impacted by Turkey Point 3 & 4 is the planned "backup" water for Units 6 & 7, further impacting the availability of fresh water flows to the National Park. (0172-7 [Cava, Daniella Levine])

**Comment:** Turkey Point's operations are already impacting Biscayne Bay's habitat, water quality, and salinity, which are vital for the health and productivity of the bay. (**0284-4** [Lopez, Josie])

**Comment:** FPL has already failed to maintain sufficient cooling capacity in the canals it maintains to service the plant it has. now[.] (0341-2 [Daniels, Bonnie])

**Comment:** The ones already built are damaging the Bay and need to be better managed before there are any more proposed. (**0667-2** [Brown, Bradford])

**Comment:** Please include the below Miami Herald article just published 3 days ago and read the whole article referenced in the last line. [Commenter attached a copyrighted Miami Herald newspaper article] (0718-4 [Buechler, Jerry])

**Comment:** Before Unit 1 was built at Turkey Point, in the eastern part of the Everglades, the salinity of water there was the same as the rest of Everglades is today, about 400 practical salinity units, PSU; 400. Under 500 is fresh water. Today, after 55 years of producing energy for Florida, Georgia and the rest of the nation the salinity at Turkey Point is 35,000 PSU, the same as sea water. That's from 400 to 35,000. And in the cooling canals it reached 95,000 PSU in 2014. Salt water, which used to begin a few miles offshore at Turkey Point, has now intruded inland four miles due to the now hypersalinity, due to the energy production on the site. (0721-12-1 [White, Barry J.])

**Response:** These comments express opposition to the existing units at the Turkey Point site or to the applicant. They do not provide information related to the environmental review for the proposed action. The proposed units will not use the cooling canals. No changes were made to the EIS as a result of these comments.

#### E.2.37 Comments Concerning Issues Outside Scope - Emergency Preparedness

**Comment:** Also we wonder how the Citizens Safety and Protection agency feels about this and what would happen if they were contacted by all of us who will be affected if, God forbid, anything were to happen at Turkey Point. (**0040-3** [Pareto, Rolando and Marlene])

**Comment:** The question of whether or not Miami Dade County will ever experience another Hurricane Andrew or similar natural disaster is not a question of "if" but "when". Clear, unobstructed and safe evacuation routes are paramount to the safety of the residents of Miami-Dade County. (0044-6 [Commenters, Multiple])

**Comment:** I live approximately 7 miles from Turkey Point and I have for years wondered what I would do in the event of a "melt down". Unfortunately, given my proximity, there really is nothing I CAN do. (0045-2 [Johannsen, Christian])

**Comment:** south florida has no feasible alternatives to mass exodus in case of a nuclear accident at the aged turkey point. yhe population explosion in 40 years has left all of us vulnerable to this accident waiting to happen. (**0055-8** [Roedel, Kitty])

**Comment:** The Turkey Point plant is already the largest generating station in Florida, in close proximity to a relatively large population and no feasible evacuation plan in an emergency. Through most of the day, the main artery (US-1) is already bumper to bumper. Further concentrating the risk in that area is irresponsible and increases the danger to the surrounding cities and towns. (0187-2 [Meyer-Steele, Shawn])

**Comment:** I wonder if our cities have any type of plan in place if there is a leak,terrorist attack,or damage from a Hurricane. (**0223-2** [Robbin, Valerie])

**Comment:** FPL mailed us all a book in Palmetto Bay called be prepared. It shows evacuations routes by FPL if sirens sound in Palmetto Bay. When I call Miami Dade they have no idea of my assigned shelter. I called Palmetto Bay they said take old Cutler and go North to South Miami. We are to listen to radio and turn off air and stay sealed in house for how long? We are NOT ready for units we have now. (0234-1 [Samole, Sharon])

**Comment:** Had an additional threat emerged, we could have had a Fukushima-level event in a densely populated American city. With the whole community reeling from massive infrastructure, transportation and communication damage from the Hurricane, rapid evacuation would have been impossible. I was here, I know what South Dade was like, and it was worse than a war zone. (**0252-8** [Van Leer, Sam])

**Comment:** [O]ur history with hurricanes has proven how difficult it is too evacuate such a heavily populated area during hurricane season when we are for the most part prepared, let alone the chaos that would ensue on the limited escape routes headed north in the event of a nuclear meltdown. (0259-6 [Lettieri, Tammy])

**Comment:** The question of whether or not Miami Dade County will ever experience another Hurricane Andrew or similar natural disaster is not a question of "if" but "when". Clear, unobstructed and safe evacuation routes are paramount to the safety of the residents of Miami-Dade County. Constructing the associated new 110' tall High Voltage Electrical Power Line Transmission towers, exempted from the high velocity hurricane zone requirements of the Florida Building Code, in a location that historically experiences Very High Velocity Hurricane force winds, at 200 foot intervals along the length of US One, the major north - south evacuation route for Dade County, poses unacceptable risks to the population of Dade County. Doing so is simply inviting catastrophe in the event of a natural or man-made disaster requiring evacuation. (**0263-4** [Orzechowicz, Holly])

**Comment:** One item that was incontrovertible was the impossibility of evacuating South Florida to save us from a nuclear disaster. Mere hurricane evacuation makes our evacuation routes by land, sea and air impassable and effective communication impossible. (**0264-1** [Dwyer, John P.])

**Comment:** If something serious happens, the public might not be warned to take precautions, like the Three Mile Island meltdown which wasn't made public for 9 years. Who made that decision? (**0336-3** [Anonymous, Anonymous])

**Comment:** As it is, there is inadequate means for evacuation in the event of a nuclear accident. (0337-5 [Philips, Sally B.])

**Comment:** I don't have a working Thyroid. A lot of good iodide will do me. Although I would like to try the cherry flavored syrup to see how it tastes (if kids will actually drink it). (**0373-13** [Lee, Nancy])

**Comment:** I know I am not supposed to address this but god guys, how are you going to get people in the keys evacuated. There is only one way to go past the plant. There are almost 4 million people in a 50 mile radius. I have yet to hear the evacuation plan. (0373-5 [Lee, Nancy])

**Comment:** They also increase the difficulties of emergency preparedness and evacuations. (0615-2-14 [Bethune, David])

**Comment:** Any accident at Turkey Point serious enough to create widespread environmental contamination by fallout will also necessitate evacuation of large numbers of the resident population, making evacuation a factor in environmental impact planning. (**0615-3-7** [Bethune, David])

Comment: Traffic flow to and from the Florida Keys is entirely constrained by a single road and, in essence, most South Florida traffic is constrained to three roads: US 1. Highway 95, and the Florida Turnpike. Bounded by the Everglades to the west, Florida simply does not have the east-west transportation infrastructure to make evacuation from Turkey Point viable. In the event of an emergency, all traffic flow would be constrained to the same north-south evacuation routes along the coast. By virtue of the road system ending in the Florida Keys, evacuation southward is also an impossibility, leaving northward travel by three roadways as the only evacuation option in case of a nuclear accident at any of the four reactors which would constitute the Turkey Point site if units 6 and 7 were completed and fueled. On a typical weekday, Miami and Fort Lauderdale experience considerable delays in trying to use these north-south roadways. During holidays, the corridor between Homestead and Key West is known to be particularly impassible. Hurricane evacuations from the Keys take 3-4 times as long as a trip during any other time, and none of these is a mass catastrophe on the order of a severe accident at Turkey Point. South Florida simply does not the geography or the road system to handle a mass evacuation such as would be necessitated by a serious nuclear accident at Turkey Point today and adding two more reactors to the site would only compound the problem. The draft EIS for Turkey Point 6 and 7 is incomplete because it fails to take into account the problems of evacuating the large population surrounding the plant when only a few northbound travel options exist and these are already constrained. Lacking a clear and workable evacuation plan, any significant radiation release (not just a meltdown) would present a considerable and unjustifiable hazard to human health and the environment. The resulting attempt by the public to evacuate a nuclear accident despite the lack of viable roadways could lead to violence, car crashes, and other hazards to people. The draft EIS is incomplete because it did not compare evacuation problems and options with other proposed sites. (0615-3-9 [Bethune, David])

**Comment:** Also, the evacuation scenarios of the Florida Keys should be evaluated as part of the siting issues, and compared with the evacuation scenarios of the alternative sites. The Florida Keys communities are offshore, and therefore have different evacuation routes than other potential sites that do not involve offshore communities with evacuation concerns. The evacuation of offshore communities in the event of an emergency should be thoroughly considered, and should also take into account the possible impacts of hurricanes occurring in conjunction with a nuclear plant emergency. (**0617-4-15** [Mueller, Heinz J.])

**Comment:** The proximity of this plant to a large population that does not have adequate escape routes due to being on a peninsula increases the safety risk. (**0641-6** [Martin, Drew])

**Comment:** One item that was incontrovertible was the impossibility of evacuating South Florida to save us from a nuclear disaster; Mere hurricane evacuation makes our evacuation routes by land, sea and air impassable and effective communication impossible. (**0673-1** [Dwyer, John P.])

**Comment:** So my only point, in conclusion, there is an excellent plan for Dade County and an excellent plan for Monroe County on how to handle not just a nuclear waste or nuclear air quality or nuclear -- or how to get the cars out of town. It's all good, it's all tied in together, it's two separate studies. One's been in existence for a long time. Well done. (0722-15-3 [McColgan, Robert])

**Comment:** My only complaint --that's what I come down here for -- Broward County has no safety plan. I did call a Broward County Emergency Management a few months ago and I asked them for their Turkey Point nuclear plan in case something happened. And plan like similar to Dade or Monroe. And I asked, can I have a copy of your plan? And they looked and looked and couldn't find it. Then they called me back 15 minutes later and they said, oh, it's not required. So therefore, I'm coming back to the source, the one who requires it. Also a high-level person, a friend of mine who's environment health administrator with the Broward County, the Division of Health for the State, I asked him to help on this and he come back a week or so later, he had a funny look on his face. I know, it's not required. He said, you know, it's not required, that's why it's not done....So therefore, everybody means well. There's -- if it's from NRC is the one who requires it or doesn't or coordinates, why can't NRC have, okay, we've got Dade County here, Monroe County here, why can't Broward County be tied in? Why does it have to have these boundaries like ten miles or fifty miles? Why can't we change that? Why can't we have some sort of plan for Broward County even if it showed people how to get out of town or what to do? (0722-15-4 [McColgan, Robert])

**Comment:** But I really, in the back of my mind, have to make a plan of leaving. And right near the front of my door I have the Turkey Point exit plan which, how will it work if you have 15 minutes to get out? And we can't even move, I can't even get to my school in 15 minutes and I have to get out of this giant cone of influence? (0723-11-8 [Berendsohn, Catherine])

**Response:** These comments relate to the adequacy of emergency plans, which is a safety issue that is outside the scope of the NRC staff's environmental review. As part of its safety review, the NRC staff will determine, after consultation with the U.S. Department of Homeland Security (DHS) and the Federal Emergency Management Agency (FEMA), whether the emergency plans submitted by the applicant are acceptable. The currently operating units have an emergency plan in place that has been reviewed and approved by both the NRC and DHS/FEMA. No changes were made to the EIS in response to these comments.

#### E.2.38 Comments Concerning Issues Outside Scope - Miscellaneous

**Comment:** Nuclear advocates frequently state that both xenon and krypton decay and disappear in a matter of seconds or minutes. What they don't tell us is that these isotopes decay into daughter isotopes that are extremely deadly emitters. The corporate proponents of nuclear power have used all kinds of disinformation and tactics to protect the industry--compelling the nuclear complex to arm guards to 'protect' these secrets and to 'protect' civilian reactors. It is not only 'terrorists' that the nuclear establishment seeks to protect us from: the armed guards and classified documents are to prevent the public from learning the truth about the destruction of

documents, the disappearing of evidence, the falsification of reports and records, the calculated fudging of risk and safety assessments. (**0673-5** [Dwyer, John P.])

# **Response:** The comment did not provide information relevant to the environmental effects of the proposed action. No changes were made to the EIS as a result of this comment.

**Comment:** It turns out that nuclear power plants don't just consume uranium. By the way, yesterday's article in the "New York Times" said that 80 percent of the world's uranium supply is now controlled by President Putin. With his help of some deft contributions to the Clinton Foundation and the -- you know, some Canadian investors, we have the Russians basically who, over time, they have acquired a lynchpin control over the uranium supply for the world. (0723-12-10 [Henry, Jim])

**Comment:** But for the uranium supplies in the future, we want to turn to Russia? I mean, that's a technology risk that I don't want to make. It may not be within the scope of this DEIS. In the timeframe that we are considering, we should be thinking about that security issue. (0723-12-11 [Henry, Jim])

**Response:** These comments discuss the available uranium-ore supply and associated potential impact on the viability of the nuclear industry, which are outside the scope of the environmental review. No change was made in the EIS as a result of these comments.

**Comment:** You people are only in it for money and greed. You'll kill everyone eventually after you've killed everything that living creatures, including us, depend on. Hope I'm already dead! (0107-1 [Black, Mary Beth])

**Comment:** I hope the you & your colleagues are un-biased & have enough integrity & complete enough with your science to come to the stronger conclusions against FPL wanting 6 & 7 Nuclear Reactors, because you have also factored in, along with Global Warming flooding where Turkey Point resulting in even greater damage to people's health & tourism, that: ... Germany (The Western European country with the most cloud cover) that gets so much of the power from solar energy that they are decommissioning nuclear power plants, with the aim of having none. The information out there that Germany uses more International Corporations' Coal than they are using solar power (making the only way their program of providing mortgage type loans for all their home owners to have the chance to own & use solar panels is able to work) is also a lie. I have read & heard from sources (I trust) that the only reason they use non-solar power & wind energy is because they & The EU already had established trade deals, with other countries. (0120-2 [Shark, Jason])

**Comment:** I am fearful of the monopolistic and lobbying power FPL has managed to obtain in our city. (0171-1 [Oria, Jordan])

**Comment:** The corporate proponents of nuclear power have used all kinds of disinformation and tactics to protect the industry -- compelling the nuclear complex to arm guards to 'protect' these secrets and to 'protect' civilian reactors. It is not only 'terrorists' that the nuclear establishment seeks to protect us from: the armed guards and classified documents are to prevent the public from learning the truth about the destruction of documents, the disappearing of evidence, the falsification of reports and records, the calculated fudging of risk and safety assessments. (**0264-5** [Dwyer, John P.])

**Comment:** Nuclear power is something very powerful that we as fellow equal human beings are still developing and still learning about. We know better than to use nuclear weapons against one another as United Nations. I believe there is a responsible and sensible use for nuclear technology. Maybe nuclear development will come in handy one day when the people of Earth are ready to explore deep into outer space. (0300-2 [Van Pelt, Jason])

**Comment:** I don't know why these agencies even consider going through with allowing this, I still get amazed at the lack of foresight and stupidity. I continue to hope that intelligence will prevail.. (0312-1 [Geiger, Marcia])

**Comment:** The state process is flawed and NRC should not rely on a bad state utility planning process that could have a tremendous negative impact on myself and all residents in the region. (0323-3 [Jennings, Cara])

**Comment:** But you're not looking at the big picture, and I want you to deal with it. (0723-11-10 [Berendsohn, Catherine])

**Response:** These comments did not provide information relevant to the environmental effects of the proposed action. No changes were made to the EIS as a result of these comments.

**Comment:** On a final note-If any nuclear energy is to be pursued in this country there is no intelligent alternative besides Thorium. China is developing LFTR from technology the USA pioneered. (**0235-1** [Bofill, Beatriz])

**Comment:** 1) the reactors need to be removed from the biosphere that we live in - meaning get the reactors a couple thousand feet underground (or in space); the steam generators and all other facilities can be on the surface, (**0502-1** [Brumleve, Charles])

**Response:** The COL applicant is responsible for selecting the reactor design it prefers to have reviewed by the NRC during the licensing process. The NRC then reviews the application in accordance with its regulations and its licensing procedures. By separate action, the NRC has certified certain reactor designs as conforming to its safety standards, including the design selected by the applicant for Turkey Point Units 6 and 7. At this time there is no design for a liquid fluoride thorium reactor or for a reactor that operates outside the biosphere certified for use by the NRC. No change was made to the EIS as a result of these comments.

**Comment:** Nuclear power is something very powerful that we as fellow equal human beings are still developing and still learning about. We know better than to use nuclear weapons against one another as United Nations. I believe there is a responsible and sensible use for nuclear technology. Maybe nuclear development will come in handy one day when the people of Earth are ready to explore deep into outer space. (0300-2 [Van Pelt, Jason])

**Response:** The NRC has carefully reviewed the application against its regulations that are intended to protect public health and safety and the environment. More information about the NRC's roles and responsibilities is available on the NRC's website at http://www.nrc.gov/about-nrc/regulatory.html. No changes were made to the EIS in response to this comment.

**Comment:** I don't want to continue to see the utility company belittle the efficacy of solar power. I don't want to expand a reactor because Sarasota doesn't want one. I certainly hope it doesn't come down to Legislators and a Governor that not only don't believe in climate change but gag-order all state EPA employees from even acknowledging 8th-grade science. (**0008-11** [Finver, Jody])

**Comment:** You just flunked fifth grade grammar. Your readers deserve better. (**0085-1** [Quarles, Greyson])

**Comment:** This power company has already acted cynically and irresponsibly to inhibit the development of solar energy (in the "Sunshine State"!) to enhance its bottom line. It has also profitted handsomely from future 'cost recovery' tariffs imposed on its customers. Enough is enough! (0341-5 [Daniels, Bonnie])

**Comment:** Your uniqueness, your monopoly reality that you have been able to cultivate over the years, it's not always going to be there. And the reality is, is if you have a chance to decentralize your client base as well as your production, therefore qualifying your distribution. Because the reality is that message of the distribution, somebody has to take care of the lines and somebody has to -- so centralized versus distribution, that doesn't make sense. (0721-34-4 [Gomez, Albert])

**Comment:** So, there's an opportunity space here. And there's someone in a management perspective -- it's old management thinking, it's not creative, it's not lateral, and I'm really depressed to know that I am supplying a company that has started to rest on their laurels, they have lost their innovation edge, and they are resting on the fact that they own the market. And it always happens, when anyone owns the market they're the biggest target. So I would just have you think from Board perspective that your stakeholders should demand more innovation, should demand more, and they're from a local citizen and from a subject matter expert in the manufacturing field, and being immersed in quality management on a day-to-day basis. (0721-34-6 [Gomez, Albert])

**Comment:** I think FPL has set up a nuclear tech program here at the local college. Why not a solar tech project? (**0723-9-4** [Schwartz, Matthew])

**Response:** These comments are directed to the applicant, therefore no changes were made to the EIS as a result of these comments.

**Comment:** Ms. Bladley, another matter that I hope you can appreciate is the fact that we have politicians down here (I think by now that is a known infamous and shameful issue, from governor Scott to Tallahassee legislators to local politicians down) who are denying environmental changes and are scrupulously gaming the energy issues. A South Miami mayor really snowed the residents by fighting huge power lines along a route from Turkey point North a few years ago. His re-election campaign was mostly financed by special interests and people who opposed the power lines. At those hearings the citizens were lulled in believing that the "reactors will never happen". South Miami spent lots of money on legal fees and promptly lost the powerline fight against FPL and the mayor was re-elected. The same mayor proceeded to forge a 30 year franchise fee agreement with FPL where alternative options were presented and available. And now, its election time again, the same mayor is a poster boy against the nuclear plants, and I am afraid that history will repeat itself. Said clever mayor was incomprehensibly chosen to be with president Obama in the Everglades on Earth day. Except for photo-voltaic panels on his own roof there is no evidence in his leadership that tells us he is truly an environmentalist. All I want to ask you is to listen to the people and not just align with a list of elected officials to make the decisions. Florida just passed a referendum where 75% of the Florida Population voted to preserve and protect environmentally sensitive land and water. The Turkey point site belongs in that category and guess what: Politicians are already trying to game that issues because of the huge sums of taxpayer money involved. (0060-6 [Beckman, Yvonne and Douglas])

**Comment:** In following the NRC's own guidelines, the expansion of Turkey Point could have unacceptable and irreversible impacts ... even if the governor does not believe they exist. (0470-2 [Lenz, Andrew])

**Comment:** And we're in a State with a Governor who doesn't even recognize that or won't even talk about it, and that's where the Public Service Commission comes from, and if somebody on the Public Service Commission who doesn't agree with the overall attitude of, let's not worry about it, they're replaced. (0721-6-4 [Harris, Walter])

**Response:** The comments did not provide information relevant to the environmental effects of the proposed action. No changes were made to the EIS as a result of these comments.

**Comment:** I am worried about the mountain tops that we are blowing up to supply more than 20% of South Florida's electricity. (0127-7 [Cusidor, Teresa])

**Response:** This comment relates to the environmental impacts of mining uranium for use as fuel in a nuclear power plant. The NRC staff evaluated the impacts from the life-cycle of fuel production, construction, operation, and decommissioning of the Turkey Point Nuclear Plant Units 6 and 7. The results of this analysis are presented in Chapters 4, 5, and 6 of the EIS. The generic impacts of the fuel cycle are codified in 10 CFR 51.51(b), Table S-3, Table of Uranium Fuel Cycle Environmental Data. In accordance with the guidance in 10 CFR 51.51, the staff relied on Table S-3 as a basis for the impacts of uranium fuel-cycle impacts. No changes were made to the EIS as a result of this comment

**Comment:** Please due the right thing for future generations. (0383-1 [Brown, Robert])

**Comment:** Please take the time to think of our future, more importantly the future of our children, of our planet. (0389-1 [Fitzpatrick, Deirdre])

Comment: We must do all we can to protect Biscayne National Park (0454-1 [Ehrmann, Nancy])

**Comment:** Please help save this precious park and its wildlife! (0465-1 [Caswell, Gail])

**Comment:** In following the NRC's own guidelines, the expansion of Turkey Point could have unacceptable and irreversible impacts on these treasured sites. Poo-for-brains is ownly good for watching fox news. (**0500-1** [Pew, Don])

**Comment:** I have been actively involved in working to protect our environment since 1970. President Theodore Roosevelt begin the National Park System by designating Yellowstone as our nation's first National Park. (**0583-1** [Harper, Diane])

**Comment:** We need to take a lesson from California and not risk ruining our state for both visitors and our residents! (0659-1 [Abalos, Jessica])

**Comment:** Thank you very much to everyone for being here. It's good to be here on Earth Day with the President right around the corner celebrating the Everglades. I helped organize the very first Earth Day celebration in Syracuse in 1970 and I've been working to protect the environment since long before that, and that's what I'm doing here today. (**0721-28-1** [Wilansky, Laura Sue])

**Response:** These comments express a general concern about the impact of Turkey Point Units 6 and 7 on the region. No specific information is provided in these comments and no changes were made to the EIS as a result of these comments.

**Comment:** I would say this, on the more the technical side but on the understanding of what it means to have a nuclear power station in your town. You can talk about Chernobyl in Russia where it did not have a free press, it did not have a diversity of opinion, and where one did not have any checks and balances, one could operate with impunity regardless of what others believed or would like to know. Or you can operate like Japan did where there has been an understanding if there existed a free press and checks and balances, but was there really? (0723-7-2 [Boling, Steve])

**Response:** This comment indicates that the free press in the United States creates a climate of extensive oversight for the operation of nuclear power plants. It provides no information relevant to the environmental review. No changes were made to the EIS as a result of this comment.

**Comment:** I would be able to do more if the United States Postal Service's officials was legal compelled to afford victims of their adverse actions due process, access to the information employed to indict their customers rights and privileges, and granting of a requested impartial hearing. Ralph Timberlake of 2117 Atkins Drive, Huntsville, Alabama 35810 mail is encumbered for his aforementioned address and his mailing is being encumbered. (**0282-2** [Timberlake, Ralph])

**Comment:** In the 1950's I was an enginer assigned by the Air Force to study the radiation fallout effects of atomic weapon explosions during the Nevada Weapons Test Program. Conditions have changed extensively but the basic problem of understanding the radiation phenomenon still remains and demands full current understanding regardless of the radiation source. EPA needs to give this subject complete overview and action, especially the complete disposal of ALL nuclear weapons around the world. (**0560-1** [Anderson, Vaughn])

**Comment:** Further, your Thorium-based nuclear systems are still too dangerous and will last a few hundred years instead of 10,000 or more years from uranium waste. I believe it was Dana Durnford, the Nuclear Proctologist who said "Thorium is more expensive than uranium because it can't sustain a reaction by itself and must be bombarded with neutrons." (**0561-3** [G., Ambriel])

**Comment:** And this Fracking thing? Causing major pollution of our underground springs-for a bit of oil? (**0593-2** [Family, Manzi])

**Comment:** [Commenter attached a file entitled: Addendum To Indigenous Elders and Medicine Peoples Council Statement Fukushima, Beyond Climate Change to Survival on Sacred Mother EARRTH. United Nations - September 21, 2014] (**0610-1** [Larsen, Shannon])

**Comment:** The "atoms for peace" program was a cover for producing bomb materials in civilian reactors. In other words, it is a lie. Typical for the government. (**0645-3** [Anonymous, Anonymous])

**Comment:** WHY KILL OUR ENVIRONMENT OR RISK A DISASTER? TEPCO IS EVIL (0656-3 [Zhivelev, Leon])

**Comment:** PITIFUL ARGUMENT [City of Miami]. (0685-12 [Batista, Carlos])

**Comment:** WHAT DOES THIS [terminating the current monitoring program for the Turkey Point power plant cooling canals] REALLY MEAN? (**0685-13** [Batista, Carlos])

**Comment:** If "profit" is what you're after, then why not follow Colorado's example and make Cannabis legal and see how much the sales of it will add to the State's bottom line making any type of technology for our citizens affordable! (0712-5 [Almer, Anessa])

**Comment:** Another big issue is being a native down here. I've seen our Dade County master plan. There is no master plan. You know, they come up with a plan, we're going to build here and not allow it further, then it goes more, more, more. This X amount of density, oh, no, we'll change that. So we need to have a master plan and stick to it and we need to limit further construction and the endless inflow of people down here, because people need electricity. And if you don't want to have to build nuclear power plants and produce mega power, which people need to live, then we need to start limiting the inflow of population through endless construction and increasing our density with vertical construction. (**0721-24-5** [Eastman, John])

**Response:** These comments are outside the scope of this review and do not provide specific information related to the environmental effects of the proposed action; therefore they will not be evaluated further. No changes were made to the EIS in response to these comments.

**Comment:** Quit supporting the most bailed out industry in US history, the nuclear power industry, since it's beginning. repeal Price-Anderson. (**0508-3** [Harrison, J. M. M.])

**Comment:** And someone mentioned about Wall Street won't pay for this. Well, also insurance companies will not insure nuclear risks. There's a Federal law that provides for coverage for that. I think it's called the Price Anderson Act. So insurance companies will not insure this, it's such a horrible risk. (0721-32-2 [Schlackman, Mara])

**Response:** The NRC is not involved in establishing energy policy; rather, it regulates the nuclear industry to protect public health and safety within existing policy. Thus, matters related to the Price-Anderson Act of 1957 are outside the scope of this review and will not be included in the EIS. However, the EIS includes an evaluation of potential health impacts of operating a nuclear plant on the Turkey Point site in Chapter 5. In addition, the safety assessment for the proposed licensing action was provided as part of the application. The NRC is in the process of developing a SER that analyzes all aspects of construction and operational safety. The NRC will only issue a license if it can conclude that there is reasonable assurance that: (1) the activities authorized by the license can be conducted without endangering public health and safety, and (2) such activities will be conducted in compliance with the rules and regulations of the NRC.

## E.2.39 Comments Concerning Issues Outside Scope - NRC Oversight

**Comment:** Your failure to protect my family and the families of others who reside in South Florida will result in protracted litigation, of this I can assure you. (**0051-2** [Smith, David W.])

**Comment:** YOU PEOPLE HAVE LOST YOUR MINDS !!!! YOU NEED TO RESIGN....YOU ARE NOT WORTHY OF YOUR OFFICE !!! (0477-1 [Garmon, Toni])

**Comment:** At the time of its creation, the NRC was charged with serving as the public's guardian over the activities of civilian nuclear power plants such as those at Turkey Point. The law which formed the NRC did so with the purpose of separating the function of protecting the public from the task of promoting nuclear energy. The NRC is to have no role in aiding the nuclear industry or in promoting the development of its products or agenda. It is not the agency's job to justify, rationalize, or encourage the industry's attempts to spread nuclear power. Yet faced with overwhelming public support for true clean energy options, particularly the solar option in South Florida, the NRC finds itself continually defending the nuclear industry's sales pitch. The lighthearted, promotional tone of the summary EIS materials presented at the April 22nd public meeting was shocking and reprehensible. As an informed and concerned citizen, I urge the agency to clean up its act. If the people of the United States decide that there is no future in nuclear power, as the people of Australia, Belgium, Germany, Italy, Japan, the Philippines, Sweden, and Switzerland have already decided, then the NRC will simply have to accept that fact and "go out of business," as one commenter on regulations.gov recommended. (**0615-3-10** [Bethune, David])

**Comment:** Good oversight is a plus. (0685-8 [Batista, Carlos])

**Comment:** There's a lot of holes here, both in the EIS. You have to be lateral and connective to all the different inputs and I don't see that. There's a lot of compartmentalization going on and I think that it's time for you guys to start open kimono on this thing and really get into it, because from a Nuclear Regulatory Commission this is your legacy. This is your watch. You're here now. So you need to shake it up and start to realize that it's your role. (**0721-34-7** [Gomez, Albert])

**Comment:** There is a collusive reality in the fact that the Commission -- you know, I remember, I've read your history from the '60s all the way up, how it developed and the whole thing, and reality is, it's tough, it's a tough reality that you're in, because you need to promote it, in the sense that you have to see it forward, it's an operating entity. You have to promote the entity as it operates. You're not obstructive to the entity, you want to make sure that the nuclear power plants doesn't shut down. (0721-34-8 [Gomez, Albert])

**Comment:** But I would like to see you guys take charge here, at least with regards to being more open, more holistic, and really look at the quality control issues that are occurring now that would affect the EIS. And this meeting is about the EIS. (**0721-34-9** [Gomez, Albert])

**Comment:** [T]he NRC's oversight of the nuclear industry has provided the United States with the best, most cost efficient nuclear power in the world. So I'm a lot more comfortable now than I was maybe five years ago as we looked into the matter. (0723-1-4 [Wallace, Otis])

**Comment:** This country and this industry that we operate, that we work in, we truly have a system of checks and balances that's rigorous. Plus we have intense government oversight and regulation, appropriately. We have an unfettered free press, we have diversity of opinion where people can come in, because of freedom of speech they can come in, they can contest what our

company wants to do, they can do it freely, openly and because FPL is not able to just do whatever we want whenever we want, we have standards we're held to and we have regulations. (0723-7-3 [Boling, Steve])

**Comment:** We've got this extremely risky project going on and the Draft EIS says, eh, it's minor, go ahead and do it. They erred and they did not follow something called a precautionary principle which means when the outcome of a project is not known, don't do it. Err on the side of caution. They didn't show that caution. (0723-9-21 [Schwartz, Matthew])

**Response:** The comments did not provide information relevant to the environmental effects of the proposed action. No changes were made to the EIS as a result of these comments.

## E.2.40 Comments Concerning Issues Outside Scope - Safety

**Comment:** I understand nuclear energy is safe, I'm also concerned about human error. I've been a pharmacist for 30 years. I've had FPL workers come in to me stressed out because there was a leak in the reactor and they had to shut down. It was an immediate issue and I can't disclose because have a HIPAA requirement that I can't talk about a patient's stress. But there is human error at any job site, I don't care how safe a nuclear reactor or nuclear power plant is. (0722-17-2 [Swenson, Cyndee])

**Comment:** It takes courage to oppose what you're all doing because you want jobs and you want to stimulate your economy. But this is America, it's just not the Everglades and Key Biscayne and FPL and NRC. It's a country. We cannot afford a meltdown here. We cannot afford human error to make a mistake for all the jobs this is going to create. And that's what created the meltdown in Japan, human error. So as many jobs as you're going to create, think of the lives if there's a mistake made, with two more nuclear power plants in the State of Florida abutting two national parks. (0723-3-2 [Star, Priscilla])

**Response:** The issues raised in the comments are outside the scope of the environmental review and are not addressed in the EIS. That said, the following are examples of how the NRC addresses operational safety issues. The NRC maintains resident inspectors at each reactor site. These inspectors monitor the day-to-day operations of the plant and perform inspections to ensure compliance with NRC requirements. In addition, the NRC has an operational experience program that ensures that the safety issues found at one plant are properly addressed at the others, as appropriate. Finally, the design of any new reactors will have already benefited from lessons learned at existing reactors and incorporate new safety features that would be impracticable to backfit onto existing plants. The NRC will only issue a license or permit if it can conclude that there is reasonable assurance that (1) the activities authorized by the license or permit can be conducted without endangering the health and safety of the public, and (2) such activities will be conducted in compliance with the rules and regulations of the Commission.

**Comment:** Locating a new, untested, and questionable Nuclear Power Plant design with reduced safety features and possible susceptibility to "flying projectiles," in close proximity to a densely populated metropolitan area, contiguous to extremely fragile natural resources and within a historically proven State of Florida defined High Velocity (Wind)-Hurricane Zone, seems at best to be an ill conceived notion based upon faulty logic and outdated information. (**0044-4** [Commenters, Multiple])

**Comment:** It has also been shown by the tidal wave event in Japan to be highly vulnerable to natural disasters. (0140-2 [Rhodes, Karen])

**Comment:** In 1992, the two existing nuclear reactors at Turkey Point took a direct hit from Hurricane Andrew. According to the NRC's own report: "The onsite damage included loss of all offsite power for more than 5 days, complete loss of communication systems, closing of the access road, and damage to the fire protection and security systems and warehouse facilities...the high water tank collapsed onto the fire water system, rendering the fire protection system inoperable. In addition, the storm threatened safety-related equipment (e.g., potential collapse of the damaged Unit 1 chimney onto the diesel generator building)." In other words - South Florida dodged a very big bullet in 1992. There is no need to build more risk in this hurricane-prone location. (**0240-5** [Commenters, Multiple])

**Comment:** Locating a new, untested, and questionable Nuclear Power Plant design with reduced safety features and possible susceptibility to "flying projectiles," in close proximity to a densely populated metropolitan area, contiguous to extremely fragile natural resources and within a historically proven State of Florida defined High Velocity (Wind)-Hurricane Zone, seems at best to be an ill conceived notion based upon faulty logic and outdated information. (**0263-8** [Orzechowicz, Holly])

**Comment:** Although the nuclear power industry has probably improved the performance and safety of reactors, and has proposed new safer reactor designs, but have they been tested? Generally, they have been untested. There is no guarantee to the general public that the reactors will be built and operated correctly. (**0333-1** [Anonymous, Anonymous])

**Comment:** Since mistakes do occur and the reactors designers at Fukushima in Japan did not anticipate that a tsunami would disable the backup systems that were supposed to stabilize the reactor after the earthquake. This has cast doubt on whether even an advanced economy like Japan can master nuclear safety. (0333-2 [Anonymous, Anonymous])

**Comment:** As a person residing inside the 50 mile radius around the Turkey Point nuclear plant and already subjected to its dangers, I distressingly find myself a party to the ongoing licensing process for two unsafe, untested AP1000 reactors which FPL wants to add to the site. (**0615-1-1** [Bethune, David])

**Comment:** In lieu of the traditional "defense in depth" safety features found in conventional nuclear power plants, the AP1000 design proposes a set of unproven "passive safety" features which are assumed to prevent or contain a meltdown accident without human intervention. The proposed plants share a number of design problems with the reactors and fuel pools at Fukushima Daiichi, problems compounded by the removal of traditional safety features as a cost-saving measure. (**0615-1-16** [Bethune, David])

**Comment:** The most important safety function of any nuclear power plant, emergency cooling, is the most severely compromised in the AP1000 design. Its predominant feature is a water supply tank located on top of the reactor building which offers only a 3 day supply of cooling water. If a plant emergency lasts more than 3 days, humans are expected to come refill the tank. In a meltdown situation, radiation at the site would severely limit human access, making further cooling difficult or impossible. With life threatening radiation levels surrounding the fuel pools there, workers at Fukushima were not able to physically approach the plant to assist in cooling and they would not be able to approach Turkey Point 6 or 7, either. Storm surge levels at the Turkey Point site can also preclude access by personnel. The draft EIS fails to consider the environmental impacts of the anticipated fission product releases from a station blackout condition lasting more than 3 days and completely the evidence of historical and predicted storm surge height at the site. (**0615-1-17** [Bethune, David])

**Comment:** It cannot be reasonably assumed that the AP1000 design will do a better job of preventing a meltdown by having only a single large cooling tank on top instead of a series of backup pumps and water supplies. The cooling design itself is dubious, involving dripping water around the outside of the containment building rather than over the fuel rods themselves. Placed in direct sunlight on the roof as it is, the cooling tank's water is subjected to solar heating, which further reduces its potential cooling effect. (**0615-2-1** [Bethune, David])

**Comment:** Lacking the multiple backups of traditional emergency core cooling systems, the AP1000 design relies on the environment to provide its cooling functions. There is no proof that this emergency core cooling function will work in the year-round warm temperatures at Turkey Point and, if it fails, the ensuing core meltdown would present a catastrophic and unacceptable risk to the people and the environment of Miami-Dade, Broward, and Monroe counties, as well as to the surrounding waterways of the United States. The draft EIS offers no evidence that the proposed in-core cooling system, which relies strictly on air circulation around the outside of the containment vessel for heat removal, will work as designed in the meteorological environment found at the site. (0615-2-10 [Bethune, David])

**Comment:** An essential part of the AP1000's emergency cooling is the chimney design in which the containment vessel sits. The chimney draws in air from the side and spews it out the top, unfiltered. Should any leak or breach of the containment vessel ever occur, the ensuing fission products would be immediately carried up the chimney and out into the environment. The design is reminiscent of the Windscale reactor in England which sprayed its radioactive leaks into the atmosphere, resulting in widespread exposure to fallout and contamination of land, water, farm animals, and crops. The narrow gap in between the containment vessel and the composite shell prevents simple inspections, making it easy for containment leaks to go unnoticed while they pour fission products into the sky. The design is full of small, moist spaces that will make it easy for corrosion, and therefore leaks, to develop around the containment vessel, and these will be immediately swept up and outside. If the air inlets at the sides of the reactor building are blocked for any reason the crucial air circulation function will be lost. Lacking the traditional array of redundant core cooling methods, this chimney design represents a single point of failure for the AP1000's emergency cooling. Both the water tank mounted on top and the pool to be dumped inside rely on the chimney air interface to actually remove heat. At Fukushima, we saw how a hydrogen explosion at an older reactor could launch debris that damaged a spent fuel pool at a different reactor. The Turkey Point siting of two AP1000's next to two older reactors would present a nearly identical situation. (0615-2-11 [Bethune, David])

**Comment:** The draft EIS for Turkey Point 6 and 7 also fails consider how the corrosive sea air at the site will affect its containment integrity, ignoring the NRC's own documentation of containment leaks at other US nuclear facilities. The combination of the containment vessel and chimney design add a new and unnecessary risk to people and to the environment, especially given the large population in the affected area and the massive fission product release that could result from a prolonged loss of cooling. (0615-2-13 [Bethune, David])

**Comment:** The AP 1000 design stores spent fuel in a what is essentially an indoor swimming pool inside a simple building constructed of the same brittle, untested material as the reactor housing. If the water in this pool were to drain to a level where the fuel rods were exposed, radiation from the fuel rods would be so intense that the spent fuel building would no longer be accessible by human beings. Westinghouse design documents show that, depending on water level and the amount and age of the fuel rods in the pool, spent fuel can melt down in a period of hours to days. Although Westinghouse claims that the fuel pool can be kept cool for 7 days in an emergency, some battery-backed parts of the system will only function for 24 hours. It is not

only conceivable, it is highly likely that a hurricane affecting Turkey Point would prevent human access to the site for more than 24 hours or even 72 hours. The proposed on-site batteries, themselves of little duration, could be easily wiped out by storm surge as they were at Fukushima. Being at sea level, the entire area can become inaccessible during severe storm surge flooding. The NRC's own assessment of the events of Hurricane Andrew reported that workers were not able to reach the Turkey Point site for 5 days after the storm due to flooding. If humans cannot reach and attend to the fuel pool and reactor cooling functions, a meltdown is assured. A fuel pool meltdown is particularly dangerous since the spent fuel rods sit in an open pool of water, rather than inside a shielded reactor. The AP1000 fuel pellets are coated in a zinc alloy, like those at Fukushima, which reacts with water and steam during an accident to produce explosive hydrogen. A hydrogen explosion in the AP1000 fuel handling building would result in a massive and catastrophic release of fission products, contaminating all of the Miami area as well as the surrounding waterways and making the area unlivable for thousands of years. Less severe accidents have also taken place in fuel pools of this design, each requiring a huge and expensive cleanup. In many ways, an open spent fuel pool is a nuclear weapon which is already deployed but is waiting to be activated. (0615-2-16 [Bethune, David])

**Comment:** Hydrogen explosions in two spent fuel pools at Fukushima allowed the fission products from self-sustaining fuel rod fires to be released into the environment with catastrophic results. The hydrogen results from the zinc alloy coating on the fuel pellets reacting with the water and steam inside a melting pile of fuel rods. Although the AP1000's containment vessel contains hydrogen igniters which claim to be able to explode the hydrogen before the hydrogen explodes the building, these are unproven systems which only work in computer models. The most vulnerable part of the plant, the spent fuel pool, has no hydrogen igniters at all. When hydrogen ignited above the spent fuel pools at Fukushima it blew off part of the roof of the building. This wasn't hard to do, as the fuel pools were located outside of the containment structure. Despite what transpired at Fukushima, the proposed reactors at Turkey Point 6 and 7 present an identical risk to people and the environment by virtue of using zinc alloy coated fuel pellets and racking them in the same type of unprotected pool. The draft EIS for Turkey Point 6 and 7 fails to demonstrate how hydrogen explosions will be avoided during a core or fuel pool meltdown scenario, despite the agency's own Fukushima task force recommendations on this subject. The most dangerous scenario for Turkey Point is also the most likely to occur, an extended station blackout combined with extensive site flooding due to a hurricane. Although extended station blackout and storm surge flooding have taken place at Turkey Point already and are expected to continue or even increase in the future as a result of climate change, the draft EIS fails to examine any aspect of this site-specific scenario. A hydrogen explosion which opened the reactor core or the top of the fuel processing building would result in a widespread release of fission products, potentially making the entire Miami metropolitan area uninhabitable for thousands of years. (0615-2-18 [Bethune, David])

**Comment:** The top-heavy nature of the tank's location makes the reactor building particularly susceptible to hurricane damage and therefore especially unsuited for South Florida. (**0615-2-2** [Bethune, David])

**Comment:** The proposed plant's fuel pool design is dangerous in its similarities to Fukushima, a danger compounded by the use of new and unproven building materials. (**0615-2-23** [Bethune, David])

**Comment:** A hydrogen explosion which opened the reactor core or the top of the fuel processing building would result in a widespread release of fission products, potentially making

the entire Miami metropolitan area uninhabitable for thousands of years. (0615-2-28 [Bethune, David])

**Comment:** Unlike traditional reactors with two containment structures, the AP1000 design offers only one. In a setup Westinghouse calls "passive cooling," this containment building would be directly exposed to the moist, salty, and corrosive air found at the Turkey Point site. The chimney-style design takes in the warm, wet air outside the building, heats it further, and sends it out the top. Nearly the entire outer surface of the containment vessel is exposed to the moist, corrosive sea air at the proposed site. Incidents of severe corrosion, including complete holes through containment vessels, have been discovered at other nuclear plants in the United States located in far less harsh environments. (0615-2-4 [Bethune, David])

**Comment:** The draft EIS for Turkey Point 6 and 7 fails to examine how the building design and materials would affect the plant's structural integrity during hurricane winds or impact from a hurricane-launched object. Should the reactor building or fuel processing building be damaged in a storm, the resulting release of fission products would present a serious environmental and health impact which remains unexamined. The emergency cooling support structure, being the reactor building itself, presents a new and unjustifiably risky design, while the open fuel pool in an unreinforced building at ground level simply repeats the problems found at Fukushima. The draft EIS is incomplete because it lacks a model for hurricane damage to crucial plant structures around the reactor and fuel pool and the potential for ensuing fission product release. (0615-2-5 [Bethune, David])

**Comment:** The outer building, which offers no containment function, is made of a new steel and concrete composite deemed proprietary by Westinghouse. No buildings have ever been built of this material in the United States and Westinghouse refuses to disclose its composition, preventing independent testing. The NRC's own lead structural engineer famously described the brittle nature of this composite when he said that it could "shatter like a glass cup" upon impact. After pointing out to Westinghouse that the proposed material wouldn't meet standard nuclear building codes for reinforced structures, the NRC accepted the company's reply that computer models were equivalent. When the primary part of the reactor building, called Module #2, failed in a Westinghouse test, the company claimed the test results were proprietary and couldn't be released to the public. The irregular physical design of the proposed reactor buildings and support structures, combined with the use of a new, unproven material, make it impossible to model the plant's structural behavior using any existing computer code. In a hurricane, the reactor building, rooftop cooling pool, or fuel storage pool could be damaged in unpredictable ways, posing an exceptional and unjustifiable risk to public safety and the environment. (0615-2-6 [Bethune, David])

**Comment:** The draft EIS for Turkey Point 6 and 7 fails to consider that the containment vessel could be compromised by the highly corrosive environment at the site or to compare the corrosion rates of such a vessel in South Florida's climate with those of the locations where reactor containment perforations have already occurred. A leak in the containment vessel of any size is an event which presents a substantial risk to human health and the environment. It is a risk which can only increase over the proposed plant lifetime of 60 years as the vessel continues to be attacked by moisture and minerals from the outside and radiation from the inside. The draft EIS omits any study of the long term effects of corrosion from the outside of the containment vessel under the lifetime aging conditions of the plant, including aging of materials due to nuclear stresses. (0615-2-8 [Bethune, David])

**Comment:** In lieu of redundant cooling systems and water supplies in the reactor core, the AP1000 design relies on a completely new and untested method of in-core emergency cooling. It purports to circulate water from a single pool without pumps using only convection and condensation. The NRC has questioned the legitimacy of such a cooling method, which is likely to be just as impossible as it sounds. In an emergency, the contents of a single pool of water will be dumped into the bottom of the reactor containment vessel. The water is expected to evaporate or boil, rising to the top of the vessel where it is collected as steam, condensed, and returned to the bottom. The actual emergency removal of heat from the system is expected to be accomplished not with multiple sources of water as in a traditional PWR reactor, by merely by the containment vessel's air interface as described previously. Westinghouse refers to this strategy as "the atmosphere is the ultimate heat sink." A better description might be that it's the only heat sink. It is a single point of failure in all core cooling scenarios in the AP1000 design. Without pumps, this in-core cooling system is claimed to be able to remove enough heat to prevent core meltdown -- but only for 72 hours. After 3 days, human intervention is again required, and the entire system will only function if there is no damage to any of its many parts, especially the screens designed to keep out debris which would clog the condensation return path. When challenged on how the system could prevent the screens themselves from becoming clogged. Westinghouse again retreated to a proprietary claim and refused to disclose the screen's makeup. (0615-2-9 [Bethune, David])

**Comment:** There is no need to build more risk in this hurricane-prone location. In 1992, the two existing nuclear reactors at Turkey Point took a direct hit from Hurricane Andrew. According to the NRC's report: "The onsite damage included loss of all offsite power for more than 5 days, complete loss of communication systems, closing of the access road, and damage to the fire protection and security systems and warehouse facilities ... the high water tank collapsed onto the fire water system, rendering the fire protection system inoperable. In addition, the storm threatened safety-related equipment (e.g., potential collapse of the damaged Unit 1 chimney onto the diesel generator building)." In other words -South Florida dodged a very big bullet in 1992. (**0655-1** [Tamburr, C.])

**Comment:** The second thing that really disturbs me about AP-1000 is that it has a very thin containment structure. Only one containment building, not two like a traditional reactor. And that containment structure is exposed to the environment. It's actually exposed by design. It has air baffles on the side that bring air in around the sides of the containment vessel and sends it out a chimney in the top. Now, if that sounds like a good containment design to you, maybe you haven't lived in South Florida very long, because it's a very corrosive environment where we have hot, moist air full of salt water and other minerals. When the steel containment vessel is exposed to this air 24 hours a day because of this convection design around the side that's built into the plant, we're exposing ourselves to corrosion risks. We've already seen through hole corrosion in other in other nuclear reactors in the United States, and it's perfectly plausible for a hole to develop in this reactor and nobody even notice. These places are tight and tiny and radioactive and it can't be easily inspected. So the entire containment design is really unsuitable. It presents an enormous environmental risk. (0721-23-3 [Bethune, David])

**Comment:** The fuel processing and storage building in AP-1000 doesn't have any special protection to prevent that kind of explosion. It doesn't even have the hydrogen ignitors that are in the core, where FPL and Westinghouse know that a potential hydrogen explosion is possible. (**0721-23-6** [Bethune, David])

**Response:** The NRC conducts a concurrent safety review of each COL application along with the environmental review; the results of the NRC's safety review of Turkey Point Units 6 and 7

will be published in a Final Safety Evaluation Report, which is scheduled for publication in November 2016. Regarding concerns about the viability of the AP1000 reactor design, approval of new reactor designs is contingent on the rigorous safety review of the design control document (DCD). New reactor construction is verified by inspections, tests, analyses, and acceptance criteria prior to initial startup testing and plant operation. The AP1000 reactor design underwent a lengthy and thorough safety review, resulting in issuance of the AP1000 Design Certification (DC) Final Rule in December 2011. The AP1000 DC website (http://www.nrc.gov/reactors/new-reactors/design-cert/ap1000.html) provides links to Westinghouse's license amendment application and the NRC's safety evaluation report.

**Comment:** It is not beyond all likelihood that a coastal facility in Florida could be subjected to extremes of weather or the vagaries of our planet's infra-structure. An earthquake in the Canary Islands eg could send a Tsunami here too. (**0213-3** [Hyams, Charles])

**Comment:** The Westinghouse AP-1000 reactor design has a number of tradeoffs, fewer active emergency cooling systems, significantly reduced concrete content, larger secondary containment volume with passive cooling, etc. Normally these would be considered improvements, except these enhancements have also added a new risk factor, buoyancy. If a tsunami, 60-80ft or higher impacts these relatively lightweight/high cubic volume secondary containment structure, it will achieve buoyancy. Ref: Canary islands volcano subsidence has been modeled (Ward and Day. Cumbre Vieja Volcano --Potential collapse and tsunami at La Palma, Canary Islands) estimated Florida beaches would be impacted by a 20-25 meter Tsunami, flooding several kilometers inland. Once the secondary containment achieves buoyancy the main steam pipes and control connections to the turbine and control buildings would be highly stressed, and very likely rupture. Such a major mechanical disruption would likely compromise the connected steam generators and the primary coolant loop. Once the flooding event is over, the containment structure itself might end up flopped on it's side, thus defeating AP-1000's passive emergency cooling system. The Atlantic seaboard would be devastated. But like we've seen at Fukushima, the subsequent meltdown and semi-permanent radioactive contamination of surrounding area and the Atlantic ocean would make things far worse for survivors. (0545-4 [Keating, Tim])

**Comment:** Increased seismic activity in the Caribbean is something also that is not addressed in the Draft EIS Statement. (0721-5-3 [Mendez, Victoria])

**Response:** The tsunami hazard for Turkey Point site is a part of the safety review and it is discussed in Chapter 2 of the Safety Evaluation Report. A somewhat exaggerated account of possible scenarios that could cause large magnitude tsunamis impacting the east coast of United States was published in paper by Ward and Day (2001). Since then additional studies performed by government agencies (i.e., National Oceanic and Atmospheric Administration and USGS) and academic organizations, and published in peer-reviewed journals, have repudiated and questioned the validity of the scenarios described in this paper. This subject is considered out of scope for environmental review. No changes were made to the EIS as a result of these comments.

**Comment:** The clustering effect of four reactors in one coastal at-risk location, similar to the clustering of reactors at Fukishima is very worrisome. Should a disaster strike, there is a possibility multiple reactors will be impacted at once, considerably reducing FPL's ability to isolate and contain the damage. (**0288-6** [Cleland, Noel] [Jackalone, Frank] [Mahoney, Stephen] [Matthews, Debbie] [Roff, Rhonda] [Scott, John] [Teas, Jim] [Ullman, Jonathan])

**Comment:** You are putting entirely too many plants in one place. What do you think we are Japan? (0373-10 [Lee, Nancy])

**Comment:** Not only would Turkey Point 6 and 7's fuel pool buildings be susceptible to damage from an accident at the older Turkey Point 3 and 4, so would the AP1000's chimneys which are essential for every emergency core cooling scenario. Debris from any kind of accident or hurricane could block part of this air circulation system, such as the filters at the air intake or the narrow annulus that separates the containment vessel from the shell building, threatening the entire setup and potentially leading to meltdown and massive release of fission products. A hydrogen explosion or turbine accident at one of Turkey Point's other two, older nuclear plants could clog these crucial air paths and prevent emergency cooling of one or both of the AP1000. The draft EIS for Turkey Point 6 and 7 fails to take into account how the single point of failure represented by the the AP1000's atmospheric cooling design could be further compromised by the older reactors at the site or by hurricane damage. (**0615-2-12** [Bethune, David])

**Comment:** The draft EIS for Turkey Point 6 and 7 ignores the the NRC's own recommendations from its Fukushima task force by looking at the two new reactors in isolation and failing to take into account that placing a total of four reactors at the same site, differing in age and design, will affect the plant's environmental impact during an accident. (**0615-2-15** [Bethune, David])

**Comment:** The draft EIS also completely ignores the very serious issue of siting the plant next to two existing, aging nuclear reactors. The NRC's own task force on Fukushima found that sites with multiple nuclear plants present special concerns in the face of extended station blackouts. (**0615-2-21** [Bethune, David])

**Comment:** Two new reactors increase the risk of an accident. Adding two new reactors could increase the risk of a nuclear accident. This plant is very close to the ocean. Storm surge or a tidal wave could cause damage to the plant and create a radiation leak. (**0641-5** [Martin, Drew])

**Response:** The issues raised in the comments are outside the scope of the environmental review and are not addressed in the EIS. Multi-unit effects are considered in the Safety Evaluation Review of the COL. No changes were made to the EIS as a result of these comments.

**Comment:** The draft EIS fails to consider the environmental impacts of the anticipated fission product releases from a station blackout condition lasting more than 3 days and completely the evidence of historical and predicted storm surge height at the site. (**0615-1-18** [Bethune, David])

**Comment:** The draft EIS for Turkey Point 6 and 7 fails to examine the environmental impacts of a meltdown event resulting from the a failure of the in-core cooling system or its atmospheric heats ink, especially during a hurricane when station blackout may last longer than 3 days and storm surge may prevent worker access to the facility. The in-core cooling system relies on the circulation of condensation and outdoor air cooling and the efficacy of these approaches has not been tested under South Florida weather conditions. (**0615-2-20** [Bethune, David])

**Comment:** In its mission to protect public safety and health, the NRC must err on the side of caution and presume that a beyond design basis accident will resemble what took place at Fukushima and, given the particular conditions at the Turkey Point site, also involve an extended station blackout lasting longer than 3 days combined with site inaccessibility due to storm surge or flooding. Given the hard evidence that an accident involving a similar

arrangement of multiple units, the loss of on-site power, and high radioactivity due to meltdown has already occurred, the draft EIS for Turkey Point 6 and 7 is substantially incomplete as it assumes on human access to prevent catastrophic environmental releases when it may not be possible for humans to reach Turkey Point during or following a hurricane. The draft EIS omits any discussion of the environmental impact of a station blackout lasting longer than 3 days or one involving long-term site inaccessibility due to storm surge, even though both of those events are anticipated to occur at the site. (0615-2-3 [Bethune, David])

**Comment:** Consider, too, that Biscayne Bay is ground zero for the landfall of hurricanes. In 1992 Turkey Point sustained a direct hit from Hurricane Andrew. According to the NRC's own report: "The onsite damage included loss of all offsite power for more than 5 days, complete loss of communication systems, closing of the access road, and damage to the fire protection and security systems and warehouse facilities...the high water tank collapsed onto the fire water system, rendering the fire protection system inoperable. In addition, the storm threatened safety-related equipment (e.g., potential collapse of the damaged Unit 1 chimney onto the diesel generator building)." In other words, South Florida dodged a very big bullet in 1992. There is no need to build more risk in this hurricane-prone location. (**0674-3** [Dwyer, Karen])

**Comment:** When we build a nuclear plant here we increase our potential risks of a radiation based accident like we saw in Fukushima. And this particular plant design, as I've been finding out, has some really serious concerns. It combines a lot of the problems of the Fukushima plants and it also has some new, untested technologies that we're relying on to keep us safe. I don't think that we can really rely on those. So I want to point out a few of them to you so that you can do your own research and make some public comments to the NRC afterwards about what you find, because this is what I found out. The main source of emergency cooling in this plant is a water tank on top. The supply will only last three days. We've just heard a gentleman explain that we already had a hurricane at that location where the power was out for five days. So we're basically asking for, with this design, a meltdown. We are creating a situation in which there is no backup water supply to cool the reactor after three days. Human beings would have to go there and refill the water tank on the top of this reactor, which is completely insane. We saw people battling the radiation at Fukushima for weeks and months, not for days. And we already know that Florida can lose power for days and weeks at a time. So building a new design that's lacking in basic safety features, because they want to save money, and leaves us with basically a three-day outage period is completely unacceptable. It provides -- it presents not only an environmental risk but also a safety risk. (0721-23-1 [Bethune, David])

**Comment:** I don't see any discussion in the EIS about accident mitigation at all. Basically we're assuming that the design basis accident, the three day accident is the only one that could ever happen, and that's ridiculous. (0721-23-4 [Bethune, David])

# **Response:** The issues raised in the comments are outside the scope of the environmental review. No changes were made to the EIS as a result of these comments.

**Comment:** From what I can see the only lessons that were learned after the Hurricane Andrew impact on the Turkey Point facility dealt with wind damage. Given the serious impact that flooding had on the Fukushima Daiichi nuclear plant in Japan what precautions have been taken by FPL after the Fukushima incident? Hurricanes can produce severe storm surges and may create a similar flooding event as was experienced in the Fukushima incident. I would request that FPL detail the actions they have taken to prevent a meltdown due to flooding from a storm surge. In particular what preventative measures they have already taken to protect the two current reactors and the assumptions that underly those measures. It would seem prudent to

me to have an understanding of how rigorous the current preventative measures are, so we as citizens can have an idea of what to expect from the company with regard to the new units. In the unlikely event that no action was taken after the Fukushima incident, I would very much like to understand the current measures in place to protect against a storm surge and have a copy of the review that must have been conducted after the Fukushima event. (**0001-1** [Tacher, Ian])

Comment: The reactor itself it old and run down. (0008-4 [Finver, Jody])

**Comment:** I also know that I would much rather prefer new, state of the art, reactors rather than continually relying on the original two that are already past their original useful life and have needed improvements to increase their outputs. This pushing the original operational envelope is much more concerning to me than providing newer, safer units. I understand the concern that people have with nuclear safety, especially since the accident in Japan, but wonder how many realize that FPL reactors are not configured and will not operate the same way. (0070-3 [Lamb, Deborah S.])

**Comment:** It relies on outdated data (some decades old) when estimating its safety. (0126-2 [Pontier, Christine Hughes])

**Comment:** I am aware that nuclear power plant technology has come a long way over the years. We now have the ability to run plants that can reuse their nuclear fuel much longer, resulting in a much more stable radioactive waste when the fuel is finally retired. I am unaware if this new, more eco-friendly plant has been implemented on this site. My suggestion would be to deny the creation of any new reactors before the likely old style reactors at this plant are replaced with the new, safer, cleaner models. Go one further and suggest they undertake this task not only at this location, but all locations where this company owns nuclear power plants. If they are so eager to spend money, let them do so and help the environment at the same time. Win-win, in my book. In the process, they build company loyalty, as you've suddenly made plants that are far safer for the workers who maintain and operate them. They build community relationships because the people who live in the vicinity of this power plant can sleep a little bit easier, knowing they have the most current, safest, and most environmentally-friendly nuclear power plants in existence. Before they know it, they are a leader in the nuclear power industry based on this tiny change in their mission statement. (**0230-1** [Delateur, Marc])

**Comment:** My concerns, along with what Laura Reynolds said on the fact that there are current problems with the maintenance and operation of 3 and 4. I understand, from what you've told me, you're not going to look at that. (0721-13-1 [Martin, Drew])

**Comment:** The older plants are '70s vintage designs, they have their own problems. Any kind of accident, including a turbine break at one of the older plants, 3 and 4, could cause flying debris that can damage the AP-1000, including clogging these important cooling vents on the side and preventing emergency cooling. It could also land in the spent fuel pool and cause damage to the fuel pool or the pumping and equipment that's used to move that water between the reactor and the fuel pool. So just creating an additional plant at the same site where we already have old plants exponentially increases our risk. Those old plants become a risk factor for the new plants. (0721-23-10 [Bethune, David])

**Comment:** The opportunity to replace units 3 and 4 by units 5 and 6 is not really reviewed, even though the NRC will claim that all they could do is approve or recommend this project. Serious consideration should be looked at replacing aging nuclear reactors rather than adding to the project. (0721-5-6 [Mendez, Victoria])

**Response:** NRC staff can only review the proposed application for Turkey Point Units 6 and 7. The decision about whether or not to decommission the existing Units 3 and 4 is a decision made by the applicant, FPL. Also, safety matters related to aging of the existing units at Turkey Point are outside the scope of the environmental review of the proposed Units 6 and 7. No changes were made to the EIS as a result of these comments.

**Comment:** Liquid, gaseous, and solid radioactive waste management systems would collect and treat the radioactive byproducts of operating the proposed Turkey Point Units 6 and 7, and these byproducts would be handled separately from the byproducts of existing Units 3 and 4. Spent nuclear fuel will require continued on-site storage. Due to the uncertainty regarding future availability of a geologic repository or other away-from-reactor storage facility, on-site storage may be required for many decades, until a permanent repository is established. The DEIS notes that each nuclear island would consist of a containment building, shield building, and auxiliary building; the radwaste building would be separate from the island, approximately 36 feet above grade (page 3-19). *Recommendations:* The FEIS should clarify plans regarding how the storage of spent nuclear fuel will be handled in order to prevent contamination, in the event of flooding at the site. We note that the proposed Units 6 and 7 will be elevated to provide safety from potential flooding, however, the low sea level in this area combined with the area's history of hurricanes requires that measures to address potential flooding be thoroughly evaluated and documented. (0617-2-2 [Mueller, Heinz J.])

**Response:** On August 26, 2014, the Commission issued a revised rule at 10 CFR 51.23 and an associated Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel (NUREG-2157). Continued Storage applies to the storage of spent fuel after the end of the licensed life for operations of a nuclear reactor and before final disposal in a permanent repository. The revised rule adopts the generic impact determinations made in NUREG-2157 and codifies the NRC's generic determinations regarding the environmental impacts of continued storage of spent nuclear fuel beyond a reactor's operating license. As directed by 10 CFR 51.23(b), the impacts assessed in NUREG-2157 are deemed incorporated into this EIS in Section 6.1.6. Section 6.1.6 also explains that current national policy mandates that high-level and transuranic wastes are to be buried at deep geologic repositories and that no release to the environment is expected to be associated with deep geologic disposal.

The radwaste building is at plant grade within the power block. Section 5.11.2.4 explains that the design basis flood elevation (24.8 ft) is below the design plant grade (26.0 ft), and no further evaluation of accidents resulting from external floods is required. Climate change, including future sea-level rise, is addressed in Chapter 2, Chapter 7, and Appendix I. The impacts of climate change on the storage of spent fuel is included in NUREG-2157. Climate change impacts on the safe operation of Units 6 and 7, including sea-level rise, flooding, hurricanes, and storm surge, will be addressed in the staff's Safety Evaluation Report.

No change was made to the EIS as a result of this comment.

**Comment:** Does FPL have the infrastructure to maintain this project?! (**0149-12** [Nelson, Joyce E.])

**Response:** The NRC's principal responsibility is to protect the health and safety of the public when authorizing the use of radioactive material. The regulations governing the environmental review are set forth in 10 CFR Part 51, Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions, and the regulations covering the safety review are in 10 CFR Part 52, Licenses, Certifications, and Approvals for Nuclear Power Plants, and other

regulations referenced therein. The NRC will only issue a license or permit if it can conclude that there is reasonable assurance (1) that the activities authorized by the license or permit can be conducted without endangering the health and safety of the public and (2) that such activities will be conducted in compliance with the rules and regulations of the Commission. Applicants must demonstrate they can meet the NRC established requirements before a license is issued. No changes were made to the EIS as a result of this comment.

### E.2.41 Comments Concerning Issues Outside Scope - Security and Terrorism

**Comment:** I would also like to know how security concerns of a potential terrorist attack are being addressed in the expansion project plans as well as the current power plants in operation today. (**0132-2** [Mauri, Tom])

**Comment:** Catastropic scenarios involving terrorist attacks are also conceivable. (0333-3 [Anonymous, Anonymous])

**Comment:** Also, at a time when there is so much terrorist activity, I cannot think of a better target for attack than a nuclear plant in the City of Miami-the very model of America's most desirable lifestyle--staffed by at least a few Homer Simpsons. (**0339-4** [Provost, Allan])

**Comment:** It also represents a national security threat, with nuclear facilities a target for any nation or group seeking to inflict harm by triggering a nuclear disaster through attack or sabotage. (0356-5 [Shlackman, Jed])

**Comment:** Seaside nuclear power plants are vulnerable targets with a large multiplier factors (5,000 to 50,000x verses tactical n-weapon) for radioactive fallout and contamination. In a world that seams to becoming more unstable as time progresses, it's just a matter time before one these facilities are targeted. (**0545-5** [Keating, Tim])

**Comment:** A terrorist attack on the poorly-protected fuel handling building, especially by air, is a notable risk. (**0615-2-25** [Bethune, David])

**Comment:** The nearby location of Miami International Airport and the even closer Homestead Air Reserve Base add another level of danger as any accident or terrorist incident involving the considerable low-altitude air traffic in the vicinity could damage the reactor buildings. The primary emergency cooling tank, the highest point above ground level, presents a particular risk, as does the spent fuel storage pool its poorly protected location. (**0615-2-7** [Bethune, David])

#### Comment: <u>NRC 's Draft EIS is Flawed Because it Fails to Adequately Address the Threat</u> of Terrorism and the Potential Consequences of a Meltdown in Multiple Units. The NRC's

NRC's Environmental Impact Statement for Combined Licenses (COLs) for Turkey Point Nuclear Plant Units 6 and 7, Draft Report for Comment (NUREG-2176) fails to address the threat of terrorism to the Turkey Pont site. Since 9-11 it has come to light that U.S. nuclear reactors have viewed as targets by the like of Al Qaeda. In fact the FBI has arrested and convicted terrorist suspects in the US who referred to U.S. nuclear reactors as "nice targets" (<u>http://articles.latimes.com/2012/nov/13/nation/la-na-nn-saudi-student-texas-terrorism-</u> 20121113).

But according to NRC's DEIS: The comments that are outside the scope of the environmental review for the proposed Turkey Point site are not included in this appendix. These include comments related to the following: safety, emergency preparedness, NRC oversight for

operating plants, security and terrorism, support or opposition to the licensing action, licensing process, nuclear power, hearing process, or the applicant. (See Appendix D.) However, almost decade ago, the U.S. Court of Appeals for the Ninth Circuit required that the NRC account for the environmental impacts of terrorism under the National Environmental Policy Act's Environmental Impact Statement (EIS) provision. (San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission, 449 F.3d 1016, 1035 (91h Cir. 2006). The 9th circuit determined that the possibility of a terrorist attack was not so "remote and highly speculative" and that the NRC should not exclude it from consideration under NEPA Furthermore, the court found NRC position to be "inconsistent with the government's efforts and expenditures to combat this type of terrorist attack at nuclear facilities." (Id.) The Court determined that NEPA requires that the NRC take a 'hard look' at the consequences of a terrorist attack upon a nuclear power plant. Mother for Peace was not asking the agency to engage in speculation or conjecture but to adequately address the range of environmental impacts if an attack took place. (Id.) The NRC's DEIS ignores this decision. Although it remains an open question in Florida due to a split between the 9th and 6th circuits, sound regulation and a federal agency cognizant of and responsive to public concerns would have long ago adjusted its process to account for terrorism during the preparation of an EIS on known terrorist targets. (http://www.pillsburylaw.com/siteFiles/Publications/839E98B17AA3C8E45DOAD74928D1108.p

df) (0716-11 [Riccio, Jim])

**Comment:** Also at a time when there is so much terrorist activity, I cannot think of a better target for attack than a nuclear plant in the City of Miami, the very model of America's most desirable lifestyle, staffed at least by a few Homer Simpson's. (0721-26-6 [Koenigsberg, Linda])

**Response:** Comments related to security and terrorism are safety issues that are not within the scope of the staff's environmental review. No changes were made to the EIS in response to these comments.

# E.2.42 General Editorial Comments

**Comment:** There are a few instances where the references to DEIS Appendix I (The Effect of Climate Change on the Evaluation of Environmental Impacts) and DEIS Appendix J (Greenhouse Gas Footprint Estimates for a Reference 1,000 MW(E) Light-Water Reactor) appear to be reversed. Instances in the DEIS include: a. DEIS Subsection 6.1.3, Page 6-8, Lines 20-21. b. DEIS Section 6.3, Page 6-39, Lines 40-41. Additionally, the title of Appendix J, "Carbon Dioxide Footprint Estimates for a 1,000 MW(e) Reference Reactor", listed in DEIS Subsection 1.6, page 1-12, line 27, is not consistent with the Table of Contents or Appendix J, "Greenhouse Gas Footprint Estimates for a Reference 1,000 MW(E) Light-Water Reactor" (0619-1-13 [Maher, William])

**Comment:** There are instances in the DEIS where a reference is either incorrectly cited, corrupt in ADAMS, or not consistent with the information referenced. Instances in the DEIS include: a. DEIS Subsection 2.6.1.2, Page 2-186, Table 2-54: DEIS Table 2-54 lists the source as (USCB 2009-TN1462). The file in ADAMS, Accession No. ML14287A731, for the DEIS reference (USCB 2009-TN1462) is corrupt. b. DEIS Subsection 6.2.2, Page 6-27, Lines 15-16: The DEIS references Addendum 1 to NUREG-1437 as the 2013 Revision 1 of the GEIS (NRC 2013-TN2654). The correct reference for Addendum 1 of the GEIS is DEIS reference (NRC 1999-TN289). c. DEIS Subsection 8.1.1, Page 8-2, Line 37: The DEIS cites "(TenYrPlan2014)" as the reference. The reference should be cited as (FPL 2014-TN3360). d. DEIS Subsection 10.6.1.2, Page 10-20, Line 31: The DEIS references Section 5.4.3.1 for additional information about the economic impacts of constructing and operating Units 6 & 7. DEIS Section 5.4.3.1

references FPL 2011-TN435 which is "Personal Communications with Miccosukee Tribe of Indians of Florida, Metro Miami Action Plan Trust and Miami-Dade Office of Community Advocacy." The reference should be a U.S. Bureau of Economic Analysis reference: BEA 2012-TN1569: BEA 2012-TN4074; or BEA 2014-TN4075. e. DEIS Subsection 11.0, Page 11-43, Lines 36-37: The DEIS reference cited, (FPL 2011-TN303), refers to FPL's "Stormwater Management Plan and Calculations" with an Accession No. ML12192A226. This Accession No. is linked to a SANDIA National Laboratories document, "RADCAT 2.3 User Guide" in ADAMS. f. DEIS Appendix F-2, Section 2.1, Page 2-4/2-5, Line 43/2: Appendix F-2 states: "A new substation...would also be necessary (Error! Reference source not found. Figure 2-3)." g. DEIS Appendix F-2, Section 4.10, Page 4-7, Lines 27-28: Appendix F-2 states: "As discussed in FPL's Ten-Year Power Plant Site Plan (FPL 2013-TN2630), population estimates...1,000 to 2,000 individuals." The reference cited, (FPL 2013-TN2630), is FPL's Ten Year Power Plant Site Plan 2013-2022. This document does not provide information about crocodile populations. The correct reference is the FPL Threatened & Endangered Species Management Plan, Rev 1 (FPL 2011-TN1283). Page 12, paragraph 3, which states, "Ogden (1978a) estimated that between 1,000 and 2,000 American crocodiles existed in south Florida in the early 20th century..." h. DEIS Appendix F-2, Subsection 5.10.5, Page 5-9, Lines 31-34: Appendix F-2 states: "The 2014 death involved an adult crocodile...not attributed to plant operations (NRC 2014-TN3718)." The reference listed could not be verified. The DEIS reference cited (NRC 2014-TN3718) refers to NRC's Event Notification Report: Offsite Notification due to Deceased American Crocodile, July 25, 2014 with an accession No. ML14338A556. This Accession No. is linked to the Appendix F-2. (emphasis added) (0619-1-18 [Maher, William])

**Comment:** The DEIS identifies FPL as "Florida Power and Light Company" and the ER identifies FPL as "Florida Power & Light Company". The correct legal name is "Florida Power & Light Company". (**0619-2-15** [Maher, William])

**Comment:** Executive Summary, Page xxxv, Table ES-1: In DEIS Table ES-1, the DEIS indicates: a. For the "Land Use" Resource Category, that the **operation environmental impact** level is "MODERATE (NRC authorized **construction impact** level is SMALL.)" (emphasis added). b. For the "Socioeconomic Physical Impacts" Category, that the construction environmental impact level is "**SMALL**." This is not consistent with DEIS Section 4.12, page 4-148, Table 4-19 and DEIS Subsection 10.2.1, page 10-7, Table 10-1, where this impact level is listed as "**SMALL** (adverse) to **MODERATE** (beneficial) (NRC authorized construction impact level is **SMALL**)." (0619-2-16 [Maher, William])

**Comment:** Inconsistencies identified in draft EIS and ER, Rev 6: Subsection 10.4.2, Page 10-15, Lines 28-33 "FPL states in Table 10.2-1 of its ER that construction of the...two new units at Turkey Point would involve... **22,000 tons of rebar**.... (FPL 2014-TN4058). Construction would also use **large quantities** of aluminum, copper... and quarry materials (nuclear and construction grade fill material, aggregate, sand, etc.)." ER Table 10.2-1 ER Table 10.2-1 lists **20,000 tons of rebar** and states, "**Small quantities**" related to aluminum, boron, titanium, tungsten, and other natural resources. (**0619-2-28** [Maher, William])

**Comment:** DEIS Subsection 8.1.1, Page 8-2, Lines 35-36: The DEIS states: "FPL is **interconnected with 21** municipal and rural electric cooperative systems (FPL 2014-TN4058)." ER Revision 6 indicates **19 external connections** as illustrated in ER Figure 8.1-3. (emphasis added) (**0619-5-11** [Maher, William])

**Comment:** DEIS Section 7.0, Page 7-3, Table 7-1: In DEIS Table 7.1 under the subheading "Energy Projects" the first project listed is "Turkey Point Units1-4". This should be changed to

"Turkey Point Units 1-5" as stated in DEIS Section 7.1, Page 7-9, Line 5. (**0619-5-7** [Maher, William])

**Response:** These comments are editorial in nature. Hyperlinks to documents within internal systems were inadvertently left in the electronic version of the draft document and led to the "corrupt and Error" messages for external readers. The hyperlinks will be removed in electronic version of the final EIS. Changes were made to reflect the correct legal term for Florida Power & Light. Additional changes were made to text in Sections 4, 7, 8, 10, Appendix I, and Executive Summary to reflect these comments.

**Comment:** In a letter dated March 17, 2014, DEIS reference (FPL 2014-TN3569), FPL removed the FPL-owned fill source from the application; however, there remain instances in the DEIS where the FPL-owned fill source is referenced. Instances in the DEIS include: a. DEIS Subsection 2.7.2, Page 2-197, Line 11. b. DEIS Subsection 4.3.1.3, Page 4-60, Line 22. c. DEIS Subsection 4.5.1.1, Page 4-120, Line 30. d. DEIS Subsection 4.8.1.1, Page 4-129, Lines 34-35. e. DEIS Appendix F-2, Section 4.7, Page 4-6, Lines 3-4. f. DEIS Appendix F-2, Section 4.8, Page 4-6, Lines 31-32. g. DEIS Appendix F-3, Section 2.0, Page 2-1, Line 28. h. DEIS Appendix F-3, Subsection 3.1.2, Page 3-7, Line 31. (0619-1-5 [Maher, William])

**Response:** The text in EIS Sections 4.3.1, 4.5, and 4.8 was revised to remove references to the FPL-owned fill source. Revision 6 of the ER includes the FPL-owned fill source in the description of the Area of Potential Effect (Section 2.5.3.3.1). To maintain consistency with the application, the fill source will be included in the features described in Section 2.7.2 of the EIS. Appendix F-2 and F-3 contain the BAs submitted to the FWS and NMFS as part of ESA Section 7 consultation. No changes were made to submitted consultation documents as result of this comment.

## E.3 Form Letter Authors

Approximately 10,618 of the written submissions were form letters. The U.S. Nuclear Regulatory Commission (NRC) identified 9 form letter templates (see Table E-4). Table E-4 includes a reference for the first piece of correspondence recived by the NRC for each of the nine form letters. The majority of the form letters were sponsored by the National Parks Conservation Association (Multiple Authors 2015-TN4716). Identical comments contained in form letters were captured only once; however, any additional comments contained in form letters were treated as unique comments. Authors and ADAMS accession numbers for form letter submissions are identified in Tables E-5 through E-13, one table per form letter.

Correspondence Identifier	ADAMS Accession No.	Table of Author Names	Reference
TURK-COL6&7-DR-00044	ML15139A604	Table E-5	Multiple Authors 2015-TN4723
TURK-COL6&7-DR-00067	ML15139A651	Table E-6	Multiple Authors 2015-TN4722
TURK-COL6&7-DR-00073	ML15139A668	Table E-7	Multiple Authors 2015-TN4724
TURK-COL6&7-DR-00102	ML15140A000	Table E-8	Multiple Authors 2015-TN4716
TURK-COL6&7-DR-00103	ML15139A729	Table E-9	Multiple Authors 2015-TN4721
TURK-COL6&7-DR-00104	ML15140A141	Table E-10	Multiple Authors 2015-TN4720
TURK-COL6&7-DR-00379	ML15141A259	Table E-11	Multiple Authors 2015-TN4719
TURK-COL6&7-DR-00240	ML15146A110	Table E-12	Multiple Authors 2015-TN4718
TURK-COL6&7-DR-00679	ML15191A341	Table E-13	Multiple Authors 2015-TN4717

Table E-4. Form Letter Identification Numbers

 Table E-5.
 Individuals Submitting the Form Sponsored by Brickell Unites with

 Correspondence ID TURK-COL6&7-DR-00044 and Representative ADAMS

 Accession No. ML15139A604 (Multiple Authors 2015-TN4723)

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Arostegui, Al	ML15139A606	Kavanaugh, Brigitte	ML15139A623
Baldwin, Brandi	ML15139A636	Lanoff, Robert and Andrea	ML15139A619
Billings, Marc	ML15139A625	Logan, Scott	ML15139A629
Corda, Charles R.	ML15139A610	Logan, Scott	ML15139A637
Curry, Carolyn	ML15139A626	McCall, Eric	ML15139A624
Curry, Richard E.	ML15147A201	Rocha, Bea	ML15139A627
Echeverria, Diego	ML15139A614	Romero, Alejandro	ML15139A618
Ehrlich, Jr., Peter R.	ML15139A608	Segor, Joseph	ML15139A630
Fernandez, Jackeline	ML15139A665	Shlachtman, Barbara	ML15139A658
Fernandez, Susie P.	ML15139A642	Soto, Angela	ML15139A638
Font, Lauri	ML15139A639	Ubieda, Yailky	ML15139A615
Grill, Helen	ML15139A596	Valente, Free N.	ML15139A670
Horowitz, Ira	ML15139A643	Vinciguerra, Anthony	ML15139A635
Hubler, Gina Marie	ML15139A604	Violich, Francesca	ML15139A592
Imbesi, Nan	ML15139A631	Wellins, Debra	ML15139A650
Ismail, Noreen	ML15139A671	Williams, Lashawnda	ML15139A640
Johannsen, Christian	ML15139A605	Wyman, Vicki	ML15139A641

 Table E-6. Individuals Submitting the Form Sponsored Brickell Unites with

 Correspondence ID TURK-COL6&7-DR-00067 and Representative ADAMS

 Accession No. ML15139A651 (Multiple Authors 2015-TN4722)

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Becerra, Francisco	ML15139A654	Hecht, Deborah	ML15139A652
De Villiers, Elena	ML15139A675	Hubler, Gina Marie	ML15139A653
Diaz, Mayra	ML15139A660	Maurer-Guy, Lourdes Lina	ML15139A662
Echeverria, Diego	ML15139A651	McCabe, Mead	ML15139A663
Hamilton, McHenry	ML15160A312	Stanley, Gael	ML15139A664
Hawkes, Tim	ML15139A673	Wilder, Jo	ML15139A632

Table E-7.Individuals Submitting the Form with Subject "Objection to FP&L's Plan to<br/>Place Huge High Voltage Lines on Poles on or Near SW 1st Avenue in the<br/>'Miami Roads' Area" with Correspondence ID TURK-COL6&7-DR-00073 and<br/>Representative ADAMS Accession No. ML15139A668 (Multiple Authors 2015-<br/>TN4724)

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #	
Alvarez, Rosa	ML15128A183	Hughes, David	ML15161A393	
Arias, Vivian G.	ML15161A393	Hughes, David	ML15139A718	
Arias, Vivian G.	ML15146A128	Koenigsberg, Linda	ML15128A183	
Ayerdis, Wenddy	ML15218A210	Lappen, Jennifer	ML15139A677	
Batista, Carlos	ML15128A183	Lucero, Olga	ML15161A393	
Cavlineau, Carmen	ML15128A183	Lucero, Olga	ML15139A728	
Cavlineau, Nicolas	ML15128A183	Lucero, Olga	ML15162A855	
Crousillont, Patrick	ML15218A210	Malcolm, Kelley	ML15218A210	
de Armas, Maria Cristina	ML15139A676	Martinez, Serafin	ML15218A210	
Dean, Glenn M.	ML15128A183	Mathia, Judith L.	ML15128A183	
DeSalle, Edward	ML15128A183	Menendez, Mike	ML15128A183	
Dogan, Zynel Oleay	ML15218A210	Milan, Craig	ML15128A183	
Echevarria, M. Paz	ML15161A393	Murillo, Maria M.	ML15218A210	
Elguaras, Carlos L.	ML15218A210	Pajor, Claudia	ML15218A210	
Febles, Ignacio	ML15161A393	Provost, Allan	ML15198A118	
Febles, Maria V.	ML15161A393	Provost, Allan	ML15128A074	
Fifer, Brian	ML15128A183	Reyes, Graciela	ML15161A393	
Fifer, Mark	ML15128A183	Reyes, Graciela	ML15146A128	
Fifer, Richard Glen	ML15128A183	Scherr, Matthew	ML15128A183	
Frade, Silvia	ML15218A210	Scudierc, Veronica	ML15146A128	
Frade-Eguares, Silvia	ML15218A210	Scudieri, Veronica	ML15161A393	
Garcia, Aida S.	ML15146A128	Stoerger, Alexandra	ML15218A210	
Garcia, Aida S.	ML15161A393	Stoerger, Stephen	ML15218A210	
Garcia, Armando	ML15128A183	Stoerger, Zarda	ML15218A210	
Garcia, Caridad R.	ML15128A183	Suquet, Guillermo	ML15161A393	
Garcia, Enrique J.	ML15161A393	Valladores, Debra A.	ML15139A668	
Garcia, Enrique J.	ML15146A128	Vazquez, Cristina M.	ML15161A393	
Garcia, Enrique J.	ML15146A128	Vinuela, Maximilian	ML15218A210	
Glass, Bonita	ML15148A482	Warren, Robert H.	ML15128A183	
Gonzalez, Juan and		Whitlock, Catherine	ML15218A210	
Jaqueline Guirola, Chavela Maria	ML15161A393	Zapata R., Martha C.	ML15146A128	
Isabel	ML15218A210	Zapato R., Martha C.	ML15161A393	
Hernandez, Dagin	ML15218A210	Zarazun, Nikki	ML15218A210	
Hughes, David	ML15138A092			
<b>U</b> ,				

Table E-8.Individuals Submitting the Form Sponsored by National Parks Conservation<br/>Association with Correspondence ID TURK-COL6&7-DR-00102 and<br/>Representative ADAMS Accession No. ML15140A000 (Multiple Authors 2015-<br/>TN4716)

_	ADAMS		ADAMS
Commenter	Accession #	Commenter	Accession #
Aaron, Allysa	ML15159B080	Ahlstrand, Heidi Lynn	ML15156A828
Aaron, Emory	ML15156B135	Aiken, Edwin	ML15154A739
Abadia, Betty	ML15160A935	Ailill, Dane	ML15148B227
Abare, Jeff	ML15159B475	Ainsley, Brian	ML15156A255
Abbasparker, Ibn-Umar	ML15161A696	Alamprese, Laura	ML15148B441
Abbott, Shaun	ML15156A528	Albanese, Dawn	ML15154C267
A'Becket, Suzanne	ML15153A963	Albar, Mike	ML15159B417
Abel, Jerian	ML15162A431	Albers, Harold	ML15156A095
Abraham, Mirla	ML15156A590	Albert, Cheryl	ML15159B558
Abrams, Michael	ML15154C261	Albert, Laura	ML15142A264
Abrams, Saliha	ML15153A966	Albertson, Pat	ML15156A748
Abrantes, Elizabeth	ML15148A897	Albonni, Ádam	ML15159B512
Abreu, Sayuri	ML15162A422	Albrandt, Patti	ML15155A367
Abshire, James	ML15155C078	Albrecht, Lonnie	ML15148B442
Ackerman, Frank	ML15153A511	Alden, Rory	ML15159A963
Ackerman, Laura	ML15155B717	Alejandro, Patricia	ML15155A018
Ackerman, Lynn	ML15154A811	Alexander, Charles	ML15160A923
Ackerson, David	ML15155A949	Alexander, Mark	ML15158A111
Ackroff, Karen	ML15148B212	Alexander, Mary	ML15156A110
Acosta, Angel	ML15148B241	Alexander, Mary	ML15156A882
Acuna, Carina	ML15161A629	Alexander, Thomas	ML15154B714
Adam, Dawne	ML15141A755	Alfano, Joseph	ML15142A327
Adam, Jackie	ML15156B197	Alfaro, Elaine	ML15154B280
Adams, Brett	ML15154C240	Alfonso, Nadine	ML15156A211
Adams, Carol	ML15154C286	Alford, Linda	ML15154B343
Adams, Charlotte	ML15147A720	Alguacil, Oscar Revilla	ML15159B240
Adams, Cindy	ML15159B537	Alippe, Lorraine	ML15158A174
Adams, Jean	ML15156A981	Alisau, Patricia	ML15155A370
Adams, Kim	ML15148A893	Allbee, Dwight	ML15148B342
Adams, Lynn	ML15154B988	Allbright, Galloway	ML15148B390
Adams, Robert	ML15142A271	Allen, D. Patrick	ML15159A317
Adams, Ruth	ML15154B962	Allen, Dennis	ML15154A391
Adams, Sandra	ML15156A936	Allen, Elise	ML15160A975
Adams, Victoria	ML15161A697	Allen, J.	ML15141A228
Adan, Elizabeth	ML15148A175	Allen, Jerre	ML15156A318
	ML15159A472		ML15162A584
Addis, Linda Adalman, Saul	ML15153A684	Allen, Juanita	
Adelman, Saul		Allen, Judy	ML15155B023
Aderhold, Steven	ML15159A041	Allen, Keith	ML15156A488
Adler, Ken	ML15155A304	Allen, Kenneth	ML15162A573
Adobajor, Alisa	ML15142A298	Allen, Linda	ML15159A237
Adobajor, Alisa	ML15154A411	Allen, Llowell	ML15154A086
Adsit, Roy	ML15162A542	Allen, Mary	ML15142A026
Aenlle, Willy	ML15141A757	Allen, Maureen	ML15141A653
Affolter, Angie	ML15154B697	Allen, Melissa	ML15156A667
Aflatooni, Mark	ML15154C001	Allen, Monique	ML15154A024
Agostinho, Elizabeth Aguirre, Robert	ML15156A589 ML15155A785	Allen, Ron Allen, Rosamond	ML15154B637 ML15141A644

	ADAMS		ADAMS
Commenter	Accession #	Commenter	Accession #
Allen, Suzanne	ML15154A137	Anderson, Katrina	ML15155C215
Allen, Tracey	ML15156A932	Anderson, Kevin	ML15154B969
Allen, Travis	ML15156A179	Anderson, Larry	ML15140A155
Allenby, Coral	ML15154B885	Anderson, Margaret	ML15156B318
Alleyne-Chin, Donna	ML15154B797	Anderson, Mary	ML15153A317
Allgood, Jean	ML15159A554	Anderson, Matthew	ML15154B235
Allphin, Toby	ML15155A751	Anderson, Mike	ML15154C197
Allred, Shelley	ML15155C029	Anderson, Patricia	ML15155C196
Almeida, Gabriela	ML15154A270	Anderson, Robert	ML15156B210
Almendarez, Mary	ML15148A615	Anderson, Sandy	ML15153A831
Almirola, Alejandro	ML15159A881	Anderson, Shel	ML15148A879
Almirola, Alejandro	ML15159A948	Anderson, William	ML15154A331
Alovis, Elly	ML15155A126	Andersson, Joan	ML15155A166
Altman, Jeff	ML15155A043	Andrade, Stacy	ML15160A871
Altman, Penny	ML15155A046	Andre, Javier	ML15155B061
Alvare, Michelle	ML15158A224	Andregg, S.	ML15148A198
Alvarez, David	ML15159A414	Andresen, Bette	ML15148A231
Alzuro, Nick	ML15141A493	Andreula, Ann	ML15156A050
Amador, Nicole	ML15141A783	Andrews, Becky	ML15160A790
Amador, Nicole Amalfitano, Gloriamarie	ML15141A460	Andrews, Becky	ML15160A790 ML15160A792
Aman, Michael	ML15155A515	Andrews, Susan	ML15156A539
Amaro, Hector R.	ML15148B225	Andrews, Terry	ML15154B975
Amato, Julie	ML15155A814	Anduskey, Susan	ML15158A226
Amato, Nicole	ML15153A992	Angel, John	ML15154A031
Amato, Sarina	ML15158A135	Angell, J.	ML15155A839
Ambler, Lana	ML15162A140	Angelovich, Nancy	ML15162B089
Ambrosio, Antoinette	ML15159B027	Angelovich, Nancy	ML15162B137
Ameen, Arshad	ML15154A729	Angotti, Kathleen	ML15155B752
Amell, June	ML15158A100	Angus, Billy	ML15154B512
Ames, Karin	ML15155B697	Ankli, Gene	ML15155A011
Ames-Curtis, Juli	ML15142A241	Anner-Bolieu, Lynn	ML15148B208
Amick, Tom	ML15154C007	Ansari, Fariba	ML15142A274
Ammon, Cara	ML15160A787	Ansarifar, Vafa	ML15155A668
Ammon, Clifford	ML15156A955	Ansay, Gabriele	ML15160A786
Anderholm, Jon	ML15159A005	Anthis, L.	ML15155A242
Andersen, Kirsten	ML15156B436	Anthony, Art	ML15159B472
Andersen, Paul	ML15148B181	Anthony, Bahuaud	ML15159B403
Anderson, Angela	ML15159A528	Anthony, Judy	ML15153B245
Anderson, Anthony	ML15156B506	Anton, Michael	ML15160A976
Anderson, Arlete	ML15156A966	Antosiak, Carol	ML15156A126
Anderson, Barry	ML15142A041	Apfel, Sarah	ML15155A385
Anderson, Christine	ML15156B256	Appelbaum, Anita Brooks	ML15155A056
Anderson, Clifford	ML15142A265	Appell, Stephen	ML15154B531
Anderson, David	ML15154A741	Appenzeller, Cary	ML15154B864
Anderson, Diana	ML15154B686	Apperson, Mariko	ML15140A026
Anderson, Dina	ML15148A238	Appleman, Luisa	ML15154B108
Anderson, Edna	ML15154A360	Araluce, Tiffany	ML15154B945
Anderson, Glen	ML15156B027	Arana, Josefa	ML15156A447
Anderson, Joel	ML15155B710	Aranita, Rosita	ML15162B091
Anderson, Judith	ML15142A226	Aranita, Rosita	ML15162B091 ML15162B146
Anderson, Julie			
	ML15153B303	Arapoudis, Sandra	ML15159A717
Anderson, Julius	ML15155B991	Arbolaez, Fidel	ML15148B100
Anderson, Karen	ML15148B092	Arbour, Carole	ML15154B886
Anderson, Karen	ML15154B938	Archambault, Caitlin	ML15160A830

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Archbold, Edwin	ML15155B654	Atwell, J.	ML15155C067
Archer, Linda	ML15147A752	Audette, Jarryd	ML15148B041
Archuleta, Patricia	ML15156B494	Augenstern, Joy	ML15142A288
Arcure, Barbara	ML15140A178	Aughey, Arlene	ML15153B183
Arens, Donnis	ML15155A798	Augusto, Keith	ML15160A865
Arent, Raymond	ML15162A605	Aulgur, John	ML15148A765
Arfin, Danielle	ML15141A637	Aulgur, John	ML15154B624
Argenzio, Diane	ML15158A029	Aungst, Judith	ML15154B904
Armato, Frank	ML15154C085	Aurigemma, Kaye	ML15154B529
Armbrust, Deborah	ML15153B004	Ausenbaugh, Jean	ML15148A730
Armenteros, Clara	ML15159A122	Ausman, Emma	ML15154B257
Armentrout, Harley	ML15148B237	Austin, Genevieve	ML15159A366
Armer, Joan	ML15154B826	Austin, Gregory	ML15154C192
Armillas, Mercedes	ML15148A710	Austin, Joyce	ML15154C019
Armitage, Chris	ML15142A247	Austin, Laird	ML15148A162
Armour, Kelly	ML15141A528	Aversa, Amy	ML15159A102
Armstead, Betty	ML15141A629	Avery, Patricia	ML15156A028
Armstead, Leroi	ML15153B265	Avery, Sara	ML15155A771
Armstrong, Jennifer	ML15155B945	Avetikyan, Jose	ML15154A296
Armstrong, Marsha	ML15148A713	Avidor, Roberta	ML15162A107
Arndt, Dolores	ML15155C037	Avrutick, Alice	ML15155A283
Arneson, Andrew	ML15161A626	Ayala, Joe	ML15162B044
Arnett, Catherine	ML15158A127	Ayala, Joe	ML15162B099
Arney, Kevin	ML15155A632	Ayers, Frank	ML15155A543
Arney, Tracey	ML15155A800	Ayers, Mark	ML15154B128
Arnold, Arthur	ML15159A342	Aylor, Anne	ML15154B756
Arnold, Ben	ML15158A102	Aylward, Diana	ML15162A649
Arnold, Marge	ML15159A033	Azcona, Gon	ML15162A101
Aronson, Murray	ML15153B137	Azzarello, Joe	ML15154A465
Aronson, Sylvia	ML15153A910	B., Angelene	ML15140A157
Arosarena, Oneida	ML15159A622	B., Angelene	ML15156B456
Arrington, Aubrey	ML15155A140	B., Christine	ML15154B687
Arsiaga, Rosa	ML15142A276	B., Enzo	ML15154A077
Artigas, Josep	ML15153A458	B., J.	ML15142A351
Arumugham, Vinu	ML15155A285	B., Shary	ML15146A370
Arveson, Michael	ML15158A215	B., Susan	ML15154B349
Asbury, Craig Lee	ML15155B912	Babb, Winifred	ML15155C142
Ascenzo, Carey	ML15153A900	Bachman, Jerald	ML15140A114
Aschenbrenner, Eva	ML15155C139	Bacic, E.	ML15154A480
Ashcraft, Hugh	ML15154B923	Backstrom, Karin	ML15154B833
Ashcraft, James	ML15154C106	Badders, Christine	ML15154A341
Ashley, Cathy	ML15154A578	Bader, Jessica	ML15162B089
Ashmore, Sandra	ML15154A716	Bader, Jessica	ML15162B134
Ashton, Elyse	ML15142A102	Bader, Sandra	ML15155A305
Ashton, Linda	ML15156B399	Bader, William	ML15153A345
		Badus, Theresa	ML15156A092
Askew, Georgena	ML15148A998 ML15140A171		ML15155A516
Askins, Ed Astalos Andrew		Badyrka, Jill Badyy, Japet	
Astalos, Andrew	ML15155B188	Bagby, Janet Bagnoli, Connio	ML15160A867
Asteinza, Josef	ML15155B417	Bagnoli, Connie Bagwall, Wilson Knov	ML15155A035
Atcheson, Sandra	ML15148B109	Bagwell, Wilson Knox	ML15156A862
Atchison, Dorian	ML15155B241	Bahn, Ted Babria, Angia	ML15154A871
Atkins, Ilene	ML15156B268	Bahris, Angie	ML15155B924
Atkinson, Paul	ML15159A852	Baier, Carol	ML15140A202
Atmore, Wendy	ML15147A722	Baier-Barnes, DeAnna	ML15156A279

<b>Commente</b>	ADAMS	<b>C</b> errorenter	ADAMS
Commenter	Accession #	Commenter	Accession #
Bailey, Chrissy	ML15160A808	Banken, Ella	ML15154A440
Bailey, Evelyn	ML15148B220	Banks, Janice	ML15156A170
Bailey, Larry	ML15154A766	Banks, Michele	ML15160A805
Bailey, Mary	ML15154B729	Bannon, Kevin	ML15155A258
Bailey, Stephen	ML15142A123	Baouche, Karen	ML15159A767
Bailie, Janae	ML15156A532	Barber, Marilyn	ML15154A657
Bailiff, Elliott	ML15153B202	Barberi, Lillyam	ML15153A501
Bailiff, Elliott	ML15154C259	Barbuto, Paul D.	ML15160A711
Bails, Jean	ML15155B729	Barclay, Daniel	ML15153B116
Bainbridge, Kathryn	ML15154A420	Barcomb, Wendy	ML15141A620
Bainbridge, Tamara	ML15155A050	Barcott, Nick	ML15158A139
Baird, Barbara	ML15156A014	Barger, John	ML15148A865
Baird, Larry	ML15155B589	Barile, Kathryn	ML15146A371
Bak, Patrick	ML15155B603	Barker, Anne	ML15154A091
Baker, Frank	ML15159A078	Barker, Chris	ML15155C187
Baker, Helene	ML15141A671	Barker, Donald	ML15154B127
Baker, Joy	ML15154B107	Barker, Mary Clare	ML15141A788
Baker, Karen	ML15155C155	Barker, Monica	ML15159A722
Baker, Kristina	ML15148A212	Barker, Scott	ML15142A105
Baker, Leslie	ML15142A035	Barkley, Dan	ML15154C175
Baker, Louis	ML15154B725	Barlow, Scott	ML15154C141
Baker, Mary Sue	ML15159A808	Barmeyer, Sarah	ML15155A148
Baker, Richard	ML15156A003	Barnard, Michele	ML15155C190
Baker, Sara	ML15155A084	Barnes, Linda	ML15155B896
Baker, Sasha	ML15155A068	Barnes, Richard	ML15158A086
Baker, Sharon	ML15154B892	Barnett, Barbara	ML15159B078
Baker, Vickey	ML15155B935	Barnett, Lynn	ML15154B465
Baker-Smith, Gerritt and		Barnett, Peter	ML15156B299
Elizabeth	ML15154B181	Barnett, Renee	ML15155A012
Bakr, Rania	ML15156A065	Barnett, Sandra	ML15155A872
Balaska, Konstantina	ML15159B274	Barney, Martin	ML15160A596
Baldino, Vincenza	ML15155A007	Barnhart, Katherine	ML15154A394
Baldock, Jason	ML15156A302	Barns, Suzanne	ML15159A791
Baldwin, Jeff	ML15142A280	Barr, Álwyn	ML15160A925
Baldwin, Tanya	ML15160A726	Barr, Ellen	ML15162A624
Baley, Patricia Mcrae	ML15162B042	Barr, Ford	ML15156A873
Baley, Patricia Mcrae	ML15162B097	Barr, Jay	ML15154B698
Balfour, Joan	ML15154A738	Barr, Nancy L.	ML15158A117
Balke, Bruce	ML15159A953	Barragan, Rosa	ML15148B242
Ball, Evelyn	ML15158A284	Barreras, Terri	ML15153A749
Ball, Tim	ML15159B508	Barrett, Donna	ML15159A219
Balles, Katherin	ML15159A710	Barrett, Elizabeth	ML15154B452
Balog, Nancy	ML15159B075	Barrett, Janet	ML15159B231
Balosie, Dean	ML15154A683	Barrett, Lisa	ML15156A800
Balzan, Darlene	ML15154C044	Barrett, Martha	ML15156A185
Balzer, Johanna	ML15142A094	Barrington, Tim	ML15155A701
Bamberger, Wayne	ML15141A725	Barron, Mikail	ML15155B004
Bamford, Robert	ML15153A604	Barrows, Steven	ML15159B583
Bamford, Stephen	ML15154C048	Barrrons, Susan	ML15159A109
	ML15161A664		ML15159A109 ML15141A552
Banach, Darlene	ML15161A664 ML15142A289	Barry, John Barry, Lynda	ML15141A552 ML15154B014
Banever, C.		Barry, Lynda Barry, Marian	
Banever, Robert	ML15153A904	Barry, Marion	ML15155B826
Banfield, David Bangham, Jerry	ML15158A235 ML15140A005	Barshter, Rebecca Bartholomew, Alice	ML15148A955 ML15155A241
Banonam Jerry		BAUDOIODEW AIICE	

Commenter Bartkowicz, Richard Bartleman, Mark Barton, Alyssa Barton, Gary Barton, Janelle Basile, C.	Accession # ML15159B216 ML15160A730 ML15159B147	Commenter Begley, Christina Begley, Matt	Accession # ML15162A576
Bartleman, Mark Barton, Alyssa Barton, Gary Barton, Janelle	ML15160A730 ML15159B147	Begley, Matt	
Barton, Alyssa Barton, Gary Barton, Janelle	ML15159B147	Begley, Matt	
Barton, Gary Barton, Janelle			ML15154B552
Barton, Janelle		Begrisch, Mary	ML15141A634
	ML15142A140	Begum, Khani	ML15148B157
Basile C	ML15154B474	Behan, Darren	ML15148B328
Baolio, O.	ML15155A270	Behl, Daniel Max	ML15161A624
Basman, Melis	ML15160A071	Bein, Ann	ML15153A885
Bass, Lanny	ML15140A267	Bejgrowicz, Thomas	ML15140A024
Bass, Wanda	ML15141A469	Belanger-lott, Nancy	ML15155B202
Bassett, Christine	ML15154C303	Belcastro, Frank	ML15155A464
Bassett, Jan	ML15156B032	Beldin, Joan	ML15148B060
Bassett, Susan	ML15154C232	Belfer, Morgan	ML15160A723
Basso, Jeremy	ML15156A726	Bell, David	ML15159B330
Bastron, Diana Kukule	ML15154C250	Bell, Denise	ML15140A196
Basye, Mae	ML15154B277	Bell, Gary	ML15160A968
Bates, Abigail	ML15148B178	Bell, Jennifer	ML15154B852
Bates, Shivaun	ML15155A396	Bell, Jim	ML15153B108
Bathrick, Patricia	ML15156A037	Bell, Lesli	ML15158A199
Battaly, Gertrude	ML15160A644	Bell, Linda	ML15154A218
Baucco, Matthew	ML15159A817	Bell, Randall	ML15148B247
Bauder, William	ML15142A086	Bellas, Brian	ML15148B359
Bauer, Cynthia	ML15154C282	Bellefeuille, Barbee &	
Bauer, Linda	ML15155A797	Ronald	ML15158A241
Bauer, Mary	ML15155A054	Bellini, Cynthia	ML15155B339
Bauer, Philip	ML15153B250	Bellomo, Stephen	ML15155C050
Bauer, Terri	ML15161A644	Belloso-Curiel, Jorge	ML15155B833
Baumann, Scott	ML15153A410	Beltran, Olivia	ML15148A878
Baures, Timothy	ML15155A182	Beltz, Judith	ML15162B044
Baxter, Lou	ML15155B966	Beltz, Judith	ML15162B112
Bayer, Judith	ML15156B431	Benco, Mike and Andrea	ML15156A070
Be, Nancy	ML15153B076	Bender, Kae	ML15154C263
Beach, Muriel	ML15148B385	Bender, Nancy	ML15148B028
Beale, Jr., Howard K.	ML15159B509	Bender-Muir, Marie	ML15159A662
Beam, Stephanie	ML15159A458	Benedetto, Mona	
Beaman, Deena	ML15154A297	Stephanie	ML15155A611
Beans, Sheree	ML15159A960	Benet, Marjorie	ML15142A082
Bearden, Jim	ML15154A552	Bengel, Anna	ML15161A653
Beardsley, Rebecca	ML15159B434	Bengston, Lynn	ML15148B139
Beatini, Tom	ML15155B272	Bening, Allison	ML15155A342
Beattie, Jane	ML15154B523	Benito, Alejandra	ML15155A062
Beatty, Lorne	ML15155A261	Benjamin, Alex	ML15148A850
Beavers, John	ML15159B123	Benjamin, Andrew	ML15148B349
Beavers, Nancy	ML15155C197	Benjamin, Elaine	ML15142A188
Bechtoldt, Lenore	ML15159A520	Benjamin, Emily	ML15162A043
Becker, Elaine	ML15160A693	Benkert, Cynthia	ML15141A670
Beckman, Linda	ML15155A499	Bennett Jr., Frank Z.	ML15155B932
Bedat, Suzanne	ML15155A369	Bennett, Astrid	ML15148B330
Bedell, Stephen	ML15156B265	Bennett, Bryan	ML15155A003
Beebee, Kara	ML15155C064	Bennett, Jesse	ML15154A233
Beecher, Christina	ML15148B133	Bennett, Maris	ML15154B232
Beeghly, Charles	ML15155B880	Bennett, Michael V. L:	ML15155A030
Beeler, James	ML15148B329	Bennett, Robbie	ML15148A890
Beerheide, Erna	ML15160A862	Bennett, Robert	ML15154A307
Beery, Richard	ML15154B993	Bennett, Virginia	ML15147A710

0	ADAMS	<b>A</b> <i>i</i>	ADAMS
Commenter	Accession #	Commenter	Accession #
Benning, Sheryl	ML15159B337	Bersell, Barbara	ML15154A665
Benoit, Marguerite	ML15154B352	Bertol, Alina	ML15159A367
Bensberg, Wilhelm	ML15148B094	Berzins, leva	ML15159B531
Benson, William	ML15159B344	Betti, Mark	ML15155A615
Bentley, Kathy	ML15140A016	Betts, Cynthia	ML15155B927
Benton, Stan	ML15153B179	Bettum, Gary	ML15159B278
Benton-Janetta, Lori	ML15156B499	Betz, Brian	ML15159A244
Bentz-Letts, Alan	ML15155A421	Beuscher, Will	ML15156B022
Beqaj, Oliver	ML15154B579	Bever, Emily	ML15148A653
Berard, Carol	ML15156A078	Beveren, Chantal	ML15159A486
Berchem, Marie-Ange	ML15141A439	Beverly, J.	ML15154B778
Berecz, Illya	ML15140A240	Beverly, Robert	ML15155C137
Bereczki, Patricia	ML15153B232	Beyerle, Brittany	ML15154A951
Berens, Bruce	ML15153A889	Bhence, Blaze	ML15154A620
Berezansky, Nick	ML15155A647	Bianchi, Melanie	ML15148B265
Berg, Elaine	ML15155B338	Biccum, Susan	ML15158A068
Berg, Jon	ML15156A523	Bickel, Michael	ML15153B117
Bergen, Jaye	ML15153A678	Bicking, Ann	ML15153B107
Bergen, Peggy	ML15148A827	Bicknell, Mary	ML15154A014
Berger, Keith	ML15155A159	Biddle, Maxine	ML15154B237
Berger, Melissa	ML15140A159	Bidney, Martin	ML15141A746
Berger, Sally	ML15155A165	Bidwell, Troy	ML15159B400
Bergeron, B.	ML15141A657	Biedermann, Martin	ML15155A642
Bergey, Don	ML15155A415	Bielaus, Edward	ML15140A013
Bergey, Nancy	ML15153A881	Bielawski, Richard	ML15154A535
Bergman, Don	ML15154C190	Bielke, Patricia	ML15159A357
Bergmann, Amy	ML15162A115	Biere, Debbie	ML15154A311
Bergstedt, Charlie	ML15155C091	Bieszk, John	ML15148A858
Beringer, Laurie	ML15154B912	Biffl, Betsy	ML15154A385
Berisford, Daniel	ML15161A646	Biggs, Amy	ML15154B877
Berkshire, David	ML15140A043	Biglia, Monique	ML15153A928
Berliner, Alice	ML15154A219	Bilenko, Stephanie	ML15154B187
Berliner, Diane	ML15158A071	Bill, Alma	ML15160A847
Berliner, Jill	ML15155A487	Billey, Catharine	ML15154A170
Berman, John	ML15160A642	Bindas, Janet	ML15156B305
Berman, Pearl	ML15155B519	Binder, Caroline	ML15162A671
Berman, Steven	ML15141A672	Binder, Gene	ML15155A128
Berna, Patricia	ML15155A634	Birch, Beatrice	ML15162A076
Bernache, Marie	ML15141A616	Bird, Richard	ML15154B149
Bernard, Christina	ML15162A087	Birkeland, Celeste	ML15148A967
Bernard, James	ML15148B343	Birnbaum, Dara	ML15159A000
	ML15154A826	Bishop, Cori	ML15159A607
Bernardo, Kathleen			
Berner, Kris	ML15142A163	Bishop, Norman	ML15159A814
Berner, William	ML15155A413	Bishop, Shirley	ML15156A257
Bernstein, Laura Ann K.	ML15155A817	Bisser, John	ML15153B143
Bernstein, Marcy	ML15148B356	Bissett, Tina	ML15162A510
Bernstein, Roslyn	ML15154A488	Bissram, Nyla	ML15153A577
Berowski, Kim	ML15155A001	Bitter, Josh	ML15154C033
Berowski, Kim	ML15156A820	Bjornbak, Kris	ML15153A500
Berry, Bethany	ML15162A718	Black, David	ML15159A146
Berry, Kenneth	ML15148B337	Black, Karina	ML15154A203
Berry, Marla	ML15158A158	Black, Mary Ann	ML15155A402
Berry, Paula	ML15153B184	Black, Mary Beth	ML15141A499
Berry, Victoria	ML15156A908	Black, Pauline	ML15154B012

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Blackwood, Jean	ML15148B076	Bogin, Ronald	ML15153B282
Blaesing-Thompson,		Bohac, Stephen	ML15162A206
Shawn	ML15148A254	Bohanan, Crickett	ML15156A143
Blair, Dan	ML15154A284	Bohl, Calleen	ML15155A277
Blaire, Jan	ML15154A474	Bohlen, Curt	ML15159B211
Blaisdell, Jill	ML15153A743	Böhm, Birgitt	ML15160A632
Blake, Frank	ML15155A706	Bohn, David	ML15156B367
Blake, Jocelyn	ML15153A474	Boise, Gretchen	ML15156B247
Blake, Richard	ML15160A630	Boka, Erika	ML15155A386
Blakemore, Richard	ML15100A050 ML15148A662	Bolcon, W.	ML15147A745
Blanchard, Ann			
	ML15160A067	Bolen, D. K. Bolivor, Emily	ML15155A520
Blanchard, Rob	ML15159A287	Boliver, Emily	ML15154B580
Blanchette, Laura	ML15140A040	Bollini, Margaret	ML15148B063
Blanck, Heidi	ML15155C231	Bolman, David	ML15155A419
Blandford, Tom	ML15148B088	Bolsky, Debbie	ML15153A747
Blanding, David	ML15155A000	Bombar, Timothy	ML15156A938
Blaney, Carol	ML15160A583	Bon, Eric	ML15155B419
Blank, Charles	ML15159A376	Bonaceto, Helen	ML15158A116
Blankenship, E.	ML15153B289	Bondy, Mamie	ML15159A512
Blanton, Robin	ML15156B014	Boner, Karen	ML15162B064
Blaschke, Lawrence	ML15154B007	Boner, Karen	ML15162B110
Blau, P.	ML15142A272	Bonetti, Donna	ML15148A988
Blay, Nora	ML15140A039	Bonfanti, Fran	ML15142A295
Bleby-Lewis, Joyce	ML15155B817	Bonfield, Barbara	ML15155A391
Bleecker, Skip	ML15153A832	Boniface, Kathryn	ML15154A108
Blesi, Donald	ML15155B736	Bonilla-Jones, Carmen	
Bley, Ann	ML15160A073	Elisa	ML15142A324
Blinder, Linda	ML15154B230	Bonini, L.	ML15160A046
Blinder, Linda	ML15156A046	Bonitatibus, Amber	ML15159B397
Bliss, Richard	ML15154A708	Bonk, Denise	ML15154B039
Block, Gary	ML15155A392	Bonnell, Christine	ML15162A117
Block, Julie	ML15162A702	Bonner, Tracey	ML15154B497
Bloedow, MaryAnn	ML15154C063	Bonnett, Andrea	ML15148B233
Blond, Olivia	ML15153B072	Bonney, Patty	ML15155A185
Bloom, Gary	ML15156B257	Bookheimer, Donna	ML15148A165
Bloom, Martin	ML15155A824	Bookwalter, Eleanor	ML15153A951
Bloomquist, Kristofor	ML15140A182	Boone, Foster	ML15154A165
Blossom, Laurel	ML15155A411	Boone, James	ML15155A604
Blount, Susan	ML15158A074	Boone, Jim	ML15154C045
Blumert, Joel	ML15155B038	Boone, Merrill	ML15148B395
Blurton, Joan	ML15159A143	Boone, Michael	ML15154A301
Bobb, Mary	ML15156B165	Booth, Erik	ML15155A627
Bobb, Mary Bobroff, Alexander	ML15160A732	Booth, Fay Booth, John	ML15156A151
Bobroff, Alexander	ML15153A739	Booth, John Booth, Napov	ML15140A165
Boccagna, Emilia	ML15155C080	Booth, Nancy	ML15254A396
Bockino, Alida	ML15155A274	Booth, Nancy	ML15162B091
Boden, Jeff	ML15148A243	Booth, Nancy	ML15162B144
Bodiford, Loretta	ML15156B342	Booth, Richard	ML15155A033
Bodleaender, Peter	ML15147A721	Borame, Joan	ML15153A578
Boeckermann, Jesse	ML15159B357	Borbon, Maria	ML15155B690
Boehler, Karen	ML15154A012	Borchardt, Jerrold	ML15156B354
Boerner, Gary	ML15161A657	Borcherding, Paul	ML15154A106
Bogan, Susan	ML15153A709	Bordegaray, Dana	ML15154B370
Boggs, George	ML15155B856	Bordelon, Tika	ML15154B689

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Commenter	Accession #	Commenter	Accession #	
Borges, Gretchen	ML15154B787	Bradshaw, John	ML15154A743	
Borich, Marilyn	ML15154B760	Bradshaw, Mary	ML15162A563	
Borie, Edith	ML15156A016	Bradshaw, Susan	ML15154B209	
Borland, Matthew	ML15155A008	Brady, Cheri	ML15153A981	
Born, Steven	ML15155C055	Brady, Daren	ML15155B732	
Boroshok, Ruth	ML15155A434	Brady, Sarah	ML15154B909	
Borske, Cindy	ML15158A256	Bragg, Emma	ML15154B034	
Bortoletto, Federico	ML15156B514	Braithwaite, Georgia	ML15142A084	
Boshears, Michael	ML15155B818	Bramblett, Sharon	ML15153B036	
Boshell, Willis	ML15155A523	Bramlette, Jenny	ML15155A195	
Bosque, Edgar Chico	ML15155A896	Branagan, Jackie	ML15155B698	
Bossard, Eudell	ML15159A217	Branch, Clair	ML15162B089	
Bostelmann, Allan	ML15155B686	Branch, Clair	ML15162B141	
Bostic, Byron	ML15148B340	Brandariz, Anita	ML15148B306	
Bosworth, Carol	ML15155A851	Brandes, Susan	ML15159A427	
Both, Bill	ML15153B100	Brandon, Annette	ML15154A214	
Bottesch, Marla	ML15153A962	Brandon, Janet	ML15154B779	
Bougie, Ronald	ML15156A157	Brandon, Jennifer	ML15154A931	
Boulan, Cassidy	ML15159A597	Brandow, Shanna	ML15154B799	
Bourlotos, George	ML15154A068	Brandreth, Zena	ML15159B306	
Bouse, Ari	ML15155B246	Brandstetter, Charles	ML15148A139	
Bousman, Thomas	ML15155A758	Brandt, Emily	ML15154B185	
Bovee, Emily	ML15154A215	Brandt, V.	ML15154A953	
Bowden, Joan	ML15156A054			
		Branfman, Judy	ML15153A750	
Bowen, Mary Ellen	ML15154C238	Braoudakis, Spyros	ML15155B439	
Bower, Mike	ML15153A612	Bratcher, Deborah	ML15159A139	
Bowers, Gary	ML15148A916	Bratcher, Suzanne	ML15155A332	
Bowie, Mary	ML15153B258	Bratvold, Gretchen	ML15148A872	
Bowles, Sherry	ML15141A709	Braunlich, Julie	ML15160A696	
Bowley, Kat	ML15158A110	Braus, Joseph	ML15155A744	
Bowman, Alix	ML15154B564	Braverman, Tobi	ML15156A593	
Bowman, Candy	ML15155A325	Brawley, Elizabeth	ML15148A253	
Bowman, Jennifer	ML15159B018	Braxton, Angelika	ML15162A554	
Bowman, Kenneth	ML15158A134	Brayfield, David	ML15153A696	
Bowman, Robin	ML15155A733	Brazis, Christine	ML15159A166	
Boyce, Richard	ML15153A913	Breakfield, Sandra	ML15154B847	
Boyd, Erin	ML15154B858	Breakstone, Enid	ML15154A182	
Boydston, Charlene	ML15155A051	Brebner, Linda	ML15154B139	
Boyens, Marguerite	ML15155A115	Breckinridge, Lynn	ML15153A825	
Boyer, David	ML15155B206	Bredow, Cindy	ML15159B070	
Boynton, Robin	ML15155C112	Breeden, Paul	ML15156B016	
Boza, Mario	ML15148B073	Brehm, Anita	ML15154A140	
Brabson, Thomas	ML15159A942	Breiding, Joan	ML15160A057	
Bracken, Fay	ML15155A692	Breiling, Ellen	ML15156A286	
Bracken, Kyle	ML15154B144	Breitkreuz, Paul	ML15140A132	
Bradbury, Margaret	ML15159A154	Brelsford, Susanna	ML15154A343	
Bradford, Leslie	ML15159A377	Bremen, Gary	ML15159B232	
Bradford, Mishelle	ML15154B666	Bremmer, Faith	ML15142A354	
Bradley, Al	ML15154A401	Bremner, Deborah	ML15159B214	
Bradley, Alan	ML15153B048	Brenner, Jared	ML15153A658	
Bradley, Kathy	ML15154C147	Brenner, Thomas	ML15148B121	
Bradley, Mark	ML15142A127	Brents, Julie	ML15154B696	
Bradshaw, Barbara	ML15156A581	Brenza, Tina	ML15155B034	
Bradshaw, Beverly	ML15156A334	Bresnahan, Rose	ML15155A522	

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Commenter	Accession #	Commenter	Accession #
Brewer, Jak	ML15153A731	Brown, Brandye	ML15141A751
Brewer, Jill	ML15154A451	Brown, Brian	ML15154B804
Brewer, John	ML15154B340	Brown, Craig	ML15148A939
Brewer, Laurel	ML15158A123	Brown, Damon	ML15159B093
Brewer, Matt	ML15154A424	Brown, Daniel	ML15162A044
Brewer, Suzanne	ML15159B295	Brown, David	ML15154B316
Breyman, Steve	ML15162A058	Brown, Dorothy	ML15153A675
Bricic, Jasmina	ML15148A170	Brown, Duncan	ML15158A010
Bricker, Linda	ML15159A843	Brown, Elizabeth C.	ML15142A189
Brickner, Marvin	ML15153A922	Brown, Greg	ML15154B881
Briddick, Gary	ML15159A815	Brown, Jeannine	ML15148A782
Bridges, Linda	ML15156A644	Brown, Jennifer	ML15147A726
Brief, Allan	ML15156A032	Brown, Jessica	ML15148B394
Brien, Ray	ML15154B105	Brown, Jim	ML15154A034
Brier, Jonathan	ML15148B146	Brown, Joseph	ML15156A505
Briery, Georgia	ML15156A007	Brown, Kathleen	ML15153A829
Brigger, Kathy	ML15148A974	Brown, Kiley	ML15142A169
Briggs, Janice	ML15142A260	Brown, Laura	ML15141A461
Briggs, William C.	ML15158A248	Brown, Lauren	ML15154A327
Brigner, Liberty	ML15159A536	Brown, Leo	ML15154A431
Brill, Elizabeth	ML15154A723	Brown, Margot	ML15142A363
Brillet, Matthieu	ML15155C058	Brown, Mary	ML15154A719
Brimm, Martha	ML15156B221	Brown, Michael	ML15141A471
Brincka, Frank	ML15156A797	Brown, Myrna	ML15155B803
Brink, Tom	ML15154B792	Brown, Nancy	ML15153A509
Brinkman, John	ML15154B028	Brown, Neil	ML15155C217
Britton, Joanne	ML15162A304	Brown, Pat	ML15159A642
Broadwater, David	ML15156A448	Brown, Robert	ML15148B082
Brobst, Robert	ML15158A143	Brown, Sally	ML15154A760
Brocious, Pamela	ML15140A239	Brown, Stevan	ML15141A729
Brod, Natalie	ML15160A779	Brown, Susan	ML15142A292
Broderick, Kathleen	ML15142A075	Brown, Susan	ML15142A297
Brody, Alice	ML15153B126	Brown, Terrence George	ML15154A711
Broer-Leroux, David	ML15148B189	Brown, Tina	ML15140A135
Bromage, Joan	ML15148B122	Browne, M. Lou	ML15148A911
Bronik, Darlene	ML15156A451	Browne, R. J.	ML15154B062
Bronner, Dennis	ML15159A020	Browne, Tina	ML15158A126
Bronner, Eric	ML15160A908	Brownell, Deirdre	ML15154C132
Brooker, Eric	ML15142A061	Brownell, Deirdre	ML15155C026
Brooker, Gary	ML15161A701	Browning, Cassandra	ML15156B428
Brooks, Olivia	ML15154A122	Browning, Craig	ML15155A190
Brooks, Patricia	ML15154B344	Brownlee, Cathy	ML15142A263
Brooks, Sandy	ML15155C235	Brown-Nesbit, Parker	ML15156A776
Brophy, Tracy	ML15155A483	Brstow, Mary	ML15156A021
Bros, Sam	ML15154B386	Bruck, Jonathan	ML15153B228
Brose, Janice	ML15155A095	Brucker, Bob	ML15148A841
Bross, Carol	ML15160A770	Bruegge, Debra	ML15160A834
Brothers, Jill	ML15156B426	Brumby, Val	ML15153A546
Broughton, Beatrice	ML15156A321	Brumleve, Charles	ML15155A420
Browder, Erin	ML15142A346	Brummette, Carrie	ML15156A454
Browder, Susan	ML15154A157	Brunelli, Anne	ML15154A907
Brower, Cristina	ML15154A418	Bruner, Edward	ML15156A890
Brown, Gina	ML15155A279	Bruner, Linda	ML15160A595
Brown, Alan	ML15159A655	Brunick, Cathy	ML15154B101

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Bruno, A. B.	ML15142A058	Burke, Bonnie Margay	ML15141A662
Brunson, Jane and John	ML15162A506	Burke, Emily	ML15159B413
Brunson, Pat	ML15147A707	Burke, Gerald	ML15155A504
Brunswick, Susan	ML15155A220	Burke, Maureen	ML15154B668
Brunton, James	ML15154A412	Burke, Patricia	ML15156B108
Brushaber, Marcie	ML15155B791	Burkhart, Don	ML15154A605
Bruton, Babette	ML15160A921	Burkhart, Imogene	ML15147A737
Bryan, Ellen	ML15159A480	Burks, Connie	ML15154A625
Bryan, Judith	ML15154B514	Burks, James	ML15156A718
Bryant, Anita	ML15141A736	Burks, Paul	ML15154A275
Bryant, Cade	ML15159A240	Burlew, Jessica	ML15154B954
Bryant, Judith	ML15159A055	Burnash, George	ML15159A124
Bryer, Gladys	ML15155B873	Burnell, Nathan	ML15155A293
Bubb, Ken	ML15148B039	Burns, Bruce	ML15148B136
Bucciere, Janet	ML15154A340	Burns, Catherine	ML15153A519
	ML15155A993	Burns, Catherine	ML15154B568
Buch, Anthony Buch, Sophia	ML15150A995 ML15140A280	Burns, Dan	ML15154A154
Buchan, Martha	ML15154B338	Burns, Laurel	ML15154A154 ML15158A171
	ML15159B405	Burns, Lyn	ML15160A076
Buchanan, Ellen Buchsbaum, Judy		Burns, Rebecca	ML15160A076 ML15148B305
	ML15148B403		
Buck, Mary Lou	ML15155B646	Burns, Terry	ML15155B716
Buckley, Nan	ML15154A288	Burns, Vikki Burr, Maraia	ML15160A708
Bucklin, Lucia	ML15159A490	Burr, Marcia	ML15156A608
Bucolo, James	ML15153A688	Burress, Edward	ML15148B118
Budde, Sharon	ML15155B658	Burstein, Mimi	ML15159B233
Budnik, Bradley	ML15154C198	Burt, John	ML15155A894
Buenrostro, Marta Rico	ML15155A260	Burtch, Robert	ML15142A028
Buensuceso, Antonio	ML15154B614	Burton, Christina	ML15158A225
Buerger, Michelle	ML15162A070	Burton, Matthew	ML15158A232
Buergermeister, Sabine	ML15142A045	Burwasser, David	ML15153A890
Bugbee, Michael	ML15142A055	Burwell, Carol	ML15156A670
Buhowsky, Joseph	ML15159A754	Busacco, Jeanne	ML15155B822
Buil, Beyssa	ML15156A449	Busani, Elena	ML15155B364
Bulatova, Nuriya	ML15162A112	Bush, Nancy	ML15159B494
Bull, Michael	ML15159A245	Bush, Victoria	ML15159A575
Bullock, Debbie	ML15159B276	Buslot, Chantal	ML15148B174
Bump, Deborah	ML15148B317	Busnach, Nadine	ML15155B661
Bunchongruksa, Sudarat	ML15154A737	Bustamante, Desiree	ML15162A285
Bunker, Diane	ML15154B857	Buster, Katey	ML15154A434
Bunker, Greg	ML15156B200	Bustos, Ray	ML15148A131
Buonaiuto, John	ML15156A072	Butenko, Melody	ML15162A699
Buono, Carmen Dello	ML15154B250	Butkiewicz, Mike	ML15155B447
Burch, Maryann	ML15155C122	Butkus, Joann	ML15159A162
Burdick, Rebecca	ML15154C211	Butler, Amber	ML15148B066
Burgard, D. J.	ML15155B567	Butler, Donna	ML15156A009
Burge, Ken	ML15142A197	Butler, Linda	ML15156B053
Burge, Laura	ML15156A161	Butterfield, Colleen	ML15154B376
Burger, Elizabeth	ML15142A107	Butterfield, Doris	ML15155C193
Burger, Nancy	ML15155C219	Butterworth, John	ML15141A498
Burger, Scott	ML15159B530	Butterworth, Leslie	ML15148A941
Burgess, Anthony	ML15148B311	Buttles, Kathryn	ML15153A797
Burgess, Ryan	ML15154C302	Button, Pat	ML15156B243
Burk, Robert	ML15148A164	Button, Reyna	ML15154C309
Burkart, Marie	ML15140A227	Butts, Judith	ML15156B077

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Buu, Hieu	ML15140A170	Canepa, John	ML15147A724
Buxman, Ryan	ML15154A705	Canning, Christine	ML15156A063
Buyea, Thomas	ML15155A458	Canning, John	ML15154B679
Byland, John	ML15159A897	Canning, Rick	ML15155A740
Byrd, Darlene	ML15154A044	Canning, Tom	ML15155A881
Byrer, Dianne	ML15154B519	Cannon, Elizabeth	ML15154C164
Byrne, Carolyn	ML15156A145	Cannon, John	ML15162A552
Byrne, Rosemary	ML15140A167	Cannon, Maxine	ML15162A550
Byrnes, Leslie	ML15155A153	Cannon, Thomas	ML15156A004
Byrnes, Richard	ML15155C158	Canny, Carlyn	ML15159A112
C., Erin	ML15158A291	Cantu, Eva	ML15155B971
C., Lynne	ML15155B201	Cantu, Roel	ML15155C214
C., Max	ML15155A135	Caolo, Rosemary	ML15154A124
C., Michael	ML15154A220	Capezzuto, Raymond	ML15154B462
C., Mike	ML15148B445	Capone, Shantell	ML15159A002
C., Shaz	ML15155B189	Capotorto, Jeanette	ML15156A313
C., Sylvie	ML15142A349	Cappa, Karen	ML15156A643
		Cappuccio, Sharon	
C., T.	ML15154A821		ML15160A650
Caballero, Luis	ML15162A050	Capstick, Hilary	ML15154C102
Cabrera, Luis	ML15155B805	Capurro, Lyn	ML15159A735
Cachopo, Patricia	ML15153A681	Carden, E.	ML15154B264
Cadot, Andrew	ML15154B373	Cardoso, Toby	ML15154A138
Cadwallader, Terry	ML15154C101	Cardwell, Paul	ML15156A791
Cafarelli, Cenie	ML15142A309	Carey, Susan	ML15156A795
Caflisch, Kathie	ML15156B150	Cargman, Jered	ML15156B497
Cahillane, Leila	ML15159A057	Cargulia, Guy	ML15155A675
Caillouette, Brook	ML15155B314	Carideo, Ida	ML15156B049
Cain, Lisa	ML15156B519	Carideo, Ida	ML15159B373
Calambro, Leslie	ML15160A789	Carl, Jeannie	ML15155A917
Calcagno, Philip	ML15154A740	Carley, James	ML15159B470
Caldwell, Dotty	ML15158A064	Carlin, Catherine L.	ML15154B267
Caldwell, Ellen	ML15154A467	Carlin, Catherine L.	ML15154C025
Caldwell, Kathleen	ML15159A626	Carlin, Catherine L.	ML15154C151
Caldwell, Myron	ML15156B295	Carlino, Thomas	ML15140A194
Caldwell, Robert	ML15153A973	Carlisle, Shelley	ML15154A834
Callahan, Loretta	ML15155A607	Carlisle, Thomas	ML15155A407
Callard, Diane	ML15148A716	Carlson, Carol	ML15158A257
Callow, Wayne	ML15148A714	Carlson, Sandy	ML15162A274
Calvert, Mary Ann	ML15158A160	Carlton, Thomas	ML15140A176
Calvert, Rick	ML15148A715	Carman, Heather	ML15154B532
Camerman, Virginia	ML15148B290	Carman, Iris	ML15159B406
Cameron, Cami	ML15154B099	Carmean, Roxann	ML15159A338
Cameron, Jean	ML15156A883	Carne, Carol	ML15156B076
Camp, David	ML15159A901	Carney, Cheryl	ML15141A676
Camp, Timothy	ML15159A296	Carney, KC	ML15153A435
Campbell, Allan	ML15159A645	Caro, Steve	ML15162B089
Campbell, Grant	ML15155A310	Caro, Steve	ML15162B138
Campbell, Karolyn	ML15156A069	Carollo-Zeuner, Christine	ML15141A635
Campbell, Susan	ML15160A890	Carpenter, Dale	ML15162B079
Campbell, Theresa	ML15154B616	Carpenter, Dale	ML15162B127
Canale, Susan	ML15158A236	Carpenter, Gary	ML15155A741
Candela, Macyle	ML15153A820	Carpenter, Matthew	ML15155A228
Candelaria, Tiffany	ML15155A052	Carpenter, Rory	ML15155B705
Candlin, Celia	ML15154C184	Carpenter, Steven	ML15155A999

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Commenter	Accession #	Commenter	Accession #	
Carpenter, Victoria	ML15148A694	Cavasian, Edward	ML15154B732	
Carper, Robert	ML15154C140	Cayton, Chris	ML15156A554	
Carr, Brittany	ML15159A620	Cease, Jane	ML15155A416	
Carr, D.	ML15154C081	Cenc, John	ML15155A021	
Carr, Gaile	ML15155B796	Cerny, Jayne	ML15153B060	
Carrell, James	ML15154B821	Cerrella, Joseph	ML15156A084	
Carrier, Cornelia	ML15154B941	Cerretti, Robert	ML15148A848	
Carrier, Paula	ML15159A475	Cervene, Amy	ML15154C307	
Carriere, Richard	ML15156A949	Cervene, Shirley	ML15141A748	
Carringer, Nancy	ML15160A768	Cesnik, Michael	ML15153A724	
Carrington, Martha	ML15153B214	Ch, Lv	ML15154A558	
Carroll, Donna	ML15159B466	Chacich, Elizabeth	ML15153B142	
Carroll, John	ML15154A798	Chadwick, Carina	ML15159A123	
Carroll, Mary A.	ML15155A384	Chaffee, Shon	ML15140A138	
Carroll, Niall	ML15155B928	Chalfen, Karen	ML15142A134	
Carson, Debbie	ML15159B369	Chalker, Mikki	ML15154B952	
Carswell, Brandon	ML15159A361	Challenger, Brett	ML15156B410	
Carter, Carl	ML15148A630	Challinor, Suzanne	ML15154B061	
Carter, Gary	ML15153B169	Chambers, Nola	ML15161A703	
Carter, Jackie	ML15156A022	Chambers, Patricia	ML15148A923	
Carter, Jacqueline	ML15154B366	Chambers, Robert	ML15156B478	
Carter, Michelle	ML15160A629	Chan, Nancy	ML15159A451	
Carter, Natalie A.	ML15159A871	Chandler, Randy	ML15155A076	
Cartwright, Jennifer	ML15154B951	Chandler, Vickie	ML15148B429	
Carvajal, Mauricio	ML15154C114	Chaney, David	ML15156B249	
Case, Alex	ML15158A107	Chang, Bryna	ML15155C015	
Caseau, Sheri	ML15155A176	Chang, Patricia	ML15155B760	
Casey, Jill	ML15141A562	Changus, Carol	ML15155B688	
Casey, 500 Cashman, Sharon	ML15155A874	Chanon, Renee	ML15155A380	
	ML15154B356		ML15156A549	
Caskey, Mark		Chapdelaine, Perry		
Caskey, Sally	ML15154B863	Chapin, Robert	ML15162B044	
Caskey, Sally	ML15156A190	Chapin, Robert	ML15162B118	
Caspar, Julia	ML15148A926	Chapman, Antony	ML15158A166	
Casper, Laurel	ML15159B553	Chapman, Charles	ML15148A190	
Cassar, Kristine	ML15154B365	Chappell, Carol	ML15154A164	
Cassasdy, Marsh	ML15141A579	Char, Elizabeth	ML15156B515	
Cassel, Candice	ML15155C233	Charest, Karry	ML15160A962	
Cassidy, David	ML15154C242	Charleston, Robert	ML15159A510	
Castaneda-Mendez, Kicab	ML15153B286	Charnas, Kelley	ML15160A081	
Castellon, Leigh Anne	ML15155B039	Charnas, Kevin	ML15142A254	
Casten, Liane	ML15155A333	Charter, Donna	ML15158A168	
Castillo, Anthony	ML15154C189	Chase, Cheryl	ML15154C080	
Castillo, Esther	ML15159B085	Chase, Felicia	ML15162B089	
Castner, Rebecca	ML15155B819	Chase, Felicia	ML15162B133	
Castri, Serenella	ML15160A044	Chase, Janet	ML15156A141	
Caswell, Gail	ML15148A721	Chase, Linda	ML15154A189	
Caswell, Susan	ML15154A305	Chasin, Barbara	ML15156A079	
Cathcart, Melissa	ML15156A690	Chasteen, Don	ML15154B888	
Catlin, Linda	ML15160A971	Cheffi, Gisele	ML15154C177	
Catskill, Clover	ML15154B442	Chelland, Ron	ML15153A472	
Caudill, John	ML15158A138	Chelmecki, Patricia	ML15140A271	
Caudill, Lori	ML15162A653	Chemai, Beverly	ML15159B519	
Cavalier, Andre	ML15155A417	Chen, Alicia	ML15155B861	
Cavan, Noz	ML15148B264	Chen, Allan	ML15159A647	

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Chen, Grace	ML15159A242	Clark, Alexander	ML15155A297
Chen, Te-Fen	ML15154B928	Clark, Carol	ML15154A396
Chenoweth, Karen	ML15156B250	Clark, Colleen	ML15148A960
Cheo, Dorothy	ML15142A157	Clark, Diane	ML15153A944
Chernysheva, Elena	ML15159A931	Clark, Diane	ML15154A168
Cherubin, Elizabeth	ML15148B068	Clark, Elaine	ML15148A970
Chesire, Chris	ML15159B437	Clark, Geoffrey	ML15153A997
Cheslock, Michael	ML15153A649	Clark, Greg	ML15158A084
Chianis, Antonia & Andrew	ML15158A290	Clark, Jamie	ML15148B384
Chiappa, Russell	ML15160A911	Clark, Jean	ML15159A904
Child, Katrina	ML15141A691	Clark, Jenny	ML15155A308
Chirillo, James	ML15155B963	Clark, Joe	ML15156A026
Chisari, Andrea	ML15154B995	Clark, Jr., James A.	ML15156A115
Chisholm, Angell	ML15141A667	Clark, Judy	ML15142A142
	ML15155A259	Clark, Kathleen	ML15159A461
Cho, T. Choi, Ali	ML15155A259 ML15142A116	Clark, Kathleen Clark, Kenneth	ML15156B130
Chopyak, Anne Chorba, Louis	ML15148B223	Clark, Leigh	ML15158A031
Chorba, Louis	ML15158A012	Clark, Maxine	ML15153A763
Choy, Duane	ML15154B248	Clark, Morgan	ML15153A793
Chrissos, H. L. Chris	ML15159A039	Clark, Rebecca	ML15162A509
Christ, Mlou	ML15154B752	Clark, Roger	ML15154C272
Christ, Ronald	ML15153A875	Clark, Ruth	ML15156B149
Christeller, Lois	ML15156B416	Clark, Stephanie	ML15154B908
Christensen, Deb	ML15154B706	Clark, Susan	ML15156A607
Christensen, Roger	ML15156A601	Clark, Todd	ML15147A758
Christenson, Amy	ML15155B605	Clark, Toni	ML15148A141
Christiansen, Sue	ML15155B995	Clarke, Bob	ML15154B879
Christianson, Chris	ML15160A961	Clarke, Darrell	ML15142A056
Christie, Roxanne	ML15159B371	Clarke, Tom	ML15159B015
Christine, Dena	ML15159A411	Clasemann, Joel	ML15159A423
Christman, Mary	ML15153B109	Clason, Susanna	ML15141A779
Christoff, Stephanie	ML15154B129	Claus, Carol	ML15154B245
Christopoulos, James	ML15155A361	Clausen, Nina	ML15153B225
Christy, Alice	ML15153A767	Clausing, Melinda	ML15154A038
Christy, Alice	ML15153A800	Clayton, David	ML15156A319
Christy, Mary	ML15159B141	Clayton, David	ML15159A703
Chung, Winnie	ML15141A753	Cleaver, Melissa	ML15142A083
Chuplis, Cindy	ML15162A402	Clegg, Ann	ML15160A905
Church, Mary Lou	ML15155A430	Clem, Jessica	ML15156B074
Churchill, Rhonda	ML15159A513	Clemens, Beatrice	ML15156A094
Churchman, Pat	ML15148B196	Clemens, Robert	ML15156A436
Chynoweth, Iris	ML15140A189	Clemens, Scott	ML15154B784
Cianciotti, Frank	ML15156A326	Clements, Scott	ML15147A715
Cifuentes, Simone	ML15159A908	Cleve, Della	ML15162A103
Cignoli, Karen	ML15159A286	Clewett, Barbara	ML15159A036
Ciliberti, Ava	ML15154A208	Clifford, Rosemary	ML15154B994
Cisna, Todd	ML15148B117	Clifton, Robert	ML15155A899
Citron, Alan	ML15155B965	Clipka, Mike	ML15155C172
Civitate, Gregory	ML15162A589	Cloud, Michael	ML15155A395
Clagett, Kathleen	ML15156A909	Clough, Cyndi	ML15155A529
Claiborn, William	ML15160A535	Clough, Steve	ML1513141A762
Clair, Kate	ML15155A328	Clower, Kimberly	ML15154A794
Clapp, Jonathan Clapp, Linda	ML15160A858 ML15159B286	Coahran, Scott Coakley, Michele	ML15154A037 ML15154C157
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Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Commenter Coates, Mark	ML15156A332	Collins, Kathy	ML15153B175
Cobb, Priscilla	ML15155B096	Collins, Megan	ML15153A787
Cobb, Priscilla Cobb, Robert	ML15156A959	Collins, Teresa	ML15154C145
Cobb, Sandra	ML15156A557	Collinsworth, Van	ML15156A294
Cobb, Tanya	ML15153B269	Collison, Chelsea	ML15140A248
Cobb-Adams, Diane	ML15159A508	Collins, Greg	ML15141A648
Coburn, Donald	ML15156B460	Colombini, Denise	ML15153A761
Cocco, Brian	ML15160A936	Colombo, Kathleen	ML15142A270
Cochran, Harold	ML15142A290	Colson, Lynn	ML15156A609
Cochran, John	ML15155C061	Colter, Alfred	ML15153B030
Cocke, Sandra	ML15154A152	Colvin, Felicia	ML15154A537
Cocks, Verna Bloom	ML15160A051	Combs, Adele	ML15148B142
Codina, Edward	ML15153A927	Combs, Cris	ML15155A248
Coe, Michael	ML15159B087	Combs, Debi	ML15159B071
Coeburn, Jeanette	ML15155A605	Combs, William	ML15148B374
Coffey, Margery	ML15154B368	Commander, Wanda	ML15148B323
Coffin, Doug	ML15155A017	Commons, Judy	ML15140A007
Cogar, Nicki	ML15161A695	Como, Marianna	ML15155A830
Cogelja, Izabela	ML15162A137	Compher, Margaret	ML15162A712
Cohen, Bernard	ML15148B440	Comrack, Janine	ML15142A048
Cohen, Bernard	ML15153A760	Comstock, Ginger	ML15148A267
Cohen, Bruce	ML15140A066	Conant, Deborah	ML15155A790
Cohen, C.	ML15156A456	Conelley, B.	ML15148B362
Cohen, Elaine	ML15156A205	Confer, John	ML15160A549
Cohen, Fritzi`	ML15153A849	Conklin, Joyce	ML15155A345
Cohen, Harriet	ML15154A854	Conklin, Lindsay	ML15160A966
Cohen, Howard	ML15155A936	Conlan, Mike	ML15156B398
Cohen, Howard	ML15153A585	Connell, Brendan	ML15159A705
	ML15156A274		
Cohen, Howard		Connelly, Walter	ML15155C236
Cohen, Judith	ML15155B968	Conner, Art	ML15153A320
Cohen, Judy Ann	ML15158A025	Conner, Steve	ML15155A355
Cohen, Patricia	ML15148B080	Connick, Cherie	ML15141A697
Cohen, Paula	ML15154A849	Connolly, James	ML15154B670
Cohen, Wendi	ML15159B410	Connolly, Joe	ML15148A135
Cohn, Robert	ML15156B140	Connolly, Makenna	ML15162A567
Colborn, Sheree	ML15159A081	Connor, Arthur	ML15156B327
Coldwell, Sherilyn	ML15155B583	Connor, David	ML15148B391
Cole, Brian	ML15155A731	Connor, Elizabeth	ML15154A363
Cole, Elizabeth	ML15154A076	Connors, Joe	ML15159B219
Cole, Elizabeth	ML15155A664	Conrad, Lori	ML15154B728
Cole, Joan	ML15156A209	Conroy, Beverly Ann	ML15155A956
Cole, Merrill	ML15142A284	Conroy, Eleanor	ML15148B143
Cole, Patricia	ML15156A331	Conroy, James	ML15155A466
Cole, Tracy	ML15140A106	Conroy, Laurie	ML15156A267
Coleman, Nina	ML15140A143	Conroy, Peggy	ML15156A064
Coleman, Richard	ML15156A080	Conroy, Thomas R.	ML15142A038
Colerich, Edward	ML15148B131	Constance, Bianca	ML15155A700
Coley, Linda	ML15154B549	Conti, Sandra	ML15154B645
Collar, Michelle	ML15153B180	Contreras, Cristian	ML15154A416
Collas, Judith	ML15148A637	Conway, Clayton	ML15155A371
Collecchia, Geri	ML15158A292	Conway, Clayton Conway, Julianne	ML15155B879
Collimore, Robert	ML15156A036	Cook, Bruce	ML15155B931
Collins, Carol Collins, Jeffrey	ML15154A446 ML15156B106	Cook, Cherie Cook, Gary	ML15156A492 ML15154A190
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Cook, Gary	ML15154B930	Costa, Sandra	ML15156A697
Cook, Geoffrey	ML15155B542	Costanzo, Linda	ML15147A777
Cook, Patty	ML15155A710	Costello, Anthony	ML15162A582
Cooke, Douglas	ML15154B720	Costello, Sheri	ML15162A583
Cooksey, Marti	ML15148A723	Costigan, Andrew	ML15154B049
Cooley, Marian	ML15155A048	Cotham, Keith	ML15159B430
Cooley, Richard E.	ML15155B955	Cotrell, Katharine	ML15158A246
Coons, Christine	ML15154A366	Cotta, Mary	ML15160A665
Cooper, Charlene	ML15155A142	Cottrell, David	ML15148A946
Cooper, Edith	ML15154C038	Cottrell, David	ML15154A330
Cooper, Gwendalle	ML15155B613	Cottrell, David	ML15154A473
Cooper, Isabella	ML15156A073	Cottrell, David	ML15154B967
Cooper, Joe	ML15159A077	Cottrell, David	ML15155A155
Cooper, Michael	ML15154A350	Cotturo, Mary L.	ML15159A067
Cooperman, Allan	ML15155C107	Couch, Jaime	ML15156B328
Cooperman, Sima	ML15155B234	Couch, Jayda	ML15153B046
Copanos, Beth	ML15148B119	Couch, Mike	ML15154B900
Cope, Peggy	ML15158A140	Couch, Sandra	ML15156B213
Cope, William	ML15156B356	Coughlin, John	ML15156A668
Copeland, Jeanette	ML15156A558	Coulaz, Yolanda	ML15159A911
Copeland, Sue	ML15155A196	Coulson, Sue	ML15154B835
Coplan, Rosemary	ML15153A540	Council, Barbara	ML15155A348
Coppotelli, Heide	WE 10 100/040	Countryman, Carol	ML15154C134
Catherina	ML15155A047	Countryman-Mills, Gayle	ML15148B338
Copulsky, Steve	ML15155A275	Courliss, William	ML15153A991
Corby, Kathleen	ML15155B252	Courtney, Donald	ML15148B135
Corcacas, Phyllis	ML15142A287	Cousino, Joyce	ML15154A904
Cordero, Carole-Anne	ML15162B091	Cousins, Vera	ML15155A198
Cordero, Carole-Anne	ML15162B153	Cousins, Vera Cousins, Virginia	ML15153A488
Corey, Sheffield	ML15154B767	Coval, Deirdre	ML15154B854
Corkey, Peter	ML15148A184	Covell, Sandi	ML15162A079
Corkran, Thomas	ML15156A129	Covington, Diana	ML15158A282
Cormier, Jerry	ML15156A146	Covington, Lainie	ML15159B347
Cormier, Joyce			ML15154A052
Cornelia, Jared	ML15148A824 ML15141A618	Covington, Laurel Covney, Chris	ML15160A605
Cornell, Denice	ML15158A153		ML15162A069
		Covney, Chris	
Cornelsen, Christy Cornett, Nina	ML15153A906	Cowan, Donald	ML15159A053 ML15154A127
	ML15154A365 ML15142A244	Cowie, Virginia	
Cornetta, Eric		Cowin, Caryn	ML15159A635
Cornish, Christopher	ML15155B655	Cowles, Traver	ML15155A029
Corr, F.	ML15158A164	Cox, Chris	ML15148B126
Corradini, Pamela	ML15155A468	Cox, David	ML15154A557
Corredoira, Carmen	ML15159B224	Cox, John	ML15148A908
Corriere, Caryn	ML15154B223	Cox, Lanie	ML15155B926
Corriere, Jim	ML15148A907	Cox, Mary	ML15148B145
Corrigan, Jim	ML15153A493	Cox, Sharon	ML15154B609
Corrigan, Sean	ML15155C054	Cox, Sharon	ML15155A319
Corrigan, Theresa	ML15159A249	Coyle, N.	ML15153A926
Corry, Ronit	ML15156A649	Coyne, Ellis Heyer	ML15155A682
Cortez, Loyd	ML15142A144	Coz, Ann	ML15159B132
Corwin, Diana	ML15148B236	Cozzi, Steven	ML15156A868
Coscione, Brian	ML15156B433	Cracchiolo, Anthony	ML15140A224
Cosgrove, Pamela Costa, Lynn	ML15153B001	Craft, Robin Craig, Susan	ML15155A063 ML15161A682
	ML15155B236		

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Crandall-Bear, Joanne	ML15154A863	Csicsery-Ronay, Elizabeth	ML15155C199
Crane, Jeff	ML15154A576	Cuadrado, Lola	ML15147A718
Crane, Marcella	ML15159A042	Cucchiara, Philip	ML15142A110
Cranmer, Pat	ML15155A841	Cuff, Kermit	ML15155A213
Crannell, Raymond	ML15158A155	Culbert, Laurette	ML15155B079
Cranston, Jr., Andrew	ML15156A201	Cull, David	ML15159B016
Cranston, Thomas	ML15153B077	Cullinan, Sarabeth	ML15162A065
Crase, Kirsten	ML15161A671	Culp, Philip	ML15148A965
Crase, Steve	ML15155C069	Culver, Bruce	ML15156A931
Cratty, Bruce	ML15156A177	Cummings, Connie	ML15161A639
Crawford, Donald	ML15155A676	Cummings, George	ML15154A432
Crawford, Jason	ML15154C049	Cummings, Kady	ML15155C168
Crawford, Licia	ML15159B525	Cundiff, William	ML15148B370
Crawford, P. E.	ML15159A233	Cunha, Carlos	ML15160A977
Creagh, Donna	ML15155A215	Cunningham, Alan	ML15155A657
Cresseveur, Jessica	ML15154A249	Cunningham, Cynthia	ML15153A586
Crickenberger, Ray	ML15162A233	Cunningham, Helen	ML15154B056
Crider, Erika	ML15159A961	Cunningham, Jennifer	ML15155A320
Crim, Noel	ML15155B062	Cunningham, Khari	ML15155B070
Crispin, Kim	ML15159B490	Cunnius, Cheryl	ML15141A785
Crist, Michael	ML15141A658	Cuolahan, Sylvia	ML15154B335
	ML15155A273	Cupp, Stephanie	
Criswell, Gary			ML15154A222
Critser, Jackie	ML15159A251	Curia, Peter	ML15154C285
Crittenden, Kathleen	ML15156A457	Curley, Frank	ML15141A764
Crittenton, Cynthia	ML15148A983	Curow, Jerry	ML15156A699
Crockett, Shirley	ML15148A894	Currey, Wally	ML15159B043
Croft, Samuel	ML15141A421	Currey, Wally	ML15159B051
Crommett, Jennifer	ML15153B244	Curry, Donna	ML15155B790
Cronin, Donald	ML15154A174	Curtis, Candy	ML15153A892
Cronin, Gary	ML15154A941	Curtis, Colleen	ML15156A976
Croom, Carolyn	ML15155B674	Curtis, Frank	ML15153A481
Crosby, Donald	ML15156A550	Curtis, Kevin	ML15141A706
Crosiglia, Nella	ML15155C165	Curtis, Marie	ML15156A452
Cross, Dave and Rita	ML15154B925	Curtler, III, Hugh	ML15148A720
Cross, Heather	ML15154A952	Cuticka, Sheri	ML15142A353
Cross, Russ	ML15147A716	Cutler, Annalisa	ML15161A681
Crotwell, Kd	ML15155A865	Cutright, Sheri	ML15154A232
Crowden, Michael	ML15154A381	Cutting, Kimberly	ML15155A424
Crowe, Edith	ML15153B226	Cutting-Brady, Joanna	ML15154A160
Crowe, Nancy	ML15148B235	D., Susan	ML15155B929
Crowley, Jeanne	ML15155B802	Dabanian, Kathylynn	ML15159A356
Crowley, Lori Ann	ML15159A613	Dabrowski, Linda	ML15153A955
Crozier, John	ML15154C246	Dace, Letitia	ML15153B016
Crozier, Mary	ML15154C036	Dahl, Kevin	ML15155A868
Cruger, Kurt	ML15155A446	Dahlberg, Nancy	ML15153B222
	ML15154B873		ML15153B222 ML15154B983
Cruickshank, Lynda		Dahlgren, Shelley Dahoda, Joff	
Cruikshank, Anna	ML15156A041	Dahoda, Jeff Dail Misballa	ML15142A039
Crumpacker, Barb	ML15141A625	Dail, Michelle	ML15154A110
Crupi, Kevin	ML15159A151	Dailey, Christa	ML15155B381
Cruz, Marian	ML15154A306	Daily, G. Allen	ML15155A880
Cruz, Marian	ML15154A868	Daiss, Becky	ML15148B322
Csaszar, John	ML15147A782	Dakouzlian, Md	ML15154A501
Csenge, Debra	ML15162A400	Dal Cais, Sandra	ML15153A856
Csenge, Rich	ML15160A900	Dalal, Namita	ML15140A105

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Dale, Byron	ML15156A259	Davis, Donna	ML15156B177
Dale, Felicia	ML15156B373	Davis, Eleanor-Ann	ML15154A615
D'Alessandro, Jenette	ML15142A365	Davis, Ellie	ML15140A004
D'Alessandro, Keith	ML15142A318	Davis, Irene	ML15158A190
Dalition, Mitch	ML15155A129	Davis, Jacqueline	ML15159A818
Dalnekoff, Cecilia	ML15154A928	Davis, Janice	ML15156B509
D'Amato, Susan	ML15156A323	Davis, John P.	ML15155A907
Dame, Laura	ML15156A160	Davis, Jolynn	ML15155A117
Dameron, Susan	ML15148B230	Davis, Kathleen	ML15140A009
Dammert, Colleen	ML15154B735	Davis, Kevin	ML15155B778
Damon, Rhea	ML15162A626	Davis, Lynn	ML15159B518
Dander, Katherine	ML15148B081	Davis, Marilyn	ML15153A596
Danehy, Cecile	ML15155C198	Davis, Mary	ML15156B451
Danek, Richard	ML15154B629	Davis, Michelle	ML15156A942
Danielĺ, David	ML15148A910	Davis, Randy	ML15154B511
Daniels, Elizabeth	ML15153A783	Davis, Roger	ML15154B225
Daniels, Joan	ML15154B254	Davis, S. K.	ML15153B256
Daniels, Michael	ML15154B667	Davis, Sarah	ML15159B356
Daniels, Patricia	ML15156B520	Davis, Sharon	ML15155A531
Daniels, Stacey	ML15160A869	Davis, Shirley	ML15156B162
D'Anna, Tina	ML15154B897	Davis, Shonna	ML15154B958
Dannelley-Mccree, Sylvia	ML15153B301	Davis, Susan	ML15147A769
Dannhardt, Beth	ML15153A712	Davis, William	ML15154C054
Danos, Teri	ML15156A059	Dawdy, Kenneth	ML15160A089
Dantonio, Lisa	ML15155A900	Dawdy, Nemietri Dawdy, Sandra	ML15141A589
Darby, Sara	ML15156B251	Dawes, Steven	ML15155A039
D'Arco, Donna	ML15147A739	Dawson, Elizabeth	ML15154C012
Darcy, Kevin	ML15162A642	Dawson, Kathyrn	ML15154B674
Dare, Cheryl	ML15142A122	Day, Charlie	ML15155A028
			ML15140A236
Darilek, Marilyn Daskal, Sharon	ML15162A703	Day, Christopher Day, Cris	ML15156A183
	ML15154C037		
Dater, Suzanne	ML15153A326	De Baca, Sylvia	ML15160A722
Dauerty, Barbara	ML15155C003	de Bruyn Kops, Julianna	ML15154A195
Daugherty, Amy	ML15153A587	De Castro, Brian	ML15155A991
Daugherty, Bret	ML15141A458	De Feo, Joseph	ML15154B819
Dauphin, Jill	ML15159B505	De Gregorio, Ermanno	ML15153A876
Davee, Heidi	ML15159B489	de la Rosa, Marco	ML15148B358
Davenport, Cheryl	ML15161A658	De La Rosa-Young, Maria	ML15148A186
Davenport, Jeanne	ML15148A933	De Laval, Jerry	ML15148B402
Davenport, L. B.	ML15153A510	De Leon, Lori	ML15141A621
Davenport, Susan	ML15155B348	De Lima, Carol	ML15159A116
Davenport, Susan	ML15156B005	De Lu, Dirk	ML15148A839
Davidson, Amber	ML15158A024	De Mars, Matthew	ML15162A511
Davidson, Bruce	ML15154A430	De Raat, Maia	ML15154B773
Davidson, David	ML15159A341	De Saglietto, Eve	ML15159A481
Davidson, Kathryn	ML15159A170	De Vlaming, Victor	ML15159A819
Davidson, Penny	ML15154A414	De Vos, Paul	ML15154B081
Davidson, Sharon	ML15154A349	Deal, Brandie	ML15148B006
Davidson, Sharon	ML15154A532	Deal, Jeff	ML15154C191
Davies, Charlene	ML15153A791	Dean, June	ML15155B094
Davies, Gyllian	ML15148B298	Dean, Sue	ML15156B392
Davine, Jill	ML15153A921	Deane, Tricia	ML15156B207
Davis, Clark	ML15158A194	Debing, Therese	ML15153A347
Davis, Cynthia	ML15155B586	Deboer, Elisa	ML15155A825

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Commenter	Accession #	Commenter	Accession #
Decarlo, Anthony	ML15156A459	Depue, David	ML15155C189
Deciccio, Robyn	ML15148A760	Der, Don	ML15155C140
Deck, Avis	ML15148B042	Derasary, Lara	ML15159A549
Decker, Eleanor	ML15155A085	Derbick-Johnson, Mary	ML15155A482
Deddy, John	ML15156A779	Derbort, Wendy	ML15148A272
Dee, Diana	ML15155C012	Derfner, Phyllis	ML15156A606
Defauw, Rachel	ML15159A332	Dermody, Cathy	ML15141A696
Defazio, Richard	ML15148A906	Deroche, Russel	ML15155B075
Defilippo, Terri	ML15153A679	Derrickson, Ray	ML15154B915
Defoggi, Virginia	ML15148B204	D'Errico, Didi	ML15153A358
Degges, Frank	ML15156B481	Dervin, John	ML15154A631
Dehn, Dennis	ML15142A205	DeSanctis, Joseph	ML15148B176
Deist, Barry	ML15153B167	Desarbe, Michael Lauren	ML15156A260
DeJong, Joan	ML15156A584	Deschenes, Paul	ML15156A081
Dekalb, Sue	ML15155B412	Desecki, Nancy	ML15154B458
Del Gado, Tanya	ML15154A925	Destrooper, Chantal	ML15154A339
Del Valle, Javier	ML15155A346	Detert, Judith	ML15154A133
Delaney, Elisha	ML15155A232	Detrick, Mary	ML15159A164
Delaney, Janet	ML15155B910	Dettmann, Barbara	ML15156A123
Delateur, Marc	ML15142A281	DeVine, Kelly	ML15154A013
Deleone, Barb	ML15148B434	Devinney, Claudia	ML15148B336
Delgado, Crystal	ML15158A141	Devlaeminck, Michelle	ML15159A774
Delgado, Sasha	ML15160A655	Devlin, III, Neil	ML15159B473
Dell ' Italia, Patrick	ML15159A734	DeWitt, Joel	ML15148A609
Dellera, Jayne	ML15140A046	Dewitt, Pam	ML15153A884
Dellinger, Robert	ML15156A103	Dial, Pamela	ML15155A447
Deloff, D.	ML15156A852	Diamante, Nina	ML15156B008
Delorenzo, Pete	ML15156B339	Diamond, Ann	ML15156A002
Deluna, Marie Claire	ML15155A457	Diamond, Nicholas	ML15148A264
Demarais, Jackie	ML15158A218	Diamond, Nichole	ML15155A418
Demarest, Kandie	ML15141A679	Diana, Patty	ML15155A486
Demarest, Russ	ML15147A763	Diaz, Herman	ML15141A760
Demaria, Karen	ML15155C181	Diaz, Jose	ML15153B283
Demers, Melanie	ML15156A594	Diaz, Lorenzo	ML15148A647
Demin, Vladimir	ML15162A737	Diaz, Sharyn	ML15148A625
Demott, Lisa	ML15160A652	Diaz, Tony	ML15156A159
	ML15154A173	Dicarlo, Leigh Ann	ML15148A632
Demott, Margaret Dempsey, Sheila	ML15153A754		ML15146A032 ML15154C306
	ML15154B313	Dick, Ruth Dickel, Geraldine	ML15159A793
Dempsey, Stephen			
Denberg, Judy	ML15160A872	Dickens, Marcay	ML15156A515 ML15159A129
Denison, James	ML15153A833	Dickey, Helen	
Denison, Lou Anna	ML15159B567	Dickey, Kim	ML15155A404
Denn, Gina	ML15141A650	Dickey, Laura	ML15156B507
Denninger, Sandra	ML15154A806	Dickinson, Richard	ML15148B373
Dennis, Gudrun	ML15154A903	Dickinson, Robert	ML15148B038
Dennison, Brett	ML15155C018	Dickinson, Vicki	ML15154A714
Denny, Rachael	ML15158A073	Dickinson-Adams, Emily	ML15156A989
Densing, Lindsey	ML15155A168	Dicks, Carol	ML15159A027
Densmore, Paul	ML15154B734	Dicks, Rodger	ML15155B657
Dent, Resi	ML15162A119	Dickstein, Stephen	ML15162A106
Dent, William	ML15162A094	DiDonato, Toni	ML15154B783
DePante, Michael	ML15159A248	Diedrich, Martin	ML15154A111
Depew, Robert	ML15158A266	Diener, B. Thomas	ML15158A063
Deppong, Genevieve	ML15159A140	Diener, B. Thomas	ML15158A070

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Diephouse, Roberta	ML15153A555	Domowicz, Artur	ML15155A151
Dietrich, Chris OMeara	ML15142A224	Donaghy, Rita	ML15155A752
Dietrich, Janet	ML15155A756	Donahue, Mary	ML15154A207
Digiannantoni, Theresa	ML15154A069	Donald, Cooke	ML15162A519
Digiovanni Jr., Robert	ML15155C006	Donaldson, Karen	ML15153B128
Dillard, Gavin	ML15148B064	Donaldson, Patrick	ML15154A781
Dillman, Michael	ML15158A040	Donnell, Bruce	ML15162B079
Dillon, Errol	ML15155B301	Donnell, Bruce	ML15162B120
Dimitri, Lindsay	ML15153A988	Donnelly, Debbie	ML15159A606
Dimock, Donald	ML15154A300	Donnelly, Debbie	ML15161A686
Dimondstein, Carla	ML15153A491	Donnelly, Russell	ML15154A061
Dingeman, Christine	ML15155A977	Donnelly, Stephen	ML15156A030
Dingman, Amy	ML15153A851	Donnelly, Thos	ML15155B360
Dipaola, Marisa	ML15156A133	Donovan, Elaine	ML15153A539
Dippre, Dawn	ML15158A169	Dooley, Maryann	ML15154A159
Dire, Tonette	ML15154B499	Dormont, Mitchell	ML15155B340
Dirrenberger, Jonathan	ML15148A193	Dorn, Valerie	ML15159A924
Disbro, Jonathan	ML15140A003	Dorraugh, Tami	ML15148A127
Dishion, Diane	ML15155A742	Dorsey, James	ML15153A853
Dishman, Patricia	ML15155A359	Dorsey, Jill	ML15142A097
Dispenza, Salvatore	ML15162A256	Dortch, Pam	ML15154B260
Divens, Alicia	ML15155A903	Dosky, Pat	ML15155B001
Dixon, Joyce	ML15154A283	Dostalek, Patricia	ML15156B369
Dixon, Matthew	ML15153A459	Doster, Patty	ML15159B461
Dixon, Nicole	ML15159B391	Dotson, Mike	ML15154C105
Dixon, Vernon	ML15154A616	Doty, Carol	ML15153A727
Dixson, Cynthia	ML15147A754	Doty, David	ML15156B228
Doane, Anne	ML15154A354	Doty, Jimmy	ML15153A487
Dobbelaere, Susan	ML15159A459	Doucet, Barbara	ML15154C068
Dobronski, Irene	ML15154B266	Dougher, Marilyn	ML15155B884
Dobson, Bruce	ML15156B326	Dougherty, Janet	ML15155C005
Dobson, Melissa	ML15148B319	Dougherty, Kate	ML15154B076
Dobson, Michael	ML15148B114	Douglas, Carolyn	ML15154A285
Dockter, Richard	ML15154B500	Douglas, Diana	ML15155A314
Dodge, Dana	ML15154C088	Douglas, Dianne	ML15161A640
Dodge, Joan	ML15148A205	Douglas, Donna	ML15155B699
Dodge, Morris	ML15159A892	Doust, Jim	ML15156B223
Dodson, Sara	ML15161A690	Dowd, Therese	ML15154A462
Doerring, Beth Ann	ML15154A379	Dowell, Joanne	ML15162A397
Doesserich, Diane	ML15156A686	Dowling, Deborah	ML15141A606
Doherty, Helen	ML15162A593	Dowling, Jay	ML15155B232
Doherty, Jeanne	ML15156A840	Downum, Monte L.	ML15159A757
Dokos, Kara	ML15155A893	Dowty, Amy	ML15162A710
Dolbear, Robin	ML15148A614	Dragavon, Linda	ML15155C111
Doles, Robert	ML15156A679	Dragavon, Linda	ML15155C117
Dolgin, Gary W.	ML15155A053	Drager, Luranne	ML15156B338
Dolin, Joy	ML15161A672	Dragona, Danielle	ML15148A711
Dollar, Ellen	ML15162A464	Drahos, Ronald	ML15153B003
Dollar, Robert	ML15154C256	Drake, Mercy	ML15159B511
Domb, Doreen	ML15155A225	Drake, Tracy	ML15148B258
Domingos, Lori	ML15159B263	Dratch, Sam	ML15154A538
Domingue, Christine	ML15162A412	Drevicky, John	ML15156A438
Dominguez, Laura	ML15155B261	Drew, Craig	ML15147A778
Domke, Ellen	ML15154B615	Drew, Janet	ML15155A705

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Drew, Virginia	ML15154B284	DuPree, M.	ML15159B153
Dreyer, Sharyn	ML15148B153	Duran, Wesley	ML15153A967
Driessen, Lynn	ML15153B066	Durden, Lynda	ML15156B127
Driggers, Judy	ML15159A560	Durfee, Evelyn	ML15162A060
Driggers, Judy Driscoll, Marie	ML15154A224	Durham, Desiree	ML15158A133
Driskell, Shelley	ML15155A064	Durham, Eric	ML15141A775
Drissell, Eric	ML15159A832	Durieux, P.	ML15158A046
Drivas, Linda	ML15153B031	Durkin, Samuel	ML15155A804
Drobny, Edith	ML15159A825	Dust, Michelle	ML15158A095
Droll, Francesca	ML15159A844	Dutka, Cindy	ML15156B152
Drullard, Claire	ML15158A217	Dutschke, Stephen	ML15156A996
Drumright, Chris	ML15147A706	Dyakon, Douglas	ML15154C016
Dryden, Marlie	ML15156A254	Dybel, Donald	ML15154A944
Du Rivage, Robert	ML15159B249	Dybel, Sandra	ML15142A352
Dubasik, Valentina	ML15160A518	Dycus, Terry	ML15156A102
DuCharme, Christy	ML15162A684	Dyer, Paul	ML15156A441
Duckson, Robert	ML15156A076	Dygas, Dorothy	ML15156A881
Duckwall, Karen	ML15156B103	Dym, Harvey	ML15154A080
Duckworth, Ronald	ML15154A209	Dzikowski, David	ML15148B344
Dudley, Gregory	ML15159A431	Dzubak, Cheryl	ML15154B875
Dudley, Gwen	ML15155A477	E., Sherry	ML15155B066
Dufel, Laura	ML15153A332	Eagle, Chief Grey	ML15154A531
Dufel, Laura	ML15154A265	Earle, Susan	ML15154A066
Dugaw, Anne	ML15154A206	Earle, Susan	ML15154A428
Duggan, Bill	ML15141A633	Earnshaw, Shinann	ML15155C194
Dukes, Aaron	ML15155A282	East, Jen	ML15154B740
Dulas, Scott	ML15159B222	East, Lawrence	ML15148B396
Dulicai, Linda	ML15156A029	Easterday, Roger	ML15153A871
Duman, Bonnie	ML15140A031	Easterling, Anne	ML15155B485
Dumford, Karen	ML15141A551	Easterling, Kermit	ML15158A008
Dummerauf, Carla-Maria	ML15154A021	Eastlake, Linda	ML15159A872
Dunaway, Susan	ML15142A089	Eastlake, Linda	ML15159A878
Dunbar, Betty	ML15148B313	Eaton, Alexandra	ML15154A608
Duncan, Bruce and		Eaton, James	ML15154A278
Wendla	ML15159A222	Eaton, Sandy	ML15156A124
Duncan, Bryan	ML15158A274	Eberg, Nancy	ML15156A182
Duncan, Kim	ML15141A784	Eberhardt, Steven	ML15155A208
Duncan, Renee	ML15160A949	Eberle, Melvin	ML15153B231
Duncan, Sylvia	ML15154A764	Ebersole, Jan	ML15155B228
Dunham, Janet	ML15154A797	Eck, Jj	ML15154B117
Dunham, Kathryn	ML15159A836	Eckard, Roberta	ML15159B528
Dunham, Moneca	ML15154A651	Eckardt, Gerhard	ML15155C124
Dunham, Moneca	ML15155C237	Ecker, Christopher	ML15155B637
Dunlap, Anne	ML15154C075	Eckerline, Mckenna	ML15142A096
Dunlop, Jean	ML15154B104	Eckert, Angela	ML15155C203
Dunn, Charles and June	ML15156B420	Eckert, Brenda	ML15154B325
Dunn, Elmo	ML15154B341	Eckler, John	ML15160A909
Dunn, Linda	ML15161A670	Eckles, Sabrina	ML15154A942
Dunn, Sara	ML15159A280	Ecklund, John	ML15154B929
Dunn, Sherry	ML15156A478	Eckstein, Susan	ML15159A160
Dunn, Timothy	ML15154C258	Edell, Elaine	ML15154B795
Dunne, Linda	ML15148B019	Edelman, Ellen	ML15156B485
Duppstadt, Eileen Dupree, Donna	ML15159A636 ML15158A106	Edens, Teresa Edfast, Roy	ML15148A733 ML15148A636

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Edgar, Lynn	ML15154B064	Ell, Christopher	ML15155A229
Edmondson, Nancy	ML15153A418	Ellefson, Colin	ML15155A866
Edmonston, Pandora	ML15155A317	Ellenberger, Charles	ML15156B143
Edridge, Michael	ML15156A967	Elliott, Allen	ML15155B953
Edson, Patricia	ML15148B170	Elliott, Judith	ML15154C266
Edwards, B.	ML15148B288	Elliott, Lynn	ML15160A914
Edwards, Bita	ML15162B044	Elliott, Terry	ML15155B784
Edwards, Bita	ML15162B117	Ellis, Susan	ML15153A946
Edwards, Carlene	ML15159A765	Ellison, David	ML15156A307
Edwards, Cynthia	ML15154C031	Ellison, Richard	ML15158A114
Edwards, Eric	ML15154A470	Elllis, Michael	ML15140A109
Edwards, Jane	ML15155A169	Elly, Karen	ML15147A719
Edwards, Joe	ML15162A608	Elm, Carole	ML15155C070
Edwards, 50e Edwards, Mary	ML15148A938	Elman, Mark	ML15148B334
Edwards, Mary Edwards, Monique	ML15154A359	Elness, Barbara	ML15154C111
Edwards, Mollique	ML15153B138	Elson, Adam	ML15155B017
Edwards, Willie	ML15141A714	Elton, Wallace	ML15160A802
	ML15148A868		ML15158A002
Eeds, Bill		Elwell, Herbert	
Eells, Margaret	ML15155A864	Emmanuele, Kurt	ML15148A742
Efron, Deborah	ML15155A809	Emmerik, Christina	ML15160A532
Efstration, George	ML15162A540	Emond, Lise	ML15159A268
Egan, June	ML15156A312	Emrick, Carol	ML15142A301
Eggan, Emily	ML15148B282	Encomenderos, Gayle	ML15154B836
Egger, Kathleen	ML15159B209	Enderlein, Andreas	ML15147A759
Eggers, Michael	ML15154B279	Endress, Daphne	ML15155A300
Egolf, Nancy	ML15148A935	Eng, Koney	ML15155A500
Ehmke, Jessica	ML15153A905	Engel, Sabrina	ML15153A846
Ehren, Aviva	ML15154B647	Engelhart, Marylee	ML15140A263
Ehrlich, Annette	ML15154A771	Engels, Angelika	ML15159A890
Ehrlich, Marion	ML15154B288	Enger, Carolyn	ML15159A094
Ehrmann, Nancy	ML15158A154	England, Roy	ML15141A428
Ei, Jen	ML15155B933	Engle, I.	ML15148B154
Eichler, Nancy	ML15154C015	Engler, Pam	ML15159B272
Eicholtz, Dennis	ML15159B551	Englerth, Charlene	ML15153A479
Eielson, Olivia	ML15159B096	Ennor, Kenneth	ML15148A236
Eiffler, Jeff	ML15141A593	Epstein, Barbara	ML15159A096
Eikenbary, Susan	ML15154B939	Epstein, Kelly	ML15142A225
Eisenberg, Howard	ML15159B150	Epstein, Sarah	ML15159B513
Eisenberg, Michael	ML15154B876	Erbs, Lori	ML15155A329
Eisenberg, Paul	ML15148B263	Ercole, Steven	ML15159A445
Eisenberg, Roberta	ML15155B190	Ergueta, Taia	ML15153A815
Eisenberg, Sarah	ML15160A864	Erickson, Charles	ML15154A033
Eisenberg, Sarah	ML15160A864	Ericson, Del	ML15142A256
Eitelman, Andrea	ML15159B463	Ericson, Gretchen	ML15153A432
Eklund, Steve	ML15155A915	Erikson, Anne	ML15141A527
Elamon, Heather	ML15148B369	Erlander, Daniel	ML15154B577
Elder, Dave	ML15155A595	Ernst, Cathie	ML15159B155
Elder, Shonti	ML15156B035	Ernst, Cathie	ML15160A598
Eldridge, Robyn	ML15156A707	Ernst, Kathleen	ML15155A204
Eley, Janet	ML15154C217	Erpel, Julia	ML15153B188
Elias, Ralph	ML15159A627	Erskine, Mark	ML15142A040
Elisberg, Cynthia	ML15148B287	Erskine, Michael	ML15161A676
Elkin, Susan	ML15153A912	Ervin, Heather	ML15159A958
Elkins, Judy	ML15159B582	Erwin, Lee	ML15155C222
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ADAMS		ADAMS	
Accession #	Commenter	Accession #	
ML15153A792	Farmer, Bonnie	ML15156A600	
		ML15141A582	
ML15153B068	Farneth, Sara	ML15154C059	
ML15154A225	Farnham, Charlene	ML15154B831	
ML15154B594	Farnor, Shane	ML15140A018	
ML15155B136	Farnsworth, Stu	ML15148A586	
ML15141A614	Farrell, Bob	ML15154A146	
ML15155C129	Farrington, Raymond	ML15153A336	
		ML15148B216	
ML15154C099		ML15155B640	
		ML15160A803	
		ML15154B657	
		ML15154B172	
		ML15156B355	
		ML15148A275	
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		ML15161A691	
		ML15156A724	
		ML15156A775	
		ML15154A746	
		ML15156B394	
		ML15155A114	
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		ML15148A171	
		ML15148A885	
		ML15153B254	
		ML15142A178	
		ML15154B515	
	Feichtinger, Dennis	ML15155A770	
ML15155A211	Feider, John	ML15153B022	
ML15160A970	Feissel, John	ML15153B008	
ML15156B167	Felch, Shelley	ML15156A857	
ML15154A777	Feld, Ellin	ML15155A097	
ML15153A609	Feldman, Dee	ML15154C227	
ML15162A263	Feldman, Paul	ML15158A252	
	Feldmann, Grace	ML15142A248	
		ML15155C195	
		ML15162A129	
		ML15162A243	
		ML15148B400	
		ML15155A199	
		ML15142A090	
		ML15154A858	
		ML15162A715	
		ML15154B201	
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ML15140A035	Fenster, Steven	ML15159A276	
	Accession # ML15153A792 ML15153A838 ML15153B068 ML15154A225 ML15154B594 ML15154B594 ML15155B136 ML15154C043 ML15154C043 ML15154C099 ML15154C099 ML15154B033 ML15156A673 ML15156B365 ML15156B365 ML15153A978 ML15153A978 ML15155A697 ML15155A697 ML15154A755 ML15154A755 ML15154A755 ML15154A755 ML15154B758 ML15154A755 ML15160A967 ML15154B233 ML15162A692 ML15155B814 ML15155B814 ML15155B814 ML15155A211 ML15155A211 ML1515A211 ML15156A177 ML15156B167 ML15154A777 ML15153A609	Accession #         Commenter           ML15153A792         Farmer, Bonnie           ML15153A838         Farmoon, William           ML15153B068         Farmeth, Sara           ML15154B252         Farnham, Charlene           ML15154B254         Farnor, Shane           ML15154B294         Farrell, Bob           ML15155C129         Farrington, Raymond           ML15154C043         Farris, Nancy           ML15154C099         Fary, Jim           ML15156A673         Fassman, Dennis           ML15156B365         Fast, Wendy           ML15153A978         Fastuca, Joy           ML15153A978         Fastuca, Joy           ML15153A978         Fastuca, Joy           ML15153A978         Fastuca, Meagan           ML15153A978         Faucett, Carol           ML15154B399         Faucett, Carol           ML15154A975         Faust, Malcolm and Carol           ML15164A97         Feder, Howard           ML15164A97         Feder, Howard           ML15164A97         Feder, Howard           M	

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Fergot, Michael	ML15156A107	Finley, Sharon	ML15154A406
Ferguson, Charlene	ML15160A740	Finn, Linda	ML15141A704
Ferguson, J.	ML15155C251	Finnegan, Pam	ML15158A097
Ferguson, Mike	ML15148B211	Finnerty, Kathleen	ML15156A517
Ferland, Linda	ML15141A542	Finney, Pam	ML15156A214
Ferland, Linda	ML15141A602	Fiore, Janet	ML15155A373
Ferman, Pam	ML15154A869	Fiorentino, Doris	ML15155B063
Fernandes, Ana-Paula	ML15159A874	Firman, Douglas	ML15154A697
Fernandez, Daniel	ML15153B213	First, Mary Beth	ML15159A212
Fernandez, Sandra	ML15154A713	Firth, Shawn	ML15148B084
Fernandez-Reyes, Ynez	ML15154A112	Fisch, Greg	ML15154C129
Ferrar, Kristen	ML15140A186	Fischer, Quentin	ML15161A652
Ferrara, Dawn	ML15142A217	Fischman, Lawrence	ML15160A810
Ferraro, Mary	ML15160A833	Fischoff, Robert	ML15142A034
Ferrera, Ernesto	ML15154A064	Fish, David	ML15159B398
Ferri, Vincent	ML15159B364	Fish, Margaret	ML15154B811
Ferro, Frank	ML15153B097	Fish, Richard	ML15159B440
Ferron, Chadd	ML15161A688	Fisher, Cheryl	ML15155B747
Fers, Álda	ML15148A633	Fisher, Chuck	ML15153A580
Fetch, Elena Marie	ML15156A207	Fisher, Karen	ML15154C135
Fetchko, Kathleen	ML15156B370	Fisher, Myrna	ML15154B291
Fetter, Sharon	ML15159B026	Fisher, Sarah	ML15156B012
Fetting, Joanne	ML15141A464	Fisher, Sharon	ML15162A553
Feuchter, Robert H.	ML15142A186	Fisher, Yvonne	ML15160A953
Feuille, Leslie	ML15155A406	Fishman, Ted	ML15148B191
Fiallos, Rebecca	ML15156B477	Fishman, Zelma	ML15154B087
Fickling, Karl	ML15154A442	Fisk, Todd	ML15153A340
Fidler, Vicki	ML15142A050	Fiske, Constance	ML15148A256
Fiedler, Patricia	ML15153A933	Fissinger, Julie	ML15154A348
Field, Fran	ML15146A228	Fite, Austin	ML15158A176
Field, Michael	ML15154A071	Fite, Barbara	ML15155A130
Fielder, Aixa	ML15154A410	Fite, Emily	ML15155A802
Fielder, Aixa	ML15154A610	Fithian, Joel	ML15155C000
Fielder, Linda	ML15155B049	Fittipaldi, Silvio	ML15153A334
Fieno, Debbie	ML15155A393	Fitzpatrick, Deirdre	ML15148B206
Fifer, Nancy	ML15159A326	Fix, M.	ML15158A267
Figge, Donald	ML15155A502	Flagg, Yvonne	ML15156B518
Figman, Janice	ML15160A540	Flanagan, John	ML15154B042
Figueroa, Alfredo	ML15155C133	Flannery, Marcia	ML15156A835
Figueroa, Daphne	ML15162A581	Fleener, Teresa	ML15154C293
Files, Heather	ML15153A543	Fleetwood, Patricia	ML15154C003
Finamore, Scott	ML15159A072	Fleming, Laura	ML15148B303
Findley, Gail	ML15156A986	Fleming, Tami	ML15141A601
Findley, Helen	ML15156A289	Fleming, Tami	ML15141A712
Fine, Cindy	ML15154A728	Fletcher, Bonnie	ML15158A271
Fine, Michael	ML15155C101	Fletcher, Carol	ML15156A046
Fine, Michael	ML15159B088	Fletcher, Jeanne	ML15156A118
Fingerhut, Ronnie	ML15160A688	Fletcher, Karen	ML15159B538
Fingerman, Robert	ML15156A139	Flick, Pamela	ML15156A020
Fink, Brian	ML15155A212	Floersch, Elizabeth	ML15155A339
Fink, Brian	ML15162A456	Florell, Tina	ML15148B308
		Florio, Dawn	ML15154B021
Finkbeiner, Theresa	ML15159A091		
Finkel, Allyson	ML15160A974	Florio, Kathryn	ML15154A514
Finley, Joel	ML15155A364	Floyd, Debra	ML15155B009

	ADAMS		ADAMS
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Floyd, Randall	ML15158A214	Fox, Kathleen	ML15159A467
-luker, Richard	ML15154C237	Fox, Larry	ML15148A990
Fly, Carol	ML15142A230	Fox, R.	ML15156A934
Fogel, Byron	ML15156A174	Foxworth, George	ML15154B069
Foley, Catherine	ML15155B223	Frale, Darren	ML15155C180
Foley, Jane	ML15159A320	France, Catherine	ML15155B672
Foley, Jr., Robert	ML15153B095	Franceil, Sondra	ML15159A986
Folger, Jessica	ML15155C097	Franchi, Irena	ML15158A163
Fonda, Thomas	ML15154C265	Francis, Lorri	ML15140A015
Fong, Melissa	ML15148B160	Francis-Swayze, Carole	ML15141A713
Fontaine, Anna Louise	ML15155B724	Franck, Irene	ML15142A114
Fontana, Mike	ML15155B909	Franck, Matthew	ML15148B281
Fontana, Sandy	ML15155B905	Franco, Diana	ML15148B408
Fonte, Jeri	ML15158A137	Frangakis, Nicholas	ML15155A137
Foote, Thomas	ML15159A665	Frank, Andrea	ML15154A668
Foran, Rochelle	ML15159B420	Frank, Patti	ML15154B690
Forbes, J.	ML15159B307	Frank, Robert	ML15148A802
Forbes, Reese	ML15154A105	Frank, Sharon	ML15153A642
Ford, Michael	ML15159A447	Frankenfield, Pat	ML15153B092
Ford, Peggy	ML15155A671	Franklin, Courtney	ML15154B910
Forgacs, Nora	ML15154C181	Franklyn, Rex	ML15156A990
Forgues, David	ML15153B298	Franks, Scott	ML15154C297
Forkish, Jo	ML15155A281	Franz, Sandra	ML15154A093
Fornari, Arthur	ML15155A910	Franzmann, Paul	ML15156A298
Forney, Kathy	ML15155A606	Fraser, Evelyn	ML15154B282
Forrest, Mariah	ML15155B868	Fraser, Mark	ML15141A770
Forschner, Jillian	ML15156A853	Fraser, Suzy	ML15156A556
	ML15156A491	Frasieur, Forest	ML15155A254
Forte, Robert	ML15140A044		ML15155A254 ML15155B775
Fortgang, Mindye		Fray, Antje	
Forwand, Arlene	ML15155C164	Frazee, Cary	ML15158A145
Fosburgh, Eric	ML15155B104	Frazier, Madelynn	ML15153A480
Foscherari, Dolores	ML15142A052	Frazier, Shelley	ML15160A585
Foskett, Maryanna	ML15155A201	Fredenburg, Frank	ML15153A708
Foss, Maryann	ML15155A644	Frederick, Anne	ML15154B741
Foster, Beverly	ML15154B337	Fredrickson, Karen	ML15148A610
Foster, Delaina	ML15159B066	Freed, Hannah	ML15159A135
Foster, Frances	ML15159A163	Freedman, Peter	ML15153B215
Foster, Jacqui	ML15156B492	Freel, Susan	ML15159A079
Foster, Leah	ML15160A791	Freeman, Amy	ML15154B956
Foster, Patricia	ML15148A144	Freeman, Carolyn	ML15154B509
Foster, Robin	ML15155B011	Freeman, Myrna	ML15155A010
Foster, Stephanie	ML15159B273	Freeman, Tyler	ML15159A224
Foster, Tracy	ML15156B385	Freestone, Mack	ML15148B355
Fotos, Janet	ML15159A267	Frega, Doreen	ML15142A347
Fouche, David	ML15148B376	Fregin, N. J.	ML15148A140
Foulk, Jennifer	ML15142A221	Freiler, Kyle	ML15162A656
Fouts, Shannon	ML15156B447	Freitas, Frank	ML15155C007
Fowler, Elizabeth	ML15148A912	French, A.	ML15156A859
Fowler, Kim	ML15159A044	French, Larry	ML15159A092
Fowler, Rachel	ML15141A568	French, Nina	ML15148A271
Fowlkes, Richard	ML15153A999	French, Stephen	ML15155A099
Fox, Carole	ML15156B262	Frerker, Ronald	ML15159A821
Fox, Delphia	ML15153A949	Freson, Neil	ML15153B154
Fox, H.	ML15154C231	Frey, Adrienne	ML15148B159

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Commenter	Accession #	Commenter	Accession #
Frey, John	ML15162A113	Gabbert, Tim	ML15161A700
Frey, Lisa	ML15154B968	Gabel, Eileen	ML15159A228
Frey, Patricia	ML15154A357	Gable, Derrelle	ML15159A616
Friar, Beth	ML15160A955	Gabriel, Candace	ML15154B775
Frick, Dean	ML15153A957	Gabriel, Robert	ML15153B296
Frick, Patricia	ML15154A147	Gaddy, Lisa	ML15153A376
Frickel, Scott	ML15155B739	Gage, Karen	ML15160A695
Fried, Marc	ML15158A035	Gainer, Beverly	ML15148A789
Friederichsen, Jacqueline	ML15141A436	Galante, Nicholas	ML15156A592
Friedland, Monique	ML15159B255	Galbreath, Jerry	ML15146A368
Friedman, Alan	ML15153A644	Gall, Gary	ML15156B349
Friedman, Cherryl	ML15159A771	Gall, Ronald	ML15153A996
Friedman, Fredrica	ML15148A213	Gallagher, E.	ML15154C120
Friedman, Terry	ML15160A933	Gallagher, Glenn	ML15154B333
Friedman, Valerie	ML15160A784	Gallagher, Jim	ML15148A787
Fries, Jeb	ML15155C148	Gallagher, Julie	ML15158A201
Fritzler, Cyndi	ML15158A277	Gallegos, Mark	ML15154A454
Froehle, Virginia	ML15153A775	Gallo, Patricia	ML15159A962
Fromberg, Jeff	ML15154B845	Galloway, Adele	ML15155A876
Frost, Keith	ML15159A424	Galst, Liz	ML15154A054
Fruchter, Rosalie	ML15141A717	Gambriel, John	ML15154A935
Fruchter, Rosalie	ML15148A235	Gandhi, Dipal	ML15154A694
Fruge, Aaron	ML15155B116	Gandolfo, Laura	ML15153A934
Frush, Mary	ML15155A887	Gangi, Melanie	ML15155A410
Frusteri, Biagio	ML15155B600	Ganter, Steven	ML15154C079
Frye, Donna	ML15158A129	Garber, Lisa	ML15156B378
Frymoyer, Allison	ML15156A043	Garcia, Armando A.	ML15156A547
Fues, Lisa	ML15153B293	Garcia, Dena	ML15159B097
Fuessel, Chere	ML15153A819	Garcia, Erik	ML15155B799
Fugate, Karl	ML15156A230	Garcia, Erin	ML15155B590
Fugit, Sherri	ML15155A377	Garcia, Evette	ML15154C276
Fukuman, Thomas	ML15156A863	Garcia, Jeffery	ML15156B088
Fuller, Astrid	ML15148B309	Garcia, Luis	ML15155B990
Fuller, Dustian	ML15153A325	Garcia, Manny	ML15161A654
Fuller, Lisa	ML15153A818	Garcia, Mark	ML15154A010
Fuller, Roy	ML15148A904	Garcia, Olaya	ML15153A701
Fullerton, Richard	ML15154C283	Garcia, Susan	ML15160A829
Fumarola, Aaron	ML15140A030	Garcialuna, Edgar	ML15156B418
Fundby, Lone	ML15153A460	Gardner, Chris	ML15148A624
Funk, İlse	ML15156A281	Gardner, Chris	ML15154B115
Fura, David	ML15155B632	Gardner, Kent	ML15155C125
Furberg, Sven	ML15159B449	Gardner, Thomas	ML15154A199
Furlan, Sophia	ML15155A363	Garescher, Marie	ML15154A403
Furlong, John	ML15155C163	Garetz, Diane	ML15148B188
Furr, Carolyn	ML15156A226	Garey, Jenne	ML15142A273
Fusco, Carol	ML15159A644	Garfield, Andrea	ML15142A109
Fuss, Joanne	ML15148A725	Garfinkel, Nina	ML15156A640
Futrell, Sherrill	ML15158A144	Garland, Carole	ML15154A742
Futrovsky, Rosemary	ML15159B340	Garland, Robert	ML15154B869
G., G.	ML15148B016	Garlit, Donald	ML15148B371
G., Jan	ML15153B235	Garmon, Toni	ML15154A221
G., K.	ML15140A120	Garnant, Gregory	ML15153B162
G., Steven	ML15160A052	Garoutte, Claudia	ML15153A788
Gaal, Tiffany	ML15148A755	Garoutte, Debra	ML15159A654

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Garratt, Liz	ML15141A668	George, Catherine	ML15141A792
Garrecht, Jamila	ML15154B542	George, Kim Sanders	ML15154A954
Garrett, Benjamin	ML15154A543	George, Mark	ML15159A903
Garrett, John	ML15154B286	Gerber, Eric	ML15156A972
Garrett, Larry	ML15153B297	Gerbitz, Gordon	ML15154A675
Garrett, Lory	ML15153A541	Gergely, Katrina	ML15159B124
Garrett, Mary	ML15162A089	Gerhard, Dan	ML15153A874
Garrett, Robert	ML15154B972	Gerke, David	ML15155B160
Garrison, Ron	ML15154A236	Germain, Mary	ML15162A643
Garrison, Susan	ML15158A188	German, Bonnie	ML15158A105
Garritson, David	ML15140A113	Germann, Lawrence	ML15158A015
Garside, Kim	ML15160A709	Gertig, Kt	ML15160A868
Garvey, Lydia	ML15154A733	Gertler, Edward	ML15155A451
Garvy, Vanessa	ML15154B202	Gerwens, Shana	ML15155A023
Gasal, David	ML15154B704	Gesland, Genelle	ML15159A621
Gasco, Christine	ML15155A244	Ghannadi, Nazlee	ML15140A180
Gaspar, Stephanie	ML15155A256	Gherardi, Lisa	ML15153A891
Gasperino, Maria	ML15159A697	Ghiggia, Michelle	ML15155B972
Gasperoni, John	ML15147A744	Gianikos, Cathy	ML15159A539
Gast, Richard	ML15159B390	Gibbs, Donna	ML15148A239
Gaster, Valerie	ML15155A147	Gibbs, Susan	ML15158A245
Gately, Daniel	ML15154A099	Giblin, Thomas	ML15148B214
Gates, Nancy	ML15156A197	Gibson, Irene	ML15153B115
Gathing, Nancy	ML15148A664	Gibson, John	ML15153B115 ML15153B196
	ML15161A656	Gibson, Raymond	ML15153B190 ML15142A285
Gatling, Gayla Gaudin, Gerard F.	ML15154B943	Gibson, Scott	ML15142A285 ML15154A378
Gault, Carol	ML15159A883	Gibson, Susan	ML15155C242
Gause, Jackie	ML15154A693	Gicela, Raymond	ML15159A324
Gauthier, Lorraine	ML15153A843	Giddings, Ron	ML15154A115
Gawron, Katarzyna	ML15153B118	Gideon, Barbara	ML15159A111
Gawryszewski, Nancy	ML15154A550	Gierlachowski, Alexandra	ML15159A921
Gay, Larry	ML15148B380	Giese-Zimmer, Astrid	ML15155C074
Gayken, Aaron	ML15148B231	Gifford, Teresa	ML15155A071
Gaylin, Rita	ML15155B231	Gilardi, Gary	ML15154C173
Gaylor, Linda	ML15154B757	Gilbert, Camille	ML15153B267
Gazzola, Linda	ML15161A621	Gilbert, Jo Ann	ML15154A302
Geary, Jonny	ML15155A132	Gilbert, Pat	ML15148B046
Gebhard, Eric	ML15155C252	Gilbert, Tracy	ML15141A674
Gebhart, Leroy	ML15153B198	Gilbreath, J. Michael	ML15155C176
Gee, Lisa	ML15142A313	Gilchrist, Amber	ML15155B316
Geer, Matt	ML15156A930	Gilchrist, Cheryl	ML15140A006
Gehrig, Judy	ML15148A706	Giles, Warren	ML15154A308
Geiger, Marcia	ML15156A978	Gill, Juliana	ML15155B702
Geiges, Marion	ML15156A217	Gill, Raymond	ML15155A146
Geiler, Janet	ML15155A272	Gill, Stephanie	ML15153B177
Gelfand, Carol	ML15148A749	Gillard, Charles	ML15159A652
Gellar, Michael	ML15160A956	Gillespie, Thomas	ML15155A284
Geller, Phyliss	ML15142A359	Gillespy, Nicole	ML15161A667
Gemmill, Robert	ML15159B236	Gillette, Shereen	ML15155B735
Genasci, Elaine	ML15154B932	Gilliland, Charles	ML15156A473
Gendvil, Derek	ML15153A643	Gilliland, Patricia	ML15154A246
Gennarelli, Michael	ML15159A468	Gillono, Mark	ML15155A596
Gensler, Donna	ML15155A251	Gilmore, Joyce	ML15155C201
Gentili-Lloyd, Mika	ML15159A051	Gilmore, Naomi	ML15158A244

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Gindele, Abigail	ML15156A830	Gold, Warren	ML15153A699
Gingeresky, Joan	ML15148B255	Goldberg, Anne	ML15148A651
Gingery, Suze	ML15154C139	Goldberg, Laura	ML15155B050
Ginn, Kenneth	ML15142A315	Goldberg, Rosalyn	ML15154B700
Gioia, Linda	ML15154B984	Goldberg, Susan	ML15153A451
Gioielli, Lawrence	ML15155A323	Golden, Tim	ML15154C067
Girvin, Darrylin	ML15156A850	Goldin, Martha	ML15156B396
Gitto, Ruth	ML15156A470	Golding, John	ML15154B189
Givens, Roger	ML15154A006	Goldman, Linda	ML15154A268
Glancy, Joann	ML15156B404	Goldmark, Leila	ML15159B552
Glandon, Clarice	ML15154A252	Goldstein, Carol Ann	ML15155C077
Glaser, Helene	ML15159B029	Goldstein, Helen	ML15160A530
Glaser, Patsy	ML15154A690	Goldstein, Louis	ML15154B561
Glass, Jordan	ML15141A611	Goldwater, Glenda	ML15156A252
Glass, Malcolm	ML15141A544	Golembeski, Michael	ML15153A954
Glass, Rachel	ML15159B572	Gollobin-Basta, Ruth	ML15148B087
Glasscock, Rita	ML15159A869	Gomez, Chris	ML15154B221
Glasser, Karen	ML15141A722	Gomez, Toni Thoman	ML15155A442
Glasser, Mark	ML15153A854	Gomez, Unai Fuente	ML15159A383
Glasser, Mark	ML15153B182	Gondos, Nina	ML15155C175
Glasser, Tanya	ML15154A466	Gonzales, Bernie	ML15154C225
Glasshof, Wendy	ML15155B196	Gonzales, Daniel	ML15159B012
Glazer, Gertrude	ML15154A783	Gonzalez, Daniel	ML15159B065
Gleason, Barbara Lafaver	ML15148B377	Gonzalez, Jose Luis	ML15156B192
Gleason, Debra	ML15153B061	Gonzalez, Raul	ML15155C174
Gleason, Melinda	ML15153A428	Gonzalez, Veronica	ML15156B425
Glenn, Alice Ann	ML15148B098	Gooden, Anne	ML15141A781
	ML15153A931	Goodin, Dale	ML15156B266
Gley, Debra Glick, Art	ML15153A951 ML15140A265	Goodman, Ellen	ML15153A530
		Goodman, Margaret	
Glick, Edward	ML15159A785		ML15153A554
Glier, Ingeborg	ML15155A397	Goodrich, Darcy Goodrich, Rebecca	ML15156B092
Gliva, Stephen	ML15148B280		ML15159A221
Gloe, Janice	ML15148A962	Goodspeed, Helen	ML15155B171
Glover, Tim Clover, Behart	ML15155A655	Goodwin, Jill	ML15154A245
Glover, Robert	ML15155B359	Gorden, Gay	ML15158A159
Gluchman, Matt	ML15148A634	Gordon, Alexandra	ML15142A060
Gmaz, Mary	ML15154A049	Gordon, Carol	ML15153A683
Gobely, Michelle	ML15159A103	Gordon, J. B.	ML15148A143
Godbee, Allycia	ML15154A356	Gordon, Janet	ML15159A063
Godbey, Stella	ML15159A155	Gordon, Michael	ML15148B201
Goddard, Simon	ML15156A567	Gore, Jesse	ML15148B137
Goden, Gay Marie	ML15155A815	Gorecki, Carole	ML15159A522
Goding, Larry	ML15153A902	Gorina, Maya	ML15153B266
Goebel, Fred	ML15155A078	Gorlicki, Coralyn	ML15142A074
Goecke, Linda	ML15162A569	Gorn, Scott	ML15141A759
Goeckermann, John	ML15154B770	Gorra, Brian	ML15142A304
Goehring, Dan	ML15153A847	Gorsetman, Mark	ML15156B133
Goetinck, Jean	ML15155C185	Gorton, Michelle	ML15159B301
Goff, Karyn	ML15155C239	Gosnell, Lisa	ML15155B709
Goff, Thomas	ML15156A961	Gossett, Gene	ML15153A919
Golata, Grace	ML15156A494	Gotesky, Stephen	ML15140A292
Gold, Carol	ML15153A794	Gotlib, Eva	ML15148A768
Gold, Ellen	ML15153A414	Gotlib, Eva	ML15154B183
Gold, Jeff	ML15153A566	Goto, Matthew	ML15159B467

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Commenter	Accession #	Commenter	Accession #	
Gottfried, Susan	ML15154B433	Green, Pamela	ML15148A913	
Gottschalk, Pat	ML15155A350	Greenberg, Jason	ML15154A029	
Gotvald, Mark	ML15148A179	Greenberg, Joshua	ML15159B499	
Gould, Catherine	ML15153B281	Greene, Carole	ML15156B438	
Gould, Ed	ML15153B024	Greenhalgh, Diana	ML15153A502	
Gould, Julianne	ML15158A118	Greenhalgh, Karen	ML15154A304	
Goulet, Christine	ML15142A125	Greenwald, Evelyn	ML15154B292	
Gover, Pat	ML15156B020	Greenwald, Ken	ML15155C084	
Gowani, Nancy	ML15155B970	Greenway, Lumina	ML15148B202	
Gowens, Edward	ML15162B079	Greer, Amy	ML15147A747	
Gowens, Edward	ML15162B121	Greer, Helen	ML15155A425	
Grace, Joel	ML15148B150	Greer, Tom	ML15153B174	
Grady, Pat	ML15147A731	Greger, Sabine	ML15155B821	
Graffagnino, Mary Ann		Gregersen, David	ML15155A716	
and Frank	ML15154B434	Gregoire, Andre	ML15156B261	
Graffell, Jess	ML15140A256	Gregory, Gregory B.	ML15154A125	
Graham, Dan	ML15156A195	Gregory, Maria	ML15154A383	
Graham, Danielle	ML15160A848	Gregson, Wright	ML15154B216	
Graham, Guy	ML15162A081	Greig, Joan	ML15142A200	
Graham, Lynn	ML15155A519		ML15148B316	
		Greig, Joe		
Graham, Sidney	ML15148A989	Greil, Judith	ML15155B501	
Grames, Patricia	ML15154B808	Greinke, Pamylle	ML15148B278	
Gramza, Amy	ML15153A515	Gribosky, Philip	ML15154C178	
Granchi, Donald	ML15158A259	Grice, Royce	ML15159A380	
Granias, Susan	ML15148A661	Griesi, Linda	ML15154B856	
Granofsky, Gabrielle	ML15154A736	Grieves, Kathy	ML15154A145	
Grant, Nancy	ML15140A163	Griffin, Ann	ML15159A046	
Grasso, J.	ML15159A015	Griffin, Anne	ML15159A114	
Graube, Davids	ML15159A446	Griffin, Charles	ML15154B229	
Graul, Kara	ML15161A622	Griffin, Denise	ML15153A952	
Gravelle, Willis	ML15154A098	Griffin, Homer Ellis	ML15154A456	
Graver, Chuck	ML15153B279	Griffin, Mike	ML15140A279	
Graves, Caryn	ML15141A744	Griffin, Pam	ML15155B828	
Gray, Alison	ML15156A154	Griffin, Robert	ML15155A266	
Gray, Debra	ML15155A902	Griffith, Carolynn	ML15154B866	
Gray, Jennifer	ML15155A103	Griffith, Julie	ML15159A993	
Gray, Joe	ML15153A738	Griffith, Michael	ML15160A689	
Gray, Marissa	ML15155B730	Griffith, Nancy R.	ML15154A223	
Gray, Sylvia	ML15154A192	Griffy, Kathleen	ML15155A941	
Gray, Tony	ML15159A633	Grillo, John	ML15154A176	
Greaves, Leeann	ML15158A077	Grillot, Charlotte	ML15159B568	
Green, Alice	ML15142A054	Grimes, Tara	ML15159A471	
Green, Carol	ML15154A702	Grimley, Chris	ML15159A334	
Green, Jamie	ML15156A937	Grimsgaard, Morten	ML15160A777	
Green, Jesse	ML15148B351	Grindle, Russell	ML15160A763	
Green, July	ML15155C095	Griswold, Dave	ML15155A020	
Green, June	ML15156A290	Griswold, Tracy	ML15154B470	
Green, Ken	ML15154A337	Grizzell, Cs	ML15142A269	
Green, Kerstin	ML15156B406	Groh, Paul	ML15148B116	
Green, Kristin	ML15153A616	Grohman, Carolyn	ML15148B025	
Green, Martha	ML15142A151	Grone, Alexis	ML15154A390	
Green, Mary Catherine	ML15156A974	Gronemann, Barbara	ML15148B017	
Green, Meredith	ML15155C245	Gronemeyer, Kimberly	ML15162A616	
Green, Natasha	ML15155B615	Gross, Anne	ML15155A381	

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Gross, Barbara	ML15142A042	Gutman, Ruth	ML15154A323
Gross, Jim	ML15160A938	Guttridge, Laura	ML15153A475
Gross, Kurt	ML15153A369	Guyon, Pamela	ML15148B163
Gross, Linda	ML15148A886	Guyot, Jack	ML15156A742
Gross, Sister James Marie	ML15156A256	Guyot, Jack	ML15156A777
Grossman, Bonnie	ML15141A669	Gwinn, Carol	ML15148B399
Grossman, Kathleen	ML15148B187	H., Jen	ML15154A212
Grossman, Kathleen	ML15156B407	H., Littlewolf	ML15155C205
Grotzke, Mark	ML15154C294	Haage, L.	ML15141A452
Grounds, Shari	ML15148B090	Haas, Evelyn	ML15153A463
Grove, Earl	ML15156A010	Habegger, Sue	ML15154B339
Grove, Paul	ML15156B298	Habick, William	ML15154A186
	ML15154B936	Hacker, Sue	ML15153B284
Grove, Stephen			
Grovenstein, Elizabeth	ML15160A924	Hackney, Stephen	ML15156A178
Grover, Justin	ML15148B301	Hade, Michaeline	ML15148A200
Groves, Linda	ML15154A698	Hadley, Shela	ML15153A538
Grubb, Harold	ML15159A009	Hadlock, Kevin	ML15154B478
Grubbs, Lisa	ML15153A710	Haegele, William	ML15153A676
Grubbs, Victoria	ML15158A030	Haertel, Melissa	ML15153B145
Gruenau, Douglas	ML15147A764	Hafer, Sarah	ML15153A960
Grush, Melissa	ML15156B476	Haffner, Barbara	ML15161A637
Gruver, Chere	ML15155A044	Haga, Martha	ML15159B507
Gualario, Lascinda	ML15155B186	Hagen, Cleo	ML15155A439
Guallar, Santi	ML15147A749	Hager, Jon	ML15156A785
Gualtieri, Kate	ML15159B008	Hagood, Hap	ML15153A765
Gucciardo, Kaye	ML15159A230	Haig, Brenda	ML15154A369
Guh, H.	ML15147A717	Haine, R.	ML15155C057
Guier, Richard	ML15159B083	Haines, Thomas	ML15141A623
Guilbault, Aubrey	ML15159B395	Hair, Karla	ML15154B950
Guilliams, Karen	ML15156B415	Hait, Gordon	ML15155A537
Guinnup, David	ML15154B810	Hajduk, Kelly	ML15156A299
Guise, Elizabeth	ML15148B180	Hajek, Jim	ML15148A274
Gulla, Audrey	ML15148A705	Hakkinen, Kari	ML15155B097
Gullerud, Lois	ML15153A741	Hale, Sharon	ML15154B121
Gullo, Paula	ML15159B459	Hale, Susan	ML15160A599
Gumpert, Michael	ML15159A696	Halem, Robert	ML15141A705
Gunn, Amy	ML15155B937	Hall, Dennis	ML15160A828
Gunter, Karlene	ML15159A082	Hall, Emily	ML15154B381
Gunther, Peter	ML15147A771	Hall, George	ML15141A743
Gupta, Dave	ML15147A781	Hall, Heather	ML15155A501
Guram, Monjit	ML15141A771	Hall, Jan	ML15153A768
Gurdin, J. Barry	ML15153B227	Hall, Janice	ML15148B320
Gurley, Marianne	ML15153B051	Hall, Jennifer	ML15142A117
	ML15153B238	Hall, Keith	ML15155B923
Gurvey, Jenna Guss, Elisaboth		Hall, Linnea M. Fronce	WIL 101000923
Guss, Elisabeth	ML15155A494		
Gustafson, Heidi	ML15158A260	Thomas	ML15160A853
Gustafson, Marcy	ML15156B007	Hall, Marian	ML15160A880
Gustafson, Owen	ML15154B942	Hall, Shawn	ML15148B368
Gustafson, Susan	ML15155A280	Hall, Silvia	ML15156A527
Guthrie, Amber	ML15154B604	Hallett, Mark	ML15142A196
Guthrie, Elizabeth	ML15159B074	Halligan, Melody	ML15154A377
Gutierrez, Emmylou	ML15155C008	Halligan, Sue	ML15154B204
Gutierrez, Nancy	ML15154B453	Hallman, Hollie	ML15159A421
Gutierrez, Oscar	ML15155B226	Hallman, Janice	ML15156B511

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Hallmark, Jena	ML15155A321	Hanson, Richard	ML15156A912
lalpern, Carol	ML15155B680	Happer, Marty	ML15153A737
Halpern, Harvey	ML15154A172	Haraoui, Samira	ML15148B032
Halsell, Claudia	ML15156A242	Harbison, G. B.	ML15148B127
Halsey, Jane	ML15148B398	Harden, Ronald	ML15159B465
Haltom, D.	ML15159A025	Hardie, Daniel	ML15153A409
Halvorson, Heather	ML15155A334	Hardin, Judith	ML15140A139
Hamann, Susan	ML15148B285	Hardin, Lillian	ML15158A172
Hamilton, Cheryl	ML15160A759	Harding, Janilyn	ML15153A752
Hamilton, Colleen	ML15148A792	Hardt, Jerry	ML15155C243
Hamilton, Janet	ML15156A722	Hardt, Vincent	ML15153B216
Hamilton, Judy	ML15155A108	Hardy, Linda	ML15154A267
Hamilton, Pamela	ML15155A079	Hardyman, Leslie	ML15155C103
Hamilton, Ted	ML15156A324	Harish, Anavai	ML15154A786
Hamm, Bill	ML15155B595	Harl, Melissa	ML15159A985
Hammer, Dorothy	ML15154A864	Harlan, Ann	ML15142A020
Hammer, F.	ML15159A239	Harlan, Melissa	ML15155B612
Hammer, Lisa	ML15156B455	Harland, Donald	ML15159A594
Hammer, Randy	ML15153B144	Harmon, Terry	ML15154C298
Hammer, Randy	ML15160A707	Harper, Alan	ML15153B262
Hammerly, Jimi	ML15160A856	Harper, Diane	ML15153A722
Hammond, Bob	ML15155B770	Harper, K.	ML15156B419
Hammond, Robert	ML15160A983		ML15154C084
	ML15154A102	Harper, Leslie	
Hammond, Todd		Harper, Marilynn	ML15148A603
Han, Richard	ML15156A703	Harper, Rebecca	ML15159B523
Hance, Judith	ML15156A638	Harper, Thomas	ML15142A167
Hancock, Lynne	ML15160A990	Harper, Tom	ML15155B198
Hancock, Rebecca	ML15147A773	Harrell, Marlene	ML15155A662
Handford, Janet	ML15154A042	Harrington, Lonnie	ML15159A339
Handwerker, Steven	ML15154C032	Harrington, Michelle	ML15159A382
Hanff, Jean	ML15154B507	Harrington, Sue	ML15153A569
Hanisee, Mark	ML15159B010	Harris, Rosemary	ML15148A975
Hanks, Douglas	ML15154A109	Harris, Susan	ML15148B030
Hanley, Lindsay	ML15158A033	Harris, Brooke	ML15142A220
Hanlon, Jessica	ML15162B108	Harris, Christine	ML15141A517
Hanlon, Jessica	ML15162B064	Harris, Harry	ML15156A652
Hanly, Heather	ML15153A464	Harris, J.	ML15154A134
Hanna, Jeff	ML15148B062	Harris, Jamie	ML15159B103
Hannan, Susan	ML15162A055	Harris, Jan	ML15148B089
Hansen, Alan	ML15155B914	Harris, Julie	ML15154C133
Hansen, Anna	ML15153B070	Harris, Kymberlee	ML15153A850
Hansen, Arthur	ML15158A175	Harrison, Catherine	ML15154A320
Hansen, Claudia	ML15155A002	Harrison, Colleen	ML15154A287
Hansen, James	ML15155C017	Harrison, David	ML15159B127
Hansen, Jan	ML15154A968	Harrison, Edward	ML15147A756
Hansen, Kathy-Jo	ML15156A229	Harrison, Jeane	ML15155B940
Hansen, Marc	ML15156B040	Harrison, Marie	ML15160A884
Hansen, Neil	ML15159B574	Harrison, Norma J. F.	ML15155B823
Hansen, Yvonne	ML15154C148	Harrison, T. Hamboyan	ML15153A381
Hanson, Craig	ML15154A023	Harris-Richardson,	
Hanson, Delene	ML15154A295	Annette	ML15159B359
Hanson, Kristin	ML15155C094	Harrod, Dawn	ML15153B136
Hanson, Naomi	ML15155B509	Harsin, Linda	ML15156A171
ianson, Naonn	ML15155B894	Hart, Barbara	ML15162B154

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Commenter	Accession #	Commenter	Accession #
lart, Barbara	ML15162B091	Hayes, Mary	ML15142A345
lart, Cynthia	ML15158A042	Hayes-Budgen, Shawndra	ML15153A702
Hart, Jamie	ML15159A949	Haymans, Deanna	ML15156A482
Hart, Jessica	ML15155B125	Hayne, Jan	ML15153A476
Hart, Kathy	ML15153A989	Haynes, Michelle	ML15160A894
Hart, Ruth	ML15155B788	Haynes, Monica	ML15154A101
Hart, Sara	ML15154B262	Hays, Helen Logan	ML15156A666
Hart, Tricia	ML15153A490	Hayward, Michelle	ML15155C081
Hartel, Gale	ML15142A320	Hayward, Susan	ML15154A315
Hartenstine, Dennis	ML15148A915	Hazard, Evan	ML15153B288
Hartfeld, Ronen	ML15160A812	Hazelleaf, Tom	ML15159A073
Hartleb, Carole	ML15148B158	Hazelton, Judith	ML15162A082
Hartleben, Christian	ML15154B891	Hazen, Alona	ML15155B794
Hartley, James	ML15141A567	Hazlett, Rob	ML15156B142
Hartman, Jenny	ML15154B548	Hazynski, Chris	ML15155C053
Hartman, Nancy	ML15158A089	Head, Ashley	ML15141A715
Hartman, Nancy Kosnar	ML15140A200	Head, Kris	ML15158A272
Hartman, Richard	ML15156A283	Headley, Kimberley	ML15155B207
Hartman, Sue	ML15154C176	Headley, Linda	ML15162B091
Hartman, Todd	ML15154A298	Headley, Linda	ML15162B149
Hartshorne, Annette	ML15155B247	Heagy-Len, Linda	ML15159B230
Hartz, Liz	ML15154B903	Heald, Mark	ML15154A015
Harvey, Kathy	ML15153A550	Heaning, Richard	ML15140A188
Harvey, Shea	ML15155A784	Hearthstone, Bonnie	ML15159B036
Harvey, Terry Greene	ML15148B168	Heartsong, Judith	ML15160A814
Harwell, Janet	ML15155B825	Heath, Mary	ML15155A645
Harwell, Mary Ann	ML15159A646	Hebberger, Jo Anna	ML15154A294
Hasbach, Corinna	ML15156B386	Hedges, Ken	ML15159B304
Haseltine, Amber	ML15142A316	Heffron, Joshua	ML15141A677
Haskell, Michael	ML15142A266	Hegarty, Elizabeth	ML15154A256
Hasselbrink, Robert	ML15142A095	Hegedus, Barbara	ML15159B564
	ML15154C100	Heide, Andra	
Hassig, William Hastinga, Maliana			ML15156B334
Hastings, Melissa	ML15159A781	Heiden, Patricia	ML15156A296
Hastings, William	ML15153B278	Heiden, Wendy	ML15159B544
Hatch, Gari	ML15141A607	Heiks, Kristina	ML15155A769
Hatch, Susan	ML15155A665	Heininger, Joseph	ML15154B911
Hatfield, Eugene	ML15154A280	Heinle, Janet	ML15148A142
Hathaway, Christsopher	ML15156A765	Heinly, Bridgett	ML15153A802
Hathaway, Susan	ML15155A867	Heinrich, Hans-Peter	ML15141A656
Hatlem, Cherie	ML15155A764	Heinrich, Hans-Peter	ML15155A621
Hattendorf, Ethan	ML15148A695	Heist, Roberta	ML15154C255
Hauber, Barclay	ML15148B007	Heithaus, Melissa	ML15159B476
Hauenstein, Cathleen	ML15159A422	Helaudais, Jamie	ML15162A665
Haugen, Bob	ML15162A255	Helenchild, Liz	ML15148B086
Haugen, Bob	ML15162A633	Helget, Linda	ML15156A278
Haupt, Carolyn	ML15140A111	Helmer, Kathleen	ML15153A607
Haussner, Norman	ML15154A181	Helmholz, Sharron	ML15154C071
Havens, Judith	ML15155A512	Helsel, Daniel	ML15159B415
Haverkamp, Kathy	ML15154A335	Hemberger, Jade	ML15160A062
Hawkins, Denise	ML15159B346	Hemingway-Proia,	
Hawkins, Patricia	ML15159A238	Georgeann	ML15153A961
Hayasaka, Kiyo	ML15153A574	Hemming, Michele	ML15154B839
Hayes, Christine	ML15154B188	Hendershot, Tamara	ML15148A655
Hayes, Linda	ML15156A712	Henderson, David	ML15156B183

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Henderson, Douglas	ML15155C068	Herwig, Gary	ML15140A067
Henderson, Mae Ann	ML15162A067	Herwig, Karen	ML15155A158
Henderson, Maria	ML15153A879	Herzog, Elaine	ML15159B001
Henderson, Rachelle	ML15140A259	Hess, Carolyn	ML15154A274
Henderson, Sherry	ML15155A238	Hess, John	ML15154B060
Henderson, Steven	ML15155A808	Hess, Joseph	ML15148B291
Henderson, Suzy	ML15159B370	Hess, Karin	ML15156B452
Hendler, Carol	ML15154A083	Hess, Paul	ML15155A088
Hendricks, Richard	ML15156B025	Hesse, Susanne	ML15148A737
Hendrix, Alice	ML15158A223	Hester, Sally	ML15142A078
Hendrix, Dana	ML15158A037	Hesterberg, William	ML15142A302
Hendry, Dawn	ML15159A052	Heuman, Chris	ML15155A072
Hennemann, W. W.	ML15141A750	Heuman, Rachel	ML15154A575
Henning, Linda	ML15154B703	Heuman, Tachel	ML15155A221
Henninger, Melissa	ML15156B175	Hewelt, Karen	ML15148B195
Henriksen, Deb	ML15160A088	Hewes, William	ML15154C022
Henriksen, James	ML15154A051	Hewett, Rosemary	ML15156A842
Henry, Anne	ML15148B024	Hewgley, Joseph	ML15154B085
Henry, Harold	ML15142A223	Hewitt, Anne-Marie	ML15155C224
Henry, Martha	ML15155B908	Hewitt, Cheryl	ML15156A155
Henry, Robert	ML15153A972	Hewitt, Sheri	ML15141A794
Henry, Sheri	ML15153A615	Hey, Lisa	ML15154B976
Hensel, Charles	ML15153B147	Heydemann, Paul	ML15142A076
Hensgen, Eric	ML15140A237	Heyden, Neil	ML15155A109
Hensley, Kim	ML15154B222	Heyneman, Amy	ML15155B786
Henson, Joey	ML15154C304	Hi, Jacki	ML15153A338
Henson, Theresa	ML15155C179	Hibbard, Jeff	ML15148A247
Henzel, William	ML15148B047	Hibben, Tresa	ML15155B860
Hepburn, Elizabeth	ML15155A488	Hibben, Walker	ML15155C100
Herbert, Annabelle	ML15153B270	Hicklin, Mary	ML15154B949
Herbert, Wendy	ML15154B506	Hickox, Ann	ML15155B846
Herbruck, Janet	ML15154B063	Hicks, Robert	ML15155B243
Herbst, Daniel	ML15141A716	Hidde, John	ML15154B273
Herda, Frank	ML15154B454	Hiestand, Nancy	ML15140A268
Herlihy, Peggy	ML15155A542	Higbee, Susan	ML15142A137
Herman, Lon	ML15156A035	Higgins, Barbara	ML15156A248
Hermann, Birgit	ML15155A443	Higgins, Susi	ML15155A006
Hermanson, Kristina	ML15161A698	Hightower, Keith	ML15159B416
Hernandez, Maria	ML15154B192	Hilbert, Pamela	ML15155C229
Hernandez, Noemi	ML15159A012	Hildebrand, James	ML15153A753
Hernandez, Robin	ML15148A197	Hildebrand, Valerie	ML15158A278
Hernandez, Steven	ML15156B446	Hildebrandt, Todd	ML15155B158
Herndobler, Beth	ML15142A027	Hildner, Ellen	ML15155A124
Heron, Robert	ML15154C226	Hill, Bobbi	ML15148B272
Herr, Richard and Marietta	ML15140A223	Hill, Carol	ML15156A950
Herr, Richard and Marietta	ML15141A553	Hill, Frank	ML15159A214
Herrera, Bill	ML15141A485	Hill, Ginger	ML15154B331
Herrera, Bill	ML15148B432	Hill, Jennifer	ML15155A532
Herring, Kathleen	ML15155A131	Hill, Jessica	ML15142A147
Herron, Andria	ML15153B125	Hill, Joy	ML15162A544
Herschler, Faith	ML15153B121	Hill, Lois	ML15162A705
Hershey, June	ML15154C062	Hill, Michael	ML15156B468
Herten, Margaret	ML15148B113	Hill, Nastassia	ML15162A226
Hertz, Albert and Marcia	ML15155B154	Hill, Sally	ML15140A119

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Hill, Steven	ML15162B042	Hoffman, Lisa	ML15153A937
lill, Steven	ML15162B100	Hoffman, Marc	ML15148A958
Hillard, Dale	ML15156A692	Hoffman, Nancy	ML15162A294
Hilliard, Donald	ML15156B146	Hoffman, Tom	ML15154B761
Hilliard, Jenn	ML15162A498	Hoffmann, James	ML15156A484
Hills, Sally	ML15156A330	Hofheins, Paul	ML15155A712
Hillstrom, Cindee	ML15159A236	Hofing, Amy	ML15156A653
Hilpman, Dwight	ML15159A772	Hogan, Cynthia	ML15154A722
Hiltz, Dan	ML15155B859	Hogan, Jack	ML15154B086
Himmelman, Carol	ML15159A688	Hogan, Michael	ML15154A171
Hinds, Elenita	ML15159A031	Hogan, Randolph	ML15155B863
Hinerman, Michele	ML15153A333	Hogle, Dick	ML15142A185
Hines, Allison	ML15154C284	Hogue, Kelly	ML15154B682
Hines, Lanier	ML15155A257	Hohenshelt, Felicity	ML15154A539
Hines, Nancy	ML15155B737		ML15160A087
		Hojda, Debora Holden, Grace	
Hinson, Kathy Hinton, Eugene C	ML15153B027 ML15142A300		ML15158A220 ML15156A804
Hinton, Eugene C.	ML15142A300 ML15153A740	Holguin, George	ML15156A804 ML15159B246
Hinze, Willie		Holland, Brett	
Hipp, James	ML15155B743	Holland, Fern	ML15154B905
Hipsher, Linda	ML15156A192	Holland, Lovice	ML15154A248
Hirano, Kim	ML15154C182	Hollenbeck, Margaret	ML15148A222
Hird, Lindsey	ML15159B399	Hollenbeck, Pamela	ML15159A137
Hirsch, Catherine	ML15155B508	Holliday, T.	ML15148B074
Hirsch, Harriet	ML15140A032	Hollington, Jason	ML15155A106
Hirsh, Ethan	ML15154B737	Hollinrake, Mark	ML15154B987
Hiseley, Michelle	ML15155A940	Hollis, Bonnie	ML15142A153
Hitchcock, Erik	ML15156A717	Hollis, Kathleen	ML15153A745
Hitchins, John	ML15148B335	Hollis, Nancy	ML15148B347
Hite, Richard	ML15154C128	Hollis-Franklyn, Candace	ML15155B516
Hittle, Mike	ML15159A749	Hollister, David	ML15156A186
Hix, Hildegard	ML15153A835	Hollon, Leanna	ML15159B433
Hix, Katherine	ML15155B209	Holloway, Elizabeth	ML15148A744
Hlat, Mike	ML15160A918	Holm, Samantha	ML15140A269
Hlodnicki, Bruce	ML15162B064	Holman, Clarisse	ML15162A362
Hlodnicki, Bruce	ML15162B131	Holmdahl, K.	ML15155C092
Hoaglin, Dianne	ML15154C097	Holmes, Andre	ML15155B622
Hoats, John	ML15141A583	Holmes, Beate	ML15159B054
Hobbs, Joan	ML15162A667	Holmes, Brad	ML15159A992
Hobson, Kelvin	ML15154A184	Holmes, Debbie	ML15141A735
Hochendoner, Bernard	ML15155A507	Holmes, Phyllis	ML15156A243
Hodge, Sonya	ML15155B584	Holmgren, Jeanette	ML15159A449
Hodges, Andrea	ML15154C216	Holoduek, John	ML15156B085
Hodges, Christina	ML15142A310	Holsten-Coleman, Karen	ML15156A246
Hodie, Jake	ML15159B366	Holt, Amy	ML15154A752
Hodovan, Francine	ML15156A116	Holt, Bill	ML15148A901
Hodson, Sally	ML15156A101	Holt, Kendra	ML15154B937
Hoegler, Jean	ML15154C117	Holt, Mary	ML15142A367
Hoernig, Paul	ML15155B379	Holt, Rhonda	ML15158A195
Hoesel, Walter	ML15155A661	Holthaus, Tracy	ML15158A253
Hoess, Joseph	ML15155B253	Holtrop, Holly	ML15159A358
Hofacker, Keith	ML15141A702	Holtzclaw, John	ML15142A286
Hoff, Mary	ML15156A083	Holtzman, Dorothy	ML15154B319
Hoff, Michelle	ML15159B578	Holtzman, Jed	ML15154B001

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Commenter	Accession #	Commenter	Accession #
Holzbach, Windy	ML15155C079	Howard, Toni	ML15158A124
Holzer, Rebecca	ML15156A977	Howden, John	ML15154A050
Holzle, Cheryl	ML15154A096	Howe, Jill	ML15155A306
Hon, Don	ML15155A295	Howell, Carol	ML15142A216
Hong, Celeste	ML15155B181	Howell, Crystal	ML15154C070
Honigsblum, Alexander	ML15155B093	Howell, Julia	ML15155A449
Honore, Stephanie	ML15159A839	Howell, Lisa	ML15153A786
Hoobing, Stan	ML15153A974	Howell, Lisa	ML15154A084
Hood, Janet	ML15159B007	Hower, Alvin	ML15155A388
Hood, Nick	ML15155A916	Howes, Abigail	ML15156A234
Hoodwin, Marcia	ML15154C109	Howes, Elaine	ML15141A694
Hook, Holly	ML15148B161	Howie, Linda	ML15158A109
Hooks, David	ML15160A903	Howlett, Ariel	ML15156A474
Hooley, Merle	ML15154C202	Howry, Marita	ML15155A139
Hooson, Clare	ML15141A447	Hoyle, Lester and Judy	ML15154C229
Hooven, Betty	ML15155B797	Hriljac, Donna	ML15154B203
Hoover, Linda	ML15156A588	Hubbard, Dan	ML15154A352
Hope, Holly	ML15154A364	Hubbell, Sharon	ML15153B218
Hope, Katherine	ML15156A204	Huber, Anne	ML15155B904
Hopkins, Blair	ML15141A424	Huckaba-Paiz, Sharol	ML15162A236
Hopkins, James	ML15148A137	Hudak, Lesley	ML15159A277
Hopkins, Jeff	ML15155B602	Huddleston, Heather	ML15154C260
Hopkins, Kathy	ML15148A240	Hudgins, Jerry	ML15154C213
Hoppenfeld, Cynthia	ML15148A133	Hudson, Harry	ML15155B471
Horan, Debbie	ML15162B079	Huerta, John	ML15155A905
Horan, Debbie	ML15162B126	Huerta, Juan	ML15154A060
Horiwitz, Laura	ML15155A379		ML15162A078
		Huffman, Russell	
Horn, Roger	ML15156A311 ML15142A238	Hufnagel, Glenn	ML15154C116
Hornak, Joann		Hufnagel, Martha	ML15155A885
Horne, Mike	ML15155A149	Huggins, Barbara	ML15153B168
Horne, Paul	ML15153A925	Hughes, Angela	ML15148B315
Horstman, Kara	ML15159A344	Hughes, Barbara	ML15153B302
Horton, Christine	ML15154B556	Hughes, Curtis	ML15155C052
Horwath, Pamela	ML15158A229	Hughes, Diane	ML15154B275
Horwitz, Martin	ML15153B062	Hughes, Jennifer	ML15160A915
Hosea, Marilyn	ML15148B271	Hughes, Jessica	ML15162A586
Hosek, Ruth	ML15156A988	Hughes, Karan	ML15155C169
Hotchkiss, Jay	ML15153A969	Hughes, Kathryn	ML15155A343
Hottenstein, Tara	ML15142A299	Hughes, Kevin	ML15156A297
Houchin, John F.	ML15155A005	Hughes, Laurel	ML15156B345
Hough, Susan	ML15148A601	Hughes, Lisa	ML15142A278
Houghton, Francis	ML15159B565	Hughes, Richard	ML15153A877
Houghton, Melissa	ML15154B789	Hui, Sng	ML15159A517
House, Robert	ML15154C006	Hulbert, Susi	ML15154C119
Houseworth, Bradley	ML15160A891	Hull, Cynthia	ML15159A034
Houston, Annie	ML15153A694	Hull, Gary	ML15153A790
Houston, Meghan	ML15159A440	Hull, Juanita	ML15156B038
Hovekamp, Larry	ML15142A362	Hull, Lise	ML15148B437
Hovey, Roseanne	ML15154B044	Hull, Ronald	ML15153B287
Howard, Bryan	ML15159A738	Humane Society	
Howard, Jim	ML15154C010	South Brevar	ML15159A037
Howard, Lucy	ML15154B748	Hummell, Annette	ML15159A401
Howard, Nancy	ML15156A240	Humphrey, Carol	ML15158A112
Howard, Sarah	ML15155B343	Humphrey, Thomas	ML15148A266

Commonter	ADAMS	Commenter	ADAMS
Commenter	Accession #	Commenter	Accession #
Humphries, Roberta	ML15142A237	Ingram, Taylor	ML15155A027
Humrich, Gilia	ML15153A372	Insurriaga, Aurora	ML15155B721
Hung, Patricia	ML15148A134	lonina, Kate	ML15162A352
Hunrichs, Paul	ML15156B301	Ireland, Victoria	ML15159B090
Hunt, Jill	ML15162A064	Irvine, Gael	ML15155B059
Hunter, Jan	ML15153A887	Isaac, David	ML15153A723
Hunter, Susan	ML15153B261	Iseri, Martin	ML15148B379
Hunter, Suzanne	ML15140A190	Ishii-Kiefer, Takako	ML15141A758
Huntington, Stephanie	ML15142A218	Ismail, Hildy	ML15154A193
Huntley, Cheryl	ML15142A364	Israel, Miriam	ML15154A813
Huntley, Heather	ML15159A147	Israil, S.	ML15148B050
Huntley, William	ML15154B652	Ivankovic, Anthony	ML15154A139
Hurley, Brady	ML15155A233	Iversen, Sheryl	ML15154B307
Hurley, Mark	ML15155A538	Iverson, Steve	ML15155B268
Hurst, June	ML15154C153	Iverson, Susan	ML15160A920
Hurtt, Kimberly	ML15159A956	Ivey, Cheryl	ML15154A229
Hurwitz, Jeffrey	ML15141A592	Ivy, Rebecca	ML15148A257
Husby, Jason	ML15155C059	Iwankiw, Pilar	ML15156A469
Hutchens, Jr., John	ML15148A620	Izzo, Martha	ML15154A624
Hutchings, William	ML15153B007	Izzo, Martha	ML15154A946
Hutchins, David	ML15153B094	Jaakola, Julia	ML15156B093
Hutchins, Katherine	ML15153A805		ML15154C055
Hutchins, Leslie	ML15155B043	Jablonski, Margaret	
		Jacinto, Paloma	ML15162A722
Hutchinson, Jerry	ML15159B338	Jackimiak, Jim	ML15141A685
Hutchison, Dwight	ML15141A491	Jackson, Carol	ML15141A642
Huth, Graciela	ML15155A436	Jackson, David	ML15156B131
Huttinger, Roberta	ML15156B129	Jackson, Ginny	ML15154C096
Huttner, Elodie	ML15153A430	Jackson, James	ML15154A634
Hutton, Craig	ML15154B114	Jackson, Judy	ML15155A089
Hvozda, Tammi	ML15154A361	Jackson, Lael	ML15154A089
Hwad, Monoe	ML15148A640	Jackson, Phyllis	ML15148A225
Hyche, Kenneth	ML15155A360	Jackson, Richard	ML15154A198
Hyde, Lynda	ML15160A531	Jackson, Sasha	ML15141A718
Hynd, J.	ML15155A399	Jackson, Warren	ML15148B055
Ibbotson, David	ML15154A072	Jacob, Sheena	ML15159A158
Idone, Carol	ML15147A709	Jacobs, John	ML15154C214
Iffland, Lisa	ML15148A747	Jacobs, Judy	ML15159A142
Ihne, Merle	ML15142A360	Jacobs, qJohn	ML15155A324
Ihrig, Janis	ML15158A285	Jacobsen, Kathleen	ML15153B081
li, Keith Rick	ML15148B213	Jacobson, Lawrence	ML15153B205
li, Riley Canada	ML15159B342	Jacobson, Martin	ML15153A914
llowiecki, John	ML15142A037	Jacobson, Paul	ML15155A672
lltis, Michael	ML15153A447	Jacobs-Pollez, Rebecca	ML15162A171
lltzsche, William	ML15155A517		ML15154A277
lluna, Mana		Jacque, Carol	
	ML15142A121	Jacques, David	ML15153A982
Imada, F. Imborton, Maria France	ML15154A449	Jacques, Karen	ML15153B006
Imberton, Marie-France	ML15156B409	Jacques, Sally	ML15148A971
Imel, Arjuna	ML15159B500	Jadczak, Andrew	ML15148B085
Imker, Susan	ML15148A650	Jaeger, Pam	ML15141A789
Immasche, Sonia	ML15156A865	Jaegers, Martha	ML15154A231
Immel, Amy	ML15156A265	Jahos, Ellen	ML15142A308
Indrelie, Kenneth	ML15160A745	Jakubowska-Cook, Ewa	ML15156B346
Infante, Neil	ML15141A723	Jalbert, Diane	ML15155A074
Ingraham, E.	ML15155A113	Jamal, Kate	ML15141A665

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James, Damian	ML15154A191	Johnson, Gordon	ML15159A148
James, Ilona	ML15142A242	Johnson, Arnold	ML15156B469
James, Kristine	ML15155A015	Johnson, Beverly	ML15155B734
James, Nancy	ML15141A584	Johnson, Carol	ML15148B221
James, R. Dean	ML15153B234	Johnson, Chad	ML15154B894
James, Robert	ML15158A049	Johnson, Don	ML15158A206
James, Russell	ML15154C204	Johnson, Edward	ML15156A664
Jamison, L.	ML15148A942	Johnson, Esther	ML15153A842
Jamison, Sara	ML15154A153	Johnson, Gregg	ML15162A603
Jamsheed, Ghazale	ML15155B947	Johnson, Janice	ML15153B150
Jamvolds, Shunko	ML15159B270	Johnson, Jim	ML15159A496
Janczuk, Stan	ML15154A520	Johnson, Joel	ML15161A625
Jandourek, Alexia	ML15158A197	Johnson, Jona	ML15154B242
Janowsky, Margaret	ML15155A193	Johnson, Julie	ML15155A145
Jarvis, J. R.	ML15155A722	Johnson, Kay	ML15161A638
Jastromb, Virginia	ML15154B855	Johnson, Larry	ML15159A022
Jatinen, Jane	ML15154A082	Johnson, Laura	ML15154A326
Jaye, Abigail	ML15142A283	Johnson, Leslie Austin	ML15156A744
Jean, Patrick	ML15160A815	Johnson, Lorraine	ML15154B765
Jeavons, John	ML15156B041	Johnson, Martha	ML15148B405
Jenisio, Kurt	ML15141A546	Johnson, Mary	ML15148B439
Jenkin, Rob	ML15155A094	Johnson, Maxwell	ML15154B907
Jenkins, Cheryl	ML15156A787	Johnson, Michael	ML15148A644
Jenkins, Eugenie	ML15148B209	Johnson, Michael	ML15153A687
Jenkins, Janell	ML15155B090	Johnson, Michael	ML15159A325
Jenkins, Lynn	ML15154A374	Johnson, Michele	ML15154B256
Jenks, Robert	ML15159A269	Johnson, Michele	ML15154B750
Jenne, Karen	ML15155A939	Johnson, Nancy	ML15153B292
Jennings, Erin Stuart	ML15148B350	Johnson, Nita	ML15148A867
Jennings, Linda	ML15155A432	Johnson, Pat	ML15159A047
Jennings, Scott	ML15155B843	Johnson, Paula	ML15155B407
Jennings, Sid	ML15156B199	Johnson, Rheta	ML15148B048
	ML15159A054	Johnson, Richard	ML15141A632
Jensen, Brett		Johnson, Robert	
Jensen, Catherine	ML15153A896 ML15156A720		ML15159B352 ML15153B212
Jensen, Cornelia	ML15155A586	Johnson, Sally	ML15153B212 ML15142A118
Jensen, Donna		Johnson, Soeren	ML15142A116 ML15141A612
Jensen, Jan	ML15148B002 ML15153B078	Johnson, Susan	ML15141A012 ML15159B435
Jensen, S. Jensen, Victoria	ML151356078 ML15142A355	Johnson, Suzy Johnson, Thomas	ML15158A019
Jernquist, Harriet		Johnson, Tracy	ML15138A019 ML15148B093
• •	ML15155A875 ML15142A047		
Jeschke, Herbert	ML15153B221	Johnson, Vicki Johnson-Hamerman, Lois	ML15153A746
Jessee, Judy			ML15154B518
Jessop, D.	ML15142A059	Johnson-Hamerman, Lois	ML15158A108
Jessup, Nicole	ML15141A763	Johnston, Allan	ML15156A085
Jeude, Shirley	ML15148A917	Johnston, James	ML15148B014
Jeude, Shirley	ML15148A924	Johnston, Judy	ML15156A529
Jezierski, Elisabeth	ML15156A651	Johnston, Susan	ML15140A028
Ji, J.	ML15158A081	Johnstone, Lizette	ML15159A211
Jimenez, Lawrence	ML15156A646	Joines, Aileen	ML15155B014
Jishi, Mazen	ML15154B198	Jolly, John	ML15154B676
Joas, Chris	ML15154A824	Joly, Frederique	ML15159B000
Jobe, Laura	ML15159A001	Jonaitis, Charles	ML15155A024
John, Oda	ML15155B334	Joncus, Andrew	ML15159B411
Johnsen, Harold	ML15153B032	Jones, Alice	ML15155C191

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ones, Andrea	ML15156A991	Kaehler, Linda	ML15155B681
ones, Angie Grosland	ML15153A470	Kaffer, Kathryn	ML15155A765
ones, Avianna	ML15154A828	Kagl, Katharin	ML15156A999
ones, Carol	ML15159B375	Kahigian, Peter	ML15159A915
ones, Charles	ML15160A065	Kahnemundt, Martin	ML15156A119
ones, Dylan	ML15155B960	Kain, Jennifer	ML15141A561
ones, Gary	ML15156B302	Kainz, Carlos	ML15153B054
ones, Ingrid	ML15159A509	Kaiser, Kathleen	ML15154A621
ones, Joshua	ML15154B095	Kaiser, Mark	ML15153A469
ones, Leah	ML15159A473	Kaitis, Kathleen	ML15148B194
	ML15155A727	Kalbac, Mariette	ML15155B781
ones, Libby			
ones, Marie	ML15141A680	Kaler, Jason	ML15148A793
ones, Ronald	ML15154A647	Kalinowski, Catherine	ML15155A641
ones, Roslyn	ML15154A782	Kalinski, Ray	ML15154C094
ones, V. and B.	ML15155A730	Kalka, Paul	ML15156A761
ordan, Archer	ML15154A097	Kalvesmaki, Andrea	ML15153B104
ordan, Lois	ML15162B111	Kameon, Kitty	ML15153B014
ordan, Lois	ML15162B064	Kaminski, Marcia	ML15155B696
ordan, Mark	ML15154B899	Kampa, Jan	ML15154B859
ordan, Scharley	ML15155A715	Kamrath, Henry	ML15148A221
orgensen, Alena	ML15155A087	Kane, Brooke	ML15148A920
orgenson, Linda	ML15140A276	Kane, Jolyne	ML15154B278
orz, Martha	ML15153A387	Kane, Linda	ML15155A378
oseph, Ann	ML15153A811	Kane, Nina	ML15156B449
osselyn, Susan	ML15160A551	Kanee, Shirley	ML15153A517
ourdenais, Richard	ML15154A866	Kanzer, Michaelain	ML15156B176
oy, Deborah	ML15156B107	Kaplan, Kay	ML15148A767
oy, Krista	ML15154A376	Kapphahn, Gregory	ML15154B963
oyce, Joy	ML15155C166	Kapustka, Franklin	ML15155A189
oym, Kat	ML15162A568	Karanjawala, Eric and	
oyner, Jerry	ML15154A780	Armin	ML15148A252
oyner, Marjorie	ML15156B380	Karlow, Edwin	ML15160A657
uba, Anne	ML15156A548	Karls, Kristi	ML15159A860
udge, Patrick	ML15153B153	Karlson, Fred	ML15156A919
uelich, Clarence		Karpel, Janice	ML15156B510
	ML15155A456	•	
uhl, Esther	ML15159A333	Karpel, Ruth	ML15155A041
ulian, Alexis	ML15154A380	Karst, Richard	ML15154C165
umet, Pamela	ML15159B077	Karsten, Annetta	ML15158A072
umonville, J.	ML15141A786	Kasey, C.	ML15154B678
une, Doris S.	ML15155A390	Kask, Pat	ML15159B363
une, Taylor	ML15156A196	Kasper, Sandy	ML15156A994
ungers, Linda	ML15148B447	Kast, Kathy	ML15140A037
un-Morris, Mary Anna	ML15156A798	Kast, Kenneth	ML15154A464
uras, Randy	ML15154B691	Kastner, Margean	ML15155B915
urczewski, Carol	ML15147A727	Katerinsky, Bess	ML15142A172
urgela, Elena	ML15148B433	Kates, Barbara	ML15158A021
urgensen, Catherine	ML15155A167	Katterson, Melissa	ML15155B720
urin, Richard	ML15141A538	Katz, Alissa	ML15155C106
uskowich, Nancy	ML15160A957	Katz, David	ML15155B762
ustice, Kimberly	ML15159B098	Katz, Ronald	ML15154A368
yleen, Ron	ML15156A191	Katz, Sondra	ML15155C110
K., C.	ML15155A352	Kaufman, Mike	ML15154B393
ζ., J.	ML15155B648	Kause, Theresa	ML15155A968

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Kavanaugh, Michael	ML15160A068	Kepley, Janna	ML15159A119
Kaye, Barb	ML15155A592	Kerman, Paul	ML15156A732
Kaye, Jackie	ML15162A588	Kern, Carol	ML15142A246
Kea, Ruth	ML15154A485	Kern, Cynthia	ML15153A613
Keast, Alix	ML15153A845	Kern, Madeleine Fisher	ML15153B247
Keats, James	ML15156A535	Kern, Mark	ML15154B653
Keegan, Helen	ML15159B451	Kerns, Loretta	ML15154A328
Keener, Arlene	ML15156B172	Kerr, Heather	ML15160A989
Keeton, Hank	ML15155A096	Kersey, Donna	ML15153B291
Kegelman, Julia	ML15154C065	Kersting, Pamela	ML15155B675
Kegler, Carol	ML15155B424	Keskitalo, Candace	ML15155B867
Kehl, David	ML15154A670	Kestell, Kathleen	ML15156A212
Keim, Steve	ML15155B491	Keup, Ástrid	ML15156A564
Keiner, Kathryn	ML15153B306	Keylin, Margaret	ML15156B464
Keiser, John	ML15147A751	Keys, Tom	ML15162A216
Keiser, Peter	ML15155A296	Keyser, Donald	ML15141A730
Keiter, Nancy	ML15156A979	Khan, Zohal	ML15140A150
Keitz, Jennifer	ML15155A687	Khoury, Donna	ML15153B273
Keller, Brandon	ML15155A243	Khoury, Valentina	ML15160A561
Kellermann, Thomasin	ML15140A197	Kibbe, Carolyn	ML15153B059
Kelley, Marci	ML15156B379	Kibbel, Kathi	ML15140A122
Kelley, Pat	ML15148B097	Kiel, G. Kendall	ML15155A760
Kelley, Ruth	ML15160A524	Kielman, Laura	ML15140A185
Kellndorfer, Emily	ML15140A291	Kienzle, Sandy	ML15156A714
Kelly, Bev	ML15142A023	Killion-Mottola, Brittani	ML15142A187
Kelly, Brian	ML15160A651	Kimatian, III, George	ML15156A285
Kelly, Gordon	ML15153B259	Kimball, Larry	ML15148B248
Kelly, Joe	ML15148B357	Kimmel, Gailmarie	ML15155A336
Kelly, Kevin	ML15142A358	Kincaid, Karen	ML15162B089
Kelly, Kevin	ML15154C112	Kincaid, Karen	ML15162B136
Kelly, Lisa Ann	ML15154C013	Kindel, Karen	ML15158A279
Kelly, Lisa Ann	ML15155A269	King, Alex	ML15155C108
Kelly, Lucy	ML15159A906	King, Barbara	ML15140A002
Kelly, Stephen	ML15148B378	King, Ben	ML15156B337
Kelly, Theresa	ML15153B105	King, Carol	ML15142A046
Kelly, Theresa	ML15154A814		ML15161A630
	ML15154C243	King, Christine King, Judith	ML15155A648
Kelman, Barry Kelebaimar, Eliaa			
Kelsheimer, Elise	ML15155A527	King, Justine	ML15158A062
Kelso, Carolyn	ML15156B196	King, Kathleen	ML15155B205
Kemnitzer, David	ML15155A736	King, Kim	ML15154A645
Kempf, William	ML15162A732	King, Ryan	ML15153A514
Kemple, Jason	ML15153A521	King, Terry	ML15154B130
Kenagy, David	ML15155B399	King, Tiffany	ML15155A081
Kendall, Donna	ML15154A180	King, Travis	ML15159B495
Kendy, Arthur	ML15155A383	Kinkaid, David	ML15142A162
Kenion, Lisa	ML15155B831	Kinney, Douglas	ML15159A235
Kennedy, Katya	ML15141A727	Kinzer, Thelma	ML15155A476
Kennedy, Sara	ML15155B193	Kirby, Yvonne	ML15154A613
Kennedy, Sarah	ML15142A194	Kirchner, John	ML15154C300
Kenney, Pat	ML15156A455	Kirk, Brian	ML15153A504
Kennington, Janet	ML15155A813	Kirk, Dorothy	ML15142A135
Kenny, Bonnie	ML15156B453	Kirk-Leach, Cheryl	ML15156A042
Kenny, Paula	ML15155C213	Kirkpatrick, Jim	ML15148B224
Keough, Maurene	ML15159A144	Kirschbaum, Saran	ML15148A753

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Kirshbaum, Adrienne	ML15155C032	Knight, Bobbie	ML15148B365
Kirsling, Mary Ann	ML15148B128	Knight, David	ML15155B005
Kish, Betty	ML15140A107	Knight, E. M.	ML15155C042
Kisinger, Ed	ML15154C072	Knight, Haven	ML15156B459
Kisner, Al	ML15159A708	Knight, Julia	ML15142A268
Kiss, Suzanne	ML15141A659	Knight, Tina	ML15155B469
Kisselburg, Desiree	ML15148B021	Knights, Lindsay	ML15154B790
Kistler, Andrew	ML15156A715	Kniola, Marjorie	ML15153B086
Kite, Richard	ML15154B878	Knoblock, Glenn	ML15140A247
Kittle, Pat	ML15140A014	Knodel, Henry	ML15154B931
Kitzinger, Jana	ML15159B522	Knoll, Carolyn	ML15155A670
Kiva, Jo Ann	ML15159A223	Knoll, Julie	ML15155B072
Kiver, Eugene	ML15154A022	Knorr, Carl	ML15142A198
Klasey, Janet	ML15154B091	Knuteson, Mary	ML15155A401
Klausing, Michael	ML15141A710	Knutson, Dana	ML15156A695
Klauss, Mike	ML15159B254	Kobayashi, Hugo	ML15154C155
Klebl, Susan	ML15142A143	Kobayashi, Hugo	ML15161A665
Kleckler, Jan	ML15160A832	Kobayashi, Kate	ML15155A795
Klefbeck, Randal	ML15155B693	Kobylarz, Denise	ML15153B170
Klein, Chuck	ML15148A991	Kocer, John	ML15154C162
Klein, Daniel	ML15155B964	Koch, Aaron	ML15155A372
Klein, J.	ML15141A790	Koch, Joann	ML15148A918
Klein, Linda	ML15160A831	Koch, John	ML15140A154
Klein, M.	ML15147A723	Koch, Peter	ML15160A075
Klein, M.	ML15153A331	Koch, Veronica R.	ML15162A708
Klein, Reinhard	ML15148B386	Koeller, David	ML15154A130
Klein, Robert	ML15155C002	Koenig, Georgia	ML15154A706
Klein, William	ML15153A734	Koeninger, Laura	ML15155C087
Klemm, Marcine	ML15155A326	Koessel, Karl	ML15153A812
Klemm, Marcine	ML15155B263	Kofler, Michelle	ML15156A051
Klemm, Marcine	ML15159B121	Kogan, Richelle	ML15153A795
Klempin, Serena	ML15155B406	Kohlenburg, Lindsey	ML15159B409
Klepek, Lisa	ML15140A232	Kohlet, Robin	ML15155A316
Klerer, Leona	ML15148A167	Kohn, Carolyn	ML15156B489
Klessig, Young	ML15158A028	Kohn, Laura	ML15154C158
Kliche, Diana	ML15148A961	Koiv, Ulle	ML15142A312
·			ML15142A512 ML15155B494
Kliche, Diana	ML15154A804 ML15154B671	Koivisto, Ellen	ML15155B494 ML15148A269
Klimovitz, Joseph		Kokaly, Atheer	
Kline, Danny	ML15154C277	Kokett, Kim	ML15153A756
Klingston, Karen	ML15156A677	Kokkonen, Donald	ML15155B068
Klinkovskaya, Irina	ML15148A994	Kolakosky, Linda	ML15156B248
Klipfel, George	ML15156B332	Kolassa, Michael F.	ML15153A769
Klock, William	ML15153A751	Kolbe, Ken	ML15154B832
Klohck, George and		Kolbe, Tiffany	ML15155B064
Vargaret	ML15155A514	Kolek, Brian	ML15159B520
Klubek, Vic	ML15155B325	Koles, Barbara	ML15154A909
Klugiewicz, Mark	ML15155B748	Kolessar, Joan	ML15154B683
Kluhsman, Holly	ML15155B573	Kollasch, Michelle	ML15154B926
Klump, Ted	ML15162A658	Kolodji, Yelena	ML15153A796
Knapton, Alex	ML15154B102	Kolodziejczyk, Dorota	ML15159B543
Kneedler, William	ML15155B726	Kolter, Art	ML15154C113
Kneeland, Leslie	ML15156A602	Komar, Delores	ML15154B096
Kneibert, Walter	ML15155A711	Komin, Tatyana	ML15148B252
Kniffin, Margaret	ML15154B656	Konczal, Eddie	ML15159A373

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Konrad, Martin	ML15140A246	Krueger, Marjorie	ML15155C075
Koo, Rebecca	ML15155B986	Krueger-Cunningham,	
Koopman, Patricia	ML15154A939	Cosima	ML15155C065
Kopp, Isabel	ML15162A546	Kruggel, Thomas	ML15162A133
Kordes, Maria	ML15159B498	Krupinski, K.	ML15154B861
Kormann, Carollina	ML15153A573	Kruppa, Muriel	ML15155B324
Korn, Sandra	ML15148B185	Kruszynski, Yasiu	ML15155B256
Kornet, Christine	ML15154A196	Krygowski, Richard	ML15141A508
Kosak, Donald	ML15156A232	Kryshak, Walter	ML15141A756
Kosar, Rebecca	ML15159A400	Ku, Michelle	ML15154A491
Koschmeder, Teresa	ML15155B936	Kubik, Jerry	ML15155A286
Kosec, Dawn	ML15159B067	Kubik, Jerry	ML15156A872
Kosmark, Mary	ML15148B366	Kubzdela, Kashka	ML15148B388
Koss, Joyce	ML15142A124	Kucewicz, Leo	ML15159A541
Koster, Philip	ML15154C027	Kuchera, Steve	ML15160A898
Kostis, Steven	ML15156A011	Kuckel, Charles	ML15148A996
Kotch, Brant	ML15154A901	Kucynski, Ron	ML15155A025
Kotsis, Eleni	ML15162A088	Kuczynski, Kathleen	ML15155B920
Kouba, Nadine	ML15160A520	Kuestner, William	ML15142A165
Kouzel, Lynn	ML15155B943	Kugler, Terri	ML15154C046
Kovac, Charles	ML15155A472	Kugler, Terri	ML15154C040
			ML15155A818
Kovacs, Jacqueline	ML15148A195	Kuhlman, Lewis	
Kovacs, Natalie	ML15158A085	Kuhn, Gerald	ML15153A390
Koven, Thomas	ML15160A086	Kuhn, Kerry	ML15155A626
Kovich, Jenni	ML15142A064	Kuhn, Marty	ML15159A132
Kowalewski, Douglas	ML15159A167	Kuhnel, Kathie	ML15148B179
Krajewski, Barbara	ML15159A059	Kuhns, Doris	ML15158A050
Kral, Suzanne	ML15142A317	Kukkonen, Holly	ML15153B176
Kramer, Andrew	ML15155B362	Kuncl, Janet	ML15155B065
Kramer, Dorine	ML15155B950	Kundrot, Kenneth	ML15154B566
Kramer, Gavin	ML15142A092	Kunkler, Scott	ML15153A433
Kramer, Kelly	ML15153A424	Kunz, Darleen	ML15148B389
Kramer, Lauren	ML15155C238	Kunz, James	ML15162A104
Kramer-Smith, Lara	ML15153B210	Kunz, Ray	ML15141A532
Krasnoff, Joshua	ML15148A776	Kuppler, Curtis	ML15159B283
Krause, Al	ML15148B120	Kuri, Joseph	ML15155A349
Krause, Doug	ML15154B311	Kurowski, Lois	ML15153B074
Krause, Karen	ML15155A102	Kurtz, Christy	ML15141A627
Krause, Susan	ML15142A032	Kurtz, Kevin	ML15160A838
Krause, Susan	ML15158A173	Kurtz, Maya	ML15162B042
Krause, William	ML15155B608	Kurtz, Maya	ML15162B096
Kreitz, Cynthia	ML15153B209	Kurucz, Laszlo	ML15162A429
Krenz, Donna	ML15155A898	Kurz, Richard	ML15159A064
Kreutzjans, Viv	ML15154A601	Kurzweil, Andrew	ML15155A255
Krewson, Caroline	ML15160A741	Kusick, Paul	ML15153B276
Krider, Sherry	ML15153B187	Kuykendall, Ron	ML15148A649
Kring, Juli	ML15156A538	Kuznier, Janys	ML15154B990
Krinsky, William	ML15160A798	Kwitt, Michael	ML15154B747
Kriss, Evan Jane	ML15153A714	Kyse, Barbara	ML15154C219
Kristy, Joseph	ML15155B886	L., Candace	ML15142A024
Kroeger-Mappes, Joy	ML15158A131	La Fleur, Gloria	ML15154A121
Krouchick, Jennifer	ML15159B496	La Forgia, Tony	ML15159A555
Krouse, Mike	ML15153A834	La Lone, Darrell	ML15153A870
Krueger, David	ML15160A582	La Mont, Sandra	ML15159A557

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La Paglia, Claudia	ML15160A056	Landau, Larry	ML15156A015
La Pointe, Drena	ML15154B802	Landeo, Eva	ML15155B707
La Pointe, Keith	ML15155A589	Landess, Michael	ML15142A161
La Rocca, Isabella	ML15142A322	Landgrebe, Gary	ML15155C049
La Serra, Stephen	ML15148B332	Landi, Barbara	ML15155B159
Lab, Michael	ML15159A463	Landry, Connie	ML15159A314
Labb, Deborah	ML15153A729	Landskron, David	ML15156A531
Labrie, Michele	ML15141A615	Lane, N. Jo	ML15155B103
Lacas, Turner	ML15154B677	Lane, Patricia	ML15156A678
Lacey, Pamela	ML15155B836	Lanehart, Rheta	ML15148B238
₋aclair, Gary	ML15154A055	LaNew, Maryann	ML15155A181
_acognata, Dale	ML15154B110	Lang, Lynn C.	ML15162A639
_acroix, Catherine	ML15148B307	Lange, Charles	ML15160A877
_add, Karen	ML15154B270	Lange, Eva	ML15155A793
_adouceur, Alain	ML15155C056	Langelan, M.	ML15154C030
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_afond, David J.	ML15156B191	Langford, Lora	ML15154C251
_afrance, Roberta	ML15156B246	Langmacher, Linda	ML15161A699
_aGasse, Jeffrey Paul	ML15154B980	Langston, Michele	ML15159A849
_agerberg, Rose	ML15154B848	Lanni, Phil	ML15155A234
_agrone, Amy	ML15141A711	Lanus, Howard	ML15156A945
_aieski, Caleb	ML15198A122	Lanzl, Catherine	ML15153B133
_aieski, Caleb	ML15162A099	LaPorte, Candace	ML15155A882
_aik, Judith	ML15155B080	Large, Daniel	ML15148B401
_aine, Alexis	ML15156A202	Large, Kenneth	ML15159A668
_aird, Jim	ML15156A899	Larkin, Timothy	ML15141A560
_aitinen, Carol	ML15158A032	Larmee, Kimberly	ML15155A693
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_akebrink, Joan	ML15154B749	Larrick, Margaret	ML15160A959
_akin, Charles	ML15155B579	Larrison, Elizabeth	ML15155A827
_akosil, Joanne	ML15154B135	Larsen, Karen	ML15155A481
_aliberte, Kevin	ML15155A820	Larson, Fran	ML15159A813
₋am, Ofelia	ML15141A733	Larson, Al	ML15156A017
amadrid, Irina Golda	ML15148A612	Larson, Brian	ML15140A148
₋amaster, Gary	ML15155B988	Larson, Dan	ML15142A053
₋amb, Diane	ML15141A511	Larson, Dene	ML15142A146
amb, Leslie	ML15148A981	Larson, Marguerite	ML15156B269
_ambert, John	ML15159A348	Larson, R. A.	ML15153A486
_ambert, Leanna	ML15154C122	Larson, Wendy	ML15155B170
_ambert, Mark	ML15154A533	Lash, Cal	ML15141A768
_ambert, Rene	ML15154B476	Lashinski, Amy	ML15141A686
_ambert, Rob	ML15140A115	Laskas, Carol	ML15155A059
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_ammers, Jon	ML15155B864	Lasorsa, Maria	ML15156A237
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_ampkin, Olga	ML15158A038	Lattanzia, Patricia	ML15153B102
_amson, Gary	ML15148A937	Lau, E.	ML15162A386
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Land, David	ML15154B813	Laughlin, Dawn	ML15154A048
Land, Martha	ML15154C206	Laughon, Char	ML15154A291
₋andau, Douglas	ML15156A044	Laurent, Thouvenin	ML15155C089

Commenter Lauritsen, Maryann Lauritsen, Nancy Lausz, Emilia Lavancher, John Laves-Mearini, Courtney	Accession # ML15162A622 ML15159B055 ML15159A032	Commenter Legault, Robert Leggett, Robert	Accession # ML15159A375
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avancher, John		Lehman, Loretta	ML15154C296
	ML15148A884	Lehr, Doris	ML15156B208
	ML15148B312	Leibowitz, Arthuir	ML15154B449
avin, Chris	ML15159A076	Leidi, Angelo	ML15156B070
awler, John	ML15154A546	Leidig, Charles	ML15156A158
awler, Karen	ML15154C262	Leighton, Rona	ML15148A857
awler, Ruth	ML15156A198	Leihy, Susan	ML15159A864
awrence, Andrew	ML15158A101	Leinbaugh, Tracy	ML15156A841
awrence, Betty	ML15156A481	Leising, Norma	ML15153A773
awrence, David A.	ML15141A507	Leiva, Miranda	ML15155A120
awrence, Geoffrey	ML15141A708	Leland, Lora	ML15156B484
awrence, Rhett	ML15159A920	Lemire, Mary	ML15155A448
awrence, Robert	ML15154B870	Lemkuil, Rita	ML15142A259
awrence, Vinnedge	ML15154B596	Lemmie, Charmaine	ML15156A038
awson, Ken	ML15160A577	Lemoine, Kathryn	ML15141A585
₋awyer, Julie	ML15141A766	Lenchner, Nicholas	ML15153B299
₋axier, Scott	ML15153A583	Lenhart, Beth	ML15148A199
₋ayfield, Elizabeth	ML15162A725	Lennick, Brendalee	ML15154A409
ayman, William	ML15154B295	Lensenmayer, Kathleen	ML15148B058
azio, Rochelle	ML15154C163	Lensi, Philip	ML15159A720
each, Brandi	ML15155B745	Lent, Kelli	ML15141A626
each, Jason	ML15154B807	Lentini, Tony	ML15148A905
eahy, Susan	ML15148B205	Lenz, Andrew	ML15154A104
eake, Barbara	ML15155B682	Lenz, Carolyn	ML15155B098
eatto, Renne	ML15142A126	Lenzen, Pat	ML15156A780
ebaron, Pat	ML15162A636	Lenzen, Pat	ML15156A802
_ebert, Mary	ML15154B978	Leo, Carlos	ML15154B902
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eclair, Peg	ML15162A268	Leon, Elizabeth	ML15160A783
edbetter, Carolyn	ML15156B255	Leonard, Cami	ML15159B368
edden, Dennis	ML15156A156	Leonard, Esther	ML15156A951
edder, Janet	ML15154B625	Leonard, Fred	ML15156B482
ederman, Jessica	ML15159B563	Leonard, Joan	ML15154B774
ee, Aldora	ML15154C051	Leonardo, Sherry	ML15154A213
ee, Audrey	ML15154A448	LePere, Renee	ML15148A952
ee, Barb	ML15159A837	Leppo, Bob	ML15156A498
ee, Brenda	ML15153B260	Lepre, Brenda	ML15159B238
ee, Christopher	ML15154C130	Lerner, Pauline	ML15155C083
ee, Cynthia	ML15156B441	Lesem, Ken	ML15159A315
ee, David	ML15156A866	Leske, Jim	ML15141A720
.ee, E. R.	ML15156A264	Leslie, J. Allen	ML15158A043
ee, Jerry	ML15154C160	Leslie, Jane	ML15140A117
ee, Madeleine	ML15142A376	Leslie-Dennis, Donna	ML15154C028
ee, Richard	ML15148A278	Lester, Lisa	ML15153B300
ee, Robert	ML15154B582	Leszczynski, M.	ML15160A045
ee, Virginia	ML15154A346	Leto, Bogdana	ML15156B187
eeman, Cavin	ML15154B348	Leton, Sharon	ML15154B688
eeuw, Lyn	ML15159A127	Leton, Sharon	ML15154B693
_eff, Michele	ML15159A127 ML15142A057	Letsche, Debbie	ML15154A161
effler, Scott	ML15154C026	Leva, Dana	ML15159B133
₋efler, Susan ₋egaroff, Kyra	ML15153B192 ML15153B044	Levant, Mary Levecchia, Naomi	ML15159A460 ML15153A968

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Levin, Shaun Marie	ML15162B089	Lightbody, Kristen	ML15153B237
Levin, Shaun Marie	ML15162B135	Lightfoot, Paul	ML15162A591
Levin, Susanna	ML15159A117	Lighthall, Tim	ML15155B432
Levine, Adam	ML15155B998	Likens, Jessica	ML15158A222
Levine, Beth	ML15154B317	Liles, Ben	ML15141A761
Levine, Christy	ML15158A177	Lilienkamp, Bryan	ML15140A187
Levine, Lynn	ML15154C271	Lillard, Cecelia	ML15153B058
Levine, Rhoda	ML15158A013	Lilli, Joseph	ML15154A938
Levine, Sandy	ML15154A413	Lillian, Michael	ML15141A700
Levine, Susan	ML15153A774	Lilvingston-Dunn, Connie	ML15154A210
_evinzon, Paulina	ML15159A021	Lim, Yee Yean	ML15162A363
_evy, Robert Brian	ML15148B218	Limpert, Rosanna	ML15158A287
_evy, Stephen	ML15160A873	Linarez, Kj	ML15156B094
Lewandoski, Nancy	ML15155A122	Lincoln, Deb	ML15156A792
Lewandowski, Michael	ML15156A907	Lincoln, Deb	ML15156B421
Lewis, Andrea	ML15156B397	Lincoln, Sarah	ML15154B906
Lewis, Brenda	ML15155B302	Lind, Gordon	ML15148B040
Lewis, Daniel	ML15154A436	Linden, Steven	ML15158A273
_ewis, Deborah	ML15155B911	Linden, Susan	ML15154A878
Lewis, Debra	ML15148B321	Linden, Susanne	ML15148A860
Lewis, George	ML15141A639	Lindenbacher, Dany	ML15155B281
Lewis, Jan	ML15140A175	Lindenberger, Stewart	ML15154A353
Lewis, Joan	ML15155A337	Lindhard, Peter	ML15154A387
Lewis, Jordan	ML15153B028	Lindhorst, Gerald	ML15154B210
Lewis, Kathleen	ML15148A233		ML15155B841
		Lindquist, Erin	
Lewis, Larry	ML15155A040	Linell, Tom	ML15159A742
Lewis, Marvin	ML15155B835	Lines, Nancy	ML15155B410
_ewis, Melia	ML15159A347	Linhart, June	ML15162A734
Lewis, Paul	ML15156A135	Lininger, Betty	ML15155B392
Lewis, Pravin	ML15154A324	Linsky, Richard	ML15155B540
Lewis, Pravin	ML15159A792	Linzmeier, Robert	ML15141A512
Lewis, S.	ML15142A211	Lipari, Philip	ML15154A695
_ewis, Shawn	ML15155A037	Lipcsey, Todd	ML15154B862
Lewis, Sherman	ML15153A958	Lipman, Elizabeth	ML15155B673
Lewis, Sherry	ML15155B351	Lippert, Amy	ML15160A882
Lewis, Verlene	ML15155B809	Lippert, Tim	ML15140A118
Leyendecker, Billie	ML15154B041	Lippmann, Becky	ML15156A734
Lezotte, Eric	ML15155A625	Lippold, Earl	ML15141A698
Libansky, Dada	ML15156A060	Lipscomb, Emmett	ML15153A725
Libbares, Georgia	ML15155A757	Lipsky, Carol	ML15155B430
Libby, Dominic	ML15154C107	Lira, Stefon	ML15154B731
Libengood, Patricia	ML15156B457	Lis, Vera	ML15159A220
Libson, Aaron	ML15155C088	Lish, Christopher	ML15211A047
Lichtenberg, Don	ML15153B122	Liss, Mary	ML15147A772
Lidicker, Naomi	ML15154B643	Liszak, Jerry	ML15155A455
Liebermann, Jerry	ML15159A048	Liszeo, Barbara	ML15153A970
Liebowitz, Virginia	ML15156A096	Litteken, Sister Clare Ann	ML15159B302
Liedike, Robert	ML15153B123	Little, Judith	ML15148A169
Lieme, Patricia	ML15162A543		ML15146A109 ML15155C045
		Little, Robyn	
Liesche, Ken	ML15154A338	Liu, Mini Lively, Nepey Zeilig	ML15155A265
Liesemer, Kirk	ML15154A789	Lively, Nancy Zeilig	ML15154A549
Liess, L. M.	ML15148A648	Livesey-Fassel, Elaine	ML15154A397

<b>A</b> .	ADAMS	• · ·	ADAMS
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_ivingston, C. J.	ML15154C069	Lotito, Mark	ML15158A020
ivingston, Deborah	ML15148A870	Lottes, Ilsa	ML15153B065
_ivingston, Elaine	ML15154A392	Lotz, Elizabeth	ML15156A874
_ivingston, Michelle	ML15154B029	Loughlin, Mary	ML15141A724
₋izer, Deja	ML15156A875	Louis, Jamie	ML15155B271
Lloyd, B.	ML15155A303	Lovely, Michael	ML15155C011
_loyd, Janet	ML15153A711	Lovitch, Derek	ML15154B890
_ochner, Kathy	ML15154C269	Low, Sammy	ML15154C215
Locicero, Jessica	ML15154C024	Lowans, Jennifer	ML15155B695
Lockett, Jennifer	ML15155B815	Lowden, Barbara	ML15155C063
Lockwood, Brian	ML15156A218	Lowe, David	ML15155A093
Lockwood, Michael	ML15153A655	Lowe, Jacklyn	ML15159A518
Lockwood, Ronald	ML15148B324	Lowe, James	ML15148B404
_oe, Steve	ML15156A175	Lowe, Margot	ML15160A816
Loeber, Charles	ML15148A837	Lowe, Rob	ML15159B382
_oeblich, Elizabeth	ML15156A671	Lowell, Meryl	ML15155B774
Loewy, Cynthia	ML15155A387	Lowenthal, Steven	ML15155C096
Loftin, Nancy	ML15156A018	Lowery, Candice	ML15159A006
Lofton, Saab	ML15159B014	Lowery, Chuck	ML15148B078
Lofurno, Susan	ML15153B124	Lowery, Joanne	ML15154B713
Lohman, James	ML15148B096	Lowes, Jane	ML15156A689
Lohr, Krista	ML15155A136	Lowney, Kathleen	ML15148B124
Loizides, Thomas	ML15156B324	Lowther, Joni	ML15156A960
Lombardi, R.	ML15155B642	Lowther, Larry	ML15156A706
Long, Deborah	ML15154B123	Luban, Holly	ML15148B140
Long, Jared	ML15153A986	Lubin, Stephen	ML15153A720
Long, Jennie	ML15153B240	Lubonovich, D. J.	ML15154A117
Long, Laura	ML15159B383	Luca, Joe	ML15161A687
Long, Leland	ML15162B079	Lucas, Adeline	ML15154B516
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Long, Nancy	ML15156A845	Luck, Patricia	ML15156A460
Long, Robert	ML15148B056	Luckett, Rosemary	ML15153A779
Loomis, Adam	ML15154C052	Ludington, Byron	ML15154B003
Loomis, Gregry	ML15153A899	Ludwick, Russ	ML15155A594
Loomis, Margaret	ML15154C123	Lueck, Donna	ML15159B239
Loomis, Rea Ann	ML15156B017	Lukas, James	ML15156A136
Loomis, Virpi	ML15155A069	Lulias, Eva	ML15156A740
Looney, Ernie	ML15140A038	Lunceford, Diana	ML15154B432
Looney, Hannah	ML15155B978	Lund, Deva	ML15159A761
Loosli, Edward	ML15155A810	Lundgren, Mike	ML15159B348
Lopez, Josie	ML15162A389	Lundgren, Roger	ML15155A541
Lopez, Josie Lopez, Laura	ML15148A700	Lundholm, Mark	ML15156A896
Lopez, Maria Sune	ML15155A598	Lundin, Anne	ML15148A992
Lopez, Ralph	ML15153B257	Lundin, Annmari	ML15141A622 ML15160A680
Lopez, Randy	ML15140A104	Lupenko, Andy	
Lopez, Vince	ML15162A092	Lupo, Jack	ML15160A537
Lopez-Hagan, Nicole	ML15154A427	Lupori, Stacy	ML15159A650
Loquvam, Mary	ML15148A727	Lusch, Mark	ML15154C131
Lorber, Deadre	ML15159A113	Lustgarten, Annette	ML15155B239
Lorenz, Gerald	ML15153A836	Lutes, Stephen	ML15159B581
Lorenz, Philip	ML15153A647	Lutman, Jeri	ML15155A427
Lorenzo, Anne	ML15162B101	Luttmann, Rick	ML15154C185
Lorenzo, Anne	ML15141A701	Lydy, Theresa	ML15154B214
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Lyman, Mike	ML15154A724	Madole, Richard	ML15153B197
ynch, Athena	ML15154A732	Madoshi, Diana	ML15148B219
Lynch, Charles	ML15154A622	Madrid, Jade	ML15161A633
Lynch, Lisa	ML15160A588	Madruga, Philip	ML15148B072
Lynch, Tifni	ML15154A447	Madson, Erin	ML15159B084
Lynch, W.	ML15148B069	Maestro, Betsy	ML15148A945
Lynn, Andy	ML15154B650	Magalas, Marie Christina	ML15155B357
Lynn, Pamela	ML15159A448	Magallon, Katie	ML15154B305
Lynn, Sandra	ML15154B220	Magallon, Katie	ML15159A515
Lynne, Sandra	ML15155A341	Magana, Maria	ML15155B203
Lyon, Ángela	ML15155A083	Magann, Gale	ML15154A090
Lyon, Marsha	ML15153B241	Magdalene, Lilithe	ML15153A621
Lyons, Pamela	ML15155A768	Magee, Dan	ML15153A584
Lyons, Tracy	ML15142A222	Maghakian, Michael	ML15154B738
Lyson, Valerie	ML15162A515	Magill, Bob	ML15141A769
Lytle, Denise	ML15162A674	Magliola, Lawrence	ML15159B422
M., Ann	ML15154A662	Mahaux, Sylviane	ML15154A004
M., N.	ML15155A914	Maher, Timothy	ML15159A110
Maar, Sandra	ML15156B502	Maher, Jane	ML15159A853
Mac Cormick, Margarida	ML15142A128	Maher, Therese	ML15141A434
Macarthur, Jacquelyn	ML15155A597	Mahnken, Jody	ML15160A743
Macbride, David	ML15153A917	Mahoney, Mary	ML15153A382
Macconaugha-Snyder,	WE TO TOOKS IT	Mahoney, Rita	ML15159B506
Morgan	ML15162B064	Mahoney, Robert S.	ML15155A210
Macconaugha-Snyder,	WE 10 1020004	Mahood-Jose, Eileen	ML15159A310
Morgan	ML15162B109	Maida, Cecilia	ML15156B400
Macdonald, Angus M.	ML15156A605	Maier, Patricia	ML15154B961
Macdonald, David	ML15153A953	Maijala, Ann	ML15159A984
Macdonald, Ethel	ML15158A270	Maitre, Florian	ML15154A322
Macdonald, John	ML15156A109	Maitre, Florian	ML15154A329
MacDonald, John	ML15159A807	Makowski, Jane	ML15154C011
Macdonald, Leo		Malcher, Luiz	ML15156A077
	ML15160A738	Malcolm, Karen Kravcov	
MacGregor, Mary	ML15154A047		ML15156B503
Mack, Joanne	ML15155B058	Maldonado, Emily	ML15159B535
Mackelvie, Elizabeth	ML15156A206	Maldonado, Jackie Maleckaite, Vaida	ML15159A816
Mackenzie, Michelle	ML15156A921		ML15155C031
Mackie, Judie	ML15155B459	Malerman, Rina	ML15153B067
Mackin, Richard	ML15147A712	Maley, Michael	ML15148A931
Mackison, George	ML15156B391	Malinauskas, Helen	ML15155B114
Mackrell, Chris	ML15154B707	Malka, Ben	ML15154A721
Maclaren, Malcolm	ML15154A703	Mallatt, Paul	ML15148B279
Macleman, Linda	ML15154A400	Malone, Peggy	ML15156A131
Macomber, Jessica	ML15156A435	Malpass, Betsy	ML15154B739
Macomber, Paul	ML15155A060	Malsheimer, Fran	ML15148A587
Macquarrie, Robert	ML15154B326	Malyon, Hilary	ML15155B974
Macraith, Bonnie	ML15142A031	Mamoyac, Joy	ML15155B076
Macy, Michelle	ML15156B180	Man, Cave	ML15140A000
Macy, Rene	ML15154A062	Manchester, Austin	ML15155A409
Maddlone, Claire	ML15162A100	Mancini, Jayme	ML15159B419
Maddox, Eva	ML15155A726	Mancuso, Erica	ML15159B294
Maddux, Daniel	ML15154B874	Mandeville, Helen	ML15154A471
Madeco-Smith, Mary	ML15158A275	Mangan, Lori	ML15158A281
Madera, Christina	ML15155C178	Mangrum, Deborah	ML15155A224
Madero, Mario	ML15160A074	Mangus, Tracey	ML15154A626

Commerter	ADAMS	Commenter	ADAMS
Commenter Michaeland	Accession #	Commenter	Accession #
Manion, Michaelene	ML15140A022	Marsh, Heather	ML15153A505
Manley, Marjorie	ML15154B844	Marsh, William	ML15154C212
Mann, C.	ML15155B930	Marshak, Judy	ML15154B883
Mann, Paul	ML15153A494	Marshall, Ann	ML15148B167
Mann, Renee	ML15148B049	Marshall, Cynthia	ML15153A549
Manning, Jennifer	ML15156A924	Marshall, Edna	ML15153A622
Manning, Patsey	ML15141A643	Marshall, Laurie	ML15159A425
Manning, Robert	ML15153A848	Marshall, LaVern	ML15155C121
Mannsfeld, Bjoern	ML15154A816	Marshall, Lisa	ML15159A225
Manroe, Beverly	ML15156B072	Marshall, Rich	ML15154C201
Manscill, Kitty	ML15148A909	Marshall, Sally	ML15159A168
Mansfield, Lynn	ML15142A091	Martens, Bill	ML15154A188
Manter, Larry	ML15155A026	Martin, Barbara	ML15154A829
Manyak, Rebecca	ML15141A707	Martin, Ben	ML15162A659
Manzini, Dulce	ML15159B329	Martin, Candice	ML15156B351
Maraldo, Mario	ML15155A100	Martin, Drew	ML15154C257
Marancik, David	ML15153B049	Martin, Elisabeth	ML15142A243
Marbach, Terry	ML15159B039	Martin, Emilie	ML15153A789
Marburger, Craig	ML15155A707	Martin, Gerry	ML15155B890
March, Mark	ML15155C102	Martin, Gregory	ML15154B805
Marchand, Babs	ML15154A081	Martin, Helen	ML15155B626
Marchand, Ginette	ML15141A446	Martin, Jeanne	ML15153B201
	ML15159B365	Martin, Julie	ML15151530201 ML15141A502
Marchello, Linda			
Marchessault, Michael	ML15156A880	Martin, Linda	ML15153A759
Marckini, David	ML15153A942	Martin, Marsha	ML15155C161
Marco, Stephanie	ML15159B421	Martin, Melissa	ML15155C046
Marcus, Janice	ML15147A730	Martin, Melodie	ML15140A250
Marcus, Martin	ML15159A152	Martin, Patrick	ML15156B347
Marcus, Mel	ML15142A267	Martin, Raymomd	ML15154A235
Marczak, Holly	ML15142A311	Martin, Sherri	ML15160A586
Margeson, Don	ML15154A067	Martin, Sue	ML15141A603
Margulies, Lee	ML15147A779	Martine, Gurinet	ML15159A838
Margulis, Kathleen	ML15155B499	Martinez, Claudia	ML15153A915
Marivn, Cindy	ML15154A333	Martinez, Janie	ML15159B217
Marjoncu, Daniel	ML15155A453	Martinez, Keiko	ML15159B290
Mark, Bernard	ML15148B182	Martinez, Lorraine	ML15158A242
Markgraf, Steven	ML15155B012	Martinez, Michele	ML15155A365
Markham, Gary	ML15154B992	Martinez, Priscilla	ML15155B975
Markham, John	ML15154A211	Martini, Carol	ML15159A811
Markham, John	ML15155B838	Martini, Denise	ML15155C038
Markillie, Paul	ML15141A793	Martinotti, Silvia	ML15160A846
Markowitz, John	ML15140A225	Martinson, Patsy	ML15154B973
Marks, Luan	ML15155B002	Marton, Dennis	ML15162A623
Marks, Richard	ML15154A094	Maryanski, Joseph	ML15155A709
	ML15160A645	Maryanski, Joseph Mascarin, Paula	ML15159B303
Markson, Craig			
Marlowe, Denise	ML15160A079	Maseduca, Heidi	ML15148A594
Maron-Friend, Judie	ML15142A184	Maselli, June	ML15154A793
Marotta, Tracy	ML15148B364	Masi, Janie	ML15155A958
Marquis, Luke	ML15142A030	Maslanek, Michael	ML15154A540
Marr, Betty	ML15148A797	Mason, Elliot	ML15155A855
Marrone, Vito	ML15141A745	Mason, Jackie	ML15156B508
Marsden, Jim	ML15155A121	Massa, Alison	ML15140A235
Marsh, Dorothy	ML15159A596	Massar, Marc	ML15153A728
Marsh, Susan	ML15159A755	Massar, Marc	ML15153B242

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Masse, Kierstin	ML15155B685	Mazuji, Nasrin	ML15153B134
Massey, Carolyn	ML15154B701	Mazza, Penelope	ML15159A671
Massey, Carolyn	ML15155B609	Mazzola, Lisa	ML15156A227
Massey, Linda	ML15154B882	Mazzotta, Gaetano	ML15154B023
Massman, John	ML15159A010	Mazzuca, Dale	ML15142A319
Masters, Stanley	ML15155A287	Mazzuca, Rich	ML15153A798
Mastri, Francis	ML15155C218	Mc Allister, Jean	ML15155B624
Masurat, Gerry	ML15154A433	Mc Dermott, Ethna	ML15156A125
Matheny, Kent	ML15158A087	Mc Intyre, Nancy	ML15154A123
Matheny, Vicki	ML15153B236	Mc Neill, Norma	ML15156B517
Mather, Elizabeth	ML15148B217	Mcafee, Al	ML15159B333
Mather, Natalie	ML15148A864	Mcalister, Suzann	ML15155B858
Matheson, Jen	ML15153A348	Mcarrell, Bianca	ML15159B533
Mathews, Holger	ML15142A239	McBride, Timothy	ML15153A355
Mathews, L.	ML15159A628	Mccabe, Elaine	ML15147A725
Mathews, Mary	ML15159A877	Mccabe, Kathleen	ML15154B040
Mathews, Peter	ML15154B917	Mccalister, Janet	ML15154B136
Mathews, William	ML15153A936	Mccall, Ann	ML15159A083
Mathis, Barbara	ML15142A262	Mccall, Charles	ML15153B271
Mathis, Rebecca	ML15162A108	Mccall, Donovan	ML15153A565
	ML15142A229		
Matlock, Kevin		Mccall, Kaye	ML15154B058
Matos, Milagros	ML15158A157	Mccann, Donald	ML15158A156
Matso, Margo	ML15159A355	Mccann, Peter	ML15156A055
Matson, Leila	ML15153A758	Mccard, Jennifer	ML15154B796
Matsui, Vicky	ML15154A818	Mccarren, Stephanie	ML15158A055
Mattes, Dale	ML15156B154	Mccart, Dale	ML15148B246
Matteucci, Gina	ML15153B149	Mccarthy, Carolyn	ML15155A467
Matthews, Larissa	ML15159B396	Mccarthy, Debbie	ML15159B225
Matthews, Marilyn	ML15154A484	Mccarthy, Maureen	ML15153B148
Matthews, Phillip	ML15156A335	Mccartin, Mike	ML15154C103
Mattingly, Georgia	ML15141A462	McCarty, Chris	ML15159A873
Mattingly, Gloria	ML15154A169	Mccauley, Brandi	ML15155B115
Mattis, Albert	ML15155A503	Mccauley, Dianne	ML15155C170
Mattson, Sandra	ML15148B207	Mcclain, Jerry	ML15156A005
Mattson, Virginia	ML15159B545	Mccleary, Harriet C.	ML15160A811
Matwichuk, Gail	ML15160A752	McClendon, Linda	ML15155A850
Matwiejko, Anton	ML15153A945	Mcclendon, Michelle	ML15154B934
Matych, Teresa	ML15154B200	Mccloskey, Michelle	ML15156A244
Matyus, Marika	ML15154B754	Mccloskey, William	ML15158A203
Maughan, Eloise	ML15158A149	Mcclung, Judy	ML15148B392
Maurelia, Kristin	ML15154B586	Mcclure, Kate	ML15155B069
Maurer, Dorothy	ML15160A934	Mcclure, Kim	ML15159B292
Maurer, Timothy	ML15159A866	McClure, Sandy	ML15154A036
Mawhorter, Jerry	ML15156A122	Mcclurg, Daviann	ML15153B111
Maxwell, Steven	ML15159A413	McCollim, Jeffrey	ML15159A525
May, Hildy	ML15160A694	McComb, Sandy	ML15155B233
May, Jim	ML15148B003	Mccomb, Tf	ML15159A712
May, Julie	ML15153B230	Mccombs, Robert	ML15162A297
May, Sarah	ML15156A534	Mcconnaughey, Sarah	ML15160A080
Mayer, Karen	ML15155A110	Mccormack, Elizabeth	ML15155A394
Mayer, Chanelle	ML15159B117	Mccormick, David	ML15148B283
		Mccormick, Douglas	
Maynard, Linda Mazhawy, Mark	ML15153B233		ML15155A471
Mazhnyy, Mark	ML15148A748	Mccorry, Eileen Mccoubrie, Elise	ML15148B353

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Mccoy, Bill	ML15162A075	Mckee, Eileen	ML15148B043
Mccoy, Catherine	ML15154B314	Mckee, Sarah	ML15154A386
Mccrate, Mary Rose	ML15155C225	Mckeever, Mary	ML15153A994
McCray, Toni	ML15162A663	Mckelvey, Gerald	ML15148A722
Mccreadie, Jane	ML15156A957	Mckelvie, Kevin	ML15154A388
Mccready, Tamara	ML15148A936	Mckelvie, Patricia	ML15148A929
Mccreary, Jan	ML15154A144	Mckenna, Colleen	ML15156A250
Mccredie, Gail	ML15153A553	Mckenney, Christopher	ML15140A116
Mccroskey, Carol	ML15154A835	Mckenzie, Ernie	ML15156A167
Mcculloch, Samuel	ML15162A111	Mckinley, Patti	ML15154B067
Mccullough, Justin	ML15159A543	Mckinnie, Robert	ML15142A325
McCullough, Justin	ML15160A785	Mckinnon, Moira	ML15141A526
Mccullough, Maureen	ML15154A779	Mckye, Christina	ML15154A423
Mccumber, Peter	ML15156B238	Mclaughlin, Bruce	ML15148A778
Mccurdy, Dassi	ML15154C000	Mclaughlin, Joe	ML15153A948
Mccurdy, Prescott	ML15154A026	Mclaughlin, Timothy	ML15154A450
McDaniel, Diana	ML15159B554	Mclaurin, Phillip	ML15162A558
Mcdermott, Jeff	ML15155B983	Mcleod, Daniel	ML15156B500
Mcdonald, A.	ML15156A568	M'Closkey, Karen	ML15140A010
Mcdonald, Joyce	ML15140A286	Mcmahan, Alexa	ML15159A418
McDonald, Norma	ML15155C134	Mcmahan, Barbara	ML15153B294
Mcdonald, Patricia	ML15148A618	Mcmahan, Michael	ML15159A669
Mcdonell, Alexander	ML15154A417	Mcmahon, Nicholas	ML15156A273
Mcdonnell, Hope	ML15142A175	Mcmillan, Reba	ML15156A012
Mcdonnell, Jameson	ML15156B217	Mcmullen, Colleen	ML15159B556
Mcdonough, Brenda	ML15154A079	Mcmurray, Kendel	ML15160A948
Mcdonough, Kimberly	ML15142A232	Mcmurray, Phillip	ML15154A817
McEachron-Taylor, Linda	ML15153B050	Mcnamara, Catherine	ML15141A693
McElhaney, Thomas	ML15159B334	Mcnaught, Anna	ML15154A483
Mcelhone, Mary	ML15159B339	Mcneil, Kerry	ML15154A994
McElwain, Judith	ML15154B585	Mcneil, Sherry	ML15156A306
McFadden, Arlene	ML15156A086	Mcneill, Katherine	ML15154A092
Mcfarland, Brian	ML15154C110	Mcnitt, Doris	ML15154A827
Mcfarland, Jackie	ML15159A153	Mcpherson, Tracy	ML15154B977
McFarland, John	ML15162A585	Mcqueen, Neil	ML15159A876
Mcgaha, Patricia	ML15158A167	McQuown, Michael	ML15155C001
McGarvie-Munn, lain	ML15159A294	Mcrill, Susan	ML15153B275
Mcgil, Kent	ML15148A604	Mcvey, Earl	ML15154A074
McGill, Ann C.	ML15155B003	Mcvey, Harry	ML15158A007
McGill, Linda R.	ML15154A395	Mcvey, Kelly	ML15155B921
Mcgilvery, Eva	ML15155B977	McVicker, Micah	ML15159A875
Mcginnis, Dan	ML15148B199	Mcwhirter, Carol	ML15156B408
Mcglashan, Maria	ML15161A636	Mead, Kathleen	ML15153A335
Mcglone, Colleen	ML15148A669	Mead, Melody	ML15159A336
Mcgoldrick, Carole	ML15154B996	Means, Jessica	ML15147A735
Mcgough, Alice	ML15155B811	Meaux, Andre	ML15160A907
Mcgowan, Richard	ML15154B324	Mechanick, Jarred	ML15160A643
Mcgrath, Barbara	ML15159A701	Mecke, Ernst	ML15154A441
Mcgrath, Mark	ML15153A841	Medeiros, Linda	ML15155B037
Mcgratty, Chris	ML15160A053	Medina, Daniel	ML15154A945
Mcguire, Jessica	ML15156A149	Medina, Kathleen	ML15159B479
Mcguire, Matthew	ML15162A731	Medina, Ratheen Medlin, Barry	ML15156A952
Mchugh, Margaret C.	ML15155A179	Medlin, Nellie	ML15156A900
Mcintyre, Misty	ML15150A179 ML15140A169	Medlin, Neille Medlin, Tony	ML15156B465
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leehan, Carol and Barry	ML15155B277	Meyer, Christina	ML15156A725
/leek, Roxanne	ML15148B115	Meyer, Emily	ML15155B000
Aeeks, Donnie	ML15154C137	Meyer, Eric	ML15140A183
/leier, D.	ML15156B118	Meyer, Harold	ML15155A077
/leier, Ron	ML15156B344	Meyer, Joan	ML15159B205
/leigs, Karen	ML15155C119	Meyer, Joe	ML15155A913
Mejia, Esperanza	ML15162A590	Meyer, Marita	ML15155A239
Mejia, Marianna	ML15153A462	Meyer, Scott	ML15156B501
Vejides, Andres	ML15155A489	Meyer, Stephan	ML15155A739
Melby, George M.	ML15154B109	Meyer, Tanya	ML15153B207
Meldahl, Deborah	ML15153A443	Meyer, Twyla	ML15148A899
Mele, Frank	ML15159B289	Meyers, Sarah	ML15147A713
Aelius, Bruce	ML15158A265	Meyers, Sue	ML15159A695
Mellen, Linda	ML15155A231	Meza, Joel	ML15155A583
Mello, Dawn	ML15142A136	Mican, Frances	ML15162A142
Meltzer, Iris	ML15160A084	Michael, Joe	ML15155B754
Menard, Rose Marie	ML15158A150	Michael, Mary	ML15155A016
Menasian, Helen	ML15155A311	Michael-Dahlmann, Tina	ML15159A118
Mendel, Chris	ML15154A534	Michaels, Traven	ML15162A080
Vendelsohn, Alex	ML15158A082	Michaud, Noreen	ML15153A893
Vendelson, Robert	ML15140A206	Michener, Jr., Robert	ML15153B110
Mendez, Tatiana	ML15148A174	Middleditch, Ellen	ML15156A885
Mendez, Virginia	ML15148A761	Midkiff, Michael	ML15140A161
Mendez-Alvarez, Javier	ML15154A554	Mietzner, Natalie	ML15156B203
Mendousa, Anthony	ML15155A042	Migliore, Eleanor	ML15142A138
Vendoza, Redelisa	ML15160A969	Mikan, Edward	ML15148B348
Mennel-Bell, Mari	ML15153B085	Miksys, Matt	ML15160A859
Mensforth, Elizabeth	ML15156A733	Mikulin, Kathleen	ML15142A204
Mensing, Max	ML15154B913	Milam, Tim	ML15159A099
Venyuk, Paula	ML15154A070	Milano, Barbara	ML15142A192
Mercer, Michele	ML15162A208	Milanowski, Tanya	ML15153B290
Mercer, Rory	ML15160A712	Miles, Joseph	ML15154A025
		Milford, Joan	ML15159A692
Mercure, Joan	ML15156A067	Milhaupt, Shannon	ML15153A404
Merino, Aimee	ML15159A105	Milione, Regina	ML15155A3404
Merino, Margaret	ML15155B876		
Merkel, Jane	ML15142A361	Milkowski, George Millensifer, Aimee	ML15142A377
Merkel, Karynn	ML15148A834	Miller, Alexis Wray Negele	ML15156A228 ML15148B438
Merl, Steve	ML15153A544	, , ,	
Merle, Lynn	ML15153A883	Miller, Betty	ML15156A752
Merljak, Julija	ML15159A241	Miller, Bob	ML15148A228
Merritt, Courtney	ML15154B083	Miller, Bobbi	ML15155B662
Merritt, Jean	ML15156A995	Miller, Brad	ML15158A023
Merz, Robert	ML15156A560	Miller, Carole	ML15159A138
Meslar, Gerald	ML15155B758	Miller, Charles	ML15155B925
Mesler, Corey	ML15155C232	Miller, D. Rex	ML15142A062
Aessling, Gordon	ML15142A174	Miller, Danielle	ML15148B352
Aetas, Nicole	ML15159A381	Miller, Dennis	ML15154B553
Metcalf, A.	ML15160A634	Miller, Diana	ML15148A842
Methven, Bernadette	ML15154A709	Miller, Diana	ML15155B700
Vetje, Melodie	ML15153B020	Miller, Donna	ML15142A258
Mettler, Joan	ML15162B079	Miller, Genevieve	ML15158A132
Mettler, Joan	ML15162B130	Miller, J.	ML15154B846
Vetz, Nancy	ML15153B141	Miller, Janet	ML15154B097

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Viller, Jennifer	ML15160A545	Mitchell, Katherine	ML15155A699
Viller, Jerry	ML15148A192	Mitchell, Kenneth	ML15141A774
Miller, Joan	ML15155A111	Mitchell, Laura	ML15155A065
Viller, K. N.	ML15156A106	Mitchell, Melissa S.	ML15161A666
Miller, Karen	ML15155A070	Mitchell, Ogden	ML15155B229
Viller, Kenneth	ML15155C009	Mitchell, Robin	ML15154B919
Miller, Lesley	ML15160A980	Mitchell, Ruby	ML15148B156
Miller, Lester	ML15154A260	Mitsuda, Michael	ML15162A071
Miller, Libba	ML15155A301	Mitsuka, Joan	ML15141A649
Miller, Madge	ML15155A105	Mittig, William	ML15155A724
Viller, Mary	ML15148B027	Mitts, Karen	ML15159B577
Miller, Nancy	ML15148B274	Mitts, Yolanda	ML15156A241
Miller, Nena	ML15156A282	Mixon, Phillip	ML15161A692
Viller, Patricia	ML15156B029	Mizell, Michael	ML15154A194
Miller, Robert	ML15153A940	Mizhir, Tina	ML15160A714
Viller, Robert R.	ML15156B037	Mock, Tim	ML15155C113
Miller, Sandi	ML15156A676	Moczarney, Cindy	ML15141A534
Miller, Sara	ML15155B352	Moder, Timothy	ML15148A234
Miller, Tia	ML15159A298	Moderacki, Deidre	ML15154B038
Miller, Timothy	ML15153A824	Moe, Helen	ML15156A805
Miller, Tracey	ML15154B920	Moenk, Jeanne	ML15148A702
Miller, Valerie	ML15159A040	Moglowsky, Myra	ML15155B623
Miller, Victoria	ML15148B383	Mohanty, Lopamudra	ML15154B320
Miller, William	ML15154A579	Moignard, Andrew	ML15154B722
Millhoff, Faythe	ML15155A826	Moland, Janice	ML15156A784
Milligan, Keith	ML15156A939	Molder, Michael	ML15155A351
Milligan, Rosanne	ML15148A927	Moldoveanu, Carol	ML15160A563
Milliken, Elizabeth	ML15154B621	Molessa, Leslie	ML15155A767
Millman, Mia	ML15153A648	Molgora, Bianca	ML15148B268
Mills, Krista	ML15155A714	Molina, Julimar Castro	ML15156A575
Mills, Marianne	ML15156A263	Molinero, Cynthia	ML15148B023
Milonas, Nikolaos	ML15148B228	Moller, Richard	ML15153A413
Milkowski, George	ML15142A377	Möllersten, Björn	ML15158A142
Milster, Amanda	ML15158A090	Mollo, Elizabeth	ML15158A196
Mims, Pat	ML15156A973	Monaco, Carol	ML15142A077
Minacheili, Susanna	ML15160A578	Monaghan, Dina	ML15142A251
Mindar, Richard	ML15154B927	Moncure, Janet	ML15155B938
Mineck, Stephen	ML15153B246	Mondazze, Gina	ML15155B870
Miner, Dan	ML15155B078	Mondo, John	ML15154B675
Miner, Rev Curt	ML15154B673	Monfort, Brooke	ML15154A183
Minglis, Erica	ML15155A335	Monroe, Donna	ML15160A794
Minich, Chris	ML15154C290	Monroe, Jim	ML15141A795
Minicucci, Dianne	ML15154A163	Monson, Christie	ML15148B360
Minor, Shannon	ML15153A839	Monson, Todd	ML15155B728
Minto, Arthur	ML15153A903	Monte, Bonnie J.	ML15158A080
Mintz, Phillip	ML15154C295	Montero, Deborah	ML15159B474
Mirabella, Judith	ML15155C183	Mont-Eton, Elaine	ML15156A305
Misero, Jamie	ML15159B322	Montford, Lawrence	ML15156B480
Misero, Jamie	ML15159B326	Montgomery, Elizabeth	ML15154A255
Misero, Janie Misra, Praveen	ML15148A210	Montgomery, John	ML15154B239
Mistretta, Jill	ML15154A375	Montgomery, Nancy	ML15154B721
Misurelli, Jude	ML15162A679	Montgomery, Richard	ML15155A045
	ML15156B021	Montoro, Ernest	ML15155A045 ML15155A141
Mitchell, Crystal Mitchell, Elizabeth			
Mitchell, Elizabeth	ML15155A440	Montreuil, Laura	ML15154B119

• · ·	ADAMS	<b>_</b>	ADAMS
Commenter	Accession #	Commenter	Accession #
Montti, Rina	ML15154B379	Moricca, Joan	ML15154B829
Moody, Janeane	ML15148B266	Morin, Carla	ML15155B337
Moody, Peggy	ML15156B513	Morley, Barbara	ML15141A776
Moody, Richard	ML15148A241	Morley, Julaine	ML15153A405
Moody, Stan	ML15154A065	Morris, Claire	ML15159B542
Mooha, Megan	ML15155A695	Morris, Florence	ML15155A534
Mooney, Marianne	ML15156A087	Morris, Kathleen	ML15159B555
Mooney, Sean	ML15142A344	Morris, Lynn	ML15148B166
Moore, Barbara	ML15154B440	Morris, Penny	ML15155A207
Moore, Carol	ML15159A899	Morris, Rebecca	ML15153A918
Moore, Charlotte	ML15155A536	Morris, Roland	ML15154B853
Moore, Claudia	ML15154C149	Morris, Steven	ML15154C245
Moore, Deb	ML15158A276	Morrison, Larry	ML15155A214
Moore, Hugh	ML15153A516	Morrison, N.	ML15155B052.
Moore, Judy	ML15142A234	Morrison, Scott	ML15153A361
Moore, Kerry	ML15155C040	Morrissey, Christine	ML15148A138
Moore, Linda	ML15159B529	Morrissey, Stephen	ML15159B527
Moore, Lorraine	ML15154B113	Morrone, Marina	ML15154C174
Moore, Nancy	ML15148B430	Morrow, Lynn	ML15154C127
Moore, Pauline	ML15148B057	Morrow, Myrna	ML15153A689
Moore, Richard	ML15156A152	Morsberger, Grace	ML15158A079
Moore, Robert	ML15158A211	Morsey, Paul	ML15142A294
Moore, Tammy	ML15156A058	Mortensen, Leni	ML15159A618
Moore, Thomas	ML15140A228	Mortensen, Susanne	ML15153B140
Moore, Thomas	ML15154C274	Mortimer, Claire	ML15156B470
Moore, Toni	ML15140A253	Morton, Robert	ML15155A375
Moore, Trois	ML15159A605	Mosca-Clark, Vivianne	ML15154C278
Moore, Valerie	ML15140A252	Moscoso, Mary Ann	ML15156B133
Mora, Lauren	ML15153A353	Mosley, Michelle	ML15155C128
Mora, Sharon	ML15159A305	Mostov, Elizabeth	ML15154B717
			ML15155B771
Morales, Margaret	ML15155A947 ML15159A758	Mothershead, Eileen	
Morales, Marisa		Mott, Evelyn	ML15159A506
Moran, Judy	ML15153B195	Motter, H.	ML15153B166
Moreira, J.	ML15162A085	Mottl, Robb	ML15147A767
Moreira, Rui	ML15142A173	Motz, Mary	ML15153A857
Morel, Will	ML15148A229	Moukas, Patty	ML15148B044
Moreland, Tom	ML15159B526	Moulton, Rodney	ML15155B944
Morell, Dario	ML15153A561	Mount, Cheryl	ML15153B052
Morello, Phyl	ML15160A690	Mourant, Wanda	ML15154A345
Moreno-Davis, Phaedra	ML15159B212	Mouzourakis, Kathy	ML15142A296
Morey, Kathy	ML15154A843	Mouzourakis, Nicholas	ML15160A913
Morgan, Alexa Joy	ML15159A802	Mowbray, Robert	ML15153B019
Morgan, Carol	ML15155C150	Mower, Amy	ML15162A618
Morgan, Claire	ML15155A405	Mowry, Vickie	ML15155A473
Morgan, Courtney	ML15142A112	Moy, Carolyn	ML15159A295
Morgan, James	ML15159A812	Moyer, Ken	ML15160A942
Morgan, Joanna	ML15154A402	Mramor, Andrew	ML15158A294
Morgan, Karen	ML15141A687	Mueller, Johanna	ML15155B245
Morgan, Kathleen	ML15154B539	Mueller, Marilyn	ML15156A709
Morgan, Kitty	ML15142A348	Mueser, Karen	ML15156A985
Morgan, Linda	ML15154A205	Mugglestone, Lindsay	ML15153A983
Morgan, Paula	ML15159A209	Mulas, Enzo	ML15159B514
Morgan-Kinsell, Judy	ML15153A782	Mulcahy, Susan	ML15156A963
Moriarty, Theodora	ML15159A095	Mulder, James	ML15155B425

<b>6</b>	ADAMS		ADAMS
Commenter	Accession #	Commenter	Accession #
Mulder, Mark	ML15153B011	Myers, David	ML15141A692
Mullan, Kate	ML15148A659	Myers, Glenn	ML15156B487
Mullane, Marilyn	ML15156A637	Myers, Kristy	ML15160A944
Nullen, Charles	ML15160A720	Myers, Linda	ML15154B146
Nullen, Timothy	ML15154C239	Myers, Rob	ML15158A178
Muller, Deborah	ML15159A045	Myers, Sonya	ML15155B862
Nulligan, Margaret	ML15159B462	Mylott, Sharon	ML15159B353
Mulligan, Margi	ML15160A710	N., J.	ML15154C092
Mullins, James	ML15154B017	Nachtsheijm, Henry	ML15154C077
Mullins, Lynette	ML15154A262	Nagel, Dennis	ML15154C210
Mulloy, Crleen	ML15159A126	Nagel, Karen	ML15148B250
Mulshine, Peter	ML15154C002	Nagy, Diana	ML15160A879
Mulshine, Peter	ML15155A253	Nagy, Mary Jo	ML15158A249
Mulvey, Lori	ML15153A342	Nagyfy, Desi	ML15155C120
Numford, Andrew	ML15155A313	Nahay, Paul	ML15156A922
Mumma, Harlan	ML15155A492	Nahill, Brad	ML15160A807
Munar, Dwayne	ML15154C207	Naidich, Sandra	ML15154B924
Munday, Sherrie	ML15153A909	Nakos, Judith	ML15155C149
Mundhenk, Norm	ML15153B015	Nall, James	ML15159A304
Mundy, James	ML15156A911	Napoleon, Alexandra	ML15155A376
Nundy, Jaye Anna	ML15159A003	Nappe, Judith	ML15155B785
Munger, Anthony	ML15155B889	Nardell, Jason	ML15155A331
Munn, J.	ML15148A245	Nardella, Nancy	ML15153A454
Munoz, Alejandro	ML15154A271	Narva, Adele	ML15148A997
Munoz, Alma	ML15158A219	Nash, Charlene	ML15155C230
Munoz, Angela	ML15147A734	Nasuti, Paul	ML15155C135
Munro, Karen	ML15141A580	Nathan, Janice	ML15158A189
Munroe, Gary	ML15154A926	Nathan, Jessica	ML15162A083
Munroe, Mj	ML15154A126	Nau, Eric	ML15155C027
Murdock, Lauren	ML15155A203	Naue, Judi	ML15156A933
Murin, Assiren	ML15156B516		ML15154A934
Murnane, Susan	ML15148A898	Naujokas, Deborah Navarro, Eleanor	ML15153B043
Murphy, Amanda	ML15159A465	Naversen, Ronald	ML15154B672
Murphy, Brian	ML15155A859	Navidad, Susan	ML15159B243
Murphy, Donald	ML15159A820	Naylor, Alan	ML15161A694
Murphy, Eileen	ML15154B763	Naylor, Brent	ML15142A129
Murphy, Garrett	ML15155A683	Naylor, John	ML15155B993
Murphy, Jane	ML15141A489	Nazzaro, Patricia	ML15154A717
Murphy, Janelle	ML15156B491	Nearing, Sue	ML15156A541
Murphy, Joe	ML15154B769	Necas, Al	ML15160A818
Murphy, Michael	ML15154A370	Nedeau, E. James	ML15155C033
Murphy, Tim	ML15154A131	Needham, Christina	ML15148B257
Murray, Edward	ML15155A435	Neff, Miriam	ML15159B003
Murray, James	ML15155A890	Neff, Victoria	ML15155C228
Murray, Mark	ML15148B011	Negri, Angela	ML15142A182
Murray, Sandra	ML15153A558	Neiberger, David	ML15162A617
Murray, Sandra	ML15154A107	Neihart, Janet	ML15156A329
Muse, Dyan	ML15155B057	Neihart, Joanne	ML15159B478
Musgrove, Tracy	ML15154C098	Neil, Carol	ML15156A184
Musialowski, Monique	ML15156A164	Neiman, E.	ML15159A629
Music, Barbra	ML15142A314	Neimark, D.	ML15142A018
Mutchler, Ruth	ML15154A351	Neis, Derek	ML15162A651
Muther, Wilhelmina	ML15154A776	Nelmes, Beverly	ML15159A631
Myers, B. J.	ML15156B026	Nelson, Brenda	ML15160A904

Commonter	ADAMS	Commenter	ADAMS
Commenter	Accession #	Commenter	Accession #
Nelson, Carol	ML15159A794	Niatum, Duane	ML15155A344
Nelson, Cyndi	ML15154A100	Niccolini, Dianora	ML15155B387
Nelson, David	ML15156B292	Nichols, Anna	ML15154B817
Nelson, David	ML15156A520	Nichols, Bill	ML15159A759
Nelson, Donna	ML15159B287	Nichols, Carmen	ML15148A756
Nelson, Helen	ML15148B346	Nichols, Carmen	ML15148A759
Nelson, J.	ML15154B726	Nichols, David S.	ML15153A591
Velson, Jonathan	ML15154B780	Nichols, Laurie	ML15154A257
Nelson, Joseph	ML15155A422	Nichols, Nick	ML15153A895
Nelson, Joy	ML15155B250	Nicholson, Kaitlyn	ML15159A916
Nelson, Kristine	ML15156B253	Nicholson, Lisa	ML15140A128
Nelson, L. B.	ML15141A778	Nickerson, Albert	ML15154A439
Nelson, M. Janet	ML15158A162	Nickerson, Nancy	ML15155B708
Nelson, Marianne	ML15156A597	Nicodemus, Sharon	ML15148A882
Velson, Nanci	ML15160A697	Nicol, Tiffany	ML15153B099
Nelson, Paul	ML15153A888	Nicolini, Elizabeth	ML15155A997
Nelson, Wendy	ML15154A040	Nicoud, John	ML15155C086
Nemeth, Stevin	ML15155A013	Nielsen, Don-Martin	ML15154B140
Veral, David	ML15155C076	Nielsen, Ruth	ML15154A767
Nerwick, Randall	ML15153A920	Nielson, Greg	ML15154B315
Nesline, Rebecca	ML15156A439	Nienaber, Rachel	ML15156A238
Nesmith, Robert	ML15153A771	Nieters, Lenore	ML15154B212
Neste, George	ML15162B044	Nietzold, William	ML15155A819
Neste, George	ML15162B098	Nieves, Maria	ML15155B636
Nettesheim, Catherine	ML15154B871	Nieves, Robert	ML15154A429
Netusil, Paul	ML15154B502	Night, Melody	ML15153A780
Veubert, Lisa	ML15154B849	Niksic, Joyce	ML15142A120
Neuenschwander, Betty	ML15141A429	Nilsen, Jeffrey	ML15159B002
Neuhauser, Alice	ML15142A036	Nix, Debra	ML15148A244
Neuman, Margaret	ML15148A600	Nix, John	ML15142A019
Neumann, Nancy	ML15159A351	Nix, John	ML15148A209
Neumeister, John	ML15154B346	Nix, Kathy	ML15159B468
Neus, Marleen	ML15162A652	Noack, Michael	ML15162A398
Neville, Janice	ML15155A475	Nobile, Stefania	ML15153B127
Neville, Paula	ML15156A701	Noble, Katherine	ML15156A253
Nevins, Laura	ML15156A948	Noble, Vida	ML15155B678
Newbeck, Phyl	ML15153A529	Noble, W. F.	ML15155B044
Newbegin, Gisela	ML15156A097	Nobrega, Robert	ML15159B460
Newberg, Rosalie	ML15159A484	Noellert, Sunnie	ML15148B260
Newell, Barrie	ML15148A226	Noga, Kathie	ML15142A170
Newfield, Madeleine	ML15155B763	Nohava, Charles	ML15148A589
Newman, Anita	ML15147A761	Nohava, Charles	ML15153A322
Newman, Donna	ML15141A737	Nolan, Dennis	ML15162A727
Newman, Kathy	ML15154A445	Nolan, Nancy	ML15153A670
Newman, Ricki	ML15155B092	Nolan, Stephen	ML15140A142
Newman, Ricki	ML15155B597	Nolan, Timothy	ML15154B889
Newman, Suzanne	ML15159B536	Nolan, Tracy	ML15162A059
Newton, Ann	ML15154B709	Noll, Frederick	ML15154A769
Newton, Carol	ML15153A703	Noordyk, James	ML15142A029
	ML15153A703 ML15148B018		ML15142A029 ML15148A984
Newton, Elizabeth		Nord, Randall Nordon, Michael	
Newton, Scurry Judy	ML15140A273	Norden, Michael	ML15156A272
Ng, Carol	ML15160A837	Nordenskiold, Mette	ML15154A063
Nghe, Keefe	ML15154B818	Nordhof, Pamela	ML15148A859
Nguyen, Tu-Quyen	ML15159B285	Norkus, Edward	ML15156A262

Commontor	ADAMS	Commontor	ADAMS
Commenter	Accession #		Accession # ML15159A330
Norman, Jane	ML15154C009 ML15141A703	O'Donnell, Deanne	ML15154B236
Norris, Brenda		Oerke, Jr., Carl	
Norris, James	ML15142A106	Oetter, Rae	ML15159B107
Norton, Jennifer	ML15162A611	Ogella, Edith	ML15156A831
Norton, Kathey	ML15159A686	Ogle, Emily	ML15159B569
Novack, Aaron	ML15148A919	O'Grady, Darlene	ML15154C018
Novak, Paul	ML15153A852	Ogren, Linda	ML15140A210
Novak, Trina	ML15154A922	O'Hara, Kathy	ML15148B341
Novkov, Russell	ML15155B166	O'Hara, Kathy	ML15154A517
Novkov, Russell	ML15155B456	Ohlanda, Andreas	ML15148B037
Novotne, Holly	ML15155A374	Ohlendorf, Carol	ML15153A420
Novstrup, Ginger	ML15155C047	Ohlson, Ken	ML15142A085
Nowack, James	ML15148A595	Ohlsson, Aase	ML15155C105
Nowak, Diane	ML15154A228	O'Keefe, Tammie	ML15142A206
Nowak, Joseph	ML15162A596	O'Kelley, Celia	ML15159B022
Nowicki, Ann	ML15148A249	Okulewicz, Katherine	ML15142A108
Nowicki, Judith	ML15159A649	O'Laughlin, Kay	ML15158A258
Noyes, Carol	ML15153A964	Oldani, Julie	ML15162A621
Nuesch, Raymond	ML15142A282	Oldfather, Jeremiah	ML15156B483
Nuesch, Raymond	ML15148B138	O'Leary, Daniel	ML15140A027
Nulty, Tom	ML15141A655	O'Leary-Chen, Jennifer	ML15148A973
Nunez, Carlos	ML15155A703	Olenjack, Michael	ML15154A438
Nutini, Michael	ML15155A073	Olivares, Yvonne	ML15158A147
	ML15162A691		ML15140A008
Nutter, Mary		Oliver, Nancy	
Nye, Janet	ML15160A887	Oliver, Niles	ML15155A218
Nylen, E.	ML15154A143	Oliver, Niles	ML15155A347
Oba, Peggy Seo	ML15155A194	Oliver, Niles	ML15155B553
O'Bara, Carina	ML15153A872	Olmstead, Michaelan	ML15156A869
Obeid, Robert	ML15154A770	Olmsted, Charles	ML15148B295
Oberdorf, Robert	ML15155A423	Olsen, Charles	ML15155B829
Oberline, Beverly	ML15155A811	Olsen, Kathy	ML15159A545
Obershaw, Lynda	ML15155C130	Olson, Beth	ML15156A495
Obert, Leonard	ML15154C288	Olson, Bruce	ML15154A321
Obr, Brooks	ML15140A029	Olson, Diane	ML15154B971
O'Brien, Beth	ML15153A661	Olson, Francis	ML15154A544
Obrien, Cecille	ML15154A073	Olson, Jane	ML15159A868
O'Brien, Dennis	ML15153A719	Olson, Linda	ML15155A034
O'Brien, Kathy	ML15154B766	Olson, Mary	ML15156B383
Obrien, Lauren	ML15160A836	Olson, Steve	ML15156B486
O'Brien, Sara	ML15154C136	Oman, Barbara	ML15159A797
Ocean, Chris	ML15155C115	O'Nan, Kathleen	ML15153A389
Och, Evelyn	ML15158A146	O'Neal, Nancy	ML15156A104
Ochoa, Chemen	ML15153B035	Oneil, Julie	ML15148A230
Ockenden, Lynn	ML15153B025	O'Neill, Cynthia	ML15159A429
Oconnell, Kate	ML15155C182	Oneill, Den	ML15156B462
O'Connell, Kathleen	ML15155A585	O'Neill, Frances	ML15155C246
		Onesti, Frances	
O'Connell, Michael	ML15159A887		ML15155A356
O'Connor, John	ML15148B331	Onorato, Stephanie	ML15155A725
Ocskai, Barbara	ML15154A030	Onufer, Mary	ML15153A984
Oda, Christine	ML15155B701	Oothoudt, Sylvia	ML15153B012
Odear, Elizabeth	ML15156A142	Oppenheim, Benjamin	ML15154B466
O'Donahoo, Roger &		Oppenhuizen, Kathy	ML15155B671
Gayle	ML15156A031	O'Rafferty, Eric	ML15155A262
O'Donnell, Dawn	ML15156A148	Orcholski, Gerald	ML15153A860

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Commenter	Accession #	Commenter	Accession #
Orem, Jennifer	ML15155A217	Owen, Stephen	ML15159B336
Orfanos, Marc	ML15154B840	Oxley, Rhonda	ML15153B190
Orlich, Mary	ML15155B666	Ozkan, Dogan	ML15155B225
Orlinski, Patricia	ML15154A216	P., C.	ML15155C240
Orlowski, Eva	ML15162A499	P., Jaz	ML15154C308
Orndorff, Robert	ML15154B605	P., W.	ML15156A522
Ornee, Mary	ML15148B045	Pace, Ann	ML15153A380
Ornelas, Karen	ML15148B001	Pace, Lisa	ML15154B308
Orons, Nancy	ML15154B884	Packman, Zola	ML15154A238
O'Rourke, Dawn	ML15148B302	Padalino, Gail	ML15154A924
O'Rourke, Jake	ML15154A398	Padelford, Grace	ML15141A749
Orozco, Angela	ML15160A550	Paden, Donna	ML15153B073
Orr, Barbara	ML15154A648	Padilla, Melania	ML15159B057
Orsetti, Rosa	ML15162A688	Padilla, Sergio	ML15160A991
Ortega, Dalyn	ML15155A852	Padmanabhan, Urmila	ML15153A713
Ortega, Victor	ML15158A280	Paganuzzi, Cinzia	ML15154B827
Ortiz, Frank	ML15153B083	Pagni, Jean	ML15153A840
Ortiz, Kathy	ML15156B042	Painter, Joanne	ML15160A906
Ortiz, Keren	ML15155B827	Pairan, Josh	ML15160A543
Ortiz, Nina	ML15154B745	Palacky, Tami	ML15142A159
Osada, Susan	ML15162A733	Palazzini, Louis	ML15148B449
Osborn, Carole	ML15156A895	Palder, Evelyn	ML15154A556
Osborn, Thomas	ML15159A896	Paley, Leon	ML15141A752
Osborne, Amanda	ML15147A736	Paling, Scott	ML15154A795
Osborne, Colin	ML15155C025	Palladine, Michelle	ML15155A177
Osborne, Deborah	ML15162A049	Pallanes, Beatriz	ML15154A035
Osborne, Denise	ML15154C146	Palmer, Marilyn	ML15156B297
Osborne, Pamela	ML15156A100	Palmquist, Wendy	ML15159B557
Osgood, Pamela	ML15154B008	Palo, Jason	ML15154A355
Oshiro, Alex	ML15153B112	Paluck, llene	ML15160A827
Oskamp, Stuart	ML15162A102	Pandit, Sudhir	ML15159B418
	ML15155A495	Pandolfi, Sara	ML15156B463
Osmond, Ronlyn	ML15159A161	Panei, Maryann	ML15148A743
Osnes, Linda			
Ossipov, Simone	ML15154B005	Pankhurst, Heather	ML15155A227
Ostapow, Judith	ML15160A835	Pannaman, Stanley	ML15155C013
Ostlie, Susan	ML15159B033	Pannell, Destiny	ML15141A631
Ostoich, Julie Ostonoff, Christing	ML15155B877	Panter, Lisanne	ML15155A426
Ostopoff, Christine	ML15156A057	Panza, Mike	ML15155B779
Ostrander, Jr., William P.	ML15154A317	Papandrea, John	ML15142A160
Ostrow, Hillary	ML15153B152	Pappas, Carole	ML15153B157
O'Sullivan, Joseph	ML15156A665	Pappas, Melissa	ML15156A039
O'Sullivan, Katherine	ML15148B289	Papscun, Alan	ML15153A950
Oswald, Keith	ML15155A469	Parcell, Ruth	ML15142A155
Oswald, Timothy	ML15155A832	Parcells, Julie	ML15155A603
Ott, Michael	ML15156B096	Parcou, Julien Kaven	ML15154B793
Otter, J. Den	ML15159B541	Pardi, Marco	ML15142A133
Otto, Brian	ML15142A253	Pardington, Akura	ML15158A221
Otzel, Margaret	ML15159B378	Parent, Amy	ML15158A227
Ouai, Dalila	ML15141A673	Parigi, Robin	ML15156A430
Ouellette, Tracy	ML15156B241	Park, Gregory	ML15156A579
Overdier, Ruth	ML15156A061	Park, Laura	ML15153B178
Overlock, Trina	ML15156A261	Park, Phyllis	ML15154B294
Overmann, Laura	ML15148A902	Parker, Ashley	ML15141A605
Overstreet, Romy	ML15159A417	Parker, Corey	ML15162B091

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Parker, Corey	ML15162B150	Pauley, Marcia	ML15148A605
Parker, Janice	ML15158A240	Pauline, Jean	ML15155C030
Parker, Jin Adams	ML15156A433	Pauls, Terry	ML15158A198
Parker, Joannie	ML15153A402	Paulson, Melony	ML15159A666
Parker, Louise	ML15148A892	Pavcovich, Michelle	ML15159A159
Parker, Patricia	ML15142A193	Paverman, Adriana	ML15159A289
Parker, Richard	ML15161A645	Pavlova, Karina	ML15159A796
Parker, Robert	ML15156A001	Paxson, Michele	ML15159A278
Parker, Sarah	ML15156A062	Paxton, Greg	ML15159A743
Parker, Sheri Dotson	ML15160A947	Paxton, Bobbie	ML15155A837
Parkhurst, Terrence	ML15142A183	Payne, Geneine	ML15159A552
Parkins, Janet	ML15160A519	Payne, Grace	ML15154B261
Parks, Joan	ML15156A194	Payne, Heather	ML15153A777
Parlee, Rodney	ML15158A003	Peale, Mike	ML15154C154
Parmenter, Annmarie	ML15153A916	Pearce, Harold	ML15159A524
Parolini, Maura	ML15141A613	Pearce, J. B.	ML15155A219
Parrish, Cynthia	ML15141A689	Pearson, B.	ML15158A255
Parrish, Jessica	ML15141A009 ML15156A093	Pearson, B. Pearson, Kiesha	ML15156A731
Parrone, Cindy	ML15148A980	Pearson, Tia	ML15154B825
Parrott, Pamela	ML15154A059	Pearthree, Pippa	ML15158A034
Parsons, Michael	ML15148B354	Pecararo, Dawn	ML15148A801
Partsch, Michael	ML15154B991	Pech, Jim	ML15141A638
Parzick, Anne	ML15154A303	Pecha, III, Anton F.	ML15159B143
Pascale, Alice	ML15155B628	Peck, M.	ML15162A375
Pascoe, Susan	ML15141A475	Peck, Sarah	ML15154B025
Pascual, Pat	ML15154B965	Peckham, Theresa	ML15154B269
Pash, Eric	ML15156A980	Pedersen, Ashley	ML15156B293
Pasholk, Robin	ML15162B102	Pedler, Stephanie	ML15154B141
Pasholk, Robin	ML15162B042	Peeples, Ruth	ML15154B443
Pasichnyk, Richard	ML15148A903	Peerman, Dean	ML15153A512
Pasqua, John	ML15155A485	Pelausa, Enrico	ML15159A511
Pasqueal, Adam	ML15155B917	Pelleg, Josh	ML15155B902
Passmore, Judith	ML15153B129	Pelletier, Joel	ML15153A646
Passoff, Dave	ML15156A056	Pellett, Ocean	ML15155B619
Patel, Kaushik	ML15159A595	Pelosi, Carol	ML15154A276
Patel, Sarosh	ML15148A863	Peloza, Amy	ML15159A857
Paterno, Ellen	ML15160A528	Peltan, Mark	ML15156B445
Patoray, Arlene	ML15153A564	Pelzer, Ann	ML15155A970
Patrick, Jane	ML15159A104	Pena, Deanna	ML15154C228
		Pena, Deanna Pena, Suzanne	
Patrick, Dale	ML15148B292	,	ML15154B290
Patrick, Duane	ML15154B503	Penchoen, Gregory	ML15154B940
Patrick, Leslie	ML15154B473	Pender, Jacqueline	ML15160A896
Patrizzi, Lee	ML15154C220	Pendergast, Betsy	ML15156B099
Patterson, Carol Joan	ML15162A735	Penn, Gigi	ML15162B079
Patterson, Dixie	ML15156A829	Penn, Gigi	ML15162B124
Patterson, Katherine	ML15154B224	Pennell, Joyce	ML15155A412
Patterson, Kevin	ML15154B791	Pennell, Sherry	ML15154B022
Patterson, Pam	ML15161A660	Pepitone, Michelle	ML15154A243
Patterson, Robin	ML15140A217	Pepper, Mark	ML15154A701
Pattison, Janet	ML15155B629	Perales, Tarasa Masia	ML15141A719
Patton, Lesley	ML15155B892	Percy, Patrick	ML15158A204
Patton, Todd	ML15155B664	Perednik, Daniela	ML15141A641
Patty, Shannon	ML15153B203	Pereira, Sheila	ML15158A170
Paul, Adrian	ML15142A252	Perenich, Theresa	ML15153A907

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Perenne, Luise	ML15155A080	Petry, Gabor	ML15155B706
Perinchief, Jana	ML15153B005	Petsco, John	ML15159A700
Perkins, Ana	ML15159A891	Pettis, Carolyn	ML15159A847
Perkins, Christophe	ML15156A068	Pettway, Beverly	ML15159A862
Perkins, David	ML15155C048	Petty, Mark	ML15156B004
Perkins, E.	ML15148A957	Pew, Don	ML15154A680
Perkins, Guy	ML15140A001	Pfeifer, Nezka	ML15155A156
Perkins, Jean	ML15159B019	Pfeiffer, Steven	ML15159A995
Perkins, Karen	ML15148A208	Pfitzner, James	ML15154A128
Perkins, Kathy	ML15155B197	Pflug, Carl	ML15156A544
Perkins, Sandra	ML15154C179	Phelps, Amy	ML15159A947
Perkins, V.	ML15154A458	Phelps, Tami	ML15155C010
Perkowski, Richard	ML15154A313	Phenicie, Deb	ML15142A164
Perlmutter, Martha	ML15154B347	Philips, Nancy	ML15159B056
Pero, Elva	ML15155B801	Phillips, Bob	ML15156B382
Perren, William	ML15141A796	Phillips, Charles	ML15162B104
Perrett, Jody	ML15154B680	Phillips, Charles	ML15162B042
Perricelli, Claire	ML15153A721	Phillips, Christopher	ML15153B185
Perrin, Amy	ML15158A076	Phillips, E. Lehuanani	ML15155B834
Perron, Patricia	ML15154A237	Phillips, George	ML15148B387
Perruccio, Frank J.	ML15155C116	Phillips, Janice	ML15154B974
Perry, Ed	ML15156B151	Phillips, Jean	ML15154B238
Perry, Frank	ML15159B432	Phillips, Jeffrey	ML15156A113
Perryman, Toddy	ML15154A691	Phillips, Nancy	ML15159A523
Persinger, Elizabeth	ML15155B363	Phillips, Richard	ML15148A875
Persky, Jerry	ML15155C044	Phillis, Ashley	ML15156A944
Petel, Amanda	ML15155B918	Piazza, Joseph	ML15155C241
Peter, Judith	ML15154B228	Piazza, Kerri	ML15159B296
Peterman, Andy	ML15156A013	Picchetti, Gloria	ML15155A673
Peters, Emily	ML15148A995	Picchioni, George	ML15148B035
Peters, Jeff	ML15156A033	Picciani, Laureen	ML15154A619
Peters, Kevin	ML15141A608	Piccione, Maryann	ML15140A110
Peters, Ray	ML15155A290	Pick, Thomas	ML15155A187
Peters, Ray	ML15155B330	Pickering, Lori	ML15147A714
Peters, Robert	ML15154A992	Pickworth-Campbell,	
Peters, Robert	ML15155B279	Carole	ML15148B155
Petersen, Sandra	ML15141A666	Picot, John Brian	ML15162A740
Petersman, Mary Jo	ML15159B343	Pielke, Janet	ML15154B824
Peterson, Dale	ML15154C270	Pier, Mollie	ML15154B296
Peterson, Elizabeth	ML15148B033	Pierce, Betty	ML15159A065
Peterson, Georgie	ML15153A748	Pierce, Brian	ML15154C058
Peterson, Kim	ML15155B526	Pierce, Ernest	ML15153B274
Peterson, Kristina	ML15154C108	Pierson, James	ML15154A699
Peterson, Linda	ML15161A631	Pietri, William	ML15141A595
Peterson, Mary	ML15154B036	Pikaart, Philip	ML15155A533
Peterson, Nancy	ML15155B667	Pikala, Christine	ML15154C035
Peterson, Robin	ML15154B914	Pike, Evette	ML15154C125
Peterson, Tarina	ML15162A448	Pikus, Barbara	ML15156A935
Peterson, Ted	ML15154B759	Pileggi, Peter	ML15155A247
Peterson, Trayce	ML15153B161	Pilz, Mila	ML15156B505
Petitpas, Bethanie	ML15155A738	Pinder, Paige	ML15148A950
Petkiewicz, Margaret	ML15148A836	Pinneau, Janet	ML15155B725
Petrisko, George	ML15142A033	Pinneo, Guy	ML15154B966
Petrova, Dobrinka	ML15159B450	Pinneo, Janet	ML15154B627

	ADAMS	<b>A</b>	ADAMS	
Commenter	Accession #	Commenter	Accession #	
Pinque, Meryl	ML15156A144	Poolos, Hazel	ML15153A938	
Pintagro, Thomas	ML15154B762	Pope, Angela	ML15159A227	
Piper, Cynthia	ML15159B028	Popoff, Dave	ML15161A693	
Piper, Janna	ML15154C115	Popp, Joseph P.	ML15141A747	
Pirrone, Annette	ML15154A088	Poppe, Dorothy	ML15154B998	
Piser, Corey	ML15155A246	Porcelli, Maureen	ML15148B071	
Pistor, Christiane	ML15153B251	Porcher, Janeene	ML15148B382	
Pitt, Jon	ML15153A859	Porreca, Audrey	ML15155A144	
Pixley, Elizabeth	ML15156A315	Porrello, Christine	ML15159A301	
Pizarro, Vanesaa	ML15154A310	Porsch, Angela	ML15154A536	
Pizzo, Sherrie	ML15159A130	Porter, Barbara	ML15154B030	
Place, Robert and Mary	ML15155A480	Porter, Betsey	ML15141A690	
Plaehn, Dave	ML15154B933	Porter, Jan	ML15156B259	
Plagge, Angela	ML15142A261	Porter, Thomas	ML15141A423	
Plant, Eleanor	ML15154A187	Porter-Keisner, Cheri	ML15155B750	
Platt, David	ML15141A604	Poskiene, Lina	ML15155C220	
Plaza, Minette	ML15148B099	Post, Mike	ML15155C202	
Plecko, Emil	ML15154C042	Postel, Rus	ML15155A444	
Plemons, Viktoria	ML15154A730	Poston, Cindy	ML15155A450	
Pliner, Elliot	ML15147A741	Potter, Doris	ML15159B024	
Plitt, Kathryn	ML15148A668	Potter, Eric	ML15148A959	
Ploenzke, Laura	ML15148A703	Potter, Meredith	ML15148A796	
Plonski, Heidi	ML15159B118	Potter, Penny	ML15154C235	
Plubell, Susan	ML15141A501	Pottinger, Catherine	ML15153A698	
Poe, Susan	ML15156B360	Poulsen, Barbara	ML15153A929	
Poese, David	ML15156A861	Poulsen, Sabrina	ML15159B013	
Poessel, Sharon	ML15153A956	Povill, Jon	ML15155B511	
Pogell, Śarah	ML15142A303	Powell, Jessie	ML15156A071	
Poist, Ellen	ML15148B005	Powell, Michael	ML15141A738	
Poland, Dianne	ML15148B314	Powell, Peggy	ML15154C183	
Polczynski, Eric	ML15154A906	Powell, Shirley	ML15159A038	
Polesky, Alice	ML15148B427	Power, Philip W.	ML15153A732	
Polidori, Marguerite	ML15159B245	Powers, Jeri	ML15154B947	
Polifroni, Josephine	ML15159A957	Powers, Paula	ML15154A775	
Polis, Rose	ML15156A277	Powers, Sheila	ML15154A553	
Polito, Gene	ML15156A308	Pratt, David	ML15148B297	
Politzer, Andrew	ML15154B768	Pratt, Frederick	ML15156B193	
Polk, James	ML15148B008	Pratt, Ted	ML15155B973	
Polk, Linda	ML15158A165	Preece, Kelly	ML15159B020	
Polk, Nora	ML15154C301	Presetti, Joan	ML15154B935	
Pollack, Gary	ML15159A050	Preston, Dee	ML15155A870	
Pollak, Jeannie	ML15155A484	Preston, J.	ML15159B423	
Pollina, Ron	ML15159B566	Pribanic, Carl	ML15155B746	
Pollock, Jeri	ML15154B782	Price, Carolyn	ML15160A603	
Pollock, Renee	ML15148A258	Price, Elisabeth	ML15155B757	
Polsky, Mark	ML15148A183	Price, Joyce	ML15155C151	
Poock, Patty	ML15156A503	Price, Joyce	ML15155C186	
Pool, Ed	ML15155B259	Price, Joyce	ML15158A261	
Pool, Roxann	ML15141A645	Price, Mary	ML15156A266	
Poole, Diane	ML15148A951	Price, Nicole	ML15141A588	
Poole, Jai	ML15155A846	Price, Tyler	ML15158A103	
Poole, Marcia	ML15154C254	Priest, Dave	ML15141A533	
Poole, Richard	ML15153B255	Priest, Donald	ML15155C146	
Pooler, Carole	ML15154B681	Priest, Ruth Ann	ML15148B261	

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Primrose, John	ML15155B999	Quinn, Zoe	ML15160A857
Prince, Noelle	ML15154C089	Quota, Ann Bainchi	ML15148B009
Priskich, Fiona	ML15155B258	R., Leslie	ML15159B034
Pritchard, Jennifer	ML15142A195	Raab, Frances	ML15154A991
Pritchett, William	ML15161A647	Raabe, Karen	ML15156A325
Prochazka, Penelope	ML15155A994	Rabenold, Paul	ML15154A629
Proctor, M.	ML15154B699	Rabin, Pat	ML15158A048
Profant, Michelle	ML15159A861	Rabinowitz, Rebecca	ML15140A108
Proietta, Susan	ML15154B597	Raby, Elizabeth	ML15158A052
Proteau, Mary	ML15158A231	Raby, Kevin	ML15156A293
Prouty, Leslie	ML15156A008	Raccio, Karen	ML15154B815
Provost, Clifford	ML15156B316	Rachal, Terese	ML15154A316
Pruet, Mary	ML15160A826	Racine, Robert	ML15162A680
Prunko, Thomas	ML15154A437	Raczka, Alan	ML15155B251
Prystauk, William D.	ML15153A781	Radcliffe, Steve	ML15154C223
			ML15156A997
Psaras, Brenda	ML15154A453	Radecki, Jennifer Rader, D. L.	ML15156A997 ML15154B205
Public, Jean	ML15156A953		
Puca, Laurie Puchalski, Holly	ML15161A673	Radke, William Bodko, Daputo	ML15154A455
	ML15156A303	Radko, Danuta	ML15154B777
Puchli, Robert	ML15154B822	Radov, Lisa	ML15153A327
Puckett, Peggy Smith	ML15156A576	Rae, B.	ML15153A770
Puddy, Michelle	ML15160A085	Rae, Brad	ML15159A061
Puentes, Felena	ML15154A734	Raftery, Rita	ML15154B441
Puerta, Jeanne	ML15158A047	Ragan, Kate	ML15162A566
Pullen, Sher	ML15148B203	Raggio, Wendy	ML15148A597
Punneo, Sheryll	ML15159B218	Ragsdale, Kelly	ML15160A912
Purbrick-Illek, Sally	ML15154A468	Rahav, Maritte (Mara)	ML15155C226
Purcell, Douglas	ML15154B901	Raite, Sarah	ML15154B957
Purdy, Patty	ML15154B089	Ralph, Cecil	ML15156B136
Purnell, Til	ML15155A786	Ramirez, David	ML15155A289
Purucker, Susanna	ML15155B507	Ramlow, Bob	ML15156A675
Purvis, Barbara	ML15159B262	Rammel, Vicki	ML15154B164
Puscheck, Susan/Robert	ML15154A148	Ramo, Carol	ML15141A505
Pusey, John	ML15154A018	Ramos, Joann	ML15156B393
Putman, Eileen	ML15156A585	Ramos, Paul	ML15148B036
Putnam, Elizabeth	ML15148B197	Ramos, Reyna Garcia	ML15154B800
Putnam, Gary	ML15153A975	Ramos, Sigrid	ML15153A865
Putnam, Lynn	ML15155C028	Ramos, Tatianna	ML15155B249
Puza, A.	ML15158A200	Ramsey, Betty	ML15153A419
Pyle, Cathy	ML15159A999	Ramsey, Elizabeth	ML15141A660
Pysher, Paul	ML15154B723	Ramsey, Kerry and Beth	ML15154A419
Quaggan, Nancy	ML15154A057	Ramsey, Philip	ML15155C035
Quaintance, Joel	ML15154B640	Ramsey, Sylvia	ML15155C221
Quasha, George	ML15156B173	Ramstrom, Eric G.	ML15153B013
Quezada, Marin	ML15148A149	Rand, Mary	ML15159A261
Quigley, Jennifer	ML15162A428	Randall, Michael	ML15158A228
Quillian, P.	ML15153A392	Randall, Victoria	ML15153A785
Quillin, Michael	ML15156A542	RandallÍ, Kay	ML15155A680
Quimby, Michal	ML15156A099	Randolph, Peter	ML15154A880
Quinlan, Lola	ML15154A185	Raney, Gary	ML15154B312
Quinlan, Lola	ML15154A986	Rankin, Jennifer	ML15140A284
Quinn, Anne	ML15155B731	Ranly, Don	ML15159A098
Quinn, George	ML15148A881	Ranney, Myrne	ML15156A832
Quinn, Patrick	ML15160A534	Ransom, Judy	ML15154A833

<b>O</b>	ADAMS Accession #	Commenter	ADAMS
Commenter			Accession #
Rantala, Mervi	ML15160A047	Reel, Joseph	ML15140A203
Ranz, Lauren	ML15142A093	Rees, Judy	ML15155B962
Rapp, Julia	ML15142A044	Rees, Les	ML15156A108
Rapp, Kathy	ML15148B183	Rees, Michael	ML15155A403
Rapp, Lauren	ML15160A767	Reese, Elizabeth	ML15155A250
Rappaport, Alexandra	ML15153A814	Reese, Sarah	ML15153A582
Rappaport, Ann	ML15153A733	Reeves, Diana	ML15153A686
Rappe, Leonard	ML15154B786	Reeves, Ella	ML15159A842
Rarick, Karen	ML15148B192	Reeves, Lenore	ML15155A901
Rascati, Barbara	ML15153A882	Reeves, Linda	ML15148A237
Rasche, Sandra	ML15155A971	Reeves, Sheila	ML15154A838
Rasmussen, David	ML15153B208	Regan, Evelyn	ML15148B102
Rasmussen, Nancy	ML15156A249	Regan, Marilyn	ML15155B008
Rater, Virginia	ML15148B141	Regan, Nora	ML15153B106
Rattman, Joseph	ML15159B145	Reichel, Tom	ML15141A787
Ratzlaff, Karen	ML15155A719	Reichter, Susan	ML15148A871
Raub, Ann	ML15154A342	Reid, Nina	ML15156A052
Raupp, Christopher	ML15148B200	Reid, Patricia	ML15156B024
Rauscher, Janet	ML15153B114	Reid, Ruth	ML15160A919
Ray, Billie	ML15148A887	Reid, Sarah	ML15159B539
Ray, Glynda	ML15154B359	Reid, Susan	ML15153A627
Ray, Glynda	ML15155A743	Reiff, Mary	ML15148A889
Ray, Kristy	ML15155A049	Reifke, Kathleen	ML15154C083
Ray, Leslie	ML15159A430	Reiher, Linda	ML15156A327
Raychaudhuri, Sumana	ML15159A066	Reilly, Marnee	ML15159A778
Rayhill, Ashley	ML15155B498	Reilly, Michael	ML15155C173
Rayle, Steven	ML15153A930	Reiman, Lynn	ML15154A478
Raymond, P. J.	ML15147A762	Reinfried, Kay	ML15147A784
Raynis, Beth	ML15159A058	Reinhart, Robin	ML15154B781
Rea, Corde	ML15156A580	Reinik, Bruce	ML15159B048
Rea, Linda	ML15155B575	Reisenbichler, Reg	ML15158A044
Read, Seth	ML15156B219	Reisman, Emil	ML15148B010
Reader, Charlene	ML15153B075	Reiter, Doris	ML15154B960
Ream, Donna	ML15156A231	Reiter, Doris	ML15154C209
Reback, Mark	ML15160A554	Remkus, Ann	ML15159A783
Reckers, Pamela	ML15154B226	Remy, Deborah	ML15154C073
Rector, Crystal	ML15141A772	Rendon, Renate	ML15154C253
Rector, Teresa	ML15148A966	Renee, Locks	ML15153A807
Redding, Carmen	ML15156A075	Rennacker, Ann	ML15154C078
Redish, Maryellen	ML15159A895	Rennie, Edwyna	ML15160A054
Redman, Sandi	ML15156B194	Renno, Gerd	ML15142A212
Redwine, Laura	ML15155A154	Renno, Kathy	ML15156A507
Redwing, Liz	ML15154B809	Renton, Kristen	ML15155A886
Reed, Avis	ML15154A001	Repiquet, Sandra	ML15153B080
Reed, Jason	ML15154B024	Resh, Brian	ML15155A779
Reed, Jennifer	ML15154A658	Resseguie, William	ML15155C126
Reed, Lucia	ML15158A186	Rettig, William	ML15155C132
Reed, Mary	ML15159A426	Revesz, Bruce	ML15154C196
Reed, Michael B.	ML15153A677	Revord, Michael	ML15154B712
Reed, Michele	ML15148B059	Rexrode, Earl	ML15148A831
Reed, Pamela	ML15154C029	Reyes, Kimberly	ML15155A807
Reed, Patrick	ML15162A246	Reynolds, Alan	ML15159A088
Reed, Robert	ML15155A588	Reynolds, Britain	ML15154A039
Reed, Rodger	ML15154A179	Reynolds, Daniel	ML15154B078
riccu, ricuyor		Neynolus, Dalliel	

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Reynolds, Jeff	ML15154A314	Ridgley, Patricia	ML15159B510
Reynolds, K.	ML15156A176	Ridgway, K.	ML15153A923
Reynolds, Lloyd	ML15156B432	Riehart, Dale	ML15140A278
Reynolds, Michele	ML15155C162	Rietzel, Marilyn	ML15155B969
Reynolds, Renee	ML15155B722	Riff, Christopher	ML15156A461
Reynolds, Ruth	ML15140A034	Riggins, Thomas	ML15154C221
Reynolds, Thomas	ML15155B073		ML15154A266
	ML15154B646	Riggs, Richard	
Rhein, Herman		Rigney, J. Dignov, Jone	ML15158A207
Rhoades, John	ML15155A216	Rigney, Jane	ML15158A208
Rhoads, Donald	ML15156A138	Riley, Diane	ML15155A223
Rhode, Christina	ML15159A830	Riley, Kathleen	ML15162B044
Rhodes, Ira	ML15160A698	Riley, Kathleen	ML15162B116
Rhodes, Janet	ML15156B422	Riley, Kelly	ML15155A055
Rhodes, Marilyn	ML15154B052	Riley, Michael	ML15140A069
Rhodes, Michael	ML15148A956	Rinaldi, Debbie	ML15155C144
Rhodes, Steven	ML15159B372	Rincon, Tanya	ML15156A027
Rhymer, Joseph	ML15154B841	Rindler, Joseph	ML15153A483
Rials, Jennifer	ML15154A273	Ringgaard, Line	ML15141A454
Ricci, Gail	ML15156A893	Ringler, Thomasin	ML15154A796
Ricci, Scott	ML15148B149	Ringquist, Rodd	ML15153B160
Ricciardi, Anthony	ML15140A068	Rinner, Timothy	ML15155A608
Rice, Everett	ML15154A175	Rios, Jen	ML15159A131
Rice, Gina	ML15154B610	Rios, Susan	ML15154A202
Rice, Jima	ML15160A817	Ripley, John	ML15141A732
Rice, Kyra	ML15155A123	Ripple, Martha Jane	ML15158A254
Rice, Michael	ML15148A985	Ripplinger, George	ML15158A053
Rich, Laura	ML15154C150	Rise, William	ML15155A497
Richard, Laree	ML15156B472	Ritola, Donna	ML15148B106
Richards, Leslie	ML15142A236	Rittenhouse, Calvin	ML15147A755
Richards, John	ML15156A856	Rittenhouse, Nancy	ML15153A499
Richards, Margie	ML15156A134	Rivard, Kris	ML15148A803
Richards, Sarah	ML15147A770	Rivas, Cecilia	ML15159B429
Richards, William	ML15148A643	Rivenburg, Russell	ML15155B323
Richardson, Aleda	ML15156A864	Rivera, C.	ML15156A300
Richardson, Danielle	ML15162A048	Rivera, Javier	ML15154B463
Richardson, Dianne	ML15148B148	Rivera, Sergio	ML15154B850
Richardson, Don	ML15142A227	Rizzo, Barbara	ML15153A391
Richardson, Gail	ML15155A652	Rizzo, Paul	ML15154C040
Richardson, K.	ML15158A036	Rizzuto, Angela M.	ML15156A163
Richardson, Katherine	ML15153A471	Roach, Edward	ML15154A299
Richcreek, Geoff	ML15155A119	Robbins, Elizabeth	ML15155C188
Richey, Paul	ML15148A629	Robbins, Eloise	ML15140A198
Richey, Sharon	ML15153B252	Robbins, Mary	ML15148A934
Richie, Lauren	ML15154A281	Roberson, Steven	ML15162A723
Richmond, Lonna	ML15148B333	Roberto, Robert	ML15154A577
Richmond, Michael	ML15155A721	Roberts, Rodney	ML15142A257
	ML15153A735		
Richter, Caleb Richter, Marthio		Roberts, Amy Roberts, Blake	ML15148B240
Richter, Marthie	ML15159B448	Roberts, Blake	ML15153A808
Rickenbach, Deborah	ML15155A267	Roberts, Brock	ML15154A773
Riddell, Brian	ML15159A293	Roberts, Chuck	ML15153A441
Ridder, Lynette	ML15140A023	Roberts, Fiona	ML15156B424
Riddle, Carolyn	ML15155A508	Roberts, Judith	ML15154C004
Rider, Dara	ML15154B736	Roberts, Julie	ML15162A711
Ridgeway, William	ML15153A373	Roberts, Laney	ML15154B227

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Commenter	Accession #	Commenter	Accession #
Roberts, Phyllis	ML15148A261	Roll, Greg	ML15156A288
Roberts, Sally	ML15154A654	Rolland, Lane	ML15154B989
Robertshaw, K. K.	ML15155A530	Rollings, Rusty	ML15154A293
Robertson, Destine	ML15160A893	Rollo, P.	ML15162A417
Robertson, Kathryn	ML15142A235	Rolston, Patricia	ML15153A810
Robey, Eddy	ML15154C275	Roma, Michele	ML15154B710
Robideau, Elizabeth	ML15142A219	Romani, Gwen	ML15156A940
Robin, Etta	ML15153B173	Rome, Abigail	ML15154B921
Robinson, Angel	ML15155A118	Romesburg, Denise	ML15161A635
Robinson, Dameta	ML15156B050	Romine, Janet	ML15156A301
Robinson, James	ML15148A130	Romine, Janet Holly	ML15153A867
Robinson, Janet	ML15154B651	Rominger, Nancy	ML15159B464
Robinson, Jeanne	ML15160A796	Ronco, Philip	ML15154A710
Robinson, Julianna	ML15158A125	Rooney, Diane	ML15153B268
Robinson, Juneko	ML15154C057	Root, Charlene	ML15154C023
Robinson, Khristine	ML15155A761	Root, Sharon	ML15154A521
Robinson, Lee	ML15148B110	Rosa-Re, Samantha	ML15154B964
Robinson, Patricia	ML15153A993	Rosasco, Stephen	ML15155A643
Robinson, Rory	ML15154A686	Roscher, Miles	ML15162A144
Robinson, Saliane	ML15153B163	Rose, Aaron	ML15156A887
Robson, Eric	ML15141A550	Rose, Amanda	ML15148B435
Rocco, Evelyn	ML15159A285	Rose, B.	ML15158A247
Rocco, Y.	ML15156A023	Rose, Jay	ML15148B448
Rocco, Y.	ML15156B358	Rose, Shannon	ML15158A250
Rocha, Nidia	ML15160A660	Rose, Timothy	ML15160A684
Roche, Chris	ML15158A128	Roseberry, Bill	ML15159A882
Roche, Peter	ML15140A047	Rosen, Susan	ML15155B025
Rocheleau, Jessica	ML15147A733	Rosen, Helene	ML15148A930
Rocke, Janice	ML15154B764	Rosen, Natalie	ML15159A810
Rockers, Kay	ML15155C019	Rosen, Paul	ML15154A009
Rodack, Soretta	ML15156A783	Rosenblood, Jamie	ML15153A718
Rodgers, Ron	ML15155B182	Rosenblum, Stephen	ML15148B326
Rodman, Shirley	ML15159A495	Rosencrans, Matt	ML15158A182
Rodoff, Lennie	ML15156B181	Rosenfeld, Alice	ML15155A909
Rodrigue, Gracinda	ML15155A353	Rosengrant, Deb	ML15159A831
Rodriguez, Angela	ML15148B270	Rosenkrantz, Bruce	ML15159A850
Rodriguez, Betsy	ML15155A749	Rosenthal, Rima	ML15154A822
Rodriguez, Ste Ven	ML15156A716	Rosier, Amy	ML15153A730
Rodriguez, Sylvia	ML15154C034	Roske, Adam	ML15142A293
Roe, Christina	ML15154A017	Ross, Audrey	ML15155B502
Roegner, Debby	ML15156A140	Ross, Barry	ML15140A162
Rogers, Belinda	ML15141A497	Ross, Carolyn	ML15155A276
Rogers, Dave	ML15159A250	Ross, Elliot	ML15153A363
Rogers, David	ML15154A405	Ross, J.	ML15148B443
Rogers, Dennis	ML15154A056	Ross, Jean	ML15148A751
Rogers, Jennifer	ML15142A021	Ross, Kay Boss, Batricia	ML15148B296
Rogers, Susan	ML15148A840	Ross, Patricia	ML15154A058
Rogers, William	ML15158A151	Rossetti, Pamela Rossi, Daniela	ML15154A027
Rohloff, Rosalyn	ML15155A188	Rossi, Daniela	ML15159B247
Rohm, Lisa	ML15159A023	Rossi, Ray	ML15155B919
Rohr, Michaela	ML15155B813	Rossini, J.	ML15141A569
Rol, Anna Natalie	ML15154A158	Rosso, Brit	ML15156A904
Roland, Jelica	ML15156B161	Rosson, Rebecca	ML15154B258
Rolbeck, Kathi	ML15154B482	Roth, Augustine	ML15156B498

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Roth, Ed	ML15153B155	Rushlau, Mary Anne	ML15156A566
Roth, Gaby	ML15153A508	Rusian, Andrzej	ML15155C204
Roth, Jerome	ML15148A667	Rusiniak, Karen	ML15155B633
Roth, Lu	ML15153A880	Russell, Claire	ML15148A869
Roth, Steve	ML15154A606	Russell, Katherine Blum	ML15156B071
Rothauser, S.	ML15159A651	Russell, Lela	ML15154A900
Rothman, Emily	ML15154B092	Russell, Nathan	ML15160A536
Rothschild, Blake	ML15160A825	Russell, Nathaniel	ML15153B264
Rothschild, Eileen	ML15155A019	Russell, Rick	ML15154B207
Rothstein, Debbie	ML15142A158	Russo, Bob	ML15159A482
Roulston-Doty, Suzanne	ML15141A441	Russo, Carl	ML15156A506
Rouse, Framk	ML15159A483	Rutherford, Helen	ML15155A150
Rousseau, Claudia	ML15156B307	Rutkowski, Robert	ML15148A947
Rousseau, Nicole	ML15154B472	Ryan, Mary	ML15154B724
Rove, Frances	ML15156A295	Ryan, Terrance	ML15156B028
Rovnak, William	ML15154A718	Ryan, Thomas	ML15154B743
Rowden, Tanya	ML15162A259	Ryan, Thomas	ML15154B982
Rowe, Jeannette	ML15154A792	Rycheck, Kevin	ML15153B079
Rowell, Edward	ML15155B327	Ryder, Gigi	ML15154A399
Rowinski, Wojciech	ML15159A288	Rysavy, Robin	ML15155C062
Rowles, Trina	ML15160A981	S., D.	ML15155B683
Rowlingson, John	ML15154B742	S., Jennifer	ML15155B596
Rowlingson, John	ML15160A958	S., R.	ML15159A505
Roy, Joe	ML15156A112	Saavedra, Yvonne	ML15159A955
Roy, Randy	ML15156B244	Sabatini, Kathy	ML15155B812
Royer, Alice	ML15154A332	Sachs, Jean	ML15155B254
Royer, Alice	ML15155A157	Sacirbey, Susan	ML15156A570
Royer, Allen	ML15155A496	Sacks, Cindy	ML15161A663
Ru, De	ML15156A180	Saddler, Robert	ML15159A762
Ru, Stephanie	ML15154C241	Sadkovsky, Vera	ML15153B243
Ruben, Martha	ML15154A150	Saeger, Judy	ML15148B065
Rubesch, Erick	ML15154A404	Saez, Denisa	ML15155A498
Rubin, Bill	ML15159A604	Safranek, Walter	ML15154B893
Rubino, Karen	ML15147A750	Sagatelian, Nancy	ML15155B610
Rubio, Maria	ML15156A258	Sager, Mary Jane	ML15148A977
Ruby, Jacki	ML15154C060	Sailer, Randy	ML15154C180
Ruby, Theresa	ML15155B572	Saja, Jean	ML15153A813
Rudd, Vickie	ML15147A732	Sak, Myrna	ML15156A858
Rudisill, Amanda Sue	ML15156A591	Salatino, Freda	ML15148B144
Rudolph, Linda	ML15148A794	Salazar, Joe	ML15155B881
Ruggiero, Linda	ML15155C159	Salgado, Jane	ML15155A877
Ruiz, Antonio	ML15154C086	Salgado, Natasha	ML15141A740
Ruiz, Arnold	ML15159A216	Sall, Frederick	ML15153A356
Ruiz, Arnold	ML15159A218	Sallah, Maggie	ML15147A774
Ruiz, Nelida	ML15159B571	Salt, Max	ML15159B452
Ruiz, Osiel	ML15156A485	Salter, Andrew	ML15141A557
Ruiz, Susan	ML15153B063	Saltzman, Barry	ML15154C193
Rule, Juliann	ML15154A201	Saltzman, Susan	ML15154A240
Rullmann, Gale	ML15153A822	Salvat, Melanie	ML15160A082
Rumiantseva, Elena	ML15148B198	Salvner, Amanda	ML15162A476
Rummel, Thomas	ML15148A168	Salyer, Allen	ML15159A128
Rusell, Jessica	ML15142A213	Salyer, June	ML15160A564
Rush, Charlene	ML15156B496	Salz, Michael	ML15154B116
Rushing, Dora	ML15153A837	Samartano, Jennifer	ML15153A659

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Sammons, Marilyn	ML15148B294	Sazonov-Robinson,		
Sampson, Debbie	ML15156B018	Mauria	ML15148B111	
Samuelson, Georgeanne	ML15156B403	Scalzo, Robert	ML15154A407	
San Cartier, Terry	ML15155A327	Scanzillo, Frank	ML15155A358	
San Socie, Robert Glenn	ML15159A888	Scarborough, Lee and Sue	ML15148B361	
Sanchez, Luz	ML15155B741	Scarbrough, Shirley	ML15154A263	
Sanchez, Luz	ML15155B765	Scarci, Kris	ML15155A734	
Sanchez, Paul	ML15156B479	Scarlata, Rachel	ML15155B922	
Sanchez, Ralph	ML15155B414	Scarlett, Steve	ML15156A066	
Sanchez, Saul	ML15155B869	Scarr, Carolyn	ML15148A826	
Sand, Margaret	ML15148B372	Scarry, Patrick	ML15159B331	
Sandel, P.	ML15155B585	Scavezze, Barbara	ML15155B393	
Sanders, Carrie	ML15155A330	Schaack, Jerome	ML15156A929	
Sanders, Melanie	ML15155A209	Schabauer, Jacinda	ML15148B029	
Sanderson, Sandy	ML15154A116	Schacht, Timothy	ML15153B088	
Sandgrund, Robert	ML15156A559	Schack, Sara	ML15154A151	
Sandoval, Lily	ML15155A763	Schaefer, George	ML15148A277	
Sandow, Chris	ML15148B259	Schaefer, Sandra	ML15155C099	
Sandritter, Ann	ML15141A721	Schaefer, Sarah	ML15141A619	
Sanford, Ken	ML15162A105	Schaefer, Stacey	ML15162B107	
Sanford, Timothy	ML15148A976	Schaefer, Stacey	ML15162B064	
Santangelo, Elaine	ML15154B439	Schaeffer, Kathy	ML15159A643	
Santiago, Jr., Raymond	ML15159A384	Schaem, Suzanne	ML15148B184	
Santonas, Gina	ML15140A036	Schafer, Dale	ML15141A742	
Santopietro, Michael	ML15154A425	Schafer, Helen	ML15154B798	
Santora, Mark	ML15155A038	Schafer, Maggie	ML15148A943	
Santos, Betty	ML15154B868	Schafer, Peter	ML15154B837	
Santos, Eloy	ML15159B328	Schall, James	ML15159A093	
Santos, Hamerling	ML15162B119	Schally, Erin	ML15154C222	
Santos, Hammerling	ML15162B079	Schamel, Raymond	ML15147A780	
Santos, Saskia	ML15158A054	Schaming, Carol	ML15155B652	
Santto, Aldana	ML15159B154	Scharaldi, Dan	ML15159B300	
Sapiro, Claire	ML15153A744	Schary, Joy	ML15154A755	
Sarkisian, George	ML15156A165	Schas, Bill	ML15156A269	
Sarraille, Marijeanne	ML15153A932	Schatz, Vivian	ML15155A650	
Sarramia, Christian	ML15154A408	Schatzle, Kathy	ML15148A626	
Sasaoka, Julie	ML15153B305	Schecter, Jennifer	ML15154B794	
Sather, Alice	ML15154C061	Schehl, Ed	ML15156A851	
Satijn, Pascalle	ML15155C098	Scheller, Emil	ML15153B224	
Saucedo, Angelina	ML15160A932	Scherzer, Teresa	ML15154A810	
Sauer, Marlene	ML15153A436	Schetzer, Kathryn	ML15162A577	
Saunders, Britton	ML15154A966	Scheyer, Marguerite	ML15153A976	
Saunders, Diana	ML15153A772	Schick, Laurie	ML15154A482	
Savadove, Lydia	ML15155A526	Schierman, Mollie	ML15154C252	
Savage-Wright, Kathleen	ML15153A799	Schiffelbian, Alexander	ML15158A237	
Savino, Heather	ML15140A290	Schildwachter, Steve	ML15159A945	
Savitch, Steve	ML15153A935	Schilling, Christy	ML15142A168	
Savla, Dinmani	ML15162A485	Schilling, Judy	ML15154B916	
Sawicki, Barbara	ML15142A180	Schindler, Maury	ML15148B101	
Sawyer, Caryl	ML15148A665	Schira, Jane	ML15159A290	
Sawyer, Jerry	ML15140A042	Schlatter, Jeanne	ML15160A758	
Sawyer, Jerry Saxon, Diana	ML15154A258	Schlein, Elizabeth	ML15155B649	
Sayers, Marrick	ML15155B176	Schlemel, Pierre	ML15142A305	
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Schlesinger, Sybil	ML15153A513	Schuhrke, Nancy	ML15156B267	
Schlitz, Barbara	ML15154A279	Schultz, Cindy	ML15148B239	
Schloss-Birkholz, Gisela	ML15148B151	Schultz, Monica	ML15159B351	
Schlupp, Deo	ML15154C143	Schultz, Stephanie	ML15160A795	
Schmalzer, Paul	ML15156A000	Schultz, Walter	ML15155A829	
Schmatjen, Sheryl	ML15154A747	Schultz, Wm	ML15156B402	
Schmeichel, Nicollette	ML15156A153	Schultze, Patti	ML15159A086	
Schmidt, Frederick	ML15155C036	Schumacher, Amy	ML15159B360	
Schmidt, Jan	ML15153A823	Schurr, Arthur	ML15153B285	
Schmidt, Kimberly	ML15155A107	Schusterman, Jennifer	ML15148A972	
Schmidt, Laurie	ML15155B839	Schwab, Judith	ML15148A623	
Schmidt, Roger	ML15154C188	Schwaller, Greg	ML15159A156	
Schmidt, Susan	ML15158A039	Schwandes, Shaytu	ML15154B814	
Schminke, Molly	ML15158A293	Schwartz, Angela	ML15155A061	
Schmitt, Donna	ML15156A681	Schwartz, Donald	ML15155A524	
Schmitt, Tim	ML15162A714	Schwartz, Jake	ML15148B193	
Schmittauer, John	ML15147A768	Schwartz, Judy	ML15153B277	
Schmitt-Debonis, Michelle	ML15154B626	Schwartz, Randy	ML15155B842	
Schmitz, Marsha	ML15156A309	Schwartz, Robert	ML15160A546	
Schmotzer, Mary	ML15160A901	Schwartz, Tamar	ML15142A080	
Schnebel, Sherry	ML15161A651	Schwartzberg, Lora	ML15161A659	
Schnee, Jane	ML15141A675	Schwarz, Don	ML15159B037	
Schneewind, Jon	ML15159A014	Schwarzauer, Dennis	ML15156B304	
Schneider, Annette	ML15155B344	Schwegmann, Annette	ML15159A343	
Schneider, Barbara	ML15156B461	Schweiss, Kraig and		
Schneider, Caitlin	ML15154B323	Valerie	ML15155B766	
Schneider, Daniel	ML15153B119	Schwinberg, Jean	ML15148B286	
Schneider, Edward	ML15156A236	Scibetta, Kimberly	ML15154A600	
Schneider, George	ML15155C066	Sciochetti, Chris	ML15148B345	
Schneider, Terri	ML15154A261	Sciolto, Maureen	ML15140A199	
Schneider, Wanda	ML15154A555	Scorzelli, Susan	ML15153A705	
Schnell, Gail	ML15155B192	Scott, Brian	ML15155B941	
Schneller, Douglas	ML15154B705	Scott, Edward	ML15148A949	
Schochet, Gordon	ML15156A691	Scott, Emily	ML15159A991	
Schoech, Dick	ML15159A599	Scott, J. David	ML15147A711	
Schoedler, Randolph	ML15154A672	Scott, Jennifer	ML15162A077	
Schoene, William	ML15159B279	Scott, K.	ML15154C082	
Schoenfield, Rick	ML15160A960	Scott, Kari Lorraine	ML15155B598	
Schoenhofer, Robert	ML15141A537	Scott, Nolen	ML15148B107	
Schoenwetter, Ruth	ML15154A516	Scott, Peter	ML15159B058	
Scholl, Barbara	ML15155B047	Scott, Raeann	ML15154A687	
Scholz, Denise	ML15156A024	Scott, Wenona	ML15154A016	
Schonberger, Jennifer	ML15148B229	Scotti, O. Bisogno	ML15156B437	
Schorey, Carmen	ML15148B232	Scouras, Robert	ML15154B357	
Schramm, Marilyn	ML15148B249	Scoville, Pam	ML15141A459	
Schramm, Peggy	ML15160A899	Scribner, Denee	ML15159A169	
Schreckengost, J.	ML15148A608	Scribner, Jason	ML15148B061	
Schreiber, John	ML15159A030	Scroggs, Tammy	ML15155B019	
Schreiber, Linda	ML15155B616	Scuder, Andrea	ML15159B062	
Schreier, Marguerite	ML15154B685	Scully, Patricia	ML15156A434	
Schreiner, Amy	ML15154A053	Seaman, Gerda	ML15148B277	
Schroeder, Andrew	ML15162A612	Seamans, Kurt	ML15142A215	
Schuchard, Susan	ML15156A276	Searle, M.	ML15148A849	

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Commenter	Accession #	Commenter	Accession #
Sears, Kim	ML15160A886	Shandruk, Maria	ML15141A581
Sears, Nicole	ML15153B018	Shane, Nancy	ML15153B057
Seaton, Chris	ML15159A856	Shank, Ronald	ML15155B081
Seaver, LaRoy and Mary	ML15153A362	Shankel, Georgia	ML15153A595
Seavey, Arthur	ML15162A239	Shanker, Adrian	ML15159B069
Sebastian, Scott J.	ML15153A503	Shanley, Karen	ML15148B051
Sebastian-Lewis, Harley	ML15142A328	Shanley, Susan	ML15153B026
Seckel, John	ML15159B242	Shapira, Susan	ML15155B773
Seckman, Sally	ML15156A913	Shapiro, Claudia	ML15156A172
Sederquest, Evan	ML15156B031	Shapiro, Irving	ML15154A696
Sedy, Alice	ML15156B098	Sharee, Donna	ML15155A782
Seeburger, John	ML15155B663	Sharif-Coon, Dawn	ML15148A874
Seeman, Paul	ML15159B584	Sharkey, Virginia	ML15142A279
Seff, Joshua	ML15154A673	Sharlock, Leslie	ML15155A309
Segal, Gussie	ML15156A215	Sharp, Kathryn	ML15155A389
Selby, Lisa	ML15142A025	Sharpnack, Sherry	ML15148A876
Selig, Ronald	ML15158A283	Shaum-Amberg, Shel	ML15154A095
Sellers, Jennifer	ML15155A998	Shauver, Charles	ML15159A933
Sellers, Robert	ML15155C234	Shaver, Tammy	ML15158A122
Sells, Greg	ML15159A846	Shaw, Janice	ML15154C152
Seltzer, Elizabeth	ML15155A505	Shaw, Mary	ML15154A217
Seltzer, Rob	ML15153B056	Shea, Mary	ML15155C216
Seltzer, Rob	ML15148B020	Shealy, Richard	ML15156A025
Semienko, Brenda	ML15154A367	Shear, Julie	ML15155B618
Sendrowitz, Mitchell	ML15155A863	Sheehy, Linda	ML15153B021
Sennello, Patrick	ML15155B849		ML15159B280
	ML15156A091	Sheehy, Steve	
Sennert, Gloria		Sheets, Aida	ML15154A227
Sennett, Frank	ML15156A713	Sheets, Gabriel	ML15162B079
September, P. J.	ML15155B871	Sheets, Gabriel	ML15162B125
Sepulveda, Christine	ML15155B913	Sheffer, Jeanne	ML15154B298
Sepulveda, Christine	ML15155B939	Sheffield, Michael	ML15147A748
Sera, Sally	ML15153A680	Sheldan, Vijay	ML15141A426
Serazio, Sandra	ML15156A650	Shelton, Kacie	ML15155A066
Sercombe, Sarah	ML15154B375	Shematek, Judith	ML15154A334
Serletic, Cathie	ML15154A974	Shemo, Mary-Alice	ML15159B288
Sesack, Brian	ML15160A063	Shepherd, James	ML15155A092
Seufert, Sarah	ML15148A611	Shepherd, Marilyn	ML15156A509
Severino, Susan	ML15160A931	Shepler, Larry	ML15155A806
Sewick, Karen	ML15141A765	Sheppard, S.	ML15160A866
Sexton, John	ML15140A112	Sheridan, lan	ML15155B396
Seymour, Linda	ML15154A805	Sheridan, Michelle	ML15159A863
Shaaban, Marian	ML15155B446	Sherman, Stephanie	ML15140A234
Shaak, Susan	ML15154C289	Sherman, Trisha	ML15159A013
Shackeldord, Patti	ML15154C224	Shermock, Margaret	ML15160A742
Shade, Lynne	ML15159B021	Sherrard, Kathryn	ML15154A167
Shade, Patricia	ML15159B063	Sherwin, Boyce	ML15155A264
Shadle, Linda	ML15154A567	Sherwood, Kate	ML15155B055
Shafchuk, Patsy	ML15148A204	Shields, Juli	ML15159B281
Shaffer, Susan	ML15160A950	Shiels, Theresa	ML15153B087
Shalat, Harriet	ML15155B687	Shifflett, Jr., James E.	ML15148B367
Shaller, Virginia	ML15141A739	Shimaoka, Earl	ML15147A766
Shallman, Elsy	ML15140A121	Shimasaki, Ewa	ML15154B895
Shanahan, Pat	ML15159A060	Shinn, Michon	ML15153A965
Shanahan, Timothy	ML15154A149	Shipe, Kathleen	ML15159B428
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Shipley, Doraine	ML15155A735	Silverman, Goldie	ML15147A729
Shipley, Renee	ML15154B772	Silvers, Margaret	ML15153B211
Shippee, Robert	ML15142A104	Silversmith, Linda	ML15156B237
Shirey, Élizabeth	ML15155B067	Silvestre, Béatrice	ML15153A692
Shirey, William	ML15154A292	Silvey, Kevin	ML15154B016
Shively, Judy	ML15154A712	Simioni, Marco	ML15159B436
Shivers, Dennis	ML15155A801	Simmerman, Scott	ML15158A216
Shocair, Abla	ML15159A134	Simmons, Amber	ML15154B694
Shoffner, Elizabeth	ML15142A154	Simmons, Chris	ML15154A129
Shoham, Amit	ML15155A540	Simon, Elaine	ML15147A765
Shook, James	ML15148A248	Simon, Philip	ML15159A870
Shook, Philip	ML15153A924	Simon, Richard	ML15147A740
Short, John	ML15162B145	Simonds, Barbara	ML15154B953
Short, John	ML15162B091	Simonds, Linda	ML15159A258
Short, Kimberly	ML15155A513	Simone, Louise	ML15158A083
Shotwell, Andreia	ML15148B267	Simone, Louise Pisano	ML15159A292
Shoup, Wendy	ML15154B551	Simonich, Claire	ML15153B096
Showell, Sada	ML15141A734	Simpson, Eric	ML15148A701
Shreve, Rick	ML15153B172	Simpson, Gary	ML15154C017
Shuben, Jeffrey	ML15155A263	Simpson, Malcolm	ML15154B274
Shubert, Stephen	ML15153B219	Simpson, Rusty	ML15159B488
Shuler, Margaret	ML15142A149	Simpson, Sally	ML15156A268
Shult, Donald	ML15154B285	Sims, Amber	ML15159A902
Shultz, Betty Jane	ML15148B190	Sims, Cindra	ML15156A878
Shultz, Jamie	ML15154A857	Sims, Mary	ML15148B070
Shultz, Linda	ML15158A104	Simson, Jo Anne	ML15140A207
Shumaker, H. Dennis	ML15155A717	Singer, Barbara	ML15153A736
Shurtleff, Blair	ML15159A784	Singleton, Jon	ML15156A876
Shuster, Marguerite	ML15155A792	Siniard, Susan	ML15140A288
Shutkin, Sara	ML15155A075	Sininger, Kathy	ML15148B152
Shutt, John	ML15155A127	Sink, Randle	ML15156B374
Siano, Christiaan	ML15141A780	Sircar, Subrata	ML15154B896
Sibelman, Grae	ML15155A366	Sirias, Christine	ML15160A788
Siddiqi, Marilyn	ML15156A839	Sisk, Sidney	ML15148B147
Siddique, Omar	ML15154B271	Sisson, Valerie Chipman	ML15148B172
Siddiqui, Saad	ML15154C200	Sisti, Susan	ML15159A049
Sidofsky, Carol	ML15158A288	Sitnick, Joan	ML15140A243
Siebe, Martha	ML15159A923	Sitton, Mary	ML15148B276
Siebert, Simone	ML15155B041	Sivley, Steve	ML15154B304
Sieck, Joanne	ML15159A318	Sixtus, Michael	ML15155A133
Siegel, Christa	ML15154A032	Sjoberg, Jon	ML15159B570
Siegel, Richard	ML15148B103	Skeele, Michele	ML15160A727
Siegner, Sandra	ML15159A795	Skerry, Priscilla	ML15155A183
Siegwald, Joan	ML15159A024	Skews, Geoff	ML15155A884
Sigler, Teri	ML15160A058	Skinner, Richard	ML15148B177
Sihmund, Bob	ML15148A781	Skinner, Russell	ML15159A360
Sihmund, Bob	ML15148A888	Skipworth, Carl	ML15142A088
Sihmund, Bob	ML15154A666	Skirvin, Katherine	ML15162B079
Sikand, Vikram	ML15158A027	Skirvin, Katherine	ML15162B123
Silan, Sheila Sill Mariaria	ML15154B669	Skirvin, Laurence	ML15158A041
Sill, Marjorie	ML15153A507	Sklute, Stacey	ML15148B375
Silodor, Steven	ML15155B985	Skoczek, Christianna	ML15159A028
Silva, Stephanie	ML15154A791	Skolnick, Kate	ML15153A357
Silvano, Liliana	ML15161A648	Skotnes, Darren	ML15153B193

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Skouge, Gloria	ML15153B248	Smith, John	ML15155A678
Skowronski, Audrey	ML15148A739	Smith, Julie	ML15142A326
Skowronski, Edmund	ML15154A415	Smith, Karen	ML15148B300
Skowronski, Joan	ML15154A336	Smith, Keelan	ML15148B169
Skutches, Gregory	ML15141A754	Smith, Kellie	ML15156B120
Slack, Debbie	ML15148B083	Smith, Kenneth	ML15153B249
Slack, Esward	ML15148B052	Smith, Kevin	ML15156A918
Slade, Colette	ML15156A916	Smith, Kristin	ML15148A788
Slater, Ruth	ML15141A586	Smith, Leslye	ML15159A141
Slaton, Marina	ML15154A967	Smith, Lisa	ML15153B191
Slawinski, Katherine	ML15159A352	Smith, Lloyd	ML15156A216
Sleeth, Janet	ML15158A185	Smith, Lori	ML15141A600
Slemenda, Joseph	ML15154C292	Smith, Lynette	ML15142A277
Sletten, Greg	ML15158A006	Smith, Madeline	ML15160A963
Sleva, Cathy	ML15154C039	Smith, Marilyn	ML15155A134
Slisher, Rebecca	ML15155B054	Smith, Mary Ann	ML15153A412
Sloane, Kenneth	ML15159A416	Smith, Mary Ann	ML15154B322
Slote, Karen	ML15159A416 ML15148B123	Smith, Maureen	ML15159A062
Slote, Karen	ML15146B125 ML15154B253	Smith, Neill	ML15159A062 ML15159B381
Small, Sharon	ML15162A664	Smith, Pamela	ML15155A184
	ML15148A940		ML15148B013
Smallwood, Tracey		Smith, Ray	
Smarr, Todd	ML15155A754	Smith, Raya	ML15162A158
Smereck, Amy	ML15156B046	Smith, Sandra	ML15159A133
Smestad, Gloria	ML15153B239	Smith, Sarah	ML15161A619
Smit, Marilyn	ML15159B439	Smith, Steven	ML15155A783
Smith and Hill, Lynn and		Smith, Stevew	ML15155C248
EdwRd	ML15154B342	Smith, Stevew	ML15156B052
Smith, Adrian	ML15159A419	Smith, Suzanne	ML15160A061
Smith, Angela	ML15148A835	Smith, Valerie	ML15154B865
Smith, Anita	ML15154B719	Smith, Vernon	ML15147A743
Smith, Barbara	ML15156A728	Smith, Walter	ML15156A987
Smith, Beverly	ML15140A231	Smith, William	ML15140A041
Smith, Bradley	ML15154A264	Smith, Yvonne	ML15154A007
Smith, Brooke	ML15153A570	Smithberger, Dana	ML15154B644
Smith, Cambria	ML15155A630	Smock, Amanda	ML15160A556
Smith, Christopher	ML15158A234	Smoker, Art	ML15154A948
Smith, Cynthia	ML15154B184	Smolarski, Ronald	ML15155A268
Smith, David	ML15153B034	Smukler, Marguerite	ML15156B252
Smith, David L.	ML15155B679	Smyke, Pete	ML15148B026
Smith, Dea	ML15153B156	Smythe, Ana	ML15155A878
Smith, Diana	ML15156A543	Smythe, Richard	ML15155A202
Smith, Dylan	ML15154B751	Smythe, Stewart	ML15156A964
Smith, Earl	ML15148B275	Sneiderman, Arthur	ML15159A719
Smith, Elizabeth	ML15155B767	Snell, Karen	ML15154C218
Smith, Indira	ML15155C138	Snider, Darleene	ML15155B866
Smith, J. T.	ML15153B047	Snider, Jay	ML15153A431
Smith, James	ML15142A209	Snook, Richard	ML15154C047
Smith, James	ML15142A357	Snow, Patricia	ML15155A271
Smith, Janet	ML15156B013	Snowdon, Hilton	ML15159B350
Smith, Janice	ML15159B361	Snyder, Joanne	ML15154A230
Smith, Jean	ML15154A607	Snyder, John	ML15141A688
Smith, Jeannie	ML15156A920	Snyder, Kristina	ML15161A668
Smith, Jeff	ML15141A617	Snyder, Laura	ML15153A816
Smith, Jennifer	ML15142A323	Snyder, Lynn	ML15156B242

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Snyder, Nancy	ML15159A867	Spann, Bridget	ML15154A155
Snyder, Robert	ML15155B659	Spanogle, Vicki	ML15154A704
Snyder, Sheri	ML15159A323	Sparks, Dana	ML15142A307
Snyder, Ted	ML15156B044	Sparlin, Shauna	ML15156A128
Snyder, Warren	ML15159A951	Spaulding, Stephen	ML15148B105
Soar, Anita	ML15155A138	Spears, Harvey	ML15154C124
Sobanski, Sandra	ML15156A019	Speciale, Samuel	ML15153A610
Sobel, Michael	ML15156A188	Species, Scott	ML15155A462
Sobel, Scott	ML15142A255	Speed, Janice	ML15159A553
Soddy, Diane	ML15155B007	Speer, Cheryl	ML15155A357
Soddy, Diane	ML15155B782	Speicher, Sandra	ML15156A432
Soenksen, Mark	ML15142A166	Speidel, Kurt	ML15155A441
Sogorka, Amber	ML15153B204	Spencer, Carole	ML15155A249
Sohl, Erica	ML15159A746	Spencer, Jeremy	ML15148B222
Sokolove, Harold	ML15155B810	Spencer, Kathleen	ML15156A954
Solano, Nicole	ML15142A356	Spencer, Martha	ML15160A876
Solaris, Laila	ML15153A908	Spencer, Sheila	ML15153A360
Soler, Sandra	ML15142A103	Spengler, Jennifer	ML15162A657
Solesby, Eli	ML15155B320	Speno, Charlie	ML15148A180
Solomon, Karen	ML15153B165	Spera, Kathy	ML15154A881
Solum, Mary	ML15154A463	Spevak, Edward	ML15142A099
Somers, Mary	ML15155A178	Spiegel, Edwyna	ML15154A226
Sommer, Kenna	ML15154A819	Spiegel, Kimberly	ML15159B041
Sommie, Lee	ML15153B186	Spielmann, Edda	ML15148B407
Sondgerath, Bob	ML15158A192	Spillman, Aileen	ML15142A343
Sonker, Jennifer	ML15153A439	Spitzer, Laura	ML15154B860
Sonnenblick, Rachel	ML15155A803	Spivack, Susan	ML15161A634
Sons, Lisa	ML15159B358	Spohn, Dena	ML15156A781
Sorano, Jessica	ML15159A535	Spokony, Irving	ML15142A176
Sorensen, Anna	ML15159B559	Spong, Timothy	ML15156A846
Sorensen, Barbara	ML15155A470	Spradlin, Karen	ML15153B093
Sorensen, Elaine	ML15155A843	Spragins, John	ML15148A800
Sorensen, Gary	ML15162A713	Sprague, Jeanne	ML15159B151
Sorenson-Banavathu, Tina	ML15162B089	Sprano, Barbara	ML15162B147
Sorenson-Banavathu, Tina	ML15162B139	Spreitzer, Francis	ML15153A495
Sorlucco, Lucy	ML15154B100	Springer, Cynthia	ML15154A011
Sortland, Joyce	ML15155C082	Springer, Steven	ML15153A809
Sosa, Gabriela	ML151310002 ML15141A678	Spry, Tom	ML15156A582
Sosa, Madeline	ML15154A373	Squires, Emma	ML15153B042
Soto, Edy G.	ML15141A695	St. Angelo, R.	ML15154C287
Sotomayor, Nora	ML15156A162	St. Clair, Sharyn	ML15154A244
Soucek, Paul	ML15159A011	St. Germaine, Gerald	ML15155B566
Southwick, Christine	ML15148A969	Staats, Jean	ML15155A521
Souza, Julie	ML15158A078	Stabler, Jessica	ML15155A307
Sowards, Michael	ML15156A132	Stachnik, Holly	ML15156A053
Sozio, Jeanne	ML15156A117	Stadler, Debra	ML15155B187
Spachidakis, Theodore	ML15160A874	Staff, George	ML15159B524
Spada, Victor	ML15156A983	Stall, John	ML15156A847
Spadoni, Michael	ML15153A869	Stallings, Kenneth	ML15142A181
Spady, William	ML15155B345	Staller, Marlene	ML15153A377
Spain, Steve	ML15155B317	Stamer, Lou	ML15155B848
Spak, Margaret	ML15162A287	Stamm, Karen	ML15142A275
Spalding, Jann	ML15102A207 ML15142A101	Stamm, Nancy	ML15142A275 ML15148A136
Shalding Jann			

	ADAMS		ADAMS	
Commenter	Accession #	Commenter	Accession #	
Stan, Talila	ML15148B243	Steinauer, Kay	ML15154B173	
Stanberry, Beth	ML15159A074	Steinberg, Jack	ML15154C203	
Standley, Dawn	ML15153A947	Steinberg, Tara	ML15142A022	
Standley, Ron	ML15153B272	Steinbrecher, Klaus	ML15155C136	
Stanley, Norm	ML15154C279	Steinbrink, Nancy	ML15153A941	
Stanley, Richard	ML15155B694	Steiner, A. L.	ML15154A254	
Stansbury, Angelica	ML15156B189	Steinfeld, Naomi	ML15158A066	
Stansfield, Jack	ML15155B056	Steinhardt, Helene	ML15153B023	
Stansill, Sally	ML15155B437	Steinhart, Carol	ML15142A115	
Stantial, Linda	ML15154B872	Steininger, Lorenz	ML15148B054	
Stanton, Liana	ML15154B898	Steininger, Robert	ML15159A823	
Stanton, Lisa	ML15156A526	Steinle, Sandra	ML15154A735	
Stapelfeldt, Horst	ML15155C071	Steinmetz, Cindy	ML15154C264	
Stapler, Carl	ML15155B554	Stellato, Pat	ML15155C160	
Stapp, Laci	ML15155C123	Stenflo, Jahnavi	ML15154B289	
Star, Star	ML15158A184	Stenseth, Carolyn	ML15155A828	
Starbuck, Stanley	ML15148B446	Stephan, Elise	ML15148A953	
Stark, Katharine	ML15153A466	Stephens, Chandra	ML15155B989	
Stark, William	ML15153A568	Stephens, John	ML15153A359	
Starling, Richard	ML15158A088	Stephens, Robert	ML15154A867	
Starr, David	ML15140A012	Steppan, Linda	ML15160A922	
Starr, Joan	ML15156B089	Sterling, Keir	ML15154B842	
Starrett, Nancy	ML15142A081	Stern, Les	ML15155A291	
Starz, Mary	ML15147A783	Stern, Richard	ML15141A654	
Stasey, Joseph	ML15154B843	Sternberg, Karin	ML15142A043	
Stassinopoulas, George	ML15154A234	Sterner, Jim	ML15154C268	
Staton, Janiece	ML15154B031		ML101040200	
		Sterzing, H. Keith		
Statts, Jeffrey	ML15162A661	Mephodie	ML15155B635	
Stauber, Michael	ML15153B164	Stetser, Ann	ML15155A004	
Stavis, Alex	ML15155A862	Steva, Megan	ML15155A091	
Stawinoga, Greg	ML15148B444	Stevens, Dennis	ML15154A929	
Stay, Chris	ML15162B079	Stevens, Earl	ML15148A986	
Stay, Chris	ML15162B128	Stevens, Earl	ML15154A778	
Steadmon, Jason	ML15154C021	Stevens, Eugenia	ML15160A885	
Stearney, Fern	ML15159A529	Stevens, Gavi	ML15158A065	
Stedman, Matt	ML15148A993	Stevens, Lisa	ML15156A898	
Steele, Cheryle	ML15155B604	Stevens, M.	ML15158A213	
Steele, Mary	ML15162A225	Stevens, Wendy	ML15156A477	
Steele, William	ML15148A638	Stevenson, Kenneth	ML15155A414	
Steers, Sandra	ML15153A653	Stevenson, Nadine	ML15140A144	
Steets, Diane	ML15156A130	Stevenson, Timothy	ML15162A730	
Steeves, Charleen	ML15156A914	Stewart, Berkeley	ML15155A990	
Stefacek, Laura	ML15154A876	Stewart, Betty	ML15156A006	
Stefanich, Rosalie	ML15154C005	Stewart, Jack	ML15155A236	
Stefano, Courtney	ML15155B512	Stewart, Margie	ML15156A513	
Steffen, Heidi	ML15142A228	Stewart, Michael	ML15159B389	
Steffen, Melanie	ML15161A641	Stewart, Rebecca	ML15159A937	
Stehle, Alice	ML15154B246	Stewart, Ruth	ML15155B015	
Steiger, Bonnie	ML15162B106	Stewart, Sharron	ML15154B125	
Steiger, Bonnie	ML15162B064	Stewart, Shelli	ML15146A369	
Steil, Ashleigh	ML15159B345	Stewart, Stephanie	ML15154B622	
Stein, Dennis	ML15153B064	Stickel, Ann	ML15153A651	
Stein, Herbert	ML15156A778	Stickney, John	ML15155A057	
Stein, Renee	ML15155C127	Stickney, Karen	ML15154B559	

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Stieber, Frank	ML15148B134	Strawn, Mike	ML15159B298
Stieglitz, Joseph	ML15159B546	Strayer, Rosa	ML15148A822
Stiehl, Joanna	ML15159A664	Strear, Nancy	ML15154B072
Stierlen, Lorelei	ML15155B398	Street, Diena	ML15142A100
Stierli, Edward	ML15148A232	Street, Patty	ML15159A374
Stiff, Gina	ML15148A921	Strehlow, Jennifer	ML15160A897
Stiff, Gina	ML15154B243	Streur, Devin	ML15154B329
Stiles, Sarah	ML15156B003	Stricker, Robert	ML15155A667
Stime, Denise	ML15159B407	Strickland, Carolyn	ML15159A087
Stimmer, Sonja	ML15153A695	Strickland, Jennifer	ML15141A728
Stimpson, Lisa	ML15142A231	Stril, Jean	ML15156A317
Sting, Gloria	ML15156B034	Stringer, David Allen	ML15159A300
Stinson, Georgia	ML15156A962	Strom, Theresa	ML15156A239
Stinson, Loree	ML15154A679	Stromberg, Patricia	ML15155B384
Stiteler, Ellin	ML15141A443	Stromfeld, Andrew	ML15155C156
Stocker, Nancy	ML15162B105	Strong, Ann	ML15155A474
Stocker, Nancy	ML15162B042	Strong, Daniel	ML15156B209
Stocker, Thomas J.	ML15155B580	Strong, Grace	ML15154A078
Stockman, Sharon	ML15160A946	Strouble, Jackie	ML15156B019
Stocks, Lawrence	ML15158A262	Stroupe, Kerri	ML15154C273
Stoddard, Eric	ML15155C145	Strowd, Carl	ML15156A310
Stoddard, Enc	ML15141A577	Strowd, Can Strowd, Richard	ML15154B090
Stoffel, Patrick	ML15156B263		ML15154B334
	ML15154A118	Strum, Cathy	ML15159A029
Stokes, Bettina	ML15154A114	Strzesak, Jacqueline Stuart, Connie	ML15155A036
Stoltenberg, John Stone, James	ML15148A627	Stuart, Michael	ML15155B621
Stone, Jane	ML15154B771	Stucker, Melinda	ML15148A780
Stone, Kelly	ML15159A782	Stuckey, Richard	ML15142A179
Stone, Lisa	ML15141A539	Stuebben, Angela	ML15156A316
Stone, Mary	ML15159A282	Stulb, Jeanne	ML15141A741
Stone, William	ML15153B101	Stulman, Esther	ML15154B191
Stoneback, Sharon	ML15159A345	Stumpf, Lawrence	ML15155B436
Stoneburner, Barb	ML15148A196	Sturek, Doshia	ML15155B266
Stonehawk, Mikerra	ML15148A925	Sturm, Sabine	ML15153B090
Stoner, Dorothy	ML15162A224	Stutes, Earl	ML15160A600
Stonier, Polly	ML15155B980	Stutz, Susan	ML15155A787
Stonington, Louise	ML15140A238 ML15159A841	Styles, Ronda	ML15159A455
Stoops, William		Su, Donna	ML15153A784
Story, Shirley	ML15156B427	Suarez, Moraima	ML15155B704
Story, Tiffany	ML15155B178	Suchenicz, Carolyn	ML15159A272
Story, Tiffany	ML15158A136	Suda, Maryska	ML15155A659
Stout, Karen	ML15155C104	Suess, Gillian	ML15155A116
Stout, Keri	ML15154C074	Suggs, Magdaline	ML15160A731
Stout, Kristen	ML15156A137	Suit, Karen	ML15155A368
Stowers, Carol	ML15148B079	Sullenberger, Nathan	ML15155A908
Strack, Daniel	ML15155B669	Sullivan, Barbara	ML15155A299
Strahan, Estha	ML15155A112	Sullivan, Carol	ML15156B335
Strailey, Faith	ML15148A718	Sullivan, Denise	ML15155A978
Strain, Darren	ML15156A199	Sullivan, Diane	ML15156A793
Strand, Emmorette	ML15154A325	Sullivan, Molly	ML15160A055
Stransky, Charles	ML15155B795	Sullivan, Tad	ML15153B304
Strate, Kris	ML15158A113	Sullivan, Teresa	ML15153A329
Strauss, John	ML15162A426	Sullivan, Tom	ML15156A639
Strauss, Nancy	ML15155A911	Sumida, Kaytee	ML15141A798

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Commenter	Accession #	Commenter	Accession #	
Summers, Lela	ML15141A540	Symonds, Allen	ML15154C142	
Sumners, Robyn	ML15153A844	Symonds, Russell	ML15162B079	
Sunada, Kristin	ML15156B030	Symonds, Russell	ML15162B122	
Sunada, Kristin	ML15154B385	Sytzko, Victor	ML15153A863	
Sundarajan, Aditi	ML15154B851	Syverson, Janelle	ML15154B163	
Sunderland, Melissa	ML15155A032	Szabo, Joseph	ML15160A845	
Sunderland, Violet	ML15154A119	Szabo, Liz	ML15155A298	
Sundquist, W.	ML15153B033	Szabo, Liz	ML15155B617	
Sutherland, John	ML15158A210	Szumal, Raymond	ML15156A105	
Sutkowski, John	ML15154B297	Szymanowski, Paul	ML15156B341	
Sutliff, Leslie	ML15148B108	Szymczak, Nancy	ML15153A898	
Sutphin, Madelaine	ML15156A838	Szymczyk, Mary	ML15154A444	
Suyehara, Erin	ML15155B855	Szyszka, Lawrence	ML15159A586	
Svare, Marlys	ML15153A821	T., C.	ML15155B832	
Svec, Bonnie	ML15154B218	T., Randy	ML15153A943	
Svensson, Bo	ML15154A242	Taber, Gloria	ML15162A097	
Swaim, Lauren	ML15155B138	Tabor, Kris	ML15154B880	
Swaim, Lenore	ML15141A767	Taffany, Laura	ML15155C184	
Swain, Aimee	ML15147A753	Taft, Robert	ML15155A979	
Swain, Robert and Mary	ML15159B128	Tagawa, Ann	ML15158A286	
Swall, Don	ML15156A210	Taggart, Carol	ML15155B522	
Swan, Cate	ML15159A035	Tait, Ann	ML15148A214	
Swan, Susan	ML15160A878	Takatsch, Julie	ML15153A804	
	ML15155A186			
Swaney, Sharon		Talbot, James	ML15142A087	
Swank, Carrie	ML15141A518	Taliano, Ronald	ML15155A192	
Swank, Phyllis	ML15148B186	Talkington, Wendy	ML15148A645	
Swanson, Lesllie	ML15140A255	Tallant, Deenie	ML15156A074	
Swanson, Lorraine	ML15156A647	Talleagle, David	ML15155B887	
Swanson, Michael	ML15142A306	Tamargo, Jorge J.	ML15154A542	
Swanson, Ricki	ML15159B220	Tamulen, Karin	ML15153A858	
Swanson, S.	ML15140A033	Tangen, Beverly	ML15154A003	
Sweazea, Alan	ML15155B085	Taniwaki, Marge	ML15162A726	
Sweeney, John Gideon	ML15154B477	Tankersley, Janice	ML15141A797	
Sweeney, Wesa-Asgaya	ML15156A511	Tann, Rosemary	ML15159A004	
Sweet, Kirsten	ML15155A969	Tann, Rosemary	ML15159A071	
Sweet, Timothy	ML15160A881	Tanner, Marjorie	ML15155B638	
Sweetland, Daisy	ML15154B252	Tanner, Phillip	ML15148A182	
Sweetling, William	ML15154A087	Tansey, Paulette	ML15154A156	
Sweeton, Margaret	ML15154A763	Tapiero, Abel	ML15142A049	
Swem, Earl Gregg	ML15159B130	Taplin, Helen	ML15155A853	
Swendrowski, Mike	ML15154B353	Tapp, Elizabeth	ML15162A241	
Swensen, Harry	ML15159A731	Tappen, Amy	ML15154B981	
Swenson, Keith	ML15155B490	Tarallo, Mary	ML15154C095	
Swenson-Zakula, Kimberly	ML15159A619	Tarantino, Ethel	ML15156B010	
Swick, Chelsea	ML15155B656	Tarkington, Victoria	ML15154B300	
Swiencicki, John	ML15154B823	Tarkowski, Brenda	ML15160A667	
Swimsaway, Crow	ML15153A485	Taroli, Garry	ML15141A510	
Swindell, Elak	ML15154B054	Tarpley, Matthew	ML15153B091	
		Tasker, David	ML15153A551	
Swindle, Terri	ML15156B230			
Swinehart, Lorin	ML15148A593	Tassell, Bruce Van	ML15154A200	
Swoffer, Tom	ML15153A864	Tate, Nancy	ML15148A982	
Sydor, Oleh	ML15153A762	Tatom, Andy	ML15159A097	
Syed, Mushtaq	ML15155A431	Tatum, Elizabeth	ML15141A630	
Symcox, Geoffrey & Linda	ML15156B033	Tatum, Elizabeth	ML15154B639	

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Commenter	Accession #	Commenter	Accession #
Tauriainen, Michael	ML15159A498	The U. Family,	ML15156A251
Taylor, Audrey	ML15156A208	Theard, Lauren Pacheco	ML15148A968
Taylor, Barbara	ML15155A226	Theroux, Rosemary	ML15159A614
Taylor, Jackie	ML15153B223	Therrien, Theresa	ML15154B118
Taylor, Kelly	ML15159B308	Thibault, Gail	ML15140A226
Taylor, Kirk	ML15155B906	Thiel, Mary Martha	ML15154B354
Taylor, Nancy	ML15159B431	Thiess, Fred	ML15159A115
Taylor, Robyn	ML15160A860	Thing, Susan	ML15155B027
Taylor, Stephen	ML15155C141	Thomas, John	ML15154B785
Taylor, Tim	ML15160A793	Thomas, Bev	ML15153A873
Tays, Shawn	ML15153B181	Thomas, Caren Crronk	ML15148A666
Teasley, Regi	ML15162A061	Thomas, Denise	ML15159A858
Teason, Christine	ML15159A806	Thomas, Eva	ML15154A873
Tedesco, Frances	ML15155B631	Thomas, Gina	ML15154A993
Tedesco, Terry	ML15155B601	Thomas, Helen	ML15158A022
Tedesco, Terry	ML15159B076	Thomas, James	ML15148A708
Tedesco-Kerrick, Terry	ML15159B402	Thomas, Jeffrey	ML15148B077
Teel, Shannon	ML15148B173	Thomas, Kimberly	ML15156A322
Teeter, Keith	ML15154B838	Thomas, Lisa	ML15161A620
Teevan, John	ML15154C126	Thomas, P.	ML15155A318
Tefertiller, Staci	ML15153B253	Thomas, Patte	ML15154B944
	ML15153A757	Thomas, Robert	ML15154C195
Tegtmeier, Diane Tehan, Patricia	ML15158A098	Thomas, Rochelle	ML15155B404
Teibloom, Joel	ML15155A737	Thomas, Toni	ML15156B195
Telfair, II, Ray C. Tali, App Maria	ML15148B299	Thomas-Hill, Pam	ML15155A237
Teli, Ann Marie	ML15153A971	Thomason, Anita	ML15154B776
Telleen, Melany	ML15153B217	Thomason, Sharon	ML15159A349
Tempelman, Steven	ML15158A004	Thomas-Virnig, Christina	ML15155A086
Temple, Michele	ML15148A763	Thompson, Beverly	ML15160A525
Templeton, Todd	ML15153A990	Thompson, Dave	ML15162A237
Tenaglia, Carol	ML15156A757	Thompson, Douglas	ML15153A690
Tenerelli, Brenda	ML15142A141	Thompson, Jackie	ML15148B428
Tennant, Allie	ML15153A416	Thompson, Jeremy	ML15161A674
Tennen, Laura	ML15153A817	Thompson, Keith	ML15148A769
Tennen, Sylvia	ML15153A855	Thompson, Mark	ML15162A423
Tennen, Sylvia	ML15155A778	Thompson, Muhammad	ML15156A270
Tenney, Joanne	ML15155A633	Thompson, Robert	ML15154B255
Teresi, Fran	ML15154B430	Thompson, Roberta	ML15154C194
Tergesen, Ron	ML15155A713	Thompson, Sally	ML15154A312
Terleski, Margaret	ML15155A362	Thompson, Susan	ML15156A723
Terriault, Michelle	ML15154A660	Thomsen, Donna	ML15148B012
Terrock, Jennifer	ML15141A652	Thorington, Helen	ML15153A536
Terry, Clifford	ML15148A657	Thornburg, Merrie	ML15156A127
Terry, Michael	ML15155B124	Thorne, Eugene	ML15155A338
Tesch, Charlie	ML15156B001	Thornell, Nigel	ML15155A511
Tetarenko, Pamela	ML15154A479	Thornsbury, Jean	ML15141A624
Tetro, Barbara	ML15155A823	Thornton, Laura	ML15142A245
Teunissen, Christina	ML15147A708	Thornton, Robyn	ML15159B550
Tevelow, Carla	ML15155C143	Thorsen, Einar	ML15154A460
Tevis, Eleanora	ML15156B310	Thrailkill, Jim	ML15154C199
Thackrey, Gale	ML15153B103	Thrower, Michelle	ML15155A180
Tharp, Reynold	ML15154C087	Thrush, J.	ML15155A245
Thayer, Mostyn	ML15155B844	Thurman, Anna	ML15156B504
The U. Family,	ML15156A245	Thurn, Clement	ML15161A702

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Fiarks, Daniel	ML15148B104 ML15154A135	Torres, Susan	ML15148B067
Γiaven, Marilyn Γibbets, Linda		Torres-Ortiz, Ramon	ML15156B095
	ML15153A866	Torrette, Ron	ML15159A108
Fice, Janet	ML15158A183	Torsander, Camilla	ML15160A760
Fichman, Nadya	ML15154A830	Torsander, Camilla	ML15160A760
Tidwell, Marion	ML15155A312	Toscani, Maureen	ML15162A575
Tieso, Jovita	ML15162A244	Tosney, Kathryn	ML15153A911
Tiessen, Grace	ML15156A771	Toth, James	ML15154B946
Tildes, Katherine	ML15156B429	Tousley, Kay	ML15156B454
Till, Mary Ann	ML15154C244	Tovar, John	ML15158A152
Tilley, Justine	ML15148A709	Towers, Gloria	ML15154A142
Tillinghast, Audrey	ML15156A599	Towner, Erline	ML15146A237
Timberlake, Ralph	ML15160A889	Townsend, Carlos	ML15159A932
Fimm, Jill	ML15155A098	Townsend, Darlene	ML15153A700
Timm, Richard	ML15155B109	Townsend, Darlene	ML15153A830
Timmerman, Don	ML15159B521	Townsend, Peter	ML15153B146
Tindol, Lolly	ML15155C060	Townshend, Elisa	ML15141A647
Tine', Tina	ML15156A169	Toy, James	ML15156B475
Fingle, Brian	ML15142A321	Toy, Mary Ann	ML15156A698
Tinsley, Brenna	ML15159A766	Tozzi, Sharon	ML15141A594
Fisdell, Jennifer	ML15153B151	Tracy, Anne	ML15155B222
Tizard, Thomas	ML15154A043	Tracy, Steven	ML15155C167
Tobias, Alice	ML15159A371	Tracz, Gordon	ML15154A457
Tobias, Christopher	ML15155C200	Trafficante, Michelle	ML15148B284
Tobin, Ralph	ML15155A230	Tran, Danielle	ML15159A845
Tobolski, Kelly	ML15159B332	Tran, Kim	ML15155B961
Todaro, Tom	ML15153B010	Tran, Sheila	ML15154A019
Todd, Miranda	ML15158A148	Trask, David	ML15162B079
Fodd, Nic	ML15154B834	Trask, David	ML15162B143
Fodd, Victoria	ML15155B457	Tratolatis, Denise	ML15159B250
Todisco, Michael	ML15156A304	Trauth, Beti	ML15159A859
Toelle, Sherry	ML15155A160	Traveler, Calum	ML15140A281
Toft, Carolyn	ML15156B125	Travis, Judi	ML15153A321
Foigo, Joe	ML15155B627	Travis, oud Travis-Morgan, Donna	ME 10 100A02 I
Tokunaga, Barb	ML15156A445	Mae	ML15154B997
Foledo, Justin	ML15155B982	Trawitzki, Tony	ML15153A901
Tolerico, Joseph	ML15154B753	Treadwell, Phyllis	ML15153A901 ML15153B053
	ML15154A251	Tredinnick, Catherine	
Follefson/Conard, Margot		,	ML15153B158
Folley, Mark	ML15154B959	Tregidgo, Richard	ML15154B617
Fomaselli, Susan	ML15156B231	Trela, Christine	ML15154B730
Tomasello, Pela	ML15155C093	Tremmel, Leonard	ML15142A350
Fomlinson, Michael	ML15153B120	Trevillian, Linda	ML15153A959
Fompetrini, Phil	ML15159B113	Trevillion-Hill, Mary Ann	ML15153B194
Tompkins, Greg	ML15159B573	Triana, Antonio	ML15155A090
Toms, Gary	ML15156A546	Trice, Tina	ML15155C157
Tonkin, Gary	ML15156A189	Trico, Sher	ML15159A925
Fonsing, Richard	ML15154B306	Trilles, Tangi	ML15159A824
Foobert, Michael	ML15155B113	Trimm, James	ML15156A114
Foone, James	ML15153A742	Trinque, Eric	ML15155B016
Tootell, Joan	ML15158A051	Trotta, Anthony	ML15162A600
Forchenot, Ferold	ML15141A773	Trotta, Kevin	ML15141A663
Torchenot, Ferold	ML15147A760	Troy, Gail	ML15154A602
Torres, Andrea	ML15148A873	Truax, Wayne	ML15155C227
Torres, Joe	ML15141A782	Trudeau, Christine	ML15154A382

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Trudeau, Christine	ML15154B922	Unger, Jennifer	ML15154C248
rue, Mary	ML15159A085	Unger, Pamela	ML15155A688
ruland, David	ML15154B948	Unger, Steven	ML15148A132
Frumann, C.	ML15158A230	Unruh, Jerry	ML15156A168
rumbull, Ramon	ML15155B200	Urban, Richard	ML15155C192
Trybus, Marilyn	ML15155C147	Urbanek, Gail	ML15155A278
Fryggeseth, Jackie	ML15155A861	Urik, J. Alan	ML15155B703
rykowski, Denay	ML15154B702	Utigaard, Nina	ML15155B852
Trykowski, Lonni	ML15155B997	Utt, Charles	ML15159A171
Tsung, Dia	ML15155B840	Utterback, Pamela	ML15154B265
Tuch, Christopher	ML15155B185	Uyenishi, Steve	ML15158A289
Tucker, Arlen	ML15160A751	Uzsak, Adrienn	ML15159B576
lucker, Jessica	ML15156A098	V., Barbara	ML15153A645
ucker, Kathleen	ML15154B716	Vachon, Adelia	ML15155A780
Tucker, Lynn	ML15156B319	Vail, Cameron	ML15155A840
ucker, Robert	ML15154C090	Vairo, Gina	ML15153A588
luckerman, Peter	ML15155C177	Valencia, Rio	ML15154B134
luckett, Natasha	ML15159A994	Valencour, Sandy	ML15160A945
Tudor, Doina	ML15154B816	Valenti, Scott	ML15153A985
ugwell, Thomas	ML15153B071	Valentic, Nerma	ML15156A034
fulloch, Mary	ML15155A058	Valentine, J.	ML15162B113
Tuman, Susan	ML15159A714	Valentine, J.	ML15162B044
uomey, Joseph	ML15154C186	Valentine, Karen	ML15159A997
urbeville, Pam	ML15154C056	Valentine, Leslie	ML15160A852
Furbush, Heather	ML15160A797	Valentine, Sarah	ML15162A218
uretsky, Sami	ML15156B168	Valerie, Stiff	ML15155B071
urnbull, Karen	ML15162A351	Valiga, Susan	ML15155A788
urner, Christy	ML15160A066	Valle, Jacqueline	ML15154B801
urner, Jeffrey	ML15159B477	Valluzzi, Jim	ML15154B581
urner, Kathleen	ML15159B493	Valney, Shirley	ML15159A534
urner, Phyllis	ML15155A601	Van Bergen, Jo Ann	ML15148A160
Furner, Thomas	ML15148B244	Van Burg, Chera	ML15154B733
utihasi, R-Laurraine	ML15159A120	Van Buskirk, Richard	ML15155A860
ſuxen, Ardelle	ML15159A089	Van Dam, Chad	ML15153A352
wickler, Carrie	ML15155A398	Van Den Blink, Kieren	ML15140A283
Twist, Shannon	ML15155B006	Van Hise, James	ML15158A251
wombly, Glen A.	ML15155A191	Van Huijkelom, Hans	ML15154B599
yler, Steve	ML15155B793	Van Lear, Tom	ML15148B397
yler, Theresa	ML15142A214	Van Leekwijck, Natalie	ML15154A609
yler, Wesley	ML15160A902	Van Leuven, Phyllis	ML15155B992
⊺yre, Michael	ML15154B213	Van Ormer, Diana	ML15155B244
yrrell, Larry	ML15154A582	Van Pelt, Jason	ML15153A518
zelil, Canan	ML15159B253	Van Petten, Melani	ML15155A955
Jchno, Lisa	ML15158A264	Van Riper, Michael	ML15154C066
Jcko, Aaron	ML15155A104	Van Velson, Nathan	ML15156A333
Jdelson, Donald	ML15154B182	Vanbuskirk, Paula	ML15142A079
Jecker, Robert	ML15159B414	Vance, Christoper	ML15155C152
Jlness, James	ML15141A628	Vance, Eric	ML15141A419
Jmbricht, Annie	ML15148B164	Vance, Richard	ML15142A131
Jnderwood, Dennis	ML15154A628	Vance, Samuel L.	ML15155B994
Jnderwood, John	ML15154B521	Vander Stoep, Dorothea	ML15154A120
Jnderwood, John	ML15154B521	Vandergrift, Debra	ML15154B999
Jngar, Luci	ML15154A855	Vanderhill, Margo	ML15154A749
Jnger, David	ML15141A731	Vandermark, Barbara	ML15155B405

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Vandersloot, Joyce	ML15153A669	Verzosa, Paul	ML15158A096
Vanderveer, Angel	ML15156A682	Vesely, Sakura	ML15158A075
Vandeventer, John	ML15155C034	Vest, Martha	ML15153A886
Vandivere, Stephen	ML15155B031	Vest, Nelda	ML15159A084
Vanetten, Margot	ML15159A399	Veyhl, Stanley	ML15154A178
Vanhoy, Rick	ML15153A633	Viacrucis, John	ML15154C230
Vaniman, Jill	ML15159A657	Vice, Daniel	ML15148B165
Vanino, Susan	ML15154B002	Vician, Doris	ML15153A482
Vankampen, Art	ML15148B293	Vickers, Margaret	ML15154C014
Vanness, Barbara	ML15142A145	Viergutz, Julie	ML15156A150
Vanruff-Howden, Susann	ML15141A791	Vignet, Stephen	ML15155A031
Vantilborgh, Tony	ML15162A716	Viljoen, Christina	ML15153A979
Varanitsa, Oleg	ML15156B211	Villanova, Carolyn	ML15155A400
Varcoe, Donna D.	ML15154A041	Villanueva, Roberto	ML15154B112
Vargas, Christopher	ML15148B226	Villarroel, Erick	ML15154C091
Varner, Miles	ML15153B206	Villars, Julia	ML15156A871
Varney, Karen	ML15154C208	Villodas, Abigail	ML15155A354
Vartenuk, Cynthia	ML15148B256	Vincent, Judith	ML15159A954
Vasily, Karen	ML15147A742	Vineski, Patricia	ML15156B359
Vatter, Sherry	ML15153B055	Viney, Mary Anne	ML15154C236
Vaughan, Carolyn	ML15154A166	Vion, Helene	ML15154A389
Vaughan, Lisa	ML15156B091	Vitek, Sandi	ML15155B883
Vaught, Kevin	ML15148B339	Vivian, David	ML15141A646
Vaulx-Smith, Wilford	ML15154A820	VL, Judie	ML15148A999
Vayda, Karen Ziomek	ML15154B558	Vlah, M.	ML15154B828
Vazquez, Sonia	ML15158A099	Vlasiadis, Andreas	ML15159B284
Vearling, June	ML15154A630	Voeltner, Carole	ML15156A514
Vecchiotti, Dorothea	ML15156B147	Vogel, Nathan	ML15154B037
Vedvik, Gary	ML15154A596	Vogel, Steven	ML15148A964
Vee, Ordell	ML15148A852	Voigtschild, Meg	ML15154C281
Vegan, Rift	ML15155B653	Volin, Judy	ML15154A655
Veijalainen, Pertti	ML15148A825	Volk, Suzanne M.	ML15156B376
Veillette, Elizabeth	ML15162A673	Vollmer, Alexander	ML15154B310
,	ML15159A840	Volpatti, Dan	ML15153A803
Veirs, Mary			ML15154C020
Veirs, Mary	ML15159A538	Volpe, Joe	
Veit, Eberhard	ML15153B029	Volquarts, Heinz	ML15155A240
Velez, Francisco	ML15160A973	Von Abele, Melitta	ML15155A525
Velez, Jorge	ML15147A738	von Sacher-Masoch,	
Velez, Sue	ML15154C053	Michael	ML15159A165
Velloo, Samara Hanson	ML15155B644	Vorachek, Mary	ML15142A152
Veltkamp, Robert	ML15160A559	Vorhees, Miranda	ML15158A045
Vena, Skip	ML15156A200	Voronov, Mikhail	ML15153A370
Venable, Sylvia	ML15154B010	Vorse, Stephanie	ML15155B984
Venezia, Sherri	ML15148A740	Voss, Barbara	ML15159B585
Veraldi, Anne	ML15154A589	Vulic, Davor	ML15147A775
Veraldi, Anne	ML15154A604	Vyatchanin, Evgenia	ML15158A205
Veralli, Robert	ML15141A444	W., Kevin	ML15148B436
Verbridge, Tara	ML15154A289	Wachowiak, B.	ML15162A607
Verhagen, Marianne	ML15154C121	Wackowski, J.	ML15159A364
Vermeer, Shellie	ML15155A762	Wade, Gf	ML15160A813
Vermeulen, Mary	ML15154B979	Wade, Julia	ML15154A751
Verna, Diane	ML15159B362	Wade, Pat	ML15153A704
Verna, Diane	ML15162A738	Wadford, Soney	ML15155C016
Verrier, Theresa	ML15154A008	Wadland, Sue	ML15159A912

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Nadsworth, Andrew	ML15159B540	Walsh, Frank	ML15142A139
Nagber, Herman	ML15156A082	Walsh, Kristin	ML15154A259
Vaggener, Michael	ML15159A069	Walsh, Nancy	ML15142A130
Vagner, Florence	ML15155B967	Walsh, Susan	ML15155B415
Vagner, Inge	ML15154B562	Walsh, Tom	ML15153B082
Vagner, Joanne	ML15161A627	Waltasti, Marilyn	ML15153A388
Vagner, Sandra	ML15153B000	Walter, Ernest	ML15156B440
Vagner, Vickie	ML15141A480	Walter, Gail	ML15154A347
Vagner-Westbrook,		Walter, Kenneth	ML15155A454
Bonnie	ML15156A233	Walter, Lloyd	ML15153A455
Vagoner, Donna	ML15155C051	Walters, Elizabeth	ML15159A462
Vagoner, Douglas	ML15159A213	Walters, Kenneth	ML15154C093
Vahosi, Mare	ML15162A683	Walters, Lindsey	ML15154A649
Vait, Cheryl	ML15153B135	Walters, Robyn	ML15159B031
Vaite, Libby	ML15154B727	Walters, Sandra	ML15154A988
Valch, Mark	ML15159A634	Walters, Sherrie	ML15159A368
Vales, Melissa	ML15159B293	Walters, Wendy	ML15162B089
Valeski, Melanie	ML15155A708	Walters, Wendy	ML15162B140
Valishko, Mary	ML15155C109	Waltman, Martha	ML15158A212
Valker, Christine	ML15159B256	Walton, John	ML15155A747
Valker, David	ML15155A732	Walton, Mark	ML15159B401
Valker, Donald and		Ward, Aurelie	ML15162A433
Charlotte	ML15156B166	Ward, Denise	ML15155C014
Valker, Herman	ML15154A005	Ward, Eddie	ML15141A563
Valker, Jason	ML15160A048	Ward, Joan	ML15155A197
Valker, Joan	ML15158A014	Ward, Ken	ML15155B857
Valker, John	ML15154C144	Ward, Lonnie	ML15153B220
Valker, Kathryn	ML15160A916	Ward, Marvin J.	ML15148B318
Valker, Kathy	ML15153A417	Ward, Nancy	ML15159A453
Valker, Leo	ML15154A000	Ward, Ralph	ML15154B618
Valker, Lynn	ML15140A011	Ward, Sheila	ML15154B249
Valker, Madonna	ML15154A808	Ward, Stacey A.	ML15154A511
Valker, Margret	ML15155A590	Ward, Terrence	ML15140A025
Valker, Matt	ML15154B788	Ward, Whitney	ML15156A320
Valker, Nora	ML15155A518	Warfle, Jamee	ML15155A452
Valker, Sylvia	ML15153B009	Warkoczewski, Marlene	ML15155A429
Valker, Verla D.	ML15140A245	Warner, Teresa	ML15148B125
Valker, Verla D.	ML15141A576	Warner, Thomas	ML15153A457
Valker, Verla D.	ML15162B080	Warner, Thomas	ML15156A946
Valker, Verla D.	ML15162B142	Warren, Barbara	ML15148A189
Valker-Dale, Heather	ML15140A244	Warren, Jan	ML15153A862
Vall, Nancy	ML15156A837	Warren, Mobi	ML15148A932
Vallace, Linda	ML15141A430	Warzalla, Jim	ML15155B847
Vallace, Pamela	ML15156B240	Wasgatt, Ann	ML15154B479
Vallach, Larna	ML15154B684	Washburn, Ted	ML15159A026
Valler, Emory	ML15140A257	Washburn, Wadetta	ML15154A384
Valler, Kelley Valler, Kyle	ML15159B234	Wasielewski, Alison	ML15148B129
Valler, Kyle	ML15148A877	Watanabe, Hiroe	ML15159A090
Valler, Russell	ML15159B237	Watene, Veronica	ML15160A681
Vallin, Willaim Vallington, Vietoria	ML15153A868	Waterhouse, Ann Marie	ML15159B438
Vallington, Victoria	ML15156A892	Waterman, Glenna	ML15153B159
Valrod, Brad	ML15156B039	Waters, Anje'	ML15153A778
Valsh, Arthur Valsh, Dorothy	ML15159A056	Waterworth, Pamela	ML15156A166
Walsh, Dorothy	ML15154A319	Watkinson, Carolyn	ML15155A684

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Natson, Carrie	ML15155B358	Welkowitz, William	ML15148B262
Natson, Chris	ML15159A834	Welling, John	ML15159A274
Watson, Claire	ML15155B107	Wells, Janette	ML15154A253
Watson, Donna	ML15154A344	Wells, Michael	ML15155A528
Watson, Fran	ML15148B273	Wells, Michael	ML15160A526
Watson, Harold	ML15155B981	Wells, Susan	ML15141A684
Watson, John	ML15154B986	Welton, John	ML15156A314
Watson, Kim	ML15159B515	Wemer, Kimberly	ML15155A206
Watson, Suzanne	ML15155A842	Wendt, Rosamund	ML15159B030
Watters, Whitney	ML15156B137	Wene, M. Ghost Dancer	ML15142A017
Waugh, Wendy	ML15156B490	Wenning, Judy	ML15158A161
Waygren, Ed	ML15155A491	Wentz, Shari	ML15159A125
Wayne, Vicki	ML15153A764	Weprin, Andrew	ML15153A411
Wear, Dennis	ML15155C039	Werner, Katherine	ML15142A098
Weatherwax, Nancy	ML15162A395	Werner, Ryvonne	ML15154B970
Weaver, Andrea	ML15156A975	Wersinger, Sara	ML15159B126
Weaver, Carol	ML15155B517	Wertz, Jennifer	ML15153A685
Weaver, Esther	ML15153B069	Wessman, Eric	ML15159A630
Weaver, Cary	ML15155B804	West, John	ML15155A222
Weaver, Joan S.	ML15135B804 ML15142A177	West, Reiven	ML15155B032
Weaver, Judy	ML15153A995	West, Diane	ML15159B534
Weaver, Mike	ML15159B497	West, Eric	ML15154C041
Weaver, Wes	ML15154C234	West, Kenneth	ML15154B711
Webb, Jane	ML15156B325	West, Meredith	ML15148B112
Webb, Kimberly	ML15153A977	Westergaard, Barbara	ML15156A902
Webb, Michelle	ML15148B130	Westfall, Rob	ML15155A152
Webb, Shannon	ML15148A914	Westmoreland, Henry H.	ML15155B563
Webber, Gary	ML15155B521	Westra, Jennifer	ML15155A938
Weber, Marsita	ML15153A552	Wettersten, Jill	ML15155A252
Weber, Zorina	ML15154A103	Wetzler, Richard	ML15162B115
Weberg, Melanie	ML15154A801	Wetzler, Richard	ML15162B044
Webster, Ellen	ML15148A617	Weyandt, Debbie	ML15159A835
Wecker, Judith	ML15160A070	Weyer, Diane	ML15154A956
Wedoff, Margaret	ML15140A129	Whalen, Patricia	ML15159B148
Wedow, Nancy	ML15148A220	Wharton, Becky	ML15154A689
Weeks, Chris	ML15154A204	Wheeler, Al	ML15160A937
Weigel, Alice	ML15155B336	Wheeler, Ken	ML15155A848
Weikert, J.	ML15156A287	Wheeler, Mark	ML15160A072
Weil-Martin, Carla	ML15155A696	Wheeler, Maureen	ML15158A091
Weiman, C. David	ML15154B302	Whelan, V.	ML15156A193
Weinberg, Henry	ML15153A556	Wheller, Noreen	ML15155A143
Weiner, Linda	ML15154A002	Whetsell, Frank	ML15148B175
Weinrich, John	ML15155B220	Whetstine, Linda	ML15153A998
Weinstein, Diane	ML15155B214	Whipple, Dave	ML15154A921
Weinstein, Elyette	ML15159A100	Whipple, Wyman	ML15154A028
Weisel, Jef	ML15148B095	Whitaker, Howard	ML15162B044
Weissman, Warren	ML15160A705	Whitaker, Howard	ML15162B114
Weisz, Russell	ML15159A145	White, Bruce	ML15155A794
Weitz, Stephen	ML15148B091	White, Charmaine	ML15159A444
Weitzman, Anna	ML15154A930	White, Claudia	ML15154A241
Weitzman, Marilyn J.	ML15142A191	White, Diane	ML15159A737
Welch, Joanna	ML15154A393	White, Gisele	ML15148B171
Welde, Logan	ML15160A594	White, Howard	ML15154A486
Weldon, Wendy	ML15148B310	White, Janet	ML15154A286

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White, John	Accession # ML15159B469	Wiley, Patricia	ML15155B153
White, Joseph	ML15155B820	Wilgus, Kathleen	ML15154B367
White, Kathy	ML15156A524	Wilke, Gail	ML15159B038
White, L.	ML15153B280	Wilken Corro	ML15156B258
White, Linda Michel	ML15154A599	Wilken, Sara	ML15148B004
White, Liz	ML15155A302	Wilkes, James	ML15154A046
White, Maria	ML15156B467	Wilkin, Sue	ML15154B018
White, Marianne	ML15162A697	Wilkins, Pat	ML15162B091
White, Mark	ML15160A703	Wilkins, Pat	ML15162B132
White, Mary	ML15160A542	Wilkinson, Art	ML15153A715
White, Mindi	ML15155B800	Wilkinson, Diana	ML15148B393
White, Ronda	ML15155B670	Wilkinson, Dorothy	ML15162A248
White, Scott	ML15162A295	Wilkinson, Maryann	ML15155A022
White, Terri	ML15142A208	Wilks, Debra	ML15148A173
White, William P.	ML15153B171	Will, Leona	ML15153A693
Whitehead, Lissette	ML15154A136	Willard, D.	ML15154A272
Whitehorn, C.	ML15154A318	Willer, Benjamin	ML15148A880
Whitener, Shari	ML15159A008	Willett, Greg	ML15148B363
Whiteside, Catherine	ML15153B017	Williams, Adam	ML15154C299
Whitford, Kirstina	ML15162A110	Williams, Billie	ML15148B304
Whiting, Carolyn	ML15155A235	Williams, Carrie	ML15156B006
Whitman, Rick	ML15159A988	Williams, Cheryl	ML15159B094
Whitson, Helene	ML15154A247	Williams, David	ML15162A415
Whitten, Robin	ML15158A067	Williams, Donald	ML15159B392
Whybrew, Michael	ML15154A685	Williams, Donald	ML15159B393
Wiant, Jean	ML15154A872	Williams, Elizabeth	ML15158A061
Wichar, Den Mark	ML15154A269	Williams, Glen	ML15156B215
Wicht, Dan	ML15156A578	Williams, Helen Jo	ML15159B394
Wick, Jodi	ML15147A776	Williams, Kathleen	ML15153B084
Widell, Janet	ML15156A450	Williams, Linda	ML15155B165
Widera, Debra	ML15154B272		ML15155A691
	ML15159B213	Williams, Marjorie Williams, Marni	
Wiebenson, Sarah			ML15140A145
Wiedemann, Janna	ML15160A892	Williams, Marty	ML15155A014
Wiedemann, Janna	ML15160A941	Williams, Nicholas	ML15154C008
Wieder, Anna	ML15156A235	Williams, Paul	ML15148B132
Wiederhold, Joe	ML15155A322	Williams, R.	ML15148B234
Wiegand, Suzanne	ML15155C244	Williams, R.	ML15148B381
Wiegert, Hans	ML15148B254	Williams, R. J.	ML15156A181
Wieland, Chuck	ML15148A596	Williams, Rita	ML15162A724
Wienert, John	ML15154B455	Williams, Sara	ML15158A202
Wiesner, Joseph	ML15153A878	Williams, Susan	ML15154A443
Wiesner, Mary Ann	ML15147A746	Williams, Terrie	ML15156A693
Wightman, Richard	ML15142A148	Williams, Vicki	ML15159A661
Wikette, Michelle	ML15154A541	Williamson, Bruce	ML15158A233
Wilberding, Ron	ML15159A884	Williamson, Gay	ML15155C171
Wilbur, Lynn	ML15141A664	Willis, Ed	ML15153B113
Wilby, Margaret	ML15159A537	Willison-Perry, Francine	ML15153A806
Wilcox, C.	ML15142A051	Willliamson, Shawn	ML15159B146
Wilcox, Robert	ML15158A026	Willoh, J.	ML15155A844
Wilde, Deena	ML15154A239	Willour, Judith	ML15154B263
Wilde, Kathy	ML15141A591	Wills, Susan	ML15159A768
Wildman, Teena	ML15148A591	Wilscam, Linda	ML15155C041
Wiles, Kristin	ML15159A266	Wilschke, Carole	ML15159B471
Whes Krishn			

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Wilson, Angela	ML15158A130	Witt, Kelly	ML15153A726
Vilson, Antonia	ML15156A213	Wittenberg, Sara	ML15159A670
Wilson, Crystal	ML15156B212	Wittkopp, Serena	ML15155C118
Wilson, David	ML15141A559	Wittner, Judith	ML15158A011
Wilson, David	ML15155A690	Woelbing, Keith	ML15162A257
Wilson, Donald	ML15154A452	Woersching, Marc	ML15155B029
Wilson, James	ML15148A602	Woessner, Paul	ML15148A599
Wilson, Kerri	ML15154C233	Wohlberg, Robert	ML15155A888
Wilson, M.	ML15142A199	Wolf, A.	ML15155B783
Wilson, Margaret	ML15142A190	Wolf, Crystal	ML15155A816
Wilson, Molly	ML15155A490	Wolf, Wesley	ML15153B002
Wilson, Polly	ML15154B009	Wolfe, Charlotte	ML15155C212
Wilson, Rick	ML15142A291	Wolfe, Claire	ML15154C104
Wilson, Rose Marie	ML15155B891	Wolfe, Gerald	ML15156B488
Wilson, Steve	ML15142A240	Wolfe, Jessica	ML15148A922
Wilson, Susan	ML15142A341	Wolfe, Kathleen	ML15148A954
Wilson, Thomas	ML15156B159	Wolfgang, Mara	ML15141A699
Wilson-Hopkins, Lori	ML15154B584	Wolfson, Brett	ML15155B777
Windham, Dallas	ML15158A263	Wolinsky, Susan	ML15141A496
Windus, Jared	ML15161A623	Wolkowitz, Rhea	ML15159A080
Wine, Jordann	ML15154B755	Wollard, Carla	ML15148B431
Wines, R.	ML15154A860	Wolle, Heather	ML15148B031
Winfrey, Bobbiejo	ML15153A894	Wollner, William	ML15159A007
Wingerd, Mala	ML15154B820	Wolongevicz, Patricia	ML15142A233
Winick, Dorothy	ML15162B091		ML15158A069
		Wolslegel, Thomas	
Winick, Dorothy	ML15162B151	Wolther, Mary	ML15159B575
Winkelmayer, Patricia	ML15154A936	Womble, Jeffrey	ML15159A521
Winkle, Annetta	ML15155A009	Wong, Barbara	ML15155C020
Winn, Laraine	ML15155A125	Wong, Kimberly	ML15156A328
Winn, Priscilla	ML15154A358	Wong, Timothy	ML15158A005
Winne, Patricia	ML15154A972	Wood, Barbara	ML15154A113
Winner, Angelika	ML15142A156	Wood, Barbara L.	ML15154A372
Winnicki, Kristine	ML15142A119	Wood, Dianna	ML15156A173
Winograd, Deborah	ML15160A579	Wood, Gordon	ML15154C156
Winstead, A.	ML15154B467	Wood, Heidi	ML15153B139
Winston, Leslie	ML15156A510	Wood, Homer	ML15153B200
Winston, Yvette	ML15162B103	Wood, Joyce	ML15146A367
Winston, Yvette	ML15141A640	Wood, Joyce	ML15160A982
Winston, Yvette	ML15162B042	Wood, Judy	ML15159A733
Winter, Kathleen	ML15155A640	Wood, Megan	ML15155B562
Winter, Ken	ML15154A772	Wood, Nancee	ML15156A501
Winter-Lisbeth, Merissa	ML15155A445	Wood, Peter	ML15154C305
Winters, Gracie	ML15154B133	Wood, Sara	ML15154B287
Winters, Valerie	ML15154B469	Wood, Shelva	ML15159A950
Wirth, Mark	ML15156B512	Wood, Stacey	ML15148A944
Wisboro, Judith	ML15153A897	Wood, Virginia	ML15154A744
Wisch, Anita	ML15154B537	Woodall, Sandra	ML15154A987
Wise, Carol	ML15153B189	Woodard, Bennie	ML15155B347
Wise, David	ML15155B723	Woodbury, Ellen	ML15156A688
Wisniewski, Georg	ML15162A602	Woodman, Renee	ML15148B215
Witham, Lisa	ML15148A895	Woodruff, Jenny	ML15159A663
Withington, Julia	ML15154A802	Woodruff, Joanne	ML15148B269
Withrow, Ferah	ML15148A194	Woods, Rocquelle	ML15147A728
Witmer, Tiffany	ML15156A040	Woods, Roth	ML15159B061

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Woodward, Melody	ML15155A746	Yazbek, Daniel	ML15141A525
Noolsey, David A.	ML15159A365	Yazell, Jeremy	ML15154B867
Worcester, Chris	ML15160A064	Yeager, Jerry	ML15160A733
Worch, Cheryl	ML15148B075	Yelenick, Lisa	ML15159A353
Wordlaw, Christine	ML15162A631	Yellis, Stefanie	ML15148B325
Workman, Mary	ML15153A473	Yerena, Jr., Julian	ML15159A909
Worley, Irene	ML15148B210	Yoder, Amanda	ML15154B171
Worley, Joseph	ML15142A366	Yokoyama, Holly	ML15156B123
	ML15154A371	Yost, Carol	
Worley, Joseph			ML15155B483
Worrell, Jennifer	ML15148A979	Yost, Gaylord	ML15154B918
Worrell, William	ML15156B377	You, Sam	ML15154C076
Wotton, Bernard	ML15154C280	Youd, Mark	ML15162B091
Wozniak, Rachel	ML15156B495	Youd, Mark	ML15162B152
Wozniak, Rhonda	ML15155B110	Young, Allan	ML15159B491
Wright, Abigail	ML15154B985	Young, Anne	ML15148A900
Wright, Carolyne	ML15155B851	Young, Cecilia	ML15156B412
Wright, Carrie	ML15162A614	Young, Cheryl	ML15154A435
Wright, Charles	ML15155A437	Young, Doug	ML15154A472
Wright, Gay	ML15153B045	Young, Douglas	ML15160A527
Wright, Glenn	ML15155A428	Young, Jo Ellen	ML15154A085
Wright, Marilyn	ML15155A101	Young, Karen	ML15159B125
Wright, Michael	ML15141A777	Young, Katherine	ML15160A548
Wright, Michelle	ML15148B162	Young, Katie	ML15160A581
Wright, Nancy	ML15156A867	Young, Kim	ML15155B916
Wright, Sandra	ML15159B374	Young, Leslie	ML15155A935
Wright, Shannon	ML15159A905	Young, Nancy	ML15154B281
Wright, Susan	ML15153A801	Young, Patricia	ML15142A329
Wright, Sydney	ML15159A121	Young, Philip	ML15153A691
Wright, Tammy	ML15154A075	Young, Rachel	ML15155A408
Writz, Gina	ML15159A485	Young, Raymond	ML15141A549
Wry, Ellen	ML15142A132	Young, Rosanne	ML15159A363
Wulf, Laurie	ML15156A187	Young, Sheila	ML15156A271
Wulf, Maureen	ML15159A281	Young, Spencer	ML15153A572
Wurtz, Jacob		Yount, Madeline	ML15154B744
	ML15160A069	,	
Wushensky, Sharon	ML15155B354	Yovella, Debra	ML15159A260
Wyatt, Aimee	ML15161A632	Yun, Allen	ML15148B022
Wyatt, Cathy	ML15156A440	Yurchuck, Ruth	ML15154A469
Wyatt, John	ML15153B229	Zachritz, Todd	ML15153A477
Wyckoff, Dana	ML15148A830	Zack, Mary	ML15148A978
Wyman, Elizabeth	ML15155A288	Zagaris, Michael	ML15153A980
Wyman, Tom	ML15158A009	Zagone, Michael	ML15154C138
Wyse, Margo	ML15153B199	Zalesak, Margie	ML15158A115
Wyse, Sheila	ML15148B000	Zambie, Dave	ML15159B140
Wyss, Jon	ML15153B295	Zammarano, Vittorio	
Xavier, Marjorie	ML15159B517	Tedesco	ML15154A132
Xhilone, Lynne	ML15156A905	Zampini, Cassandra	ML15142A249
Xiberras, Paula	ML15155C223	Zand, June	ML15162A051
Y., Nancy	ML15159A101	Zanders, Marya	ML15153A861
Yaffee, Steve	ML15141A610	Zarek, Elizabeth	ML15153A717
Yancey, Robert	ML15154A177	Zarkhosh, Helia	ML15159A068
Yanke, Brian	ML15154A197	Zarsky, Terry	ML15153B098
Yantselovskiy, Alexandr	ML15154A669	Zatz-Diaz, Ivan	ML15148A948
Yarger, Andrea	ML15155B979	Zavaro, Mario	ML15156B411
Yarter, E. C.	ML15158B034	Zawała, Dave	ML15160A765

	ADAMS		ADAMS
Commenter	Accession #	Commenter	Accession #
Zawadzki, C.	ML15159A070	Zillhardt, Matt	ML15155A067
Zawaski, Joan	ML15140A017	Zimanova, Emilia	ML15148A188
Zebracki, Nancy	ML15156A489	Zimbelmann, Merrilyn	ML15155B438
Zegledi, Dawn	ML15154C249	Zimmer, Louise	ML15153A440
Zehm, Carmen	ML15156A203	Zimmer, Susan	ML15155A200
Zeilenga, Jack	ML15141A476	Zimmerer, Mary Beth	ML15159B492
Zeilenga, Jack	ML15141A609	Zimmerman, Craig	ML15156A965
Zelazny, Bernie	ML15156A788	Zimmerman, Marcus	ML15148B015
Zelinski, Dawn	ML15160A725	Zimmermann, John	ML15156A789
Zeller, Jennifer Kim	ML15148A987	Zimmermann, John	ML15154A715
Zellmer, Kevin	ML15154B955	Zimny, Gloria	ML15148A757
Zelmanovich, Silvana	ML15155A205	Zinn, Andrea	ML15159B380
Zeman, James	ML15148B406	Zinn, Cari	ML15155B242
Zendzian, Paul	ML15159A983	Zinn, Robert	ML15142A111
Zepeda, Robert	ML15158A060	Zinn, William	ML15148A862
Zerr, Laura	ML15154B648	Zirasri, Ran	ML15147A757
Zetley, Herb	ML15156A536	Zissu, Thoams	ML15156A284
Ziama, Kristin	ML15159A275	Zoldak, Loretta	ML15153A429
Zibordi, Barbara	ML15140A261	Zoro, Piero	ML15148B245
Zibordi, Barbara	ML15153B089	Zschaler, Clara	ML15154A989
Ziegler, David	ML15159A546	Zuber, Margaret	ML15142A342
Ziegler, Herbert	ML15154A422	Zuber, Margaret	ML15154A020
Ziegler, Russ	ML15153B041	Zuckerman, Michael	ML15154C161
Ziegler, Russell	ML15141A651	Zudell, Keith	ML15156A280
Ziehler-Martin, Paige	ML15155B957	Zukoski, Katie	ML15159A434
Zielke, David	ML15148B327	Zwick, Larry	ML15154A618
Ziencina, Terra	ML15154A688	Zywan, Katherine Barrett	ML15155A796
Zierikzee, R.	ML15148B053	Zyzda, Marilyn	ML15156B434

## Table E-9. Individuals Submitting the Form with Subject "No New Reactors at Turkey Point" with Correspondence ID TURK-COL6&7-DR-00103 and Representative ADAMS Accession No. ML15139A729 (Multiple Authors 2015-TN4721)

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Abal, Ramiro	ML15142A340	Ali, Rozina	ML15142A340
Abbondante, Jim	ML15156A663	Allan, Larry	ML15139A944
Abraham, D. L.	ML15142A340	Allan, Linda	ML15156B388
Abraham, Karin	ML15140A051	Alverson, David	ML15161A689
Abraham, Karin	ML15140A052	Amann, Marianne	ML15142A340
Acquino, Mary	ML15139A936	Ammon, Cara	ML15162A788
Adams, Chardae	ML15156B364	Andersen, Peggu	ML15162A148
Aghayan, Veronic	ML15156A291	Anderson, Valda	ML15158A059
Ahuja, Neha	ML15162A484	Anderton, Phillip	ML15142A340
Alabiso, Marie	ML15159A354	Andrade, Abigail	ML15162A041
Albani, R.	ML15139A829	Andreacchio, Tonya	ML15139A964
Alden, Susan	ML15162A802	Andrews, Laquitta	ML15162A564
Alexander, Larry	ML15162A682	Andrews, Renee	ML15142A340
Alexander, Natalie	ML15162A382	Andrews, Thomas	ML15142A340
Alexander, Tiffany	ML15142A013	Angelo, Marjorie	ML15139A845
Alfimow, Beverly	ML15148B423	Ankiel, Summer	ML15142A340
Alfimow, Beverly	ML15153A662	Apple, Karla	ML15142A340

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Apple, Karla	ML15162A186	Bekkers, Anne	ML15162A827
Arana, Josefa	ML15159A369	Bell, Lindsey	ML15155C211
Arana, Josefa	ML15159A369	Bellamy, Ray	ML15139A803
Arana, Josefa	ML15162A773	Belt, Dana	ML15162A842
Araskog, Julie	ML15139A860	Bendure, Ellie	ML15139A796
Arfin, Danielle	ML15142A340	Benito, Alejandra	ML15142A071
Armm, Edward	ML15142A340	Benkert, Cynthia	ML15139A990
Armstrong, Brooks	ML15155C210	Bentsur, Eyal	ML15155C021
Artigas, Jose	ML15142A340	Berger, Barbara	ML15160A591
Arvidsson, Rikard	ML15142A340	Berger, Keith	ML15142A340
Atkinson, Deborah	ML15142A340	Bergman, Ingrid	ML15142A340
Atkinson, Joan	ML15139A819	Bernabei, Kaatje	ML15159A848
Atler, Neil	ML15139A871	Bernatis, Jenn	ML15142A340
Auld, Denise	ML15139A848	Best, Rudy	ML15162A790
Auster, Evan	ML15160A895	Bielski, Michele	ML15159A640
B., Donna	ML15142A340	Biemuller, Eric	ML15142A340
В., V.	ML15142A340	Biermaier, Jennifer	ML15159A477
B., V.	ML15162A238	Bigas, Michelle	ML15155C208
Bahos, Miguel	ML15139A909	Bilek, Heidrun	ML15142A340
Bailar, Tami	ML15156A222	Bischoff, Carol	ML15142A340
Bailey, Marcia	ML15139A779	Bitnar, Patricia	ML15159A464
Baker, Mary Sue	ML15159A826	Bittner, Jill	ML15142A340
Balfour, Michele	ML15160A929	Bittner, Jill	ML15162A594
Balkan-Litowitz, Donna	ML15139A951	Bittner, Michael	ML15142A340
Balogh, Daniel R.	ML15142A371	Black, Meaghan	ML15162A812
Bangerter, Jim	ML15142A340	Blair, Libby	ML15161A685
Banks, Janice	ML15142A340	Blais, Sonia	ML15142A340
Bannon, Richard	ML15139A858	Blake, Dale	ML15142A340
Baracca, Marco	ML15142A340	Blakestad, Nancy	ML15162A819
Barhoum, Tawfik	ML15139A804	Blanton, Cricket	ML15159A577
Baridon, Flavia	ML15142A340	Blauer, Sara	ML15148A805
Barlow, Jeffrey	ML15139A974	Blessing, Anna	ML15139A800
Barmann, Adriene	ML15155A833	Blue, Julie	ML15148B424
Barron, Marie	ML15139A826	Boczkowski, Diane	ML15142A340
Barroso, Mario	ML15158A094	Bodine, Frank	ML15142A340
Barry, Mina	ML15155C207	Boeckman, Evelyn	ML15162A848
Bartlett, Ellen	ML15139A773	Boehl, Ingrid	ML15162A063
Bassett, Roy	ML15158A268	Bogle, Tim	ML15142A340
Bastian, Mark	ML15142A340	Bolen, D. K.	ML15155A173
Batchelder, Jan	ML15142A340	Booras, Cyndee	ML15139A806
Bate, Jo Ellen	ML15162A744	Bornejko, Trina	ML15142A340
Bateman, Cheryl	ML15142A340	Bouilland, Stacy	ML15142A340
Bauer, Lynda	ML15162A772	Bousquet, Bob	ML15142A340
Beam, Stephanie	ML15142A340	Bow, Leslie	ML15162A219
Beattie, Gordon	ML15139A867	Bowers, Mary	ML15142A340
Beauchamp, Beryl	ML15142A340	Boyce, Sheila	ML15139A781
Beaupre, R.	ML15142A340	Boyce, Thomas	ML15142A340
Bechmann, Elisabeth	ML15142A340	Boylston, Sandra	ML15142A340
Bechmann, Elisabeth	ML15161A683	Bracciotti, Federica	ML15162A793
Bechtel, William	ML15139A945	Brachman, Phyllis	ML15142A340
Becker, Lauren	ML15159A945 ML15161A643	Bracken, Fay	ML15142A340 ML15142A340
			WIL 10 142A040
Bedat, Suzanne Boglov, Kathloon	ML15154B412	Bradley-Johnson,	MI 15120A025
Begley, Kathleen	ML15162A190	Carol Brady, Carl	ML15139A835
Behl-Whiting, Kathy	ML15155C153	Brady, Carl Branch, Dat	ML15142A339
Bekkers, Anne	ML15142A340	Branch, Pat	ML15142A340

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Brand, Barbara	ML15142A340	Canas, Yisel	ML15155C250
Braswell, A.	ML15142A340	Capasso, Celeste	ML15142A340
Bredda, Marina	ML15142A340	Capstick, Hilary	ML15142A340
Brewer, Kelly	ML15142A340	Caracci, Gina	ML15139A901
Brien, Ray	ML15142A340	Carbia, Vanessa	ML15162A630
Brienza, Zachary	ML15139A920	Card, Kevin	ML15142A340
Briggle, Ryan	ML15139A895	Cardoso, Toby	ML15142A340
Briggs, Lois	ML15156B235	Cardoso, Toby	ML15162A762
Brigner, Liberty	ML15142A340	Carr, Marcus	ML15142A068
Brimer, Richard	ML15160A716	Carroll, Donna	ML15142A340
Britz, Barbara	ML15162A719	Carter, Cindy	ML15142A340
Broad, Elisa	ML15162A114	Carvajal, Mauricio	ML15142A340
Broughton, Alyssa	ML15148A804	Caserrta, Kimberly	ML15142A340
Brower, Amanda	ML15156A571	Caskey, Sally	ML15142A340
Brown, Arlene	ML15142A009	Cassens, Susie	ML15142A340
Brown, Deborah	ML15153B038	Caton, Elizabeth	ML15142A340
Brown, Howard	ML15142A340	Cecil, Jon	ML15162A251
Brown, Ilean	ML15162A209	Celandine, Anna	ML15162A800
Brown, Judith	ML15162A281	Cellette, Richard	ML15156A247
Brown, Lillian	ML15142A340	Chapman, Kevin	ML15159A855
Brown, Taylor	ML15154A529	Chi, AniMae	ML15142A340
Browne, Judy	ML15139A973	Chin, Trevor	ML15142A340 ML15142A340
Browning, Tina	ML15139A866	Chirino, Miguel	
Browning, Tina Browning, Tina	ML15139A930	Chisari, Andrea	ML15142A369 ML15155C023
Brubaker, Dawn			
	ML15139A975	Christoff, Stephanie	ML15142A340 ML15162A786
Brush, Johnnie Bruton, Babette	ML15140A062 ML15160A926	Christoplos, Florence Chu, Sandra	ML15162A536
Bruton, Darlene	ML15160A927	Chulock, Jan	ML15156B321
Bryer, Loree	ML15159A252	Chynoweth, Iris Ciardello, Elaine	ML15142A340
Buchwald, Marla	ML15139A731		ML15142A340
Buchwald, Marla	ML15142A340	Ciesielski, J.	ML15139A770
Buck, Michelle	ML15156B202	Ciftci, Oscar	ML15139A900
Bugbee, Michael	ML15142A340	Claiborn, William	ML15139A836
Bullock, Elizabeth	ML15142A340	Clark, Jeff	ML15139A812
Burdine, Laura	ML15142A171	Clark-Alexander,	
Burns, Georgina	ML15142A340	Barbara	ML15139A935
Burton, Martha	ML15142A340	Claudine, Bos	ML15142A340
Bush, Sandra	ML15162A168	Clay, Cynthia	ML15139A986
Bushway, Cindy	ML15148B419	Clement, Kevin	ML15162A811
Butler, Amber	ML15139A883	Cleveland, Joel	ML15159A370
Butterfield, Doris	ML15162A350	Clifford, Susan	ML15156A089
Byrne, Matthew	ML15139A840	Clutter, Marcie	ML15139A948
Byrnes, Richard	ML15139A934	Clutter, Marcie	ML15139A970
Byron, Lee	ML15142A340	Coffey, Rotraud	ML15142A340
C., N.	ML15159B282	Colby, Helen	ML15156A120
Cabala, John	ML15142A340	Cole, 3rd, Lincoln P.	ML15139A863
Cadieux, Monique	ML15142A340	Coleman, Laura	ML15156A224
Caisse, C.	ML15154A530	Collins, Kathy	ML15139A853
Call, Cynthia	ML15142A070	Collins, Larry	ML15142A340
Calo, Joan	ML15142A340	Collins, Larry	ML15139A733
Campbell, Anne	ML15139A880	Collins, Trevor	ML15139A969
Campbell, Jacqueline	ML15142A340	Combes, Steven	ML15139A764
Campbell, Jacqueline	ML15162A728	Comella, John	ML15142A340
Campbell, John	ML15159A641	Connelly, Sally	ML15142A340
Campbell, Sean	ML15153B037	Connolly, Makenna	ML15162A572

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Contreras, Constance	ML15162A619	Deneault, Donna	ML15162A610
Cook, Debra	ML15142A340	Dengel, Pat	ML15162A487
Cook, Steven	ML15162A660	Densmore, Teresa	ML15159B443
Copeland, Damon	ML15162A750	DePante, Michael	ML15139A783
Corby, Kathleen	ML15142A340	Desharnais, Jodi	ML15142A340
Corby, Kathleen	ML15162A288	Destefano, Robert	ML15154B403
Cortes, Juan	ML15159B502	Detrick, Mary	ML15159A157
Corzo, Cara	ML15156B320	Devine, Lauren	ML15142A340
Corzo, Hector	ML15156B361	Devine, Lauren	ML15139A730
Cosentino, Debra	ML15142A340	Diaz, Mayra	ML15142A340
Cotz, Elina	ML15142A340	Diaz, Mayra	ML15139A755
Cotz, Elina	ML15139A734	Diaz, Yelina	ML15140A021
Courtney, Susan	ML15142A012	DiFilippo, Robert	ML15142A340
Coyle, N.	ML15142A340	Dillon, Sheila	ML15162A779
Crabtree, Summer	ML15142A340	Dillon, Sheila	ML15142A340
Craciun, George	ML15139A742	DiVicino, Roseann	ML15159B486
Craft, Katie	ML15142A340	DiVicino, Roseann	ML15159B487
Cranford, Connie	ML15159A658	Dobereiner, Trish	ML15139A907
Creech, Jeff	ML15142A340	Dobos, Robert	ML15159A215
Crowley, Joyce	ML15162A200	Dodd, Belinda	ML15162A273
Crum, Bill	ML15162A250	Dolly, William	ML15159A500
Csanyi, Cheryl	ML15139A785	Domino, Michael	ML15142A340
D., L.	ML15162A839	Donis, Bea	ML15139B009
Daab, Antoinette	ML15139A926	Donovan, Patrick M.	ML15142A340
Dace, Letitia	ML15153A664	Dorchin, Susan R.	ML15142A340
Dace, Letitia	ML15162A116	Dorn, Kathryn	ML15155B897
Dace, Leilla Daen, L.	ML15142A340	Dorsey, Tara	ML15154B404
Dahl, Thomas	ML15142A340	Downey, Noel	ML15139A757
Daly, Erik	ML15162A805	Dresser, Connie	ML15139A828
D'amour, Roland	ML15162A074	Driver, Monica	ML15162A629
Danios, Tea	ML15156A049	Drummond, Willa	ML15162A131
D'Annunzio, Patrick	ML15142A340	du Brin, Jane	ML15154C168
D'Antonio, Lisa	ML15155A479	Dührkopf, Manja	
			ML15142A340
Dascotte, Melinda	ML15142A331	Dunbar, Laura	ML15162A062 ML15139A997
Davis, Joan	ML15142A340	Duncan, Jane	
Davis, John	ML15160A951 ML15139B006	Duncan, Renee	ML15160A952
Davis, Liora		Duncan, Sue	ML15155A174
Davis, Liora	ML15139B007	Dungee, Adrienne	ML15159A150
Davis, Robin	ML15139A915	Dunn, Melissa	ML15142A340
Day, C.	ML15142A340	Dunn, Timothy	ML15162A202
Day, Edward	ML15142A340	Durrer, Mary	ML15142A340
de Buzon, Sylvie	ML15142A340	Düsterwald, Manuela	ML15142A340
De Voy, Christy	ML15139A954	Dutton, Matthew	ML15161A669
Deacy, Bob	ML15142A340	DuVerger, Roy	ML15159B299
Deane, Triciat	ML15139A813	Dyck, Cheryl	ML15154B424
DeBias, Anita	ML15154B399	E., Cheryl	ML15162A595
DeFauw, Rachel	ML15139B001	Easter, Jeff	ML15142A340
Dehler, Patricia	ML15148B421	Easter, Tara	ML15162A803
Delgado, Alejandro		Eaton, Rick	ML15142A340
Ceruelo	ML15162A121	Eckert, Jacqueline	ML15139B008
Delgado, Barbara	ML15160A863	Edelman-Tolchin,	
DeLia, Tony	ML15139A922	Gayle	ML15159A019
DeLuca, Patricia	ML15142A340	Edelman-Tolchin,	
DeLuca, Patricia Demello, Christine Demers, Ralph	ML15142A340 ML15155C024 ML15159A744	Edelman-Tolchin, Gayle Edmonds, Steven	ML15160A734 ML15142A340

Commontor		Commontor	ADAMO Associate #
Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Edmonson, Michele	ML15139A771	Patricia	MI 151400240
Egan, Marilyn	ML15142A340	Flaherty, Jill	ML15142A340
Ehrenberger, Jennifer	ML15142A340	Flanders, Gail	ML15142A340
Eiser, Tina	ML15142A340	Fletcher, Louise	ML15159A284
Elbirt, Diana	ML15162A825	Flint, Vally	ML15156A661
Elferdink, Luann	ML15162A743	Floersch, Elizabeth	ML15162A792
Eller, Dennis & Martha	ML15142A340	Floyd, Melanie	ML15142A340
Eller, Dennis & Martha	ML15139A748	Foley, Patricia	ML15142A005
Eller, Dennis & Martha	ML15139A751	Foster, Debbie	ML15162A837
Eller, Dennis & Martha	ML15139A756	Fowler, Luci	ML15148B422
Eller, Dennis & Martha	ML15139A761	Fox, Joyce	ML15142A340
Ellicott, Barbara	ML15142A340	Fox, Justin	ML15142A340
Elliott, Jan	ML15162A296	Fragela, Elizabeth	ML15139A972
Elliott, Jan	ML15162A299	Frank, Andrew	ML15159B501
Elliott, Judith	ML15154B408	Frederickson, Kelly	
Enfield, Martie	ML15139A887	Elizabeth	ML15155B676
England, II, Roy	ML15139A894	Frelli, Gianfranco	ML15142A340
Epstein, Philip	ML15160A627	French, Lee Ann	ML15156A660
Escobar, Hector	ML15155A164	Friedman, Donna	ML15160A940
Escobar, Melissa	ML15142A340	Fuchsman, Douglas	ML15159A880
Esterly, A.	ML15139A978	Fullmer, Mark	ML15158A056
Estrin, Mildred	ML15142A340	Fulwiler, Fran	ML15142A337
Eubank, Marana	ML15142A340	Fulwiler, Fran	ML15142A340
Evans, Janet	ML15159A136	Fundby, Lone	ML15142A340
Eyclesheimer, Susan	ML15142A340	Futch, Patrick	ML15142A340
Faison, Sandy	ML15139A775	Gaal, Stephanie	ML15142A340
Farrell, Roberta	ML15162A774	Gaarlandt, Jonathan	ML15139A767
Faulkner-Uriarte, Elisa	ML15142A340	Gaff, Mal	ML15142A340
Faulks, Lea	ML15162A783	Gaff, Mal	ML15161A678
Fazio, Kristina	ML15142A340	Gagliardi, Michael	ML15139A896
Feder, Melanie	ML15162A752	Gallegos, Mark	ML15142A340
Feder, Melanie	ML15142A340	Galloway, Nancy	ML15162A813
Feeney, John	ML15142A340	Galvina, Inguna	ML15162A093
Feeney, John	ML15162A801	Garcia, Haydee	ML15142A340
Feldman, Dee	ML15139A897	Garcia, Joanna	ML15142A340
Felicione, Felicia	ML15155B808	Garcia, Maria	ML15162A231
Fell, Cynthia	ML15162A215	Garcia, Mary	ML15142A340
Fell, Cynthia	ML15162A548	Garsson, Jane	ML15162A820
Fell, Cynthia	ML15162A741	Gasco, Christine	ML15155A161
Fera, Kristen	ML15162A747	Gaskins, Melissa	ML15142A335
Ferguson, Anisa	ML15162A625	Gasser-Sanz, Eva	ML15159B053
Ferguson, Heather	ML15161A661	Gaudry, Rita	ML15142A340
Fernandez, Beth	ML15142A340	Geisheim, Roswitha	ML15139A917
Fielder, Linda	ML15142A340	Genn, Oliver	ML15142A340
Fige, Patti	ML15154B401	Gentry, Kahla	ML15139A865
Finamore, Scott	ML15158A243	Gerosa, Robert	ML15142A340
Firth, Walter	ML15142A340	Gerosa, Robert	ML15162A748
Fischer, Quentin	ML15162A781	Gerwens, Shana	ML15142A069
Fisher, Jack	ML15139A837	Gestro, Patrizia	ML15154A525
Fisher, Sarah	ML15139A888	Gibb, Bianca	ML15139A869
Fisler, Mill	ML15139A911	Gibson, Raymond	ML15139A904
Fitzgerald, Gerry	ML15159A149	Gibson, Sara	ML15162A253
Fitzke, Marion	ML15142A340	Gideon, Barbara	ML15158A269
Fitzpatrick, Deirdre	ML15139A940	Gifford, Deborah	ML15160A979
Fitzpatrick, Louis and	ML15154A527	Gilmore, Susanna	ML15140A057

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Giraldo, Gladys	ML15142A340	Hancock, Karen	ML15142A340
Glenn, Julie	ML15161A677	Handy, Erin	ML15139A977
Glidewell, Marie	ML15139A809	Hankins, Judith	ML15162A650
Glorioso, Ellinor	ML15162A414	Hanrahan, Mary	ML15162A810
Gloyd, Susan	ML15139A818	Hansen, Bev	ML15140A059
Goetz, Janet	ML15142A340	Hanson, Laura	ML15159A879
Goldman, Eve	ML15139A847	Happenny, Peter	ML15139A984
Gonzalez, lara	ML15139A906	Harker, Kathy	ML15142A340
Goodman, Ellen	ML15162A794	Harney, Kathy	ML15139A955
Goodman, Margaret	ML15159A210	Harper, Jim	ML15142A340
Gordon, Alexandra	ML15139A872	Harper, Rebecca	ML15162A381
Gordon, Amanda	ML15156A225	Harris, Freya	ML15142A340
Gordon, Megan	ML15142A340	Hart, Terry	ML15139A868
Gorges, Nadine	ML15142A340	Hartley, Cynthia	ML15142A370
Gould, Catherine	ML15162A780	Harvey, Geraldine	ML15154B406
Grage, Janina	ML15142A340	Havener, Alice	ML15140A048
Graham, Guy	ML15142A340	Havlik, Charles	ML15154B395
Graham, Guy	ML15162A073	Havlik, Hugh	ML15148B420
Graniello, Domenico	ML15142A340	Hawks, Whitney	ML15162A632
Graniello, Domenico	ML15162A512	Hawlik, John	ML15139A929
Graniello, Luciano	ML15142A340	Hay, Peter	ML15139A765
Grasmugg, Franziska	ML15142A340	Hays, P.	ML15156B157
Grassi, Catherine	ML15162A266	Hays, P.	ML15156B444
Grassi, Catherine	ML15162A266	Hays, P.	ML15159B091
Gravuer, Elizabeth	ML15139A884	Hazen, Gail	ML15142A340
Grawunder, Marc	ML15142A340	Headley, Linda	ML15142A340
Greene, Vaughan	ML15142A340	Heinlein, Richard	ML15142A340
Grguric, Jackie	ML15142A340	Hellmold, Harr	ML15161A679
Gries, Sylvia	ML15142A340	Henao, Adela	ML15139A931
Griffin, Jr., Henry W.	ML15142A340	Hendershot, Tamara	ML15148A810
Griffin, Vivian	ML15142A340	Hendry, Dawn	ML15142A340
Griffith, Randy	ML15142A340	Henize, Tina	ML15142A340
Grill, Brock	ML15142A340 ML15142A340	Hensgen, Eric	ML15140A055
Grimes, Tara	ML15139A814		ML15140A054
Grobler, Mariette	ML15142A340	Hermida, Daniela Hernandez, Amanda	ML15156A219
Groh, Paul	ML15142A008	Hernandez, Dannette	ML15139A794
	ML15162A615		ML15139A794 ML15139A810
Gronemeyer, Kimberly		Herrera, Briseida	
Grossenbacher, John	ML15139A921	Hickman, James	ML15139A995
Grushko, Olga	ML15162A291	Hicks, Barbara	ML15155A294
Guennar, K.	ML15154C291	Hicks, Barbara	ML15155A460
Guggino, Monique	ML15142A340	Hicks, Connie	ML15162A797
Guzman, Tessi	ML15142A340	Hill, Michael	ML15159A804
H., Manuel	ML15142A340	Hoang, Xuandai	ML15139A992
Habben, Nicholas	ML15142A004	Hoeksema, Bruce	ML15158A180
Hager, Beverly	ML15162A775	Hoffman, Sue	ML15142A011
Hague, Joy	ML15160A917	Hogan, Dennise	ML15159A926
Haguel, Jane	ML15155C131	Hogan, Dennise	ML15159A929
Haile, Randall	ML15162A201	Hogan, Jack	ML15148B410
Halkewycz, Ryan	ML15155C154	Hoin, Brigitte	ML15142A340
Hall, Dennis	ML15139A732	Holliday, Tricia	ML15142A340
Hall, Dennis	ML15142A340	Hollier, Fiona	ML15142A340
Hamilton, Dianna	ML15142A340	Hollon, Hollie	ML15148A483
Hammock, Richard	ML15142A340	Holmquist, Laurel	ML15154C187
Hammock, Richard Hammond, Todd Hampton, S.	ML15142A340 ML15159A502 ML15142A001	Holmquist, Laurel Holton, John Holtzman, Lawrence	ML15154C187 ML15142A340 ML15142A340

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Holy, Kate	ML15159B549	Jones, Janice	ML15162A549
Honore, Stephanie	ML15162A640	Jones, Jason	ML15142A067
Hoodwin, Marcia	ML15156B114	Jones, Jeff	ML15139A839
Hope, Jane	ML15142A340	Jordan-Vilanova,	ME 10 100/0000
Hornaday, Sherral	ML15142A340	Hettie	ML15142A340
Horne, Paul	ML15142A340	Juges, Jonathan	ML15156A121
Horvath, Elizabeth	ML15142A340	Jungers, Carolann	ML15160A850
Horwath, Pamela	ML15142A340	Kain, Laura	ML15154B563
Houde, Cathy	ML15139A937	Kalinová, Markéta	ML15162A742
House, Mark	ML15142A340	Karkruff, Lee	ML15142A340
Houston, Meghan	ML15159A395	Karrmann, Dave	ML15154A526
Hris, Angie	ML15142A340	Kawa, Sandra	ML15159A283
Hubbard, Robin			
	ML15156A048	Kayser, Joan Kayvali, Susanna	ML15162A401
Hubbard, Ron L.	ML15142A340	Kayyali, Susanne	ML15142A202
Huey, Patrick	ML15142A340	Keaney, John B.	ML15139A938
Hughes, Karen	ML15162A720	Keaton, Rebecca	ML15155A438
Hughes, William	ML15142A340	Keim, Mary	ML15142A340
Humphrey, Bente	ML15160A964	Keisling, George	ML15139A807
Hundemer, Sarah	ML15142A333	Keller, Diann	ML15142A340
Hunkler, Lisa	ML15139A821	Kelley, Jeannette	ML15158A121
Hunt, Evan	ML15142A375	Kelly, Jean	ML15142A340
Hurley, Fredrika	ML15142A340	Kelly-Banks, Patricia	ML15139A913
Hyland, Lillian	ML15159A828	Kemp, Tasha	ML15142A340
Hylton, Marion W.	ML15139A778	Kemperle, Esther	ML15142A340
Ibarra, Isabel	ML15159A639	Kendall, Donna	ML15148B414
Idesawa, Naoko	ML15142A340	Kennedy, Tania	ML15139A923
lerubino, Mary	ML15142A340	Kerr, Anne	ML15162A799
Inman, Linda	ML15142A340	Key, Laurence	ML15142A340
Itzoe, Francis	ML15139A842	Khan, Rani	ML15155A162
Jacobs, Celia	ML15139B004	Kibbe, Carolyn	ML15162A768
Jacobs, Jenny	ML15156B083	Kidd, Lori Beth	ML15159A478
Jacobs, Renee	ML15162A678	Kiedis, Denise	ML15139A893
Jacobson, Ann	ML15139A947	Killay, Sharon	ML15139A864
Jakubzik, Petra	ML15142A340	King, Charles	ML15139A769
James, Brenda	ML15142A340	King, Eileen	ML15158A181
James, Sarada	ML15142A340	King, Eileen	ML15160A649
Jankowski, Corinne	ML15139A833	King, John	ML15142A340
Jannicelli, Barbara	ML15153A668	King, Marsha	ML15139A859
Janota, Linda	ML15156A220	King, Roy I.	ML15142A340
Jaques, Diana	ML15162A199	Kirchner, Brooke	ML15139A772
Jarrett, Vera	ML15142A340	Kirn, Steven	ML15142A340
Jarvis, Michele	ML15142A340	Kiss, Carolyn	ML15139A824
Jennings, Jan	ML15142A340	Klayman, Joel	ML15142A340
Jensen, Norman	ML15148B409	Klien, Gabriele	ML15142A340
Jett, Rachel	ML15160A870	Knappman, Tanya	ML15139A899
Joannou, Jr., Benjamin	ML15139A949	Knight, Tina	ML15154B397
Johansen, Matt	ML15142A340	Knowles, Jerell	ML15142A340
Johnson, Darlene	ML15155B850	Koch, Robin	ML15142A336
Johnson, Esther	ML15153A987	Kolbe, Daniela	ML15142A340
Johnson, Jacqueline	ML15162A279	Kom, Willem	ML15142A340
Johnson, Libia	ML15139A786	Komin, Dmitriy	ML15162A404
Johnson, Richard	ML15139A881	Konigsberger, Kathryn	ML15148B412
Johnson, Shannan	ML15148B413	Kovacs, Robert	ML15139A942
Johnson, Terry	ML15148B426	Kraut, Arthur	ML15142A201
Jones, Christopher	ML15140A065	Kraut, Michelle	ML15139A797
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Commenter	ADAMS Accession #	Commenter	ADAMS Accession
Krawiecki, Susan	ML15155C209	Link, Diana	ML15162A042
Kreiner, Dennis	ML15155A175	Lintner, Lawrence	ML15142A340
Krieger, Barbara	ML15142A340	Linton, Brandy	ML15142A000
Krolick, Brian	ML15139A952	Lippincott, John	ML15162A838
Kronholm, Linda	ML15142A340	Lippner, Linda	ML15148B418
Kropf, Keith	ML15139A957	Livingston, Nancy	ML15159A827
Krygowski, Richard	ML15140A019	Lockard, Donald	ML15142A340
Kumar, Rahul	ML15162A539	Loftus, William	ML15139A918
Kuzina, Maria	ML15153A667	Lomascolo, Suzanne	ML15154B417
Kwetian, John	ML15142A340	Long, Jacquelyn	ML15142A340
LaBow, Charles	ML15139A994	Lopes, Ana	ML15142A340
LaChatte, Savanna	ML15142A340	Lopez, Yahaira	ML15158A179
Lagasca, Jeana	ML15162A826	Lorenzo, Carlos	ML15159B579
Laieski, Caleb	ML15162A675	Love, Dee	ML15139A890
Lampka, Joseph	ML15142A340	Lovett, Kirsten	ML15156A088
Lanehart, Rheta	ML15139A762	Lowell, Jen	ML15139A870
Langdon, John	ML15148A484	Lucas, Addie	ML15154B414
Langford, Bob	ML15139A885	Lucas, Mark	ML15155A172
Laprade, Kenneth	ML15139A908	Lucido, Angela	ML15159A397
Lario, Rocio	ML15139A991	Lujan, Crystal	ML15142A340
Larson, Cynthia	ML15142A340	Lunde, Lauren	ML15142A340
Larson, June	ML15162A189	Lympius, Frauke	ML15142A340
Lasahn, J.	ML15162A392	Lynley, Lauren	ML15142A340
Laslie, Mary Lou	ML15142A340	Lynn, Pam	ML15159A396
Latham, Cathy	ML15142A340	M., Lynda	ML15140A058
Lawler, Ruth E.	ML15142A340	M., Pino	ML15142A340
Lawrence, Clifford	ML15154C171	MacFarlane, Adrienne	ML15156A657
Lawrence, Diane	ML15155C249	MacFarlane, Shari	ML15139A823
Lazzarino, Carol	ML15139A795	MacInnes, Brenda	ML15155C072
Learch, Lynn	ML15156B389	Mack, Jean	ML15159A263
Leavitt, Meaghan	ML15142A340	Maddock, June	ML15142A340
Leclerc, Marc	ML15162A698		ML15142A340 ML15142A340
LeDent, Jamie	ML15162A098 ML15142A340	Maene, Sylvia Magaña, Konnoth	ML15162A745
		Magaña, Kenneth Mabar, M	
Lee, Jean	ML15139A993	Maher, M.	ML15139A953
Lefkowitz, Jill	ML15139A749	Maji, Rosanne Malaran Latisia	ML15142A340
Leisey, Tamara	ML15159A107	Malagon, Leticia	ML15158A238
Lemoine, Lizzie	ML15162A769	Malott, Randy	ML15142A340
Lepikkö, Tanja	ML15142A340	Maltbie, Anne Marie	ML15142A340
Levi, Anna-Lina	ML15142A015	Manes, Regina	ML15142A340
Levitt, Michael	ML15142A340	Maness, Barbara	ML15142A210
Levitt, Michael	ML15162A254	Marie, Shari	ML15156A467
Levy, B.	ML15142A340	Marinelli, Antonella	ML15142A340
Lewis, JoAnn	ML15156B442	Marinelli, Antonella	ML15162A486
Lewis, Larry	ML15142A340	Marques, Jorge	ML15142A340
Lewis, Mary	ML15142A340	Marsh, Sherry	ML15162A164
Lewis, Nita	ML15139A855	Marsh, Suzanne	ML15139A777
Lewis, Norman	ML15142A340	Marshall, David	ML15142A072
Lieberman, Marah	ML15156A047	Martin, Ashley	ML15148B416
Lieurance, Cynthia	ML15139A793	Martin, Gayle	ML15142A340
Lillich, Anthony	ML15155A171	Martin, Robin	ML15142A340
Lillywhite, Harvey	ML15142A340	Martin, Samuel	ML15142A340
Lindner, Diane	ML15142A340	Martin, Timothy	ML15139A841
Lindsay, David	ML15142A340	Martinez, Fay	ML15158A120
Lindsay, Marion	ML15142A340	Martins, Claudia	ML15139A956
Lindsay, Marion	ML15162A191	Masarati, Piero	ML15142A340

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Massar, Marc	ML15139A831	Miller, Mary	ML15142A340
Massar, Marc	ML15139A832	Miller, Meghan	ML15139A854
Masse, Kierstin	ML15142A340	Miller, Robin	ML15139A862
Massetti, J.	ML15162A349	Miller, Stacie	ML15161A675
Massey, Linda	ML15142A340	Millett, Cheryl	ML15154C169
Mastrototaro,		Minacheili, Susanna	ML15142A340
Domenico	ML15162A293	Minor, Shannon	ML15139A792
Mathews, Mary	ML15162A830	Mira, Mark	ML15142A340
Matthews, Wade and		Misicka, Ed	ML15139A789
Betty	ML15159A578	Mitchell, Marilynn	ML15142A340
Mattison, Stephen	ML15139A820	Mitts, Karen	ML15159B562
Mayer, Ramona	ML15139A802	Mizrachi, Robyn	ML15142A340
Mays, Constance	ML15139A882	Moats, Paula	ML15162A090
Mazzarella, Rebecca	ML15142A007	Mohseni, Leila	ML15162A758
Mc vay, Margaret	ML15162A161	Mollberg, W.	ML15142A340
Mcalister, Suzann	ML15139A850	Monroe, Katrina	ML15139A782
McAlpine, Tracy	ML15160A718	Moore, Mercedes	ML15142A340
Mccallin, Marissa	ML15142A340	Morais, Bonnie	ML15162A162
McCarthy, Louise	ML15160A965	Morgan, Paula	ML15139A966
McCarty, Valerie	ML15139A844	Morgan, Paula	ML15142A340
McClasky, Stephen	ML15159A667	Moriarty, Karen	ML15159A253
McCray, Toni	ML15162A672	Morrison, Barb	ML15139A747
Mcdow, Derek	ML15142A340	Morse, Kathryn	ML15142A340
McGinn, Keven	ML15162A038	Moser, Prairie	ML15162A579
McGinty, Jacquelyn	ML15162A174	Moss, Vickie	ML15162A096
Mcgovern, L.	ML15142A002	Mothley, Drucilla	ML15139A928
McKenna, Sarah	ML15142A340	Moyers, Michele	ML15154B405
McMillan, Douglas	ML15159A585	Mulcare, James S.	ML15142A340
McMillan, Joanne	ML15139A941	Mumaw, John	ML15154C247
McMillan, Katherine	ML15142A340	Munn, Enid	ML15162A677
McNeil, Kerry	ML15139A736	Munoz, Alejandro	ML15142A340
McNeil, Kerry	ML15142A340	Murphy-Larronde,	
McNicol, Lottie	ML15159B484	Suzanne	ML15142A340
McPherson, Andrew	ML15142A340	Myers, David Russell	ML15142A373
Mcquade, Linda	ML15156A221	Myers, Michelle	ML15142A340
Medders, Melissa	ML15160A855	Nafarrate, Nancy	ML15142A340
Meegan, Colleen	ML15142A340	Natali, Nts	ML15142A340
Melegari, David	ML15139A768	Navarro, Matilde	ML15162A561
Mercer, John &		Nece, Melissa	ML15161A655
Saundra	ML15162A157	Neckes, Shannon	ML15154B398
Merino, Aimee	ML15162A160	Neimark, Debbie	ML15140A137
Merrick, Thomas	ML15162A204	Nelson, Emily	ML15142A340
Mes, Ferry	ML15142A340	Nelson, Jeena	ML15156A466
Metzger, Harvey	ML15160A851	Nelson, Peggy	ML15139A791
	ML15148A485		ML15162A502
Meyer, Dawn		Nersesian, Colleen Ness, Chris	
Michel, Paul	ML15154B394		ML15162A046
Mick, Rick	ML15142A340	Neste, Lisa	ML15142A340
Mickler, Walt	ML15139A745	Newsom, Glenda	ML15139A776
Milian, Yosniel	ML15158A058	Nguyen, Michelle	ML15162A270
Miller, Ann	ML15142A340	Nicklas, Andrea	ML15142A338
Miller, Caroline	ML15158A209	Nierenberg, Susan	ML15162A709
Miller, Christopher	ML15142A340	Nixon, Peter	ML15159A583
Miller, Diane	ML15139A849	Noble, Amanda	ML15139A861
Miller, Dianne	ML15159A331	Norsworthy, Julie	ML15159A264
Miller, J.	ML15139A902	Nualchawee,	ML15142A340

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Rungruedee		Pike, Evette	ML15142A010
Nyerick, Gary	ML15139A774	Piner, George	ML15142A340
Obenchain, Helen	ML15148A821	Piper, Janna	ML15161A650
Oberdorf, Robert	ML15139A933	Pirotte, Danielle	ML15142A340
O'Brien, Shannon	ML15142A340	Pirotte, Danielle	ML15162A601
Oelman, Robert	ML15142A340	Pitchford, Victoria	ML15142A340
Ohland, Andreas	ML15142A003	Pittea, Chetna	ML15162A556
O'Laughlin, Elizabeth	ML15162A700	Plisko, Vladimir	ML15156B111
O'Leary, Suzanne	ML15142A340	Poiani, Maria	ML15139A889
Oliver Smith, Jennifer	ML15139A927	Poindexter, Tawnee'	ML15159A270
Olivia, Ana	ML15159B341	Pomeroy, Linda	ML15155C206
Olmstead, Daniel	ML15162A823	Pond, Christopher	ML15142A340
Oppenhuizen, Kathy	ML15142A340	Pond, Christopher	ML15162A537
Ornee, Mary	ML15139B002	Pope, Alexine	ML15140A020
Ornee, Mary	ML15162A846	Pope, Donna	ML15160A988
Osborne, Diana	ML15139A846	Porcelli, Angela	ML15156A572
Osborne, Martin	ML15139A939	Porter, Donald J.	ML15139A780
Osorno, Juan	ML15153B040	Porter, Mark	ML15162A132
Osterhoudt, Bettie	ML15160A736	Posch, Robert	ML15142A340
Oswald, Allan	ML15139A784	Posner, Jessica Jean	ML15162A185
Ott, Michael	ML15142A340	Prada, Francesca	ML15161A662
Ott, Michael	ML15139A735	Pratt, Fred	ML15139A980
P., T.	ML15142A340	Preston, Apryl	ML15139A968
P., Victoria	ML15142A340	Preston, Apryl	ML15139A985
Pachina, Maria	ML15162A378	Preston, Dee	ML15142A340
Pachios, Darlene	ML15142A340	Preston, Robin	ML15142A340
Palladine, Michelle	ML15162A669	Printz, Jackie	ML15139A801
Pallatino, Mary	ML15162A503	Pritchett, Ellouise	ML15140A063
Pallatino, Mary	ML15162A505	Pritchett, William	ML15139A892
Papaioannou, Kostis	ML15162A761	Proulx, Michelle	ML15142A340
Papworth, Carol	ML15156B113	Provchy, Gregory	ML15162A232
Parker, Julianne		Prunhuber, Carol	ML15142A368
	ML15142A340		
Parkinaon, Robert	ML15139A743	Pullaro, Barbara	ML15139A788
Parra, Dolores	ML15142A203	Pusek, Jasminka	ML15142A340
Patch, Frances	ML15158A239	Quaintance, Charles	ML15142A340
Paul, John	ML15139A910	Quaritius, Karen	ML15142A340
Paul, Laura	ML15142A340	Quillen, River	ML15159A499
Paulet, Virginia	ML15156A656	Raab, Elizabeth	ML15142A340
Pe, Dani De arlus en Maria	ML15139A805	Rabin, Patr	ML15142A340
Pearlman, Marie	ML15154C166	Rader, Kyle	ML15142A340
Pearlmutter, Nancy	ML15154C167	Raganato, Alessandro	ML15162A689
Pecha, Richard	ML15162A372	Rainey, Ann	ML15156A464
Peranio-Paz, Giana	ML15142A340	Ralph, Kathy	ML15159B560
Percy, Leo	ML15139A808	Ramage, Jennifer	ML15140A146
Perry, Marian	ML15156A821	Ramirez, Sally	ML15162A796
Peter, Judith	ML15142A340	Ramon, Laura	ML15159A501
Peterson, Patricia	ML15156A823	Ramos, Jaime	ML15142A340
Petlack, Howard	ML15142A340	Randler, John	ML15142A340
Petrus, Veronica	ML15156A292	Rapp, Daniel	ML15159A106
Petty, Kevin	ML15142A340	Rausher, Hilary	ML15139A950
Phelps, Ellen	ML15139B003	Ravine, Devon	ML15156A223
Phillips, Jennifer	ML15159A247	Rayburn, Tammie	ML15153B039
Phillips, Jim	ML15162A127	Reed, Alaina	ML15139A967
Pickard, Alexandria	ML15159A966	Reeves, Diana	ML15148B415
Pierce, Tanya	ML15139A878	Rego, Sonia	ML15156B078

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Reichert, Robyn	ML15159A503	Ryan, Allan	ML15148B417
Reilly, Mary	ML15141A484	Ryan, Marian	ML15139A746
Reilly, Mary	ML15162A203	Sabol, Barbara	ML15139A958
Reining, Francis	ML15148A808	Sadiq, Tracey	ML15139A827
Remington, L.	ML15161A628	Sadura, Judith	ML15142A340
Reynolds, Helen	ML15153A665	Sagovac, Emily	ML15140A050
Rhein, Brenton	ML15142A340	Salgado, Natasha	ML15142A340
Ribokas, Robert	ML15162A782	Saluja, Virginia	ML15139A932
Rich, Laura	ML15142A340	Salyers, Helen	ML15162A666
Richardson, K.	ML15158A016	San Socie, Robert	ML15142A340
Richmond, Michael	ML15142A340	Sander, Susan	ML15162A784
Ridgway, Kathi	ML15162A751	Sandulovic, Desanka	ML15142A340
Rindler, Joseph	ML15142A340	Santiago, Rebeca	ML15142A340
Ripple, Jeff	ML15159A271	Satiro, Cathy	ML15142A340
Rivera, Ed	ML15142A340	Savopoulos, Paskalini	ML15162A303
Rivera, Emma	ML15162A756	Scarbeck, Christopher	ML15162A785
Rivera, Hilda	ML15139A754	Schaaf, William	ML15142A340
Rivera, Hilda	ML15142A340	Schackney, Stephanie	ML15142A340 ML15142A340
Roberts, Phil	ML15139A790	Scheffley, Helen	ML15159B425
Robinett, Margaret		Schildwachter, Steve	ML15142A340
Christine	ML15162A156	Schloss, Morley	ML15142A340 ML15142A340
Robins, Michael	ML15142A340		
		Schnabel, Arthur	ML15142A340
Robinson, Darlene	ML15140A053	Schnee, Jane	ML15142A340
Robinson, Janet	ML15142A340	Schneider, Cheryl	ML15162A153
Robledo, Olga	ML15139A838	Scholl, Linda	ML15162A809
Roderigues, Mr. & Mrs.		Schollhorn, Maria	NII 454404040
Dennis Denkis	ML15142A340	Teresa	ML15142A340
Rodrigues, Snndra	ML15139A919	Schultes, Yolanda	ML15142A340
Rodriguez, L.	ML15142A340	Schultze, Patti	ML15142A340
Roehl, Richard Ralph	ML15142A340	Schwarz, Robin	ML15142A340
Roffe, Jessica	ML15139A903	Scott, Joan	ML15162A707
Rogers, Carrie	ML15160A854	Scott, Judith E.	ML15142A340
Rogers, Dirk	ML15142A340	Scott, Lorrie	ML15142A340
Rollings, Rusty	ML15142A372	Scott, Robin	ML15142A340
Roman, Christina	ML15142A065	Scott, Wenona	ML15142A340
Romero, Cristy	ML15162A508	Scott, Wenona	ML15162A560
Rosa, Sam	ML15139A873	Scully, Rosemary	ML15142A340
Rosado, Val	ML15142A340	Sebesta, Doyle	ML15142A340
Rose, Lawrence	ML15140A060	Semmelhaack, Carl	ML15162A052
Rose, Mary	ML15139A999	Sequeira, Kathleen	ML15142A014
Ross, Kathy	ML15142A340	Serne, S.	ML15154C170
Ross, Rachel	ML15162A685	Serra, Ruth	ML15142A340
Rothman, Mitzi	ML15142A340	Serrano, Tahimi	ML15140A064
Rothstein, Richard	ML15155B899	Severino, Susan	ML15160A928
Routh, Jeffrey	ML15142A340	Shamis, Elliot	ML15139A912
Routh, Jeffrey	ML15139A750	Shank, Nancy	ML15139A857
Rowell, Edward	ML15139A965	Sharbaugh, Thomas	ML15139A763
Rozo, Ćarolina	ML15142A340	Sharkeu, Bradley	ML15142A340
Rubin, Joan	ML15139A976	Sharrer, Brian	ML15139A875
Rudner, Patricia	ML15162A380	Sheard, Sue	ML15162A832
Rudolph, John	ML15139A996	Sheets, Aida	ML15139A752
Ruhl, Geri	ML15142A340	Sheets, Aida	ML15142A340
Rusinko, Stephen	ML15139A787	Shero, Dale	ML15155B022
Russo, Andy	ML15139A759	Shifflett, Jr., James E.	ML15156A090
Russo, M. R.	ML15142A340	Shultis, Bob	ML15142A340

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Siano, Kelly	ML15161A680	Stevens, Patricia	ML15142A340
Siegel, Ruth	ML15162A354	Stevens, Robert	ML15142A340
Sierchio, Debbie	ML15142A340	Stevenson, Richard	ML15139A962
Sierra, Juan Carlos	ML15139A960	Stevenson, Richard	ML15139A963
Sill, K.	ML15139A987	Stewart, Jacqueline	ML15162B091
Simkins, Dave	ML15139A959	Stewart, Jacqueline	ML15162B148
Simmons, Haley	ML15142A340	Stewart, Marlin	ML15139A856
Simontacchi, Alexis	ML15162A835	Stickel, Gary	ML15159A492
Sims, Nancy	ML15142A340	Stickel, Gary	ML15159A494
Sinclair, David	ML15139A961	Stone, James	ML15139A830
Skelton, Laura	ML15142A340	Stone, Susan	ML15158A119
Slowey-Thomas,		Strack, Daniel	ML15155B807
Dianna	ML15162A276	Strader, Helen	ML15142A340
Smith, A.	ML15139A811	Strobel, Sabine	ML15139A760
Smith, Angela	ML15155B020	Struck, Caroline	ML15142A340
Smith, Betsy D.	ML15162A125	Suchy, Robin	ML15142A340
Smith, Donna	ML15159B335	Sullivan, Gretchen	ML15162A829
Smith, Greg	ML15142A340	Sullivan, Susan	ML15142A340
Smith, Janet	ML15162A721	Sulprizio, Karen	ML15142A340
Smith, Jr., William M.	ML15142A340	Summers, Janine	ML15139A825
Smith, Karen	ML15139A891	Summers, Sandi	ML15142A340
Smith, Karen	ML15139A914	Sunde, Lill-Jeanette	ML15162A771
Smith, Kenneth	ML15142A340	Sunderland, Felicia	ML15156B390
Smith, Linda	ML15139A817	Sunfire, Michael	ML15148A812
Smith, Melissa	ML15162A841	Sweeten, Brittany	ML15160A939
Smith, Wendy	ML15142A340	Swoboda, Lois	ML15139A729
Smyth, Teri	ML15142A340 ML15142A340	Swoboda, Lois Swoboda, Lois	ML15142A340
Snowe, Sandy	ML15139A851		
		Swystun, Lydia	ML15139A753
Snyder, Lynn Sodon, Mony	ML15139A798	Swystun, Lydia T., Mandi	ML15142A340 ML15142A340
Soden, Mary	ML15139A989		
Sokol, Abbey	ML15155B900	Tainio, Coe	ML15140A056
Solomon, Laura	ML15142A340	Tairova, Olga	ML15159A231
Sophie, Grosbois	ML15139A766	Tamborello, Isidoro	ML15142A340
Soteropoulos, Patricia	ML15142A340	Tardif, Mark	ML15142A340
Sotomayor, Nora	ML15162A149	Tarpinian, Karina	ML15142A340
Sowden, Bruce	ML15162A439	Tatgenhorst, Joy N.	ML15159A246
Spencer, Susan	ML15162A648	Taylor, Kay	ML15148B425
Spigel, Sue	ML15139B000	Taylor, Walter	ML15158A017
Spotts, Richard	ML15142A340	Temple, Laurel	ML15162A192
Sprano, Barbara	ML15162B091	Tempone, Antonio	ML15142A340
Sprecher, Cindy	ML15142A340	Tenhouten, Warren	ML15162A194
Sprecher, Cindy	ML15162A145	Terrier, Bernard	ML15162A770
Sprecher, Cindy	ML15162A746	Thayer, Mostyn	ML15139A843
Squire, Julie	ML15162A764	The U. family,	ML15139A925
Srivastava, Suneet	ML15142A340	The U. family,	ML15161A684
Stafford, Heather	ML15142A334	The U. family,	ML15162A394
Stahl, James and Kay	ML15139A852	The U. family,	ML15162A399
Standing, Barbara	ML15162A228	The U. family,	ML15162A844
Stapelfeldt, Horst	ML15155C073	The U. family,	ML15162A845
Stapleton, Judy	ML15142A340	Thollaug, Julia	ML15139A946
Starr, Lawrence	ML15139A916	Thomas, Carrie	ML15142A340
Stefanova, Silviya	ML15162A220	Thompson, Brenda	ML15162A787
Steffen, Shirley	ML15142A340	Thompson, Kate	ML15162A368
Steigerwaldt,		Thuline, James	ML15139A799
Samantha	ML15154B416	Tirado, Luis	ML15156A826
	-	<i>,</i>	

Commenter	ADAMS Accession #	Commontor	ADAMS Accession #
Titilah, Jennifer	ML15162A789	Commenter Walker, Leanne	ML15159A255
Togati, Joanne	ML15142A340	Walker, Leanne	
Tomkins, Cassandra	ML15159A479		ML15159A257 ML15162A547
Tompetrini, Phil		Walker, Lynne	
	ML15139A905	Walker, Terry	ML15158A093
Torquato, Bruno	ML15139A924	Walker, William	ML15139A758
Torres, Marcos	ML15159A965	Wall, James	ML15155A836
Totan, Dan	ML15142A340	Wall, Regina	ML15142A340
Tran, Dat	ML15162A135	Wallace, Larry	ML15139A815
Traub, Susan	ML15142A340	Wallace, Steve	ML15156B322
Travers, L. J.	ML15162A834	Walper-Taylor, James	ML15142A340
Travis, Michael	ML15154A522	Walsh, Ellen	ML15158A092
Tremblay, Nancy	ML15142A340	Walters, Kenneth	ML15142A340
Trent, Sharon	ML15142A340	Walters, M.	ML15142A073
Triana, Jennifer	ML15156B443	Walters, Sandra	ML15142A340
Triff, Asdur	ML15142A374	Waltrip, Laura	ML15142A340
Trudeau, Stephanie	ML15142A332	Ward, Diana	ML15139A983
Tucker, Barbara	ML15155A478	Warrington, Thomas	ML15139A879
Tudorache, Lynette	ML15162A367	Wasko, Tara	ML15139A874
Turner, Ted	ML15154B413	Watson, Chris	ML15162A760
Turney, Lynda	ML15156B387	Watts, Cynthia	ML15139A876
Tutko, Jackie	ML15142A340	Watts, Cynthia	ML15139A877
Tweedy, Mary	ML15211A055	Way, Karen	ML15162A808
Updike, Carl	ML15142A340	Weaver, George	ML15140A173
Urbanek, Adele	ML15142A340	Weber, Gae	ML15142A006
Valencia, Suzanne	ML15159A016	Weber, Steve	ML15142A340
Valencia, Suzanne	ML15159A017	Weckering, Daniel	ML15142A340
Valencia, Suzanne	ML15159A018	Weinkle, Gary	ML15139A816
Valero, Maudie	ML15162A039	Weisberg, Edmund	ML15162A766
Vallender, Andrew	ML15142A340	Weisman, Milt	ML15142A340
Van Vleet, Rodney	ML15142A340	Weiss, Arwen	ML15142A340
Vandal, Lise	ML15142A340	Weisser-Lee, Melinda	ML15148A806
Varanitsa, Oleg	ML15156B474	Welles, Diane	ML15160A648
Vargo, Gabriel	ML15139A898	Wentz, Pat	ML15142A340
Vartanian, Carol	ML15142A340	Wenzel, Tom	ML15162A850
Vaughn, Matt	ML15139A822	Wheeler, Cynthia	ML15159B561
Veach, Deb	ML15142A066	Widdowson, John	ML15139A886
Veltkamp, Robert	ML15142A330	Wiechec, Christina	ML15162A822
Vennett, Sean	ML15139A982	Wiehemeijer, Robert	ML15142A340
Vessicchio, Susan P.	ML15162A755	Wieland, Martin	ML15155C022
Vieira, Barbara	ML15142A340	Wildner, Andrea	ML15142A340
Vieira, Ed	ML15142A340	Wilkinson, lan	ML15155A753
Villanueva, Vivian	ML15154C172	Williams, Alek	ML15155C090
Villar, Michelle	ML15139A971	Williams, Brigida	ML15162A694
Villarnovo, Victoria	ML15162A057	Williams, Caroline	ML15159A172
Villaverde, Kristina	ML15158A057	Williams, Celia	ML15156A659
Vines, Jimmy	ML15139B005	Williams, Dodie	ML15142A340
Vivero, Daniel	ML15156A468	Williams, Freddie	ML15142A340
Voris, Stephanie	ML15142A340	Williams, Linda	ML15142A340
Voss, Skyler	ML15162A265	Williams, Marjorie J.	ML15142A340
Vries, M.	ML15142A340	Williams, Stephen L.	ML15142A340
Vuotto, Karla	ML15142A340	Williamson, Judith	ML15142A340
W., C.	ML15162A514	Willis, Jennifer	ML15142A340
Wachowiak, Mark	ML15156A658	Wilson, Kerri	ML15142A340
Wade, Karen	ML15159A519	Wilson, L.	ML15139A998
Walker, John	ML15142A340	Wilson, L. Wilson, Winn	ML15142A340

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Wilson, Winn	ML15162A687	Wu, Miki	ML15142A340
Windle, A.	ML15142A340	Yaffee, Steve	ML15162A817
Winick, Dorothy	ML15139A834	Yanez, Mario	ML15156A462
Winicki, Anne	ML15142A340	Yantselovskiy,	
Winters, Margueritta	ML15142A340	Alexandr	ML15142A340
Wolf, Chantal	ML15142A340	Yashirin, Nick	ML15139A744
Wolf, Darlene	ML15139A979	Yazdi, T.	ML15162A184
Wolf, Davis	ML15139A981	Yoo, Sunnah	ML15148B411
Wolle, Heather	ML15142A340	Youd, Mark	ML15139A988
Wolter, Manuela	ML15142A340	Young, Karen	ML15156B080
Woo, Regina	ML15154B407	Young, Mary	ML15156B158
Wood, Ruby	ML15142A340	Zagar, Virginia	ML15155A170
Woodard, Bennie	ML15142A340	Zarzycka, Alexandra	ML15162A424
Woodlief, Ann	ML15162A815	Zebracki, Nancy	ML15142A340
Woods, Sherry	ML15142A340	Zella, Donna	ML15139A943
Woods, Teresa	ML15154A807	Zimmermann, Karin	ML15142A340
Workman, Mary	ML15142A340	Zintel, Angelika	ML15142A340
Workman, Wickard	ML15142A340	Ziring, Sidney	ML15156B117
Wortham, Michael	ML15142A340	Zuckerman, Arlene	ML15142A340
Worthington, Nathalie	ML15142A340	Zuckerman, Barry	ML15140A061

Table E-10. Individuals Submitting with Subject "Support the 'No Action' Alternative"with Correspondence ID TURK-COL6&7-DR-00104 and RepresentativeADAMS Accession No. ML15140A141 (Multiple Authors 2015-TN4720)

	ADAMS		ADAMS
Commenter	Accession #	Commenter	Accession #
achtung@znaut.com	ML15162A926	Brexel, Sr., Charles	ML15197A051
Aghayan, Veronic	ML15196A484	Bromley, Gary	ML15201A470
Albrecht, Lonnie	ML15196A072	Broughton, Janet	ML15162A418
Anderson, Kelley	ML15195A030	Brown, Allie	ML15198A533
Anderson, Vaughn	ML15141A262	Bucolo, James	ML15195A159
Anderson, Vaughn	ML15195A631	Burgess, Candice	ML15162A496
Anderson, Vaughn	ML15162A942	Burns, Mary	ML15196A467
Anderson, William	ML15160A702	Byars, Rain	ML15162A917
Aponte, Jonathan	ML15201A468	Campbell, Grant	ML15160A078
Ayers, Randall	ML15196A496	Campbell, Linda	ML15198A517
Baird, Melissa	ML15195A630	Campbell, Susan	ML15195A562
Balfour, Joan	ML15195A046	Carver, Pat	ML15198A503
Balfour, Joan	ML15195A589	Catalina, Janet	ML15196A071
Barnes, Janice	ML15195A188	Colby, Helen	ML15196A154
Battin, John	ML15198A547	Collins, Denise	ML15201A471
Bell, Angela	ML15162A923	Constantino-Martin, Patti	ML15160A521
Bellamy, Ray	ML15198A545	Cook, Kevin	ML15201A465
Bolen, D. K.	ML15162A924	Corbin, Randy	ML15160A538
Bolen, D. K.	ML15195A170	Craciun, George	ML15196A054
Bordonaro, Jo	ML15195A597	Curci, James	ML15195A646
Born, Deborah L.	ML15159B483	De Nolf, Susan	ML15195A717
Bowden, Deanna	ML15162A405	de Sart, Marci	ML15198A515
Bowman, Kenneth	ML15195A611	Debus, John	ML15198A532
Bowman, Kenneth	ML15196A060	Deddy, John	ML15195A650
Brady, Meaghan	ML15195A638	Detrick, Mary	ML15161A649
Braley, Brian	ML15197A044	Detrick, Mary	ML15195A033

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
dsinclair2013@hotmail.com	ML15196A477	Knight, David	ML15195A174
Dunn, Elmo	ML15195A652	Kollbach, Anja	ML15197A048
Dunn, Wendy	ML15195A640	Kramer, Richard	ML15196A255
Dunn, Wendy	ML15196A075	Kwo, Ken	ML15160A735
Duval, Ruthann	ML15196A124	Levin, Monnie	ML15195A579
Easter, Jeffrey	ML15195A591	Lightfoot, Martha	ML15201A469
Enfield, David	ML15142A383	Linden, Susan	ML15160A059
Family, Manzi	ML15198A509	Luke, Keth	ML15195A564
Fernandez, Maria	ML15160A553	Marchand, Babs	ML15196A086
Foster, Winnie	ML15159B548	Marder, Karen	ML15196A471
Frederick, Diana	ML15141A264	Margeson, Don	ML15195A120
Friedman, Donna	ML15198A506	Maricque, Mitchell	ML15196A252
Frotscher, H. David	ML15160A668	Mariotte, Michael	ML15196A095
Frotscher, H. David	ML15160A679	Marold, Doran	ML15195A144
Fults, Jason	ML15140A141	Marold, Doran	ML15195A614
-ults, Jason	ML15196A165	Martin, Drew	ML15160A719
Gibson, David	ML15162A490	Martinez, Judith	ML15195A707
Gifford, Bonnie	ML15162A409	Massar, Marc	ML15195A573
Glenn, Martha	ML15195A627	Mawhinney, John	ML15195A625
Glickman, Susan	ML15198A530	Mayotte, Monica	ML15159B458
Gutierrez, Kim	ML15159B503	Mazuca, Frank	ML15196A074
Hall, Dennis	ML15195A567	McClasky, Stephen	ML15197A041
Hallman, Janice	ML15196A052	McGlone, Colleen	ML15160A692
Hamilton, Dianna	ML15196A055	McGlone, Colleen	ML15195A574
Harsin, Linda	ML15195A124	Mejides, Andres	ML15197A045
Haun, Pamela	ML15162A493	Meyer, Colonel	ML15195A172
Headley, Linda	ML15162A928	Meyer, Colonel	ML15195A590
Henderson, Maria	ML15159B516	Meyer, Colonel	ML15195A653
Henderson, Maria	ML15162A856	Michel, Paul	ML15195A639
Henderson, Maria	ML15195A137	Miller, Michele	ML15198A524
Hendrix, Kia	ML15160A049	Milne, Martha	ML15196A134
Hensgen, Eric	ML15160A701	Minniss, Regina	ML15162A501
Hensgen, Eric	ML15196A253	Montesi, Toni	ML15159B453
Hollister, David	ML15162A494	Moore, Jeannine	ML15159B547
Hollister, David	ML15197A050	Moore, Jeannine	ML15162A935
Hoodwin, Marcia	ML15198A571	Moore, Jeannine	ML15195A713
Howard, Karen	ML15196A085	Moss, Eric	ML15162A940
Hung, Shiu	ML15195A621	Mumaw, John	ML15196A468
Jennings, Cara	ML15162A489	Nelson, Toni	ML15162A419
Jennings, Sid	ML15195A709	Nicholson, Carol	ML15195A705
Johnson, Diane	ML15196A475	Novotny, Jan	ML15196A076
Jones, Susan	ML15159B456	O'Brien, Robert	ML15196A485
Kahn, Nancy	ML15198A546	Oster, Teresa	ML15160A552
Kapp, Bill	ML15195A584	Paleias, Linda	ML15162A910
Kasenow, Lisa	ML15159B532	Paleias, Linda	ML15196A499
Keeley, Robert	ML15195A636	Patten, Elaine	ML15162A425
Kerkhoff, Joyce	ML15162A497	Pattison, Janet	ML15195A578
Kerkhoff, Joyce	ML15162A889	Pellegrini, Robert	ML15196A149
Kerkhoff, Joyce	ML15196A092	Peter, Judith	ML15195A063
Kerr, Earl	ML15162A862	Plockelman, Cynthia	ML15160A077
Khajeh-Noori, Jeri	ML15196A128	Porretto, Nick	ML15162A915
Khajeh-Noori, Jeri	ML15162A951	Pratt, Richard	ML15162A907
King, Michele	ML15196A497	Prexl, Esther	ML15195A647
Kluson, Forrest	ML15160A589	Price, Sue	ML15196A166

	ADAMS		ADAMS
Commenter	Accession #	Commenter	Accession #
Riley, Russell	ML15195A184	Southern, Tom	ML15198A513
Rilling, Fred	ML15162A943	Stallworth, Alicia	ML15198A572
Rilling, Fred	ML15195A601	Stansbery, Mark	ML15195A605
Rilling, Fred	ML15198A525	Stokes, Bill	ML15162A893
Robbin, Valerie	ML15160A050	Stoll, Maria	ML15195A181
Roberts, J. P.	ML15196A155	Stone, James	ML15196A073
Rock, Andrew	ML15198A542	Storino, Michael	ML15195A642
Rogers, Maureen	ML15195A629	Stuchly, Ryan	ML15196A103
Rowell, Edward	ML15196A146	Tatum, James	ML15198A518
Rowell, Edward	ML15196A147	Thomas, John	ML15162A941
S., C.	ML15195A603	Tiano, Michael	ML15160A060
S., J.	ML15196A465	Tomi, Joseph	ML15159B454
Sabol, Barbara	ML15162A899	Truesdell, Terrence L.	ML15159B480
Saunders, Suzanne	ML15195A582	Upchurch, Sandra	ML15159B482
Scionti, Cynthia	ML15197A052	Upchurch, Sandra	ML15162A950
Scott, Jennifer	ML15204A734	Usinger, Gary	ML15159B580
Scott, Jennifer	ML15162A072	Usinger, Gary	ML15195A166
Scott, Jennifer	ML15195A561	Vennett, Sean	ML15196A131
Sechrist, Linda	ML15195A167	Ward, Diana	ML15195A022
Shafchuk, Patsy	ML15195A571	Ward, Diana	ML15196A091
Shaw, Donald	ML15195A047	Whetstone, Joe	ML15195A641
Shetler, Terry	ML15195A587	Williams, Alek	ML15198A541
Smith, Brenda	ML15162A903	YII, Judy	ML15196A068
Smith, Jody	ML15189A035	Zambrano, Ota	ML15160A522
Smith, Leigh Emerson Sockloff, Judith	ML15162A432 ML15162A906	Zook, Caryl	ML15196A256

## Table E-11. Individuals Submitting with Subject "Support the 'No Action' Alternative"<br/>with Correspondence ID TURK-COL6&7-DR-00379 and Representative<br/>ADAMS Accession No. ML15141A259 (Multiple Authors 2015-TN4719)

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Albrecht, Lonnie	ML15196A139	Claiborn, William	ML15162A857
Andreacchio, Tonya	ML15195A635	Claiborn, William	ML15195A721
Arthur, Barbara	ML15196A474	Clever, Sonnett	ML15162A495
Axelrod, Andrea	ML15198A516	Colon, Yamarie	ML15159B387
Benjamin, Christopher	ML15195A157	Colson, Clay G.	ML15162A913
Benjamin, Christopher	ML15196A478	Colson, Clay G.	ML15195A566
Bernabei, Kaatje	ML15196A156	Covington, Laurel	ML15196A062
Bills, Kathleen	ML15196A126	Cox, Lesley	ML15162A390
Boda, Andrew	ML15195A710	Craciun, George	ML15198A523
Brenner, Barbara	ML15198A520	Cummins, Lynne	ML15195A593
Breslin, Gail	ML15195A044	Datz, Amy	ML15198A512
Brizard, Irene	ML15195A711	Davidson, Maggie	ML15162A895
Brunke, Richard	ML15195A704	Davidson, Maggie	ML15196A144
Cabral, Edgar	ML15162A921	De Nolf, Susan	ML15195A176
Cameron, Erin	ML15198A531	De Parny, Sylvie	ML15195A712
Cammardella, Neil	ML15196A498	Debus, John	ML15198A505
Campbell, Frank	ML15197A042	Delson, Dave	ML15196A058
Campbell, Grant	ML15198A504	Detrick, Mary	ML15196A251
Cargille, Frances	ML15196A466	Dietz, Noella	ML15198A537
Carroll, Glenn	ML15196A121	Doenmez, Sarah	ML15196A247
Cherubin, Elizabeth	ML15195A020	Doyle, Brian	ML15195A720

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Duffey, Michael	ML15195A568	Landau, Doug	ML15195A127
Dunn, Elmo	ML15195A576	Landau, Doug	ML15196A492
Dunn, Marybeth	ML15198A540	Lange, Barbara	ML15197A046
Duval, Ruthann	ML15195A143	Laxon, Barbara	ML15196A122
Eberly, Kenneth	ML15195A703	Leary, James	ML15195A610
Edmondson, John	ML15159B426	Leavengood, Dena	
Elizey, Georgia	ML15159B485	Gross	ML15195A565
Elizey, Georgia	ML15162A949	Leone, Pakita	ML15198A510
Evelyn, Patty	ML15195A177	Lettieri, Tammy	ML15195A570
Fahrenkopf, Gladys	ML15195A608	Lewis, John	ML15162A393
Felice, Kathleen R.	ML15196A481	Linden, Susan	ML15195A045
Felice, Kathleen R.	ML15196A483	Linden, Susan	ML15195A648
Frotscher, H. David	ML15195A622	Losen, Willy Karl the	ML15195A624
G., J.	ML15159B404	Lux, Sharon	ML15198A548
Gale, Michelle	ML15196A161	Mack, Heathe	ML15195A596
Gerster, Edward	ML15159B455	Marra, Tony	ML15198A521
Gibbs, Covelo	ML15196A094	Marra, Tony Martinaz, Natalia	ML15195A633
Glenn, Martha	ML15195A031	Martinez, Natalie	ML15159B481
Glover, Tim	ML15196A487	McDonald, Patricia	ML15195A165
Gould, Mark	ML15196A493	McGrath, Marcela	ML15196A259
Grannon, Salima	ML15196A463	Mercado, Monica	ML15166A030
Guay, Mary	ML15159B445	Merritt, Mandy	ML15159B384
Guidry, Ashley	ML15162A365	Merritt, Mandy	ML15159B385
Gulden, Dale	ML15162A562	Mesches, Arnold	ML15195A164
Gulden, Dale	ML15162A890	Miller, Lynn	ML15198A514
Gulden, Dale	ML15195A722	Milne, Martha	ML15196A059
Hall, Dennis	ML15196A168	Minniss, Regina	ML15162A500
Hamilton, Dianna	ML15195A606	Montesi, Toni	ML15162A884
Hamilton, Kathleen	ML15195A613	Mora, Christian	ML15162A492
Hancock, Guy	ML15198A534	Morrison, Marc	ML15162A897
Harrison, J. M. M.	ML15195A715	Natilson, Nancy	ML15196A473
Hauck, Barbara	ML15195A141	Navarra, Rudi	ML15198A543
Haun, Pamela	ML15162A853	Nayer, Cyndy	ML15198A519
Headley, Linda	ML15195A594	Nayer, Stuart	ML15198A570
Hendrix, Kia	ML15162A912	Newton, Michael D.	ML15197A047
Hendrix, Kia	ML15196A480	Novotny, Jan	ML15196A153
Hensgen, Eric	ML15162A939	O'Brien, Robert	ML15159B424
Hertzman, Ron	ML15196A164	Olson, Mary	ML15188A201
Hill, Ann	ML15195A587	O'Meara, Patrick	ML15195A644
Hill, Catherine	ML15196A261	Osborne, Martin	ML15198A544
Hoffman, Ace	ML15198A536	Owen, Cheryl	ML15161A642
Hohenshelt, Felicity	ML15196A057	Paleias, Linda	ML15141A261
Hohenshelt, Felicity	ML15196A158	Pannaman, Stanley	ML15141A259
Howard, Barbara	ML15195A719	Pannaman, Stanley	ML15196A157
Hudon, Karen	ML15198A511	Paradise, Brian	ML15162A902
Hughes, Barbara	ML15159B442	Paul, Stephen	ML15159B457
Hughes, Curtis	ML15159B441	Perez, Jose	ML15195A131
Hunt, Jim	ML15160A978	Perez, Letty	ML15195A135
Jennings, Sid	ML15196A064	Peter, Judith	ML15195A651
Kerr, Earl	ML15195A612	Pontones, Steven	ML15195A604
Kimbrough, Mecca	ML15162A952	Pottinger, Brandon	ML15141A266
King, Michele	ML15195A168	Pritchard, Alvera	ML15195A716
Kirkland, Kathy	ML15162A151	Quillen, Carter	ML15195A706
Kramer, Richard	ML15195A563	Raby, Joyce	ML15195A162
Kwo, Ken	ML15195A714	Rapuano, Shannon	ML15198A522

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Rehbit, La	ML15196A143	Stephenson, James	ML15195A138
Rilling, Fred	ML15159B446	Stone, James	ML15195A718
Rilling, Fred	ML15159B447	Sullivan, Viola	ML15162A407
Rinaldi, Elaine	ML15196A490	Tann, Rosemary	ML15195A146
Roderigues, Abel	ML15195A599	Thomas, John	ML15159B444
Rose, Pat	ML15195A042	Tirey, Sheila	ML15159B504
Rowell, Edward	ML15195A037	Torres, Victor	ML15198A535
San Pedro, Patricia	ML15159B354	Treuer, Galen	ML15190A271
San Pedro, Patricia	ML15198A529	Truesdale, John	ML15196A069
Satori, Linda Sartori	ML15196A097	Tweeton, Tanya	ML15162A955
Schlumpf, Sebastian	ML15196A133	Vennett, Sean	ML15195A580
Scott, Jennifer	ML15162A909	Waitkevicz, H. Joan	ML15195A160
Scott, Jennifer	ML15195A602	Wallace, Christine	ML15162A223
Sharifi, Yasamin	ML15201A464	Washburn, Thomas	ML15196A088
Shetler, Terry	ML15196A084	Whetstone, Joe	ML15159B427
Silvey, Kevin	ML15195A708	Whetstone, Joe	ML15162A888
Sisco, D.	ML15198A527	Whitfield, Isabelle	ML15162A953
Smith, Brenda	ML15159B386	Williams, Penelope	ML15196A067
Spencer, Patrick	ML15196A127	Williamson, Barbara	ML15196A486
St. Martin, Darlene	ML15196A491	Wright, Edmund	ML15195A038
Stephan, Carole	ML15162A410	Yambor, Arthur	ML15196A145

## Table E-12. Individuals Submitting the Form with Subject "Reject permits to build new<br/>nuclear reactors at Turkey Point" with Correspondence ID TURK-COL6&7-<br/>DR-00240 and Representative ADAMS Accession No. ML15146A110 (Multiple<br/>Authors 2015-TN4718)

Commenter	ADAMS Accession #	Commenter	ADAMS Accession #
Agler, Mindy	ML15141A397	Gallart, Frank	ML15198A141
Anonymous,		Greene, Lisa	ML15225A088
Anonymous	ML15211A041	Griswold, Dave	ML15198A134
Anonymous,		Hoffmeyer, Lisa	ML15211A036
Anonymous	ML15201A044	Holland, Karen	ML15211A044
Anonymous,		James, Denise	ML15141A321
Anonymous	ML15211A058	Key, Laurence W.	ML15198A131
Anonymous,		Mahoney, Robert S.	ML15201A062
Anonymous	ML15146A232	Montalvo, Stephanie	ML15198A133
Barnidge, Virginia	ML15201A041	Paleias, Linda	ML15201A040
Bofill, Beatriz	ML15211A034	Siegel, Ellen	ML15201A053
Bofill, Beatriz	ML15142A382	Smoller, Merry Sue	ML15198A142
Colby, Helen	ML15146A126	Smoller, Merry Sue	ML15141A254
Dwyer, John P.	ML15201A045	Sweetay, Lynn	ML15201A058
Dwyer, Karen	ML15201A048	Umpierre, Diana	ML15160A316
Dwyer, Karen	ML15141A398	Umpierre, Diana	ML15162A271
Ferro, Colleen	ML15146A231	Younger, Sarah	ML15146A110
Fielding, Ed	ML15142A379	-	

Table E-13. Individuals Submitting the Form with Subject "Re: NRC-2009-0337 Turkey<br/>Point Expansion" with Correspondence ID TURK-COL6&7-DR-00679 and<br/>Representative ADAMS Accession No. ML15191A341 (Multiple Authors 2015-<br/>TN4717

Commenter	ADAMS Accession #
??, unnreadable	ML15191A341
??, unnreadable	ML15191A341
??, unreadable	ML15191A341
??, unreadable	ML15191A341
??, Corey Lopez	ML15191A341
Bara, Sharon	ML15191A341
Benson, Linda	ML15191A341
Bonnell, Elizabeth	ML15191A341
Chiszar, Benjamin J.	ML15191A341
Cleland, Noel	ML15160A314
Garcia, Dany	ML15191A341
Jacobs, Lee	ML15191A341
Kerr, Karen	ML15191A341
Klopfer, Carol	ML15191A341

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11. ABSTRACT (200 words or less) This environmental impact statement (EIS) has been prepared in response to an application submitted to the U.S. Nuclear Reg Commission (NRC) by Florida Power and Light Company (FPL) for two combined construction permits and operating licens combined licenses or COLs). The proposed actions related to the FPL application are (1) NRC issuance of COLs for two new reactor units (Units 6 & 7) at the Turkey Point Nuclear Power Plant site in Miami-Dade County, Florida, and (2) U.S. Army O Engineers (USACE) decision to issue, deny, or issue with modifications a Department of the Army (DA) permit to perform cond dredge and fill activities in waters of the United States and to construct structures in navigable waters of the United States rela- the project. This EIS documents the review team's analysis, which considers and weighs the environmental impacts of constructing and op two new nuclear units at the Turkey Point site and at alternative sites, including measures potentially available for reducing on avoiding adverse impacts. After considering the environmental aspects of the proposed action before the NRC, the NRC staff's recommendation to the Commission is that the COLs be issued as proposed. This recommendation is based on (1) the application, including the Environmental Report (ER), submitted by FPL; (2) consultation with Federal, State, Tribal, and local agencies; (3) the review independent review; (4) the consideration of public comments received on the environmental review; and (5) the assessments summarized in this EIS, including the potential mitigation measures identified in the ER and this EIS.	ses ) w power Corps of certain lated to operating or w team's s
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