

L-2015-253 10 CFR 52.3

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#### September 30, 2015

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, D.C. 20555-0001

Re: Florida Power & Light Company Proposed Turkey Point Units 6 & 7 Docket Nos. 52-040 and 52-041 Observations on the Draft Environmental Impact Statement (DEIS) Comment Letters Submitted to the U.S. Nuclear Regulatory Commission by the U.S. Department of the Interior and the Environmental Protection Agency

References:

- U.S. Fish and Wildlife Service (USFWS) letter to U.S. Nuclear Regulatory Commission (NRC) dated July 15, 2015, Comments and Recommendations for the Draft Environmental Impact Statement (DEIS) for Combined Licenses for Turkey Point Nuclear Plant, Units 6 and 7, Homestead, Florida - Docket ID NRC-2009-0337
- 2. U.S. Environmental Protection Agency (EPA) letter to NRC dated July 17, 2015, EPA Review and Comments, DEIS, Turkey Point Nuclear Plant, Units 6 and 7, Combined Licenses (COLs), Miami-Dade County, Florida - CEQ No. 20150054
- 3. National Park Service (NPS) letter to NRC and U.S. Army Corps of Engineers (ACOE) dated July 17, 2015
- 4. NPS letter to NRC and ACOE dated July 23, 2015
- NUREG-2176, Environmental Impact Statement for Combined Licenses (COLs) for Turkey Point Nuclear Plant Units 6 and 7; Draft Report for Comment, February 2015

Florida Power & Light Company (FPL) provides, as attachments to this letter, its observations on certain comments submitted to the NRC by the USFWS (Reference 1), EPA (Reference 2), and NPS (References 3 and 4) on the DEIS for the proposed Turkey Point Units 6 & 7 COLs (Reference 5). FPL initiated its examination of these comment letters to assist the NRC and ACOE in their evaluation and disclosure of environmental impacts of the project in the final EIS (FEIS). Accordingly, the attached FPL observations are intended to assist in the preparation of a complete, accurate, and timely FEIS, which is currently scheduled for publication in February 2016.

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 L-2015-253 Page 2

If you have any questions, or need additional information, please contact me at 561-904-3794.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on September 30, 2015.

Sincerely,

William Maher Senior Licensing Director – New Nuclear Projects

WDM/RFO

Attachment 1: FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015

Attachment 2: FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015

Attachment 3: FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015

CC:

PTN 6 & 7 Project Manager, AP1000 Projects Branch 1, USNRC DNRL/NRO Regional Administrator, Region II, USNRC Senior Resident Inspector, USNRC, Turkey Point Plant 3 & 4 Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 1 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
No. 1	USFWS Comment [bold text applied for emphasis] USFWS letter dated 7/15/15, Page 1, 2 <sup>nd</sup> paragraph <u>Endangered Species</u> The proposed project occurs within the geographic range of nine species protected by the Endangered Species Act of 1973, as amended (Act) (87 Stat. 884; 16 U.S.C. 1531 et seq.), including: the endangered Bartram's scrub-hairstreak butterfly (Strymon acis bartrami), Everglade snail kite (Rostrhamus sociabilis plumbeus; snail kite), Florida bonneted bat (Eumops floridanus; FBB), Florida leafwing butterfly (Anaea troglodyte floridalis), Florida panther (Puma concolor coryi; panther), Schaus swallowtail butterfly (Heraclides aristodemus ponceanus = Papilio aristodemus ponceanus), West Indian manatee (Trichechus manatus), beach jacquemontia (Jacquemontia reclinata), crenulate lead-plant (Amorpha crenulata), deltoid spurge (Chamaesyce deltoidea deltoidea) , Florida brickell-bush (Brickellia mosieri), Small's milkpea (Galactia smallii), and tiny polygala (Polygala smallii) as well as the threatened American crocodile (Crodylus acutus;crocodile), Red Knot (canutus rufa), piping plover (Charadrius melodus), wood stork (Mycteria americana), and Garber's spurge (Chamaesyce garberi).	<ul> <li>FPL Observation [bold text applied for emphasis]</li> <li>As described in FPL's Turkey Point Units 6 &amp; 7 Federal Biological Assessment for Six Listed Species, Table 1., the Project is not likely to have any impact on the following species:</li> <li>Florida bonneted bat (Eumops floridanus; FBB)- see also FPL Observation to USFWS comment No.3 below <ul> <li>Potential Habitat within Miami Dade County - Primarily found in dwellings in urban areas, but occasionally in tree cavities</li> <li>Documented Occurrence at Turkey Point Units 6 &amp; 7 Plant or Along Associated Facilities – Only three records in Miami Dade County after 1965.</li> <li>Potential Impact to Listed Species from Turkey Point Units 6 &amp; 7 Plant and Associated Facilities -Not likely— FPL will not impact any existing dwellings; population in the county presumed to be rare</li> </ul> </li> <li>Schaus swallowtail butterfly (Heraclides aristodemus ponceanus = Papilio aristodemus ponceanus)</li> <li>Potential Habitat within Miami Dade County - Not likely, known from the upper Florida Keys,</li> <li>No documented Occurrence at Turkey Point Units 6 &amp; 7 Plant or Along Associated Facilities</li> </ul>

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 2 of 92

No.	<b>USFWS Comment</b> [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>crenulate lead-plant (Amorpha crenulata)</li> <li>Potential Habitat within Miami Dade County - Pine rockland and marl prairie (transverse glades) with slash pine, saw palmetto, wax myrtle, and poisonwood</li> <li>No documented Occurrence at Turkey Point Units 6 &amp; 7 Plant or Along Associated Facilities</li> <li>Potential Impact to Listed Species from Turkey Point Units 6 &amp; 7 Plant and Associated Facilities -Not likely— six populations known, five on managed areas (one introduced)</li> </ul>
		<ul> <li>deltoid spurge (Chamaesyce deltoidea deltoidea)</li> <li>Potential Habitat within Miami Dade County - Pine rocklands with scattered shrubs and exposed limestone</li> <li>No documented Occurrence at Turkey Point Units 6 &amp; 7 Plant or Along Associated Facilities</li> <li>Potential Impact to Listed Species from Turkey Point Units 6 &amp; 7 Plant and Associated Facilities - Not likely—preferred habitat uncommon in Project area, no individuals observed</li> </ul>
		<ul> <li>Small's milkpea (Galactia smallii),</li> <li>Potential Habitat within Miami Dade County - Redland pine rocklands of southern Dade County, with South Florida slash pine, saw palmetto, willow bustic, and poisonwood</li> <li>No documented Occurrence at Turkey Point Units 6 &amp;</li> </ul>

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 3 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>7 Plant or Along Associated Facilities</li> <li>Potential Impact to Listed Species from Turkey Point Units 6 &amp; 7 Plant and Associated Facilities - Not likely—Project not located within range of species</li> </ul>
		<ul> <li>piping plover (Charadrius melodus),</li> <li>Potential Habitat within Miami Dade County - Winters on both Gulf and Atlantic coasts, although much more common on Gulf coast; found on open, sandy beaches and on tidal mudflats and sandflats</li> <li>No documented Occurrence at Turkey Point Units 6 &amp; 7 Plant or Along Associated Facilities</li> <li>Potential Impact to Listed Species from Turkey Point Units 6 &amp; 7 Plant and Associated Facilities - Not likely—no individuals observed, impact to nontidal mudflat habitat within industrial wastewater facility not considered preferred habitat</li> </ul>
		<ul> <li>Garber's spurge (Chamaesyce garberi).</li> <li>Potential Habitat within Miami Dade County - Sandy soils over limestone in pine rocklands, hammock edges, coastal rock barrens, grass prairies, salt flats, beach ridges, and swales</li> <li>No documented Occurrence at Turkey Point Units 6 &amp; 7 Plant or Along Associated Facilities</li> <li>Potential Impact to Listed Species from Turkey Point Units 6 &amp; 7 Plant and Associated Facilities - Not likely—preferred habitat uncommon in Project area, no</li> </ul>

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 4 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	· · · · · · · · · · · · · · · · · · ·	individuals observed
		Reference – Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species, November 2012
		<ul> <li>Beach jacquemontia (Jacquemontia reclinata)</li> <li>Potential habitat within Miami Dade County – native to coastal barrier islands in southeast Florida from Biscayne Bay in Dade County northward to Palm Beach County; prefers beach coastal strand and maritime hammock habitats, typically occurring within open areas on the crest and lee sides of stable dunes prefers beach coastal strand and maritime</li> <li>No documented occurrence at Turkey Point Units 6 &amp; 7 Plant or along associated facilities</li> <li>Potential impact to listed species from Turkey Point Units 6 &amp; 7 Plant and Associated Facilities – Not likely, no individuals observed, no impact proposed to preferred beach dune and maritime hammock habitat</li> </ul>
		Reference: USFWS South Florida Multi-Species Recovery Plan, 1999
		<ul> <li>Florida brickellbush (Brickellia mosieri)</li> <li>Potential habitat within Miami Dade County – Pine rocklands with open shrub layer, exposed limestone, and minimal leaf litter</li> <li>Documented occurrence at Turkey Point Units 6 &amp; 7</li> </ul>

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 5 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>Plant or along associated facilities - Observed on western transmission line corridor.</li> <li>Potential impact to listed species from Turkey Point Units 6 &amp; 7 Plant and Associated Facilities – Minimal, preclearing surveys will be used to aid in access road and structure pad location/design to avoid impact; relocation of individuals, if feasible</li> </ul>
		See also FPL Observation to USFWS comment No. 7 below.
	· · · · · · · · · · · · · · · · · · ·	With regards to Bartram's scrub-hairstreak butterfly (Strymon acis bartrami), Florida leafwing butterfly (Anaea troglodyte floridalis) and the tiny polygala (Polygala smallii), please see FPL Observation to USFWS comment No. 7 below.
		With regards to the Red Knot (canutus rufa), 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".
		Regarding wood storks, please see FPL Observation to USFWS comment No. 6 below.

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		In addition, in its Final Order, the Siting Board adopted the conclusion of the Administrative Law Judge to certify the West Consensus Corridor, with the FPL West Preferred Corridor as the second choice if a Right-of-Way within the West Consensus Corridor cannot be secured in a timely manner and at a reasonable cost. Use of the West Consensus Corridor (MDLPA 2 Corridor) reduces the probability of potential impacts to the federally endangered wood stork and Everglade snail kite.
		Use of the West Consensus Corridor (MDLPA 2 Corridor) reduces the probability of potential impacts to the federally endangered wood stork and Everglade snail kite. As stated in ML13311A105 regarding wood storks, "The MDLPA 2 Corridor is located east of all 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 published by the U.S. Fish & Wildlife Service (USFWS) (Ogden, 1990)."
		Reference – ML13311A105
		In 2010, FPL conducted a risk assessment to evaluate the potential effects on wood storks of the West Preferred and West Secondary Corridors. Please note, this assessment did not include the West Consensus Corridor because this corridor was not identified at that time. It is anticipated the risks would be less for the West Consensus Corridor which is located further east from the known wood stork colonies. The

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 7 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	<b>kkk</b>	risk assessment was submitted with the responses to the 5th round transmission completeness questions in "Ecological Risk Assessment of Potential Impacts of Turkey Point Units 6 & 7 West Corridor Transmission Lines on Wood Storks", Pandion, July 2010. An Addendum to this report was submitted on September 2010.
		Section 2 of the Addendum states, "The collision risks to Wood Storks are addressed in detail in the Risk Assessment (see Section 4.3 <i>Specific Injury/Mortality</i> <i>Risk Assessment</i> ). The presented characterization of risk is based on a thorough review of both the Wood Stork literature and avian collision literature (see Section 6 – <i>Selected</i> <i>Literature [Cited or Reviewed]</i> ). Based on the weight of evidence regarding Wood Stork biology and the predicted interactions of Wood Storks with transmission lines and in particular with FPL's proposed West Corridor transmission lines, the following characterizations of collision risk were concluded:
		<ol> <li>Limited collisions are anticipated because of behavioral avoidance of collisions reported and/or supported by relevant studies of Wood Storks, visibility of the proposed transmission lines, documented acclimation of Wood Storks to transmission lines in their nesting area and range in Florida and the Southeast, and the few reported local incidents of collisions;</li> <li>Because of variable exposure/effects, different levels of risk for collisions will occur to individual Wood Storks</li> </ol>

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		depending upon:
		a. Their life stage – adults, fledglings, juveniles and
		immatures. Specifically, there will be differential
		exposure to young fledgling birds versus adults
		based on their behavior,
		<ul> <li>b. Their life history – courtship, nest building,</li> </ul>
		fledgling flights, feeding flights to and from nest,
		"milling around," and foraging. There will also
		be differential risks between nesting and
		foraging Wood Storks. During nesting there will
		be exposure for adult Wood Storks that engage
		in courtship behaviors and nesting building
		activities in vicinity of a colony and to fledgling
		Wood Storks that are developing their flight
		behaviors including making numerous short
		distance flights in the vicinity of a colony and
		returning frequently to their nest to be fed. The
		closer the transmission lines are to the colonies,
		the greater will be the exposure of the nesting
		Wood Storks and therefore the risks to these
		groups of birds. The risk to foraging Wood
		Storks will be from their departing and entering
		the colony and crossing the transmission lines to
		feed. The exposure to foraging Wood Storks
		will be a function of the direction of foraging and
		the frequency of crossings. After nesting
		dispersal exposure will be a function of the
		direction and distance of dispersal and proximity
	· · · · · · · · · · · · · · · · · · ·	to the transmission lines. In seasons with good

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>hydrological foraging conditions Wood Storks may remain in the Everglades, while in seasons with poor hydrological foraging conditions Wood Storks may fly to better foraging areas outside of the Everglades.,</li> <li>c. Temporal variables – daily, seasonal, and annual, and</li> <li>d. Proximity to the lines the Risk Assessment shows there will be higher risks from the Secondary Corridor than the Preferred Corridor due to the closer proximity to the colonies and corresponding higher exposure to nesting Wood Storks;</li> <li>3. No threats to the survivability of the four colonies from collisions will occur;</li> <li>4. No negative impacts to population and CERP Targets will occur; and</li> <li>5. The overall risks are of moderate potential (limited and local mortality, no population effects).</li> </ul>
		These conclusions are further elaborated in the full Risk Assessment (see Risk Assessment Section 4.3). These conclusions were developed without consideration of mitigative measures that may be implemented to reduce the risk to nesting and foraging Wood Storks. Such mitigative measures will further reduce the risks characterized in the Risk Assessment. The Risk Assessment, including this Addendum, will form a partial basis for the risk management decisions for implementation of such measures. The Risk

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Assessment, including this Addendum, does not consider the opportunity for risk reduction and avoidance by implementation of any mitigative measures, as is discussed in Section 5 below and Section 4.3.6 of the Risk Assessment. The Risk Assessment will form a partial basis for decisions on risk reduction and avoidance through mitigative measures."
		Reference –Ecological Risk Assessment of Potential Impacts of Turkey Point Units 6 & 7 West Corridor Transmission Lines on Wood Storks, Pandion, July 2010, submitted with the responses to the 5th round transmission completeness questions and Addendum dated September 23, 2010
		Regarding wood storks and Everglade snail kites, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to coordinate with FWC and conduct surveys for the listed species that may occur within the transmission line ROW. Condition of Certification, Section C. III.B. states,
		"B. General Listed Species Survey
		1. Prior to conducting detailed surveys, the Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain the current listed species (in accordance with Article IV, Section 9 of the Florida Constitution and Rule 68A-27, F.A.C.) and follow the current survey protocols for these listed species that may occur within the transmission line ROW, and implement appropriate

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		buffers as defined by the listed species' survey protocols.
		2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact mitigation methodologies."
		Reference – Condition of Certification, Section C. III.B.
		Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to coordinate with FWC and conduct surveys for the listed species that may occur within the plant and non-transmission project areas.
		Condition of Certification, Section B. IV.B. states,
		"B. General Listed Species Survey
		1. Prior to conducting detailed surveys, the Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain and follow the current listed species (in accordance with Article IV, Section 9 of the Florida Constitution and Rule68A-27, FAC) and follow the current survey protocols for these listed species that may occur within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way, as well as implement appropriate buffers within FPL property or rights of way as defined by the listed species' survey protocols.

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 12 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact avoidance, minimization, or mitigation methodologies."
		Reference – Conditions of Certification, Section B. IV.B.
		Condition of Certification, Section B. IV.C. states, "C. Specific Listed Species Surveys
		Before land clearing and construction activities within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way occur, the Licensee shall conduct an assessment for listed species which shall note all habitat, occurrence or evidence of listed species. Listed species to be included in this survey
		shall include the bald eagle and those species listed as threatened, or species of special concern by the FWC or those listed as endangered or threatened by U.S. Fish and Wildlife Service (USFWS). Wildlife surveys shall be conducted during the reproductive or "active" season for each
		species that falls before the projected clearing activity
		For species that are difficult to detect, the Licensee may make the assumption that the species is present and plan
		appropriate avoidance/mitigation measures after consultation with FWC. The Licensee will submit avoidance/mitigation

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		measures for FWC post-certification review and approval at least 60 days prior to commencing clearing or construction activities within the surveyed area.
		1. This survey shall be conducted in accordance with USFWS/FWC guidelines and methodologies by a person or firm that is knowledgeable and experienced in conducting flora and fauna surveys for each potentially occurring listed species.
		2. This survey shall identify any wading bird colonies within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way that may be affected.
		3. This survey shall identify locations of breeding sites, nests, and burrows for listed wildlife species. Nests and burrows shall be recorded with GPS coordinates, identified on an aerial photograph, and submitted with the final listed species report. Although nests and burrows may be recorded individually with GPS, the FWC prefers that any applicable protection radii surrounding groups of nest sites and burrows be included on a site specific basis, rather than around individual nests and burrows, and be physically marked so that clearing and construction shall avoid impacting them.
		4. This survey shall include an estimate of the acreage and percent cover of each existing vegetation community (Florida Land Use, Cover and Forms Classification System, or FLUCFCS, at the third degree of detail) of each

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 14 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		community that is contained within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way prior to land clearing and construction activities using GIS. Examples of such wildlife-based habitat classification schemes include Florida's State Wildlife Action Plan (FWC 2005), Descriptions of Vegetation and Land Cover Types (FWC 2004), or Natural Communities Guide (FNAI 1990)."
		Reference – Conditions of Certification, Section B. IV.C
		Regarding wood storks and other wading birds, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to identify the baseline conditions which may indicate the potential for impacts to wood storks and other wading birds, and to help quantify potential mitigation for such impacts by performing pre-construction flight surveys, post –construction Mitigation Effectiveness Study and providing the results to FWC as listed below
		Conditions of Certification Section C.III.F states,
		"In order to identify the baseline conditions which may indicate the potential for impacts to wood storks and other wading birds, and to help quantify potential mitigation for such impacts, FPL will perform the following pre- and post-construction studies:
1		1. Pre-construction follow flight surveys

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		shall be conducted during nesting for the currently known wood stork colonies along Tamiami Trail (East 1, East 2, and West) and the 3B Mud East Colony using fixed wing aircraft. The follow flight surveys shall be conducted both prior to and during the fledging period. The surveys would ascertain flight line corridors for the wood storks in terms of direction, numbers of birds, and altitudes. These data would be compared to existing data for the Tamiami Trail and 3B-Mud East colonies collected to date. The survey design shall be submitted to FWC for review prior to implementation.
		2. A post-certification, pre-clearing aerial survey shall be conducted via fixed wing or rotary wing aircraft, between the months of December and May, once it is confirmed by FWC, USFWS or SFWMD that wading birds are nesting in the area of the proposed transmission line right-of- way. The surveys shall employ a series of two transects, along each side of the right-of-way. To minimize disturbance to the colonies, the flight(s) shall be conducted at altitudes no less than 300 feet.
	•	a. This survey shall identify any wood stork/wading bird colonies in addition to any found from agency records that may be affected within one-half mile of the project ROW.
		b. Center locations of all wood stork and wading bird colonies shall be delineated with a Wide Area Augmentation System (WAAS) enabled Global Positioning System (GPS) unit.

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		c. All wood stork and wading bird colonies shall be ground inspected, as aerial identification of intermediate-sized and dark-plumaged wading birds (little blue heron, tricolored heron, glossy ibis) is difficult at best and because they tend to nest below the vegetation canopy, making species identification all but impossible. To avoid flushing birds from their nests, identification of species shall be made using binoculars and surveys shall follow the protocols in Rodgers and Smith (1995).
		Reference: Rodgers, J.A., and H.T. Smith. 1995. Set-back distances to protect nesting bird colonies from human disturbance in Florida. <i>Conservation</i> <i>Biology</i> 9:89-99.
		3. For the currently known wood stork colonies along Tamiami Trail (East 1, East 2, and West) and the 3B Mud East Colony, and for any newly identified wood stork colonies within one-half mile from the corridor as a result of the above-referenced, post-certification pre-clearing survey, FPL shall implement the following measures:
		a. Flight Diverters - FPL will install spiral corkscrew design bird flight diverters (or other mutually agreeable design flight diverters) on the Overhead Ground Wires (OGW) of each transmission line from a point one-half mile south of the Tamiami Trail colonies to a point one half mile north of the 3B Mud East Colony, and between points one half mile in either direction from any newly identified colonies. The point one-half mile shall be identified from the

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		actual colony boundary to adhere to the USFWS Wood Stork Guidelines for activities within the primary boundary. Flight diverters have been shown to reduce mortality and will be installed according to the manufacturers' instructions.
		b. FPL will also install perch discouragers at transmission structure pole tops and arms to address risks from nest building and streamers (defecation) and reduce the exposure and potential risk of electrocutions.
		c. Mitigation Effectiveness Study - FPL will fund a monitoring study during the first wood stork nesting season after construction along the marked stretch of the transmission lines near the currently known wood stork colonies, similar to the study performed by Frederick and Deng (1997) on the FPL Levee-Midway Transmission Line. The results will be used to determine effectiveness of wood storks (and other wading birds) in avoiding the new transmission line facilities, and especially if effectiveness of marked sections of lines is significantly different from unmarked lines.
		Reference: Frederick, P. and Deng, J. 1997. Bird-Strike Mortality on the Everglades Section of the Levee-Midway Powerline. Florida Power & Light Co. 27 pp.
		The surveys shall generally be performed as follows:
		(1) Specific study protocols including mortality monitoring and sampling biases protocols will be developed in conjunction with FWC, USFWS, and SFWMD biologists using Avian Power Line Interaction

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Committee (APLIC) guidelines for mitigating bird collisions
		with power lines.
		(2) Surveys will be conducted
		on a regular frequency sufficient to detect mortality, such as
		every other day, in the mornings and in the evenings.
		(3) Any dead or injured birds
		found will be identified, located with GPS, and collected for
		necropsy (if dead).
		(4) Surveys will be conducted
		along the marked stretch of transmission line right-of-way in
	•	100m transects, with each transect separated by 100m.
		I ransects shall be centered on any observed flight lines as
		Transact width shall include the right of wey width and any
		visible dimension on either side
		(5) Observations of flight
		behavior of any birds crossing the lines will also be recorded
	•	A protocol for visual observations similar to the Frederick and
		Deng studies will be developed.
		d. Post-survey Review - After the
		Mitigation Effectiveness Study has been conducted, the
		results will be presented to FWC. If mortality to wood storks
		reasonably related to collisions with the transmission lines is
		documented to impact the wood stork population and as
1		determined by the USFWS Biological Opinion, FPL and the
		Study Investigator will meet with FWC to discuss the results of
		the Mitigation Effectiveness Study. The populations
ļ		considered in determining impacts will be the four colonies
		(Tamiami East I, East 2, and West, and the 3B Mud East) and

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 19 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		other colonies formed within one-half mile of the transmission right-of-way, based on the SFWMD's annual wading bird survey that year. If in the judgment of the FWC the wood stork population of the four colonies that year was not within "ten- year average" ranges, FPL may be required to resurvey the right-of-way in that vicinity during an additional nesting season. If the post-survey review shows that mortality to wood storks within the colonies due to collision with the transmission lines exceeds that portion of the colonies' population that is allowed by the USFWS Biological Opinion, additional mitigation measures such as, but not limited to, different configurations or greater density of flight diverters, or additional monitoring, or a combination may be required by FWC."
		Reference – Conditions of Certification Section C.III.F.
		Regarding the Everglade snail kite, see also FPL Observation to USFWS comment No. 2 below.
		In addition, Conditions of Certification Section C.III.G. states,
		"1. A survey (USFWS South Florida Ecological Services Office Draft Snail Kite Survey Protocol, May 18, 2004) is necessary when the project site is within the snail kite consultation area and suitable habitat is present. The following criteria can be used to judge the adequacy of the habitat for snail kites.
		Appropriate foraging habitat present [paspalidum

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 20 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		( <i>Paspalidium geminatum</i> ), spikerushes ( <i>Eleocharis spp</i> .), panicum ( <i>Panicum spp</i> .), or beakrushes ( <i>Rhynchospora spp.</i> )].
		<ul> <li>Perching and/or nesting substrate present, i.e., [willows (<i>Salix caroliniana</i>), melaleuca (<i>Melaleuca quinquenervia</i>), or pond cypress (<i>Taxodium ascendens</i>)]; or [sawgrass (<i>Cladium jamaicense</i>), cattail (<i>Typha spp</i>.), giant bullrush (<i>Scirpus validus</i>), or reed (<i>Phragmites australis</i>)], respectively.</li> <li>Appropriate water depth (0.2-1.3 m deep) under nesting substrate.</li> <li>Nesting substrate an adequate distance (&gt;150 m) from upland.</li> <li>Proximity of nearest wading bird colony.</li> </ul>
		2. If suitable habitat is present or snail kites are reported on the transmission line right-of-way, the following survey procedures shall be used to document their occurrence. To maximize the chances of finding snail kites the survey shall be conducted in January to May during the breeding season. A visual survey of suitable habitat shall be made for birds and nests.
		A boat may be needed for the survey as the best nesting habitat may be a considerable distance (> 150 m) from uplands. Check small trees, such as, willow, melaleuca, and pond cypress along the open water edge for nests or perching birds. If snail kites are observed, then nests can be located through the bird's behavior. When flushed from a nest the

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 21 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>adult tends to circle upward, whereas non-nesting birds that are flushed fly more horizontally away from the disturbance (Bennetts et al. 1988). Nests also can be found by following kites carrying sticks, adults carrying apple snails, aerial courtship displays, vocalizations of adults or begging calls of the young, and through a thorough search of areas where adults are repeatedly observed (Bennetts et al. 1988).</li> <li>3. In the event that surveys determine that a project transmission line has the potential to impact snail kites, the following measures shall be used to minimize and mitigate for these impacts.</li> <li>FPL and FWC will meet to discuss the specific issues and mitigation alternatives.</li> <li>FPL will then provide a detailed mitigation plan to address the specific impacts, which must be reviewed and approved by FWC, and be consistent with all other COCs or federal permit conditions.</li> <li>FPL will provide a monitoring report after a designated period to document effectiveness of the mitigation plan.</li> <li>Corrective action alternatives will be determined and implemented if necessary. Reference: Bennetts, R.E., M.W. Collopy, and S.R. Beissinger. 1988. Nesting ecology of Snail Kites in Water Conservation Area 3A. Department of Wildlife and Range Science, University of Florida, Gainesville. Florida Cooperative Fish and Wildlife Research Unit, Technical Report No. 31, 174 p."</li> </ul>
		Reference – Conditions of Certification Section C.III.G.

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 22 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Regarding manatees, they occur within fresh, brackish, or salt water habitats; and are affected by water temperatures. The project will not have any affect on water temperature in the bay and is not located within an area designated as critical manatee habitat. The only area of in-water work is within the barge unloading expansion area, where FPL will follow FWC and MDC manatee protection guidelines.
		Regarding panthers see also FPL Observation to USFWS comments Nos. 4 and 13.
		In addition, BDA Environmental Consultant, Estimated Impacts to Florida Panthers Habitat, Turkey Point Units 6 & 7 Project, April 2013, page 13 states,
		"The roadway improvements are proposed in an area at the urban fringe of the Primary Zone where telemetry and mortality records indicate that panthers have occurred infrequently within the area over the last 20 years. Installation of wildlife crossings to accommodate future movements of Florida panthers are not warranted in this area due to the small area of potentially suitable habitats north and east of the roadways. If panthers do eventually occur in the area, they are likely to safely cross the new roads at the anticipated
		traffic volumes if wide road shoulders are maintained to eliminate concealment cover and promote visibility, panther crossing signs are installed, and low speed limits are established. Moreover, training should be given to project

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 23 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		personnel to be aware of and avoid Florida panthers and other listed species of wildlife."
		Reference – BDA Environmental Consultants, Estimated Impacts to Florida Panthers Habitat, Turkey Point Units 6 & 7 Project, April 2013. Submitted with 3 <sup>rd</sup> Round Completeness Responses, April 5, 2010.
		Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to incorporate wildlife exclusion fencing and wildlife underpasses in the roadway design as described below.
		Conditions of Certification Section B. VII.H.3. states,
		"Pursuant to MDC Resolution No. Z-56-07, FPL shall to incorporate wildlife protection features into the roadway design for all segments of the temporary access roads south of SW 344 <sup>th</sup> Street. Along SW 359 <sup>th</sup> Street and along the portions of SW 117 <sup>th</sup> Avenue and SW 137 <sup>th</sup> Avenue that are to
		be constructed south of SW 344 <sup>th</sup> Street, wildlife exclusion fencing shall be installed and shall include small mesh material, such as silt fencing, of appropriate mesh size and
		neight to provide an exclusion barrier for reptiles and other small animals. The SW 359 <sup>th</sup> Street temporary roadway shall
		accommodate a minimum of two (2) wildlife underpasses west of the L-31E levee, one of which must be constructed
		other between SW 117 <sup>th</sup> Avenue and the L-31E borrow canal.

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 24 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		The bridge over the L-31E borrow canal may serve as one of the wildlife underpasses provided that the plans demonstrate it has been appropriately designed for this purpose. These underpasses shall be of adequate design and shall be constructed to facilitate the safe passage of all wildlife known to occur or to potentially occur in this area during all times of the year, including but not limited to deer, Florida panthers, bobcats, snakes, American crocodiles, and amphibians. A minimum of three (3) crocodile underpasses shall also be provided along the temporary access road immediately north of the cooling canal system. The required underpasses shall be positioned to provide safe access to the habitat."
		Reference – Conditions of Certification Section B. VII.H.3. In addition, FWC conditions require active or passive wildlife protection measures be implemented as described below.
		Conditions of Certification Section B.IV.I.states,
		"1. The Licensee shall take proper precautions during clearing and construction to protect panthers from accidental injury due to conditions within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way during construction.
		a. Construction policies and practices identified by the FWC to protect panthers shall be used by the Licensee whenever feasible. These include:

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 25 of 92

No	USEWS Comment [bold text applied for emphasis]	<b>FPL Observation</b> [bold text applied for emphasis]
		<ul> <li>Limiting speeds on access roads to 45 mph or less and adjust trucking activities and material delivery schedule within the panther consultation area to reduce speeds at dawn and dusk.</li> </ul>
		<ul> <li>Conducting frequent and unannounced site inspections to monitor for compliance with the above.</li> </ul>
		b. Any panther observations (dead or alive) made by Licensee's employees or contractors shall be verified by a qualified expert agreed to by FWC and reported to FWC within 24 hours.
		2. The Licensee shall take proper precautions during construction and plant operations to protect panthers from accidental injury due to vehicle collisions along access roadways in the panther consultation area as defined by the USFWS (Attachment G), including SW 359 <sup>th</sup> Street, SW 137 <sup>th</sup> Avenue, and SW 117 <sup>th</sup> Avenue.
		a. Speeds on access roads shall be limited to 45 mph or less. Passive measures shall be implemented to enforce slower speeds and shall include lighted speed signage, speed bumps, and slow speed zones at dawn and dusk, and panther crossing signage.
		b. In lieu of the passive measures identified in this condition, the Licensee may choose to use exclusionary fencing along the length of SW 359th Street between SW 117th Avenue and SW 137th Avenue to prevent accidental

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 26 of 92

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		injury and/or panther mortality due to vehicle collisions.
		c. Any panther observations (dead or alive) made by Licensee's employees or contractors shall be verified by a qualified expert agreed to by FWC and reported to FWC within 24 hours.
		3. The Licensee shall construct at least one (1) wildlife underpass and associated fencing to facilitate north-south movement across SW 359 <sup>th</sup> Street.
		a. The underpass shall be located between 117th Avenue and 137th Avenue in an appropriate location for use by panthers. The Licensee shall consult with FWC during placement of the underpass.
		b. The underpass shall be of appropriate size and design to facilitate panther movement. The Licensee shall consult with FWC during design of the underpass."
		Reference – Conditions of Certification Section B.IV.I.
	· · · · · · · · · · · · · · · · · · ·	Regarding crocodiles see also FPL Observation to USFWS comments Nos. 5, 9 and 20.
	·	In addition, Section 6.2.1 of the Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species (ML 123390437) submitted to the NRC on 11/30/2012 provides details of the existing FPL crocodile management program and the Project's proposed species-specific conservation and monitoring measures to avoid, minimize, and mitigate for any

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 27 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>below;</li> <li>"FPL initiated a formal comprehensive crocodile management program for the industrial wastewater facility in the early 1980s, consisting of a combination of the following: <ul> <li>Habitat preservation and creation of habitat suitable for crocodile nesting and basking.</li> <li>Establishment of exclusion zones at known nesting sites (nest sanctuaries</li> <li>Daytime and nighttime monitoring surveys to document nesting activity and utilization of the industrial wastewater facility.</li> <li>Capture and tagging of hatchlings using American Veterinary Identification Devices (AVID) microchip technology.</li> <li>Relocation of hatchlings to low-salinity habitat during early life stages to increase survival.</li> <li>Recapture, monitoring, and release of individuals to document growth and survival."</li> </ul> </li> </ul>
		"In addition to the monitoring and habitat enhancement activities that directly benefit the crocodile, FPL also has enacted an extensive crocodile awareness program to educate the public as to the status of the crocodile in south Florida. All of these existing activities will continue throughout the construction and operation phases of the new Units 6 & 7."
		Section 6.2.1.3 of the Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species (ML 123390437)

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		submitted to the NRC on 11/30/2012 provides details of the crocodile population monitoring as listed below;
		"Monitoring of the number and location of nests, production of hatchlings, and their growth and survival has been conducted within the Turkey Point Plant property since 1978. Surveys are conducted to identify nest locations, nest sites are revisited during the hatching period, and each hatchling is captured, permanently marked for identification, measured, weighed, sexed, and released. Permanent identification through American Veterinary Identification Device allows for the recapture of individuals after several years to document survival and growth rates. Surveys are conducted throughout the year, with different surveys conducted in different seasons based on crocodile behavior and life history. The population monitoring program at the Plant involves surveys conducted during the breeding, nesting, hatching, and juvenile phases of the crocodile's life cycle, as well as ongoing surveys documenting crocodile activities."
		Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to incorporate wildlife protection features into the roadway design for all segments of the temporary access roads south of SW 344 <sup>th</sup> Street. Along SW 359 <sup>th</sup> Street and along the portions of SW 117 <sup>th</sup> Avenue and SW 137 <sup>th</sup> Avenue that are to be constructed south of SW 344 <sup>th</sup> Street, wildlife exclusion fencing shall be installed and shall include small mesh material, such as silt fencing, of appropriate mesh size and height to provide an exclusion barrier for reptiles and other small animals. The SW 359 <sup>th</sup>

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 29 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Street temporary roadway shall accommodate a minimum of two (2) wildlife underpasses west of the L-31E levee, one of which must be constructed between SW 137 <sup>th</sup> Avenue and SW 117 <sup>th</sup> Avenue and the other between SW 117 <sup>th</sup> Avenue and the L-31E borrow canal. The bridge over the L-31E borrow canal may serve as one of the wildlife underpasses provided that the plans demonstrate it has been appropriately designed for this purpose. These underpasses shall be of adequate design and shall be constructed to facilitate the safe passage of all wildlife known to occur or to potentially occur in this area during all times of the year, including but not limited to deer, Florida panthers, bobcats, snakes, American crocodiles, and amphibians. A minimum of three (3) crocodile underpasses shall also be provided along the temporary access road immediately north of the cooling canal system. The required underpasses shall be positioned to provide safe access to the habitat.
		Reference – Conditions of Certification Section B. VII.H.3.
		In addition, FPL will create the Sea Dade Canal Crocodile Sanctuary as part of the Project's additional mitigation activities described in its Mitigation Plan Section 3.5 which states, "As part of the Project's additional mitigation activities, the Sea Dade Canal Crocodile Sanctuary involves creation of wetlands impacted by historical dredging and filling, topographic grading and planting, creation of low-salinity ponds for juvenile crocodile refugia, and creation of habitat

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 30 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		conditions with suitable nesting substrate specifically benefitting the federally threatened American crocodile ( <i>Crocodylus acutus</i> ). The approximately 6.4-acre area is located southwest of the industrial wastewater treatment facility, adjacent to the Sea Dade Canal and an existing meteorological tower (Figure 17)."
		"The proposed Sea Dade Canal Crocodile Sanctuary is currently comprised of previously filled uplands, open water borrow ponds, mixed hardwood wetlands, dwarf red mangrove marsh, and sawgrass marsh (Figure 18) adjacent to the Sea Dade Canal. An access road leads to a meterological tower on the eastern edge of the site. Areas of forested wetland are vegetated with a mixture of red mangrove, white mangrove, buttonwood, poisonwood, and the threatened species locust berry ( <i>Byrsonima lucida</i> )."
		"The target community is modeled after the successful crocodile sanctuary created upon previously filled land within the EMB in 2008. A post-enhancement conceptual design is presented in Figure 19. Upland areas will be topographically graded to restore wetland hydrology and planted with a variety of native species such as buttonwood, bay cedar ( <i>Suriana maritima</i> ), Florida silver palm ( <i>Coccothrinax</i> <i>argentata</i> ), willow bustic ( <i>Sideroxylon salicifolium</i> ), muhly grass ( <i>Muhlenbergia capillaries</i> ), and railroad vine ( <i>Ipomea</i> <i>pes-capri</i> ) to create a mosaic of habitats, including saline lagoon areas connecting to the Sea Dade Canal, isolated low- salinity ponds, and crocodile pesting areas utilizing a proven

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		mixture of peat,marl, and sand. In addition to providing a
		nesting sanctuary for crocodiles, the area will provide
		potential foraging habitat for wading birds, including wood
		storks, through the creation of shallow freshwater ponds
		suitable for tactile feeding."
		Reference – FPL Mitigation Plan (ML12269A222)
2	USFWS letter dated 7/15/15, Page 2, 1 <sup>st</sup> paragraph	In its Final Order, the Siting Board adopted the conclusion of
		the Administrative Law Judge to certify the West Consensus
	Everglade snall kite	Corridor, with the FPL West Preferred Corridor as the second
	If the Preferred corridor segment of the west transmission line in	choice if a Right-of-Way within the West Consensus Corridor
	chosen as the preferred alternative, it will result in habitat loss for	cannot be secured in a timely manner and at a reasonable
	the shall kite and significantly increase the likelihood that shall	Cost. Use of the West Consensus Corridor (MDLPA 2
	kites are injured and killed due to collisions with transmission	Corridor) reduces the probability of potential impacts to the
	advorse offects of the proferred comment of the west	because it is leasted further cast, outside of the END
	transmission line corridor to the snail kite. The Department	
	notes that we have had discussions with FPI regarding	As stated in MI 13311A105 "The Everalade snail kite is
. •	moving the northern segment of west transmission line [i e	commonly observed forgaing in the Everglades National Park
	the currently proposed Preferred and Consensus corridors)	(ENP) and Water Conservation Area (WCA) 3B north and
	much farther to the east, away from the Everglades National	south of Tamiami Trail. There has been historical nesting
	Park (ENP) and adjacent to existing development. We believe	occurring west of FPL's Preferred Corridor (NPS, 2010). The
	that movement of this segment of the west transmission	MDLPA 2 Corridor is located to the east of these historical
	corridor as described will reduce potential adverse effects to	nesting locations, and outside of the federally designated
	the snail kite. We urge FPL to adopt this new corridor. If	critical habitat for the Everglade snail kite (USFWS, 1977)."
	adoption of the new corridor does not occur, we recommend	
	that FPL consider protecting currently unprotected wetlands	Reference – ML13311A105
	habitat for the snail kite to minimize the adverse effects from	
	the project.	In addition, Conditions of Certification issued by the Siting

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No.	USEWS Comment [bold text applied for emphasis]	<b>FPI Observation</b> [bold text applied for emphasis]
		Board on 5/19/14 require FPL to conduct an Everglades snail kite survey when the project site is within the snail kite consultation area and suitable habitat is present. In the event that surveys determine that a project transmission line has the potential to impact snail kites, measures identified in the conditions of certification will be used to minimize and mitigate for these impacts.
		Conditions of Certification Section C.III.G. states,
		"1. A survey (USFWS South Florida Ecological Services Office Draft Snail Kite Survey Protocol, May 18, 2004) is necessary when the project site is within the snail kite consultation area and suitable habitat is present. The following criteria can be used to judge the adequacy of the habitat for snail kites.
		<ul> <li>Appropriate foraging habitat present [paspalidum (<i>Paspalidium geminatum</i>), spikerushes (<i>Eleocharis</i> <i>spp</i>.), panicum (<i>Panicum spp</i>.), or beakrushes (<i>Rhynchospora spp</i>.)].</li> </ul>
		<ul> <li>Perching and/or nesting substrate present, i.e., [willows (Salix caroliniana), melaleuca (Melaleuca quinquenervia), or pond cypress (Taxodium ascendens)]; or [sawgrass (Cladium jamaicense), cattail (Typha spp.), giant bullrush (Scirpus validus), or reed (Phragmites australis)], respectively.</li> <li>Appropriate water depth (0.2-1.3 m deep) under</li> </ul>

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No	USEWS Comment [bold text applied for emphasis]	<b>FPI Observation</b> [bold text applied for emphasis]
		<ul> <li>nesting substrate.</li> <li>Nesting substrate an adequate distance (&gt;150 m) from upland.</li> <li>Proximity of nearest wading bird colony.</li> </ul>
		2. If suitable habitat is present or snail kites are reported on the transmission line right-of-way, the following survey procedures shall be used to document their occurrence. To maximize the chances of finding snail kites the survey shall be conducted in January to May during the breeding season. A visual survey of suitable habitat shall be made for birds and nests. A boat may be needed for the survey as the best nesting habitat may be a considerable distance (> 150 m) from uplands. Check small trees, such as, willow, melaleuca, and pond cypress along the open water edge for nests or perching birds. If snail kites are observed, then nests can be located through the bird's behavior. When flushed from a nest the adult tends to circle upward, whereas non-nesting birds that are flushed fly more horizontally away from the disturbance (Bennetts et al. 1988). Nests also can be found by following kites carrying sticks, adults carrying apple snails, aerial courtship displays, vocalizations of adults or begging calls of the young, and through a thorough search of areas where
		3. In the event that surveys determine that a project transmission line has the potential to impact snail kites, the following measures shall be used to minimize and mitigate for

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		these impacts.
		<ul> <li>FPL and FWC will meet to discuss the specific issues and mitigation alternatives.</li> <li>FPL will then provide a detailed mitigation plan to address the specific impacts, which must be reviewed and approved by FWC, and be consistent with all other COCs or federal permit conditions.</li> <li>FPL will provide a monitoring report after a designated period to document effectiveness of the mitigation plan.</li> <li>Corrective action alternatives will be determined and implemented if necessary. Reference: Bennetts, R.E., M.W. Collopy, and S.R. Beissinger. 1988. Nesting ecology of Snail Kites in Water Conservation Area 3A. Department of Wildlife and Range Science, University of Florida, Gainesville. Florida Cooperative Fish and Wildlife Research Unit, Technical Report No. 31, 174 p."</li> </ul>
		Reference – Conditions of Certification Section C.III.G.
3.	USFWS letter dated 7/15/15, Page 2, 2 <sup>nd</sup> paragraph	The Florida bonneted bat_is primarily found in dwellings in urban areas, but occasionally in tree cavities. There are only 3
	Florida bonneted bat	records of this species in Miami-Dade County since 1965 and
	The project will result in the loss of potential suitable	it is not likely to be impacted by the project because the
	roosting habitat for the FBB within the Department's focus	project will not impact any existing dwellings.
	area for the species. To better ascertain the status of the FBB	
	on the project site, we request that a pedestrian survey of all	Reference – Turkey Point Units 6 & 7 Federal Biological
	suitable roosting habitat for the FBB be conducted within the	Assessment for Six Listed Species, November 2012
Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 35 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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.	Nevertheless, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to coordinate with FWC and conduct surveys for the listed species that may occur within the transmission line ROW. Condition of Certification, Section C.III.B. states,
		"B. General Listed Species Survey 1. Prior to conducting detailed surveys, the Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain the current listed species (in accordance with Article IV, Section 9 of the Florida Constitution and Rule 68A-27, F.A.C.) and follow the current survey protocols for these listed species that may occur within the transmission line ROW, and implement appropriate buffers as defined by the listed species' survey protocols.
		2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact mitigation methodologies."
	LISEWS latter dated 7/45/45 Dave 2, 2 <sup>10</sup> persons	Reference – Condition of Certification, Section C. III.B.
4	Florida panther The Biological Assessment states that the project will result in the	potential effects of the proposed transmission line on Florida panthers and their habitats. However, the proposed
	loss of 69 acres of panther habitat located within the project	unimproved access roads are expected to only temporarily

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NO.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	footprint. This habitat is located in the Department's primary and	affect Florida panther habitat during the construction phase.
	secondary zones for the panther. FPL's consultant has applied	Available data demonstrate that Florida panthers co-exist with
	the Department's panther habitat methodology (PHM) to the	transmission line ROWs, jeep trails, dirt roads, and canal
	habitat types affected by the project and calculated that the 69	levees in other areas of their range, and panthers occur on
	acres of panther habitat lost due to the project provide 412	these features at a frequency greater than their random
	Panther Habitat Units (PHUs). Based on the PHM, a total of 1,030	occurrence within panther home ranges. Elevated fill areas
	PHUs of panther habitat will need to be provided to offset the loss	may be expected to improve foraging and high-water refuge
	of panther habitat due to the project. We request a detailed	opportunities for whitetailed deer, the principal prey species of
	habitat compensation plan indicating how FPL intends to	panthers. The long-term functionality of panther habitats
	provide 1,030 PHUs of panther habitat to offset the loss of	within and adjacent to the new transmission line corridor will
	panther habitat due to the project.	be maintained without adverse effect. The USFWS
		methodology for calculating potential loss of Florida panther
		habitats is not appropriate for application to the transmission
		line components of this project. The methodology only
		compares the relative values of land cover types under pre-
		and post-project conditions and assumes a direct loss of
		habitat. However, the methodology does not have the ability
		to reflect the habitat values and benefits provided by the
1		features occurring within and likely to result from the proposed
		transmission line ROWs. Therefore, no mitigation should be
		required for construction of the proposed transmission lines
		regardless of whether the FPL West Preferred or FPL West
		Consensus Corridor is selected for this project.
	·	The conceptual footprint for the proposed roadway
		improvements would result in the direct loss of panther babitat
		with a value of 297 PHUs, requiring an estimated 743 PHUs
		of mitigation. However, loss of nanther habitat is expected to
		be minimized in some areas and temporary in others. The
		be minimized in some dreas and temporary in others. The

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 37 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		proposed roadway improvements are temporary to accommodate construction and limited to the period of construction. Following construction, the roads will be restored to their pre-construction condition. Within two years following the construction of Turkey Point Units 6 & 7, any privately owned roadway will be returned to the minimum roadway width required to provide maintenance to FPL facilities, and will not be more than two lanes. The existing 14- foot transmission line access road along SW 359th Street will be restored as an 18-foot transmission line access road once construction is complete.
		The roadway improvements are proposed in an area at the urban fringe of the Primary Zone where telemetry and mortality records indicate that panthers have occurred infrequently within the area over the last 20 years.
		FPL will work with the USFWS, ACOE, and other appropriate agencies to determine actual mitigation requirements for the direct and temporary loss of panther habitats after a final design for project features has been achieved.
		Reference –BDA Environmental Consultants, Estimated Impacts to Florida Panthers Habitat, Turkey Point Units 6 & 7 Project, April 2013. Submitted with 3 <sup>rd</sup> Round Completeness Responses, April 5, 2010.
		Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to incorporate wildlife exclusion fencing

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 38 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		and wildlife underpasses in the roadway design as described below.
		below. Conditions of Certification Section B. VII.H.3. states, "Pursuant to MDC Resolution No. Z-56-07, FPL shall to incorporate wildlife protection features into the roadway design for all segments of the temporary access roads south of SW 344 <sup>th</sup> Street. Along SW 359 <sup>th</sup> Street and along the portions of SW 117 <sup>th</sup> Avenue and SW 137 <sup>th</sup> Avenue that are to be constructed south of SW 344 <sup>th</sup> Street, wildlife exclusion fencing shall be installed and shall include small mesh material, such as silt fencing, of appropriate mesh size and height to provide an exclusion barrier for reptiles and other small animals. The SW 359 <sup>th</sup> Street temporary roadway shall accommodate a minimum of two (2) wildlife underpasses west of the L-31E levee, one of which must be constructed between SW 137 <sup>th</sup> Avenue and SW 117 <sup>th</sup> Avenue and the other between SW 117 <sup>th</sup> Avenue and the L-31E borrow canal. The bridge over the L-31E borrow canal may serve as one of the wildlife underpasses provided that the plans demonstrate it has been appropriately designed for this purpose. These underpasses shall be of adequate design and shall be constructed to facilitate the cafe means of all wildlife known
		to occur or to potentially occur in this area during all times of
		bobcats, snakes, American crocodiles, and amphibians. A minimum of three (3) crocodile underpasses shall also be
		provided along the temporary access road immediately north of the cooling canal system. The required underpasses shall

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 39 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		be positioned to provide safe access to the habitat."
		Reference – Conditions of Certification Section B. VII.H.3.
		Conditions of Certification Section B.IV.I.states, "1. The Licensee shall take proper precautions during clearing and construction to protect panthers from accidental injury due to conditions within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way during construction.
		<ul> <li>Construction policies and practices identified by the FWC to protect panthers shall be used by the Licensee whenever feasible. These include:</li> </ul>
		<ul> <li>Limiting speeds on access roads to 45 mph or less and adjust trucking activities and material delivery schedule within the panther consultation area to reduce speeds at dawn and dusk.</li> </ul>
		ii. Conducting frequent and unannounced site inspections to monitor for compliance with the above.
		b. Any panther observations (dead or alive) made by Licensee's employees or contractors shall be verified by a qualified expert agreed to by FWC and reported to FWC within 24 hours.
		2. The Licensee shall take proper precautions during construction and plant operations to protect panthers from accidental injury due to vehicle collisions along access

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		roadways in the panther consultation area as defined by the USFWS (Attachment G), including SW 359 <sup>th</sup> Street, SW 137 <sup>th</sup> Avenue, and SW 117 <sup>th</sup> Avenue.
		a. Speeds on access roads shall be limited to 45 mph or less. Passive measures shall be implemented to enforce slower speeds and shall include lighted speed signage, speed bumps, and slow speed zones at dawn and dusk, and panther crossing signage.
		b. In lieu of the passive measures identified in this condition, the Licensee may choose to use exclusionary fencing along the length of SW 359th Street between SW 117th Avenue and SW 137th Avenue to prevent accidental injury and/or panther mortality due to vehicle collisions.
		c. Any panther observations (dead or alive) made by Licensee's employees or contractors shall be verified by a qualified expert agreed to by FWC and reported to FWC within 24 hours.
		3. The Licensee shall construct at least one (1) wildlife underpass and associated fencing to facilitate north-south movement across SW 359 <sup>th</sup> Street.
		a. The underpass shall be located between 117th Avenue and 137th Avenue in an appropriate location for use by panthers. The Licensee shall consult with FWC during placement of the underpass.
		b. The underpass shall be of appropriate size and design to facilitate panther movement. The Licensee shall consult

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No.	<b>USFWS Comment</b> [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		with FWC during design of the underpass."
		Poteroneo Conditions of Cortification Section B IV/
- 5	LISEW/S lotter dated 7/15/15 Page 2 Ath paragraph	No adverse impacts will occur to American crocodile or the
5	USE VVS letter dated 1/15/15, Fage 2, 4 paragraph	waters of the ENP BNP and BBAP from cooling tower drift
	American crocodile	deposition associated with the Turkey Point Units 687
	The proposed project will result in the loss of approximately 270	Project The denosition impacts to American crocodile were
	acres of designated critical babitat for the crocodile associated	directly addressed in the SCA Section 6.1.4 and no adverse
	with the construction of Units 6 and 7 The project also has the	impacts would occur from using either treated reclaimed water
	notontial to affect water quality in the cooling canal system at	or saltwater. This conclusion was based on analyses submitted
	the Turkey Point site. The cooling canal system provides	for approval of the Site Certification (PA 03-45A3) and the
	important habitat to crocodiles. <b>Drift from the cooling towers</b>	federally approved Prevention of Significant Deterioration
	from the use of reclaimed water is expected to deposit a	(PSD) Permit issued by EDEP (Reference EDEP Project No
	small amount of chemical contaminants (e.g. 1 A-	02500003-013-AC: PSD-FL-409) The analyses demonstrate
	dichlorobenzene phenenthrene conner etc.) into waters of	that atmospheric deposition will not have an adverse effect on
	the cooling canal system although information provided in	water quality or terrestrial areas including impacts to the
	the DEIS indicate that the denosition rates of these	American crocodile
	contaminants is extremely low Additional water quality	
	testing in the canal system should be considered to address	Please see
	these contaminants EPI intends to store the muck removed	
	from the project footprint on the berms within the cooling	<ul> <li>Site Certification Application Sections 6.1.4 and</li> </ul>
	canal system. This practice has the potential to introduce	Appendix 10.2.5
	organic matter and nutrients (e.g. nitrogen phosphorus	<ul> <li>SCA Completeness Responses;</li> </ul>
	etc) and decrease the quality of the water in the cooling	• SOA Completeness Responses.
	canal system This will undoubtedly further exacerbate the	
	poor water quality currently experienced in the cooling canal	$\sim SWEWMD_B_65 SWEWMD_B_66 SWEWMD_B_$
	system and further adversely affect the crocodile that inhabit	68 and SW/EW/MD-B-94
	system and rarther adversery arrest the crocoune that mildhit	

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 42 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	the system.	<ul> <li>MDC-B-3 and MDC-G-3,</li> <li>FFWCC-D-1.</li> <li>2SFWMD-B-65(63), 2SFWMD-B-65(64),</li> <li>2SFWMD-B-66(65), 2SFWMD-B-68(67)</li> <li>2SFWMD-B-69(68)</li> <li>2MDC-B-3</li> <li>2SFWMD-13-65(64)(c)</li> <li>3MDC-B-3</li> <li>4MDC-B-3</li> <li>BNP-5, BNP-11, BNP-37 and BNP-38</li> <li>2BNP-31, 2BNP-32 and 2BNP-33</li> </ul>
		The potential for stored muck to increase the nutrient concentration in the IWF was evaluated during the Site Certification Completeness process. The response to second round completeness question SFWMD-B-92(78) includes a description of the evaluation and results. In summary, muck from selected sampling locations was analyzed for ammonia, TKN, nitrate, nitrite, total phosphorus (TP), and total organic carbon (TOC). The samples were also analyzed by the SPLP method to determine potential nutrient concentrations from rainfall runoff and infiltration. The results of the nutrient loading analysis and the conservative nature of the calculations indicate that the maximum nutrient loadings would be small. As a result, no adverse environmental impact to the IWF is expected from excavating the muck or from placing the muck on the existing upland spoil areas within the industrial wastewater facility.

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Reference – SCA Completeness response (2 <sup>nd</sup> round) SFWMD-B-92(78)
		Regarding muck management, the spoils management areas were specifically selected because they do not contain suitable nesting substrate conditions for the American crocodile. SCA Section 5.4.1.1 states,
		"Terrestrial systems associated with areas for spoils placement will include approximately 200 acres of existing upland berms within the industrial wastewater facility, located on the east and west sides of the Grand Canal and along the southern boundary of the industrial wastewater facility. These areas were created through deposition of dredged material associated with excavation of the cooling canals, and currently are sparsely vegetated with exotic species, as described in Subsection 3.3.5. Access roads are located upon the berms adjacent to the Grand Canal and along the southern boundary of the industrial wastewater facility, which will provide access for placement of spoils material.
		The spoils areas were specifically selected due to their lack of suitable nesting substrate conditions for the American crocodile. No crocodile nesting has been historically recorded within any of the spoils areas. The spoils areas do not contain any areas of freshwater refugia necessary for juvenile crocodile development. The addition of spoils material to these areas will not significantly change the current condition of existing habitat following completion of construction. Based upon the significantly disturbed nature of the berms proposed

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		for spoils, lack of suitable crocodile nesting habitat or juvenile refugia, and sparse vegetative cover comprised of exotic species, no significant adverse impacts to wildlife resources in the area are anticipated as a result of spoils placement upon the berms."
	· · · · ·	Reference – FPL Turkey Point Units 6 & 7 Site Certification Application, Section 5.4.1.1
		Conditions of Certification issued by the Siting Board on 5/19/14 require spoils be placed on Spoil Areas A and C, located along the east and west berms of the Grand Canal, to the greatest extent practicable. 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 IWF.
		Conditions of Certification Section B. VII.C.2. 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."

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 45 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Conditions of Certification Section B. VII.C.7. states,
		"Except as provided in Condition 8 below, <i>Materials</i> that have not been tested may be permanently stored or disposed at Spoil Area B, provided the licensee implements protective measures to prevent runoff from Spoil Area B entering offsite wetlands, groundwater or surface waters to the south of the cooling canal system (CCS). Such protective measures shall incorporate the design of the "Area B Conceptual Spoils Management Area," included as Attachment N. Design details for the protective measures shall be submitted to RER- DERM for review prior to implementation and shall include the following:
		a. The dimensions and storage capacity of Spoils Area B
		<ul> <li>b. Calculations indicating that the proposed protective measures are capable of retaining and controlling predicted storm water runoff from the <i>Material</i> stockpile such that overflow into the adjacent offsite wetlands and surface waters to the south of the CCS is minimized to the extent practicable</li> </ul>
		c. Details of the design and discharge capacity of any drainage pipe for routing runoff back into the cooling canal system
		d. Long term maintenance plan for any swale areas
		e. Details of long term strategies to be implemented (in addition to sloping) to

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 46 of 92

No	USEWS Comment [hold text applied for emphasie]	<b>FBL Observation</b> [hold toxt applied for omphasis]
		prevent stockpile erosion and the potential for runoff of sediments into the wetlands and other surface waters to the south of the CCS at concentrations that results in adverse impacts (applicable numeric and narrative water quality standards)."
		Reference – Conditions of Certification, Section B. VII.C.2.and 7.
		See also FPL Observation to USFWS comment No. 20 below reading the Crocodile Conservation and Monitoring Plan Section 6.1.5, which addresses specific actions to be taken prior to the initiation of clearing, during construction, and following construction to ensure that adverse impacts to the crocodiles are avoided.
		Regarding mitigation for potential crocodile impacts, FPL will create the Sea Dade Canal Crocodile Sanctuary as part of the Project's additional mitigation activities described in it's Mitigation Plan Section 3.5 which states, "As part of the Project's additional mitigation activities, the Sea Dade Canal Crocodile Sanctuary involves creation of wetlands impacted by historical dredging and filling, topographic grading and planting, creation of low-salinity ponds for juvenile crocodile refugia, and creation of habitat conditions with suitable nesting substrate specifically benefitting the federally threatened American crocodile (Crocodylus acutus). The approximately 6.4 acre area is

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	· · · · · · · · · · · · · · · · · · ·	located southwest of the industrial wastewater treatment facility, adjacent to the Sea Dade Canal and an existing meteorological tower (Figure 17)."
		"The proposed Sea Dade Canal Crocodile Sanctuary is currently comprised of previously filled uplands, open water borrow ponds, mixed hardwood wetlands, dwarf red mangrove marsh, and sawgrass marsh (Figure 18) adjacent to the Sea Dade Canal. An access road leads to a meterological tower on the eastern edge of the site. Areas of forested wetland are vegetated with a mixture of red mangrove, white mangrove, buttonwood, poisonwood, and the threatened species locust berry ( <i>Byrsonima lucida</i> )."
		"The target community is modeled after the successful crocodile sanctuary created upon previously filled land within the EMB in 2008. A post-enhancement conceptual design is presented in Figure 19. Upland areas will be topographically graded to restore wetland hydrology and planted with a variety of native species such as buttonwood, bay cedar ( <i>Suriana maritima</i> ), Florida silver palm ( <i>Coccothrinax</i>
		<i>argentata</i> ), willow bustic ( <i>Sideroxylon salicifolium</i> ), muhly grass ( <i>Muhlenbergia capillaries</i> ), and railroad vine ( <i>Ipomea</i> <i>pes-capri</i> ) to create a mosaic of habitats, including saline lagoon areas connecting to the Sea Dade Canal, isolated low- salinity ponds, and crocodile nesting areas utilizing a proven mixture of peat mark and sand. In addition to providing a
		nesting sanctuary for crocodiles, the area will provide potential foraging habitat for wading birds, including wood

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		storks, through the creation of shallow freshwater ponds suitable for tactile feeding."
		Reference – FPL Mitigation Plan (ML12269A222)
6	USFWS letter dated 7/15/15, Page 3, 1 <sup>st</sup> paragraph	In its Final Order, the Siting Board adopted the conclusion of
	Wood Stork	the Administrative Law Judge to certify the West Consensus
	The proposed west transmission line corridor for the project	choice if a Right of Way within the West Consensus Corridor
	occurs within the core foraging areas (i.e., all lands within	cannot be secured in a timely manner and at a reasonable
	18.6 miles) of five active nesting colonies of the wood stork.	cost.
	As currently proposed the Preferred Corridor segment of west	
	corridor transmission line occurs within about 1 mile or less of an	Use of the West Consensus Corridor (MDLPA 2 Corridor)
	active wood stork nest colony. Consequently, if this alternative is	reduces the probability of potential impacts to the federally
	selected, it will likely result in injuries and deaths of wood storks	endangered wood stork and Everglade snall kite. As stated in
	and other bird species due to comsions with the transmission	ML13311A105 regarding wood storks, The MDLPA 2
	sighted we recommend considering additional compensation for	colony (Tamiami East 1) is 0.86 mile away. This distance falls
	impacts to wood stork above those currently being considered for	outside the recommended primary (500-1500) and secondary
	wetland impacts. In addition, a wetlands mitigation plan	(2500') management zones published by the U.S. Fish &
	that adequately compensates for the loss of wood stork	Wildlife Service (USFWS) (Ögden, 1990)."
	foraging habitat due to the project should be developed. This	
	should include a functional analysis of the loss of wood stork	Reference –ML13311A105
	foraging habitat within the project footprint (including the	
	transmission lines) through the application of the Fish and	In 2010, FPL conducted a risk assessment to evaluate the
	Wildlife Service's (FWS) Wood Stork Foraging Habitat	potential effects on wood storks of the West Preferred and
	Wethodology (FWS, 2012). Please be aware that we consider	Vest Secondary Corridors. Please note, this assessment did
	all wetland types as suitable for wood stork foraging, and all	not include the vvest Consensus Corridor because this
	wettand types lost due to the project should be included in	condor was not identified at that time. It is anticipated the

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	the analysis.	risks would be less for the West Consensus Corridor which is located further east from the known wood stork colonies. The risk assessment was submitted with the responses to the 5th round transmission completeness questions in "Ecological Risk Assessment of Potential Impacts of Turkey Point Units 6 & 7 West Corridor Transmission Lines on Wood Storks", Pandion, July 2010. An Addendum to this report was submitted on September 2010.
		<ul> <li>Section 2 of the Addendum states,</li> <li>"The collision risks to Wood Storks are addressed in detail in the Risk Assessment (see Section 4.3 Specific Injury/Mortality Risk Assessment). The presented characterization of risk is based on a thorough review of both the Wood Stork literature and avian collision literature (see Section 6 – Selected Literature [Cited or Reviewed]). Based on the weight of evidence regarding Wood Stork biology and the predicted interactions of Wood Storks with transmission lines and in particular with FPL's proposed West Corridor transmission lines, the following characterizations of collision risk were concluded:</li> <li>1. Limited collisions are anticipated because of behavioral avoidance of collisions reported and/or supported by relevant studies of Wood Storks, visibility of the proposed transmission lines, documented acclimation of Wood Storks to transmission lines in their nesting area and range in Florida and the Southeast, and the few reported local incidents of collisions;</li> <li>2. Because of variable exposure/effects, different levels of</li> </ul>

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risk for collisions will occur to individual Wood Storks
depending upon:
a. Their life stage – adults, fledglings, juveniles and
immatures. Specifically, there will be differential
exposure to young fledgling birds versus adults
based on their behavior,
b. Their life history – courtship, nest building,
fledgling flights, feeding flights to and from nest,
"milling around," and foraging. There will also
be differential risks between nesting and
be exposure for adult Wood Storks that engage
in courtship behaviors and pesting building
activities in vicinity of a colony and to fledgling
Wood Storks that are developing their flight
behaviors including making numerous short
distance flights in the vicinity of a colony and
returning frequently to their nest to be fed. The
closer the transmission lines are to the colonies,
the greater will be the exposure of the nesting
Wood Storks and therefore the risks to these
groups of birds. The risk to foraging Wood
Storks will be from their departing and entering
the colony and crossing the transmission lines to
teed. The exposure to foraging Wood Storks
will be a function of the direction of foraging and
the frequency of crossings. After hesting
direction and distance of dispersal and provimity

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	,	<ul> <li>to the transmission lines. In seasons with good hydrological foraging conditions Wood Storks may remain in the Everglades, while in seasons with poor hydrological foraging conditions Wood Storks may fly to better foraging areas outside of the Everglades.,</li> <li>c. Temporal variables – daily, seasonal, and annual, and</li> <li>d. Proximity to the lines the Risk Assessment shows there will be higher risks from the Secondary Corridor than the Preferred Corridor due to the closer proximity to the colonies and corresponding higher exposure to nesting Wood Storks;</li> <li>3. No threats to the survivability of the four colonies from collisions will occur;</li> <li>4. No negative impacts to population and CERP Targets will occur; and</li> <li>5. The overall risks are of moderate potential (limited and local mortality, no population effects).</li> </ul>
		These conclusions are further elaborated in the full Risk Assessment (see Risk Assessment Section 4.3). These conclusions were developed without consideration of mitigative measures that may be implemented to reduce the risk to nesting and foraging Wood Storks. Such mitigative measures will further reduce the risks characterized in the Risk Assessment. The Risk Assessment, including this Addendum, will form a partial basis for the risk management

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		decisions for implementation of such measures. The Risk Assessment, including this Addendum, does not consider the opportunity for risk reduction and avoidance by implementation of any mitigative measures, as is discussed in Section 5 below and Section 4.3.6 of the Risk Assessment. The Risk Assessment will form a partial basis for decisions on risk reduction and avoidance through mitigative measures."
		Reference –Ecological Risk Assessment of Potential Impacts of Turkey Point Units 6 & 7 West Corridor Transmission Lines on Wood Storks, Pandion, July 2010, submitted with the responses to the 5th round transmission completeness questions and Addendum dated September 23, 2010
		In addition, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to identify the baseline conditions which may indicate the potential for impacts to wood storks and other wading birds, and to help quantify potential mitigation for such impacts by performing pre- construction flight surveys, post –construction Mitigation Effectiveness Study and providing the results to FWC as listed below
		Conditions of Certification Section C.III.F states,
		"In order to identify the baseline conditions which may indicate the potential for impacts to wood storks and other wading birds, and to help quantify potential mitigation for such impacts, FPL will perform the following pre-

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 53 of 92

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		and post-construction studies:
		1. Pre-construction follow flight surveys shall be conducted during nesting for the currently known wood stork colonies along Tamiami Trail (East 1, East 2, and West) and the 3B Mud East Colony using fixed wing aircraft. The follow flight surveys shall be conducted both prior to and during the fledging period. The surveys would ascertain flight line corridors for the wood storks in terms of direction, numbers of birds, and altitudes. These data would be compared to existing data for the Tamiami Trail and 3B-Mud East colonies collected to date. The survey design shall be submitted to FWC for review prior to implementation.
		2. A post-certification, pre-clearing aerial survey shall be conducted via fixed wing or rotary wing aircraft, between the months of December and May, once it is confirmed by FWC, USFWS or SFWMD that wading birds are nesting in the area of the proposed transmission line right-of-way. The surveys shall employ a series of two transects, along each side of the right-of-way. To minimize disturbance to the colonies, the flight(s) shall be conducted at altitudes no less than 300 feet.
		a. This survey shall identify any wood stork/wading bird colonies in addition to any found from agency records that may be affected within one-half mile of the project ROW.
	·	b. Center locations of all wood stork and wading bird colonies shall be delineated with a Wide Area

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 54 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Augmentation System (WAAS) enabled Global Positioning System (GPS) unit.
		c. All wood stork and wading bird colonies shall be ground inspected, as aerial identification of intermediate-sized and dark-plumaged wading birds (little blue heron, tricolored heron, glossy ibis) is difficult at best and because they tend to nest below the vegetation canopy, making species identification all but impossible. To avoid flushing birds from their nests, identification of species shall be made using binoculars and surveys shall follow the protocols in Rodgers and Smith (1995).
		Reference: Rodgers, J.A., and H.T. Smith. 1995. Set-back distances to protect nesting bird colonies from human disturbance in Florida. <i>Conservation</i> <i>Biology</i> 9:89-99.
		3. For the currently known wood stork colonies along Tamiami Trail (East 1, East 2, and West) and the 3B Mud East Colony, and for any newly identified wood stork colonies within one-half mile from the corridor as a result of the above-referenced, post-certification pre-clearing survey, FPL shall implement the following measures:
		a. Flight Diverters - FPL will install spiral corkscrew design bird flight diverters (or other mutually agreeable design flight diverters) on the Overhead Ground Wires (OGW) of each transmission line from a point one-half mile south of the Tamiami Trail colonies to a point one half mile north of the 3B Mud East Colony, and between points

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 55 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		one half mile in either direction from any newly identified colonies. The point one-half mile shall be identified from the actual colony boundary to adhere to the USFWS Wood Stork Guidelines for activities within the primary boundary. Flight diverters have been shown to reduce mortality and will be installed according to the manufacturers' instructions.
		b. FPL will also install perch discouragers at transmission structure pole tops and arms to address risks from nest building and streamers (defecation) and reduce the exposure and potential risk of electrocutions.
		c. Mitigation Effectiveness Study - FPL will fund a monitoring study during the first wood stork nesting season after construction along the marked stretch of the transmission lines near the currently known wood stork colonies, similar to the study performed by Frederick and Deng (1997) on the FPL Levee-Midway Transmission Line. The results will be used to determine effectiveness of wood storks (and other wading birds) in avoiding the new transmission line facilities, and especially if effectiveness of marked sections of lines is significantly different from unmarked lines.
		Reference: Frederick, P. and Deng, J. 1997. Bird-Strike Mortality on the Everglades Section of the Levee-Midway Powerline. Florida Power & Light Co. 27 pp.
		The surveys shall generally be performed as follows:
		(1) Specific study protocols including mortality monitoring and sampling biases protocols

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 56 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	······································	will be developed in conjunction with FWC, USFWS, and
		SFWMD biologists using Avian Power Line Interaction
		Committee (APLIC) guidelines for mitigating bird collisions
		with power lines.
		(2) Surveys will be conducted
		on a regular frequency sufficient to detect mortality, such as
		every other day, in the mornings and in the evenings.
		(3) Any dead or injured birds
		found will be identified, located with GPS, and collected for
		necropsy (if dead).
		(4) Surveys will be conducted
		along the marked stretch of transmission line right-of-way in
		100m transects, with each transect separated by 100m.
		I ransects shall be centered on any observed flight lines as
		identified in the pre-construction follow-flight surveys.
		I ransect width shall include the right of- way width and any
		Visible dimension on either side.
		(5) Observations of flight
		benavior of any birds crossing the lines will also be recorded.
		A protocol for visual observations similar to the Frederick and
		Deng studies will be developed.
		d. Post-survey Review - After the
		Mitigation Effectiveness Study has been conducted, the
		results will be presented to FWC. If mortality to wood storks
		reasonably related to collisions with the transmission lines is
	•	documented to impact the wood stork population and as
		determined by the USFWS Biological Opinion, FPL and the

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 57 of 92

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No	LISENC Comment [hold toxt applied for emphasis]	EPI Observation [hold text applied for emphasis]
		Study Investigator will meet with EWC to discuss the results of
		the Mitigation Effectiveness Study. The populations
		considered in determining impacts will be the four colonies
		(Tamiami Fast L Fast 2 and West, and the 3B Mud Fast) and
		other colonies formed within one-half mile of the transmission
		right-of-way, based on the SFWMD's annual wading bird
		survey that year. If in the judgment of the FWC the wood stork
		population of the four colonies that year was not within "ten-
		year average" ranges, FPL may be required to resurvey the
		right-of-way in that vicinity during an additional nesting
		season. If the post-survey review shows that mortality to wood
		storks within the colonies due to collision with the
		nonulation that is allowed by the USEWS Biological Opinion
		additional mitigation measures such as but not limited to
		different configurations or greater density of flight diverters, or
		additional monitoring, or a combination may be required by
		FWC."
		Reference – Conditions of Certification Section C.III.F.
		Regarding a wetlands mitigation plan that adequately
		compensates for the loss of wood stork foraging habitat. a
		functional analysis of the loss of wood stork foraging habitat
		associated with the Project and replacement of foraging
		habitat through the Project's wetland mitigation plan was
		conducted in accordance with the FWS Wood Stork Foraging
		Habitat Methodology (FWS, 2012) and provided as Appendix
		A of FPL's Biological Assessment (November 2012).

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# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 58 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Reference- Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species, November 2012
	USFWS letter dated 7/15/15, Page3, 2 <sup>nd</sup> paragraph <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.	With regards to species that occur in pine rocklands, the proposed impacts within suitable pine rocklands habitat are anticipated to be less than 2 acres (Transmission Completeness Response MD(3)-04). Preclearing plant surveys will be conducted to aid in location of access roads and transmission line structure pads to avoid impacts to candidate plant species. Relocation of unavoidable individuals to undisturbed areas of the transmission line right-of-way may be conducted, if feasible. Due to the small area of suitable habitat, preclearing plant surveys, and relocation of unavoidable individuals, the potential for adverse impacts to these candidate plant species resulting from the Project is minimal.
		Reference – Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species, November 2012
		In addition, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to coordinate with FWC and conduct surveys for the listed species that may occur within the transmission line ROW.

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 59 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Condition of Certification, Section C. III.B. states,
		"B. General Listed Species Survey 1. Prior to conducting detailed surveys, the Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain the current listed species (in accordance with Article IV, Section 9 of the Florida Constitution and Rule 68A-27, F.A.C.) and follow the current survey protocols for these listed species that may occur within the transmission line ROW, and implement appropriate buffers as defined by the listed species' survey protocols.
		2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact mitigation methodologies."
		Reference – Condition of Certification, Section C. III.B.
8	USFWS letter dated 7/15/15, Page 3, 3 <sup>rd</sup> paragraph	FWS overstates the Migratory Bird Treaty Act as follows:
	Main plant area footprint	under the Miaratory Bird Treaty Act (MBTA). 16 U.S.C. 703. It
	The construction footprint for the Unit 6 and 7 reactors and	provides no protection to or restriction on alteration of
	associated infrastructure (i.e.,	migratory bird habitat and jurisdictions are split as to whether
	cooling towers, make-up water reservoir, ancillary buildings etc.)	the Act applies to incidental "takes" at all. The concept of a
	is currently comprised largely of occasionally flooded mudflats that	"trust resource" is not contained in the Act (16 USC §§703 et
	provide important habitat for shorebirds and wading birds. These trust resources are protected under the Migratory Bird Treaty Act	seq) or in regulations implementing the Act (50 CFR Part 10). Specifically, the concept of "take" under the MBTA does not

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 60 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	(MBTA), 16 U.S.C. 703. According to the DEIS, the project will	include habitat modification as a basis for take. 50 CFR §
	result in the loss of 182.05 acres of mud flats (listed as non-	10.12 ("Take means to pursue, hunt, shoot, wound, kill, trap,
	vegetated in Table 4-1) that provide habitat for shore birds and	capture, or collect, or attempt to pursue, hunt, shoot, wound,
	wading birds. To minimize the impacts of the project to	kill, trap, capture, or collect.") While FPL has committed to
	migratory birds, the Department has requested that FPL	minimize potential impacts to shorebirds by mitigating for loss
	compensate for the loss of mud flats (migratory bird habitat)	of shorebird habitat, this is not required by the MBTA."
1	that will be lost from project construction. In past	
	discussions with the Department, FPL has indicated that they	Regarding avian use of the mud flat area within the industrial
	may be able to create and maintain the same acreage of mud	wastewater treatment facility, FPL has incorporated specific
	flat habitat in perpetuity on FPL-owned lands north of the	activities in the Turkey Point Units 6 & 7 Mitigation Plan to
	project site. These lands are currently being leased for	compensate for the loss of mud flat habitat for shorebirds in
	agricultural purposes. We request that FPL provide the	three different areas:
	Department with a detailed plan on how they intend to	
	minimize and compensate for the loss of the migratory bird	Everglades Mitigation Bank Assessment Area 10
	habitat. We further request that the NRC and U.S. Army Corps of	In consultation with the Florida Fish and Wildlife Conservation
	Engineers include this plan, once approved by the Department, as	Commission and Miami Dade County, FPL has committed to
	a condition of any permit or authorization to offset the loss of	enhancement and preservation of an approximately 170-acre
	habitat for shorebirds and wading birds.	parcel of sparsely vegetated mud flat habitat located
		immediately to the southeast of the industrial wastewater
		treatment facility within the Everglades Mitigation Bank as
		described in Conditions of Certification Section B.IV.F.3.b.and
		Section B.VII.O.6., listed below.
		,
		Conditions of Certification Section B.IV.F.3.b. states.
		"Where practicable, the Licensee will mitigate for loss of
		shorebird habitat in consultation with FWC.
		h . For should will inter mouth the bit of the second
		D. For shorebirds utilizing mudilat habitat, the Licensee
		will consider mitigation through preservation, restoration,

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 61 of 92

No.	USFWS Comment [bold text applied for emphasis]	<b>FPL Observation</b> [bold text applied for emphasis]
		enhancement, or a combination thereof, of similar habitat within the Everglades Mitigation Bank or other location deemed as appropriate in consultation with the USFWS."
		Reference – Conditions of Certification Section B.IV.F.3.b.
		Conditions of Certification Section B.VII.O.6. states, "FPL shall mitigate for loss of shorebird habitat through credits obtained for the restoration and preservation of approximately 170 acres of similar habitat within the Everglades Mitigation Bank. These mitigation credits shall be permanently deducted from the EMB ledger and dedicated to Turkey Point 6 & 7 Project. Five credits obtained from this area shall be used solely to offset the loss of shorebird habitat and shall not be included within the credits necessary to offset mangrove or wetland impacts."
		Reference – Conditions of Certification Section B.VII.O.6.
		Northwest Restoration Site "Mitigation activities will restore the native vegetative community composition and enhance the hydrologic regime within the area, targeting conditions typical of a shallow sawgrass marsh/marl prairie community with mangroves and scattered tree islands. The majority of the Northwest Restoration Site will be restored to native sawgrass marsh, with areas of mangrove swamp, mixed wetland hardwood tree islands, and relatively open marl prairie areas supporting

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 62 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		birds and shorebirds.
		The Northwest Restoration Site is located within areas that historically supported marl prairie, with hydroperiods ranging between three and seven months and having relatively shallow water depth of approximately 4 inches. The network of mosquito ditches has facilitated colonization by Australian pine; backfilling the network of ditches should moderately elevate the water level within the marsh, discouraging recolonization by Australian pine. Removal of exotic species of vegetation and supplemental planting, if necessary, will be utilized to maintain the target community."
		<u>SW 320th Street Restoration Site</u> "The target communities for the SW 320th Street Restoration Site are freshwater marsh and mixed wetland hardwood wetlands dominated by native species typical of the historical condition. Areas of exotic wetland hardwoods and palm tree nurseries will be restored to freshwater marsh, while the exotic wetland hardwood/mixed wetland hardwood forest along the eastern portion of the site will be restored to a native mixed wetland hardwood community. Control of exotic species of vegetation will facilitate regeneration of desirable wetland vegetation from the seed bank, supplemented by planting as necessary to achieve the target communities. The anticipated vegetative community composition associated with freshwater marsh systems include a variety of herbaceous species such as spikerush, sawgrass, arrowhead,
		beaksedges ( <i>Rhynchospora</i> spp.), camphorweed, leather

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		fern, and pickerelweed (Pontederia cordata), as well as
	·	occasional shrubs and small trees such as buttonwood,
		willow, coco plum, and buttonbush. Within the restored
		freshwater marsh, sparsely-vegetated areas of exposed
	· · ·	substrate will be created to provide potential shorebind
		variety of native canony and shrub species, such as
		buttonwood myrsine coco plum white manarove willow and
		dahoon holly, with an understory dominated by sawgrass."
	·	
		Reference – FPL Mitigation Plan (ML12269A222)
9	USFWS letter dated 7/15/15, Page 4, 1 <sup>st</sup> paragraph	For clarification, the statement "The lateral pipes associated
		with the CWs will be located 25 to 40 feet beneath the bottom
	Radial collector wells	of the Bay, but will draw water from the Bay itself" is
	The Department is concerned that the <b>operation of the radial</b>	Incorrect. The radial collector wells will withdraw water from
	conlector weres (CWS), instaned to provide a backup source of	recharge to the aquifer from the Bay, the wells will withdraw
	salinity of Biscavne Bay (Bay). The lateral pipes associated with	water from the aquifer In addition the statement "During
	the CWs will be located 25 to 40 feet beneath the bottom of the	operation of the CWs. the water withdrawn from the Bay
	Bay, but will draw water from the Bay itself. <b>During operation of</b>	will be replaced mostly by ocean water," is not correct. As
	the CWs, the water withdrawn from the Bay will be replaced	stated above, the water withdrawn by the radial collector wells
	mostly by ocean water containing a typical ocean salinity of	will come from a saline aquifer that will be recharged from
	about 35 practical salinity units (psu). <b>Consequently, operation</b>	Biscayne Bay. The water recharged from Biscayne Bay will
	of the CWs could negatively affect salinity (mesohaline; 5-18	be replaced by additional Biscayne Bay water.
	psu) in this area of the Bay, and may undermine efforts of the	Defense of Turkey Deint Linite C. 9.7 Dedict Cells stor Well
	Comprehensive Evergiades Restoration Plan (CERP) in the	Reference – Turkey Point Units 6 & 7 Radial Collector Well
	modeling of the effects of CWs as provided in the DEIS indicate	Summary, Nev. I
	that under the most conservative scenario (continuous pumping)	Because the NRC/USGS model was intended to assess

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	the maximum salinity increase was ±2.3 psu above the base condition in the immediate vicinity of the lateral pipes of the CWs. However, most of the time salinity was within ±1 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. <b>We recommend that FPL develop a monitoring plan</b>	regional effects and therefore had a coarse scale, there were limitations on the ability of the model to precisely locate various features of the Project to the appropriate resolution. For example, the model's grid size made it impossible to locate the RCW system entirely offshore when running the model, even though the system will be constructed entirely offshore. Because of the model's limitations, it resulted in an apparent overestimation of the effect of groundwater withdrawals from the RCW on freshwater volumes along the park's shoreline and within the park.
	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 <u>+</u> 1 psu.	The USGS model discussed in the DEIS appears to overestimate the 1) impacts from removal or moderation of freshwater along the shoreline and 2) extent of the area of groundwater removal. The USGS model uses very coarse grid spacing (1620 ft) and a very high transmissivity. Consequently the model indicates a larger area of impact than will actually occur.
		In addition, the results predicted by both the USGS model and the FPL models are conservative since they assume continuous operation of the radial collector well system (365 days/year, 24 hr /day) or variants of 90 day operations.
		A mixing chamber model was used by FPL to evaluate the potential impacts of RCW operations on salinity in Biscayne Bay. Data from various monitoring stations in the vicinity of the Turkey Point peninsula (BB41, BISC 122, BISC 101 and

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 65 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		BNP 12) was used in the salinity impact analyses. The results of these analyses are discussed in the Turkey Point Units 6 & 7 Radial Collector Well Summary (Rev 1.), Section, Hydrologic and Salinity Impacts of Radial Collector Well Operation. Using data from BNP 12B, the average and median salinity value increases by only approximately 0.1 psu (0.3 percent) within 1/2 mile of the radial collector wells (Scenario 1) and by less than 0.02 psu (0.06 percent) within one mile (Scenario 2). These salinity impact analyses from multiple stations demonstrate that operation of the radial collector wells will have no adverse impact on salinity levels in Biscayne Bay and the change in salinity would have no adverse impact on the estuarine biota that is already acclimated to a salinity variation between 13 ppt and 40 ppt.
		Reference – Turkey Point Units 6 & 7 Radial Collector Well Summary (Rev 1.)
		In addition, as stated in response to completeness questions (4 <sup>th</sup> round) MDC-C-6, "The modeling study conducted by the U.S. Army Corps of Engineers (USACE) for the Biscayne Bay Coastal Wetlands Study, Alternative O, Tentative Selected Plan Evaluation (July 2007) (BBCW Phase 1 Draft Integrated PIR and EIS, Appendix A, Attachment A-1, March 2010)* shows that in the area of the Turkey Point peninsula the CERP Project will have very little or no impact on the salinity. According to the USACE modeling, the CERP salinity benefits will occur further north in Biscayne Bay."

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Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 66 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Finally, and to USFWS main point <i>that FPL develop a</i> <i>monitoring plan to ensure that salinity in the Bay is consistent</i> <i>with the predicted modeling,</i> the Conditions of Certifications issued by the Siting Board on 5/19/14 require development and implementation of a Radial Collector System Monitoring Plan for the purpose of monitoring potential adverse impacts to ecological and water quality resources of Biscayne Bay and adjacent nearshore areas resulting from the construction and operation of the radial collector well system. If adverse impacts are identified as a result of such monitoring, additional measures shall be required to evaluate, abate or mitigate such impacts.
		Conditions of Certification Section B. I.A.1.a states,
		"Radial Collector Well System Monitoring Plan (RCWSMP)
		a. Licensee shall implement a RCWSMP to confirm that no adverse impacts occur to ecological and water resources or to the biological values of Biscayne Bay Aquatic Preserve and nearshore areas resulting from the construction and operation of the RCW system. The data collected from the RCWSMP will help monitor the effects, if any, of RCW system operations on seagrass, shoreline vegetation within the area of influence, benthic and macroalgae communities <b>and on near-shore salinity</b> and water quality above the RCW laterals. The RCWSMP shall be incorporated as Attachment D to these Conditions."

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No	USEWS Comment [bold text applied for emphasis]	FPI Observation [hold text applied for emphasis]
		Reference – Conditions of Certification Section B. I.A.1.a.
		To the USFWS point that <i>FPL develop an adaptive management plan to address what steps will be taken if salinity level exceed the <u>+</u> 1 <i>psu,</i> Conditions of Certification Section B. I.A.2.c.states,</i>
		"c. If the DEP, upon consultation with FWC, and SFWMD, determines that the comparison of pre- construction (baseline) monitoring and construction monitoring or post-construction monitoring data indicates statistically significant adverse impacts to the resources of Biscayne Bay (including nearshore vegetation within the area of influence) resulting from RCWS construction and/or operation activities, then additional measures shall be required to evaluate, abate or mitigate such impacts. These measures may include enhanced monitoring, modeling, or mitigative measures."
		Reference – Conditions of Certification, Section B. I.A.2.c.
		Thus, the USFWS recommendations regarding development of a monitoring plan and adaptive management strategy are addressed in the Conditions of Certification.
10	USFWS letter dated 7/15/15, Page 4, 2 <sup>nd</sup> paragraph	The USGS modeling indicated this potential result only during extended periods of pumping. However, Conditions of
	We are also concerned that the operation of the CWs may	Certifications issued by the Siting Board on 5/19/14 limit water
	exacerbate the hypersaline plume of ground water underneath the	withdrawals from the RCWs to only when reclaimed water is

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No.	USEWS Comment [bold text applied for emphasis]	<b>FPL Observation</b> [bold text applied for emphasis]
	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	not available in the quantity or the quality required and for up to 60 days and withdraw a maximum volume of 7,465 MG in any consecutive 12 month period. Reference – Conditions of Certification B. VI.C.2.b.i.(1) and (3) respectively.
	in the Bay; however, as previously indicated increased salinity in the Bay would have undesirable ecological effects to the Bay's ecosystem.	Because the NRC/USGS model was intended to assess regional effects and therefore had a coarse scale, there were limitations on the ability of the model to precisely locate various features of the Project to the appropriate resolution. For example, the model's grid size made it impossible to locate the RCW system entirely offshore when running the model, even though the system will be constructed entirely offshore. Because of the model's limitations, it resulted in an apparent overestimation of the effect of groundwater withdrawals from the RCW on freshwater volumes along the park's shoreline and within the park.
		The NRC/USGS model is conservative in the sense that it overestimates the extent of drawdown due to the coarse resolution in the model and the very high transmissivity (nearly 2 million ft <sup>2</sup> /d) relative to site-specific values obtained during FPL aquifer testing and because it assumed continuous operation of the RCWs, rather than the limited use authorized by the Conditions of Certification.

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		about 2.0 percent of the water supplying the radial collector wells originates from boundaries representing the cooling canal system (see Table 11). Water drawn towards the radial collector well system will remain at depth within the salt water (G-III) aquifer due to the placement of the radial collector well laterals approximately 25 to 40 ft below the seabed and due to its higher density relative to saltwater. Therefore, intermittent pumping of the radial collector wells is not expected to adversely affect the groundwater beneath the cooling canals.
		In addition, the results predicted by both the USGS model and the FPL models are conservative since they assume continuous operation of the radial collector well system (365 days/year, 24 hr /day). The other scenarios represented in the USGS model are also conservative because they use variants of 90 day operations instead of the maximum of 60 days contained in the Conditions of Certification.
11	USFWS letter dated 7/15/15, Page 4, 3 <sup>rd</sup> paragraph 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	The increase from the quoted average velocity of 0.0003 ft/min to the worst case of 0.43 ft/min is a factor of over 3 orders of magnitude. This scale-up implies a large amount of uncertainty in an area that was specifically targeted for quantification in the Aquifer Performance Test.
	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	The 0.43 ft/minute value appears to be based on a hypothetical direct connection between the lateral and the bay bottom, possibly through a solution feature. This is highly unlikely to occur for two reasons: 1) if the feature existed at

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#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 71 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		A land- based mesocosm study conducted at Turkey Point in 2013, showed no evidence of an adverse impact on seagrass productivity from RCW operation. The study was conducted to evaluate the impact, if any, of the downward movement of waters from Biscayne Bay into the porewaters of shallow seagrass meadows. Samples were collected to assess changes in the nutrient content of porewaters, the turnover rates of seagrass blades (an indicator of health) and cumulative blade production quantities before and after commencing a simulated downward flux of surface waters into bottom sediments. The experimental design used both "controls" (no downward flux) and "treatments" (downward flux) throughout three phases of the experiment: equilibration, full experiment, and recovery. This study evaluated potential impacts over a three month period; as the COC limits operation of the RCWs to no more than 60 days in any 12 month period, this study was conservative in its approach. At the end of the experiment, seagrass continued to grow in all six mesocosms. Additionally, results during the recovery period showed that porewater nutrient concentrations (TN and TP) increased back to the levels found prior to the imposition of the downward flux of waters into the bottom sediments.
		Reference – Land-Based Mesocosm Project to Evaluate Potential Radial Collector Well Impacts to Seagrass, Atkins, April 2013
		As the mesocosm study showed, sediment pore-water

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		characteristics are not expected to be permanently impacted by any downward movement of waters from Biscayne Bay into the porewaters.
		Conditions of Certifications issued by the Siting Board on 5/19/14 require development and implementation of a Radial Collector System Monitoring Plan for the purpose of monitoring potential adverse impacts to ecological and water quality resources of Biscayne Bay and adjacent nearshore areas resulting from the construction and operation of the radial collector well system. If adverse impacts are identified as a result of such monitoring, additional measures shall be required to evaluate, abate or mitigate such impacts.
		Reference – Conditions of Certification Section B. I.
		In addition, Condition of Certification Section B. I.B.1.c.,d. and e.require specific benthic and seagrass monitoring be included as part of the Radial Collector System Monitoring Plan. Condition of Certification Section B. I.B.1.c.,d. and e. state,
		"c. In order to accurately assess potential impacts to listed species dependent on resources within Biscayne Bay, pre-construction (baseline) monitoring, construction monitoring, and post-construction monitoring, as defined above, of seagrass cover and benthic fauna shall be conducted within the area surrounding the Turkey Point peninsula encompassed by the extent of the RCW laterals

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Two monitoring control sites shall be located in seagrass beds within five miles of the Turkey Point peninsula.
*.		i. Seagrass and benthic monitoring shall be conducted quarterly during the pre- construction, construction, and post-construction monitoring periods. The following methodologies shall be used during pre-construction, construction, and post-construction monitoring.
		ii. Seagrass Monitoring Methodology: A series of 30 linear transects surrounding the Turkey Point peninsula shall be established, evenly spaced within the area encompassed by the extent of the RCW laterals. Each transect shall be 300 meters in length, with sampling stations at the shoreward and seaward ends of each transect and at 25-meter intervals in between for a total of twelve sampling locations per transect. Within each control site, ten 300-meter transects shall be established with sampling stations at 50-meter intervals for a total of seven sampling locations per transect. At each sampling station, a 0.25-m <sup>2</sup> PVC quadrat shall be randomly placed on the bottom three times. All seagrass species present within the quadrats shall be identified, and their percent cover visually estimated using Braun Blanquet or another approved methodology. All in-water observations shall be conducted by biologists with considerable practicable experience working in the seagrass communities of south Florida.
		iii. Benthic Fauna Monitoring

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Methodology: Ten benthic fauna sampling stations shall be established within the area encompassed by the RCW laterals, and 10 sampling stations shall be located within the control sites. Three replicate benthic samples shall be collected at each station, using a diver-operated core sampler with a surface area of 225 cm. Each sample shall be rinsed in the field using a 0.5 mm mesh bucket sieve and preserved in separate sample containers with a 10 percent buffered formalin solution. Laboratory taxonomic analysis shall include organism enumeration and identification to the lowest practicable taxon.
		d. The Licensee shall be required to submit regular monitoring reports. All reports shall include all data and statistical analyses resulting from the monitoring requirements.
		i. Timing. During the pre- construction monitoring period, the construction monitoring period, and the post-construction monitoring period, as defined above, the Licensee shall prepare a report after each year (365 days) of monitoring activity ("annual reports"). Reports shall be submitted to the DEP SCO and FWC for review within 90 days following the completion of the annual monitoring periods.
		ii. Additional requirement for post construction monitoring. During the post-construction monitoring period, the reports shall summarize all data and statistical analyses collected to date and provide an analysis

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		comparing those monitoring data to the control data and to the pre-construction monitoring (baseline) data.
		e. If the DEP SCO and FWC determines that the comparison of pre-construction (baseline) monitoring and construction monitoring or post-construction monitoring data indicate statistically significant adverse impact to the fish and wildlife resources of Biscayne Bay resulting from RCW construction and/or operation activities, then additional measures shall be required to evaluate or to abate such impacts. These measures may include enhanced monitoring, modeling, or mitigative measures."
	· · · · · · · · · · · · · · · · · · ·	Reference – Condition of Certification Section B. I.B.1.c.,d. and e.
		Therefore polychaetes, amphipods, mollusks, and other benthic macro-invertebrates present in near shore locations above the CW laterals are not likely to be adversely impacted by the operation of the RCWs.
12	Intentionally blank.	Intentionally blank.
13	USFWS letter dated 7/15/15, Page 5, 2 <sup>nd</sup> paragraph	Based upon the traffic analysis conducted, the existing roadways are insufficient for construction traffic associated
	<u>New paved roads</u>	with the Project. The existing roadway to the Turkey Point
	The project will result in the construction of new paved roadways	Plant only consists of SW 344th Street/Palm Drive that is a
	to provide the main	two-lane road incapable of handling the projected construction
	construction access to the project site and allow the delivery of fill,	workers required for the Project. During the construction
	be constructed within the footprint of existing dist roadways et: SM	period, construction-related traffic will access the site via SW 359th Street. Operations traffic for existing units will continue
	be constructed within the toolprint of existing dift roadway at: SW	

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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 359 <sup>th</sup> 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	to access the site from SW 344 <sup>th</sup> Street. Two points of access for construction-related traffic and current workforce traffic is needed to provide sufficient (e.g. safe, secure, optimal operation, optimal construction) access from a capacity/level of service standpoint. Combining construction traffic and workforce access on a single road would increase commute times, reduce productivity, impact existing operations and security and ultimately result in schedule delays. Any delay of traffic on SW 344th Street due to construction would not only impact the construction schedule but also impact existing operations.
	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.	Carpool and transportation demand management strategies were considered during the development of the traffic study. Carpooling will be encouraged through multiple programs. Off-site park and ride lots have also been identified, including the Homestead Motor Speedway, however, the success of these programs is not guaranteed. Therefore, in order to assess impacts with a bounding scenario (conservative assumption) all construction traffic was assumed to arrive via automobile with a vehicle-occupancy of 1.0. Reference – Turkey Point Peak Construction Analysis, traffic atudy (Pay 1) October 2012. TraffTools Engineering and SCA
		study (Rev. 1) October 2012. TraffTech Engineering and SCA Completeness Responses FDEP-II-B-62, MDC-D-36 and MDC-D-37 (First Round) With regards to road wetlands impacts, as stated in FPL's Mitigation Plan Section 2.3.3, "Following construction, the

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		temporary construction access roads will be restored, with
		exception of a permanent transmission line access road on
		SW 359th Street, as described in Section 3.6. Although the
		majority of wetland impact associated with the temporary
		construction access roads will be restored, these areas will be
		mitigated as permanent impacts."
		Reference – FPI Mitigation Plan (MI 12269A222)
		See also FPL Observation to USEWS comment No. 4 above
14	Intentionally blank	Intentionally Blank
15	USEW/S letter dated 7/15/15, Page 5, 4 <sup>th</sup> paragraph	Construction of the Project will impact approximately 0.004
10		acres of SAV within the barge unloading basin area
	Barge unloading facility	acies of OAV within the barge unloading basin area.
	To support construction activities, the equipment harde unloading	Benthic surveys of the area above the radial collector well
	area located at the	laterals were conducted in 2009, including seagrass and
	northeastern portion of the Turkey Deint Dewer Diant site will be	honthis invertebrate compliant. The resulting reports were
	oplarged by 0.75 apres. This activity will require the dredging of	included in the October 2000 Site Contification Application
	ennarged by 0.75 acres. This activity will require the dredging of	Completeness Developer 2009 Sile Certification Application
	approximately 0.1 acre of manne bottoms in the turning basin, and	Completeness Responses – Plant and Non-Transmission
	the installation of sneet pilling to support building activities.	Associated Facilities. No impacts to SAV in these areas are
	Surveys conducted in 2008 indicate that at least some	proposed.
	seagrasses occur in the area to be affected. We recommend that	
	FPL resurvey the area to be affected to determine the extent	A seagrass survey was conducted within the area of the turning
	of seagrasses and provide mitigation for the loss of these	basin proposed for dredging in 2008, resulting in approximately
	valuable marine resources.	0.004 acres of sparse <i>Thalassia</i> and <i>Halodule</i> . Prior to
		construction, FPL will resurvey the barge basin expansion area
		for the presence of benthic resources.
		Conditions of Certification issued by the Siting Board on

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		5/19/14 require FPL to avoid and minimize impacts to benthic resources, including surveying the area for benthic resources and providing mitigation as necessary. Condition of Certification Section B. VII.O.7. states, "FPL shall avoid and minimize impacts to benthic resources and be responsible for mitigation of unavoidable adverse impacts to benthic resources (i.e. corals, sponges, or seagrasses) that may result from the dredging, expansion and/or operation of the barge basin. Prior to construction in the barge basin, FPL shall survey the barge basin expansion site for the presence of benthic resources. If the expansion of the barge basin will result in adverse impacts to benthic resources, FPL shall provide a post certification mitigation plan to compensate for unavoidable impacts to benthic resources in the barge basin."
		Reference – Condition of Certification Section B. VII.O.7
16	USFWS letter dated 7/15/15, Page 6, 1 <sup>st</sup> paragraph <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. Consequently, the location of the	Please note, the statement " <i>The proposed treatment facility</i> <i>will result in the loss of 42.82 acres of dwarf mangroves and</i> 0.78 acres of mixed wetland hardwoods" is not correct because it refers to the original location. The wetlands impacts for the current location are 32.6 acres of sawgrass marsh/dwarf mangroves, 3.7 acres of exotic wetlands hardwoods, and 3.2 acres of canals/ditches. Use of reclaimed water for cooling by the Project is a beneficial and cost-effective means of increasing the use of reclaimed water from Miami-Dade County (County) and will enable the County to meet approximately one-half of its water

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	water treatment facility, as proposed, will result in a	use permit and outfall elimination requirements. In the
	significant loss of valuable wetland resources. To minimize	absence of reuse opportunities, all or a significant portion of
	the loss of wetlands resulting from the project, we	this treated domestic wastewater would likely continue to be
	recommend that FPL relocate the reclaimed water treatment	discharged to the ocean or deep injection wells. This reuse of
	facility to a site with minimal or no impacts to wetlands or to	reclaimed water will provide environmental benefits by
	a disturbed uplands closer to the Miami-Dade Water and	reducing the volume of wastewater discharged by the
	Sewer Department's South District Wastewater Treatment	County. In addition to this beneficial reuse, the cooling
	Plant. We understand that FPL has stated security concerns	system for Turkey Point Units 6 & 7 will utilize cooling towers
	as a reason to site this facility in its current location.	as an effective way of reducing the amount of water required,
	However, the Department asserts that those concerns can be	since the water can be recycled or "cycled" through the
	addressed with adequate fencing and other safeguards, and	cooling towers multiple times. To manage reclaimed water as
	that these concerns do not warrant the destruction of	the primary cooling water source, the Project will include a
	wetlands within the current preferred site. We recommend	reclaimed water treatment facility (RWTF) and associated
	that the NRC require the reclaimed water treatment facility to	pipelines. The RWTF will polish the water received from
	be moved from the currently proposed location.	MDWASD so that good water quality can be achieved and
•		maintained.
		Early in the project planning phase 3 on-site locations for the
		RWIF were considered. As the design, layout and
		construction of the plant evolved 2 of the potential sites were
		no longer available for use. The site located on 344" St was
		the most feasible RVVIF location at that time. Since that
		time, and as requested by the Miami-Dade County, FPL
		revisited the siting of the RVVIF to determine if a reasonable
		upland alternative location existed. Two off-site locations
		Location were evoluated based on a number of
		pocation were evaluated pased on a number of
		compare allows, including plant operations and security,
L		commercial issues, zoning approvais, land availability and
	· · · · · · · · · · · · · · · · · · ·	

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FPL Observation [bold text applied for emphasis]
wetlands impacts, crocodile habitat impacts and construction costs.
Following extensive analysis of these factors, FPL was not able to identify a feasible upland location, either on the Turkey Point plant property or off the Turkey Point plant property that would support the operational requirements of the RWTF as a component of a nuclear power plant. FPL was, however, able to identify an alternative location on the Turkey Point plant property, which would result in fewer wetland impacts when compared to the original proposed location while meeting other important Project requirements.
This location is within an area of lower quality wetlands at the Turkey Point Plant, in an area historically dredged for test cooling evaluations, which currently consists of upland spoil piles dominated by Australian pine, excavated open water canals, an upland access pathway, sawgrass marsh, dwarf mangroves, and exotic wetland hardwoods. Use of this significantly disturbed area could reduce impacts to mangrove and sawgrass wetlands by approximately 10 acres and the associated functional loss by approximately 5 credits as compared to the location originally proposed. Use of this
location would allow installation of the treated reclaimed water delivery pipeline within construction access road areas, further reducing temporary wetland impacts by approximately 3.4 acres. Use of this location for the PWTE was approved in
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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		the site certification process.
		Reference – Turkey Point Units 6 &7 FPL Reclaimed Water Treatment Facility Location Analysis, February 28, 2012 and FPL Mitigation Plan, Rev 2 (ML1226A222)
		In addition, Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis (October 2011) Section 9.5 states, "9.5 FPL Reclaimed Water Treatment Facility and Reclaimed Water Pipelines
		Additional avoidance and minimization efforts focused on identification of an alternative location for the FPL reclaimed water treatment facility within an area of lower quality wetlands at the Turkey Point Plant property. The proposed alternative location is an area historically dredged for test cooling evaluations, which currently consists of upland spoil piles dominated by Australian pine, excavated open water canals, an upland access pathway, sawgrass marsh, dwarf mangroves, and exotic wetland bardwoods. Use of this
		significantly disturbed area could reduce impacts to mangrove and sawgrass wetlands by approximately 10 acres and the associated functional loss by approximately five credits as compared to the location originally proposed. Use of the
•		proposed alternative location for the FPL reclaimed water treatment facility would also allow installation of the treated reclaimed water delivery pipeline within construction access road areas, further reducing temporary wetland impacts by
	· · · · · · · · · · · · · · · · · · ·	approximately 3.4 acres.

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 82 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Avoidance and minimization efforts associated with the reclaimed water pipelines include the selection of corridors that maximize opportunities for co-location with existing disturbed linear facilities such as existing roadways, canals, and ROWs. Co-location with existing linear features minimizes the amount of additional clearing of ROWs required for construction and reduces wetland impacts. As discussed in Chapter 9.0 of the SCA, the FPL reclaimed water pipelines have been located within corridors proposed for certification rather than within specific ROWs. Locating linear facilities within corridors allows flexibility in routing and incorporation of additional wetland avoidance/minimization opportunities during final design of the pipelines."
		Reference – Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis (October 2011)
17	USFWS letter dated 7/15/15, Page 6, 2 <sup>nd</sup> paragraph <u>Transmission lines</u> 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	In its Final Order, the Siting Board adopted the conclusion of the Administrative Law Judge to certify the West Consensus Corridor, with the FPL West Preferred Corridor as the second choice if a Right-of-Way within the West Consensus Corridor cannot be secured in a timely manner and at a reasonable cost. Regarding visual impacts of the West Consensus Corridor (MDLPA 2) on park resources, ML13311A105 states, "The addition of these new structures would alter the viewscape;
	transmission line will adversely affect the aesthetic experience of visitors to the ENP. Moreover, active nesting	however, the visibility would be reduced with increased distance. At the present time, most of the views into the ENP

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No	LISEWS Comment [hold text applied for emphasic]	<b>FPI</b> Observation [hold text applied for emphasis]
110.	colonies of the wood stork are located near both the	from the Tamiami Trail are obstructed by vegetation growing
	Preferred Corridor and the Consensus Corridor Locating	along the highway. In addition, the MDI PA 2 Corridor turns
	new transmission lines near these colonies will increase the	east approximately one mile south of the Tamiami Trail
	notential for injuries and deaths of wood storks from	boundary of ENP further reducing potential visual impacts of
	collisions with power lines and transmission towers The	the transmission facilities "
	Department has had discussions with FPL about moving this	
	segment of the west corridor eastward in order to abut	Reference – MI 13311A105
	existing development to the greatest extent practicable. FPL	
	may be amenable to this approach. We recommend that the	Visual impacts to the ENP associated with the western
	NRC require the location of the west corridor to be relocated	transmission lines were addressed by the Administrative I aw
	eastward along existing developed areas.	Judge in the Recommended Order on Site Certification, at ¶¶
		690-97 and supporting testimony and evidence. Relative to
		Everglades National Park (ENP), the presence of the ENP
	·	was considered in the comparison of the alternate corridors
		and in the selection of the FPL West Preferred Corridor
		because it potentially harbors more listed wildlife species and
		is the subject of various government-funded restoration
		projects. FPL balanced proximity to both existing and
		planned urban development/adjacent land use considerations,
		engineering considerations, and environmental
		considerations/effect on environmentally sensitive areas in
	· ·	comparing the western transmission line corridors and
		attempted to achieve the best balance of all of those
		considerations in selecting its preferred corridors. The
		presence of the ENP was one factor in the analysis. FPL
		assessed the visibility of the proposed transmission line
:	· · · · · · · · · · · · · · · · · · ·	structures from various vantage points. The west
		transmission line structures placed in either the West
		Preferred or the West Consensus corridor would not be visible

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 84 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		to visitors at the ENP Shark Valley Visitor's Center Observation Tower, which is approximately 16.7 miles west of the L-31N levee. At an airboat vantage point within the ENP approximately 3.44 miles west of the L-31N levee, existing structures in the area, such as the Miccosukee Indian Casino and numerous radio and cell towers, are visible, but the proposed transmission lines in the West Preferred Corridor would be barely visible on the horizon and not visible at all in the West Consensus Corridor. Transmission lines are not uncommon in rural areas. The location, construction, operation, and maintenance of the proposed western transmission lines in the west alternate corridors will not cause significant adverse effects to scenic or recreational values. SCO, RO ¶¶690, 694-97 See FPL Observation to USFWS comment No. 6 above for Conditions of Certification regarding wood storks and wading birde
18	USFWS letter dated 7/15/15, Page 6, 3 <sup>rd</sup> paragraph 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.	FPL's Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species, Section 1.1.3 states, "Proposed impacts within suitable pine rocklands habitat are anticipated to be less than 2 acres (Transmission Completeness Response MD(3)-04). Preclearing plant surveys will be conducted to aid in location of access roads and transmission line structure pads to avoid impacts to candidate plant species. Relocation of unavoidable individuals to undisturbed areas of the transmission line right-of-way may be conducted, if feasible. Due to the small area of suitable habitat, preclearing plant surveys, and relocation of unavoidable individuals, the potential for adverse impacts to

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		these candidate plant species resulting from the Project is minimal."
		Reference – Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species, November 2012
		In addition, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to coordinate with FWC and conduct surveys for the listed species that may occur within the transmission line ROW.
		Condition of Certification, Section C. III.B. states,
		"B. General Listed Species Survey 1. Prior to conducting detailed surveys, the Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain the current listed species (in accordance with Article IV, Section 9 of the Florida Constitution and Rule 68A-27, F.A.C.) and follow the current survey protocols for these listed species that may occur within the transmission line ROW, and implement appropriate buffers as defined by the listed species' survey protocols.
		2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact mitigation methodologies."
		Reference – Condition of Certification, Section C. III.B.

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No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		See also FPL Observation to USFWS comments Nos. 1 and 7 above.
19	USFWS letter dated 7/15/15, Page 6, 4 <sup>th</sup> paragraph 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.	<ul> <li>Please see FPL Observation to USFWS comments Nos.2 and 6 above for Conditions of Certification regarding Everglade snail kite, wood storks and wading birds</li> <li>As stated in FPL's Turkey Point Units 6 &amp; 7 Threatened and Endangered Species Evaluation and Management Plan, Section 6.10,</li> <li>"In addition, FPL will coordinate with the FWC in the development of an Avian Protection Plan that delineates a program for threatened, endangered, and avian species of special concern designed to reduce the operational and avian risks that result from avian interactions with transmission lines associated with the Project with the goal of reducing avian mortality. FPL coordinated closely with USFWS in 2007 to develop an Avian Protection Plan (Appendix E), which will be updated accordingly."</li> </ul>
		Reference – ML 14217A138
20	USFWS letter dated 7/15/15, Page 7, 1 <sup>st</sup> paragraph	As stated in FPL's Turkey Point Units 6 & 7 Threatened and Endangered Species Evaluation and Management Plan,
	<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	Section 4.1, "Although the Site (plant area and laydown areas to the west) is located within the USFWS-designated critical habitat area
	northeast portion of the cooling canal system and immediately east of the footprint for Units 6 and 7. <b>This area is largely</b> disturbed but is located immediately east of canal and berm	for the crocodile, historical monitoring of the crocodile population within the cooling canals indicates occasional observations of basking crocodiles along the perimeter of the

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 87 of 92

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 88 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		taken prior to the initiation of clearing, during construction, and following construction to ensure that adverse impacts to the crocodiles are avoided, including traffic minimization. Section 6.1.5 states, "The conservation and monitoring plan for the Project addresses specific actions to be taken prior to the initiation of
		clearing, during construction, and following construction to ensure that adverse impacts to the crocodiles are avoided. The conservation and monitoring plan is designed to ensure that the crocodiles will not be adversely impacted as a result
		of the Project. The plan involves the continuation of the existing Turkey Point Threatened and Endangered Species Management Program, expansion of the scope to include the Site, and the addition of specific actions pre-construction, during construction, and post-construction as follows:
		<ul> <li>A. Pre-Construction</li> <li>Pre-clearing surveys will be conducted throughout the Site to locate</li> </ul>
		any individual crocodiles utilizing the Site. Day and night surveys will be conducted twice monthly at the Site prior to initiation of construction activities. Individuals may be live-captured by non-harmful means
		<ul> <li>cooling canals. Captured crocodiles will be processed and held only long enough to transport them to a suitable release site within the canals.</li> <li>The existing American crocodile protection/education plan will be utilized to include the Project for all</li> </ul>

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 89 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		construction personnel to
		follow. A program of lectures, brochures, videos, and
		informational signs will be utilized for all construction
		personnel to become familiar with the crocodile's
		protected status under federal law.
		Information included in the education materials will
		include, at a minimum:
		a. A description of the American crocodile, its
,		habitat and
		behavior, and protective status under federal
		law;
		b. Instructions not to injure, harass, or kill this
		species;
		c. A description of the appearance of crocodile
		signs, such as tall drags and claw marks, by
		which construction personnel become familiar
		the construction areas:
		d. Directions to coase clearing activities if
		crocodiles are observed within the Site and
		allow the crocodiles sufficient time to move
		away from the Site prior to resuming clearing.
		and
		e Telephone numbers of EPI Environmental
		Specialists to be contacted immediately upon
		observation of any crocodiles and/or crocodile
		signs in the construction areas.
		Preparation of a pre-construction monitoring report for
		submittal to the USFWS and FWC. The monitoring

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 90 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		report will include a summary of all surveys, documentation of any crocodiles and/or crocodile signs observed at the Site, approximate size, location, and behavior of individuals observed, summaries of any relocations conducted, and identification of any relocated individuals.
		<ul> <li>B. During Construction It is likely that intense human activity during construction will discourage crocodile utilization of the Site and vicinity. A perimeter wall will be installed around the plant area in the early phases of construction and should prevent crocodile intrusion into that area. In addition, to avoid adverse impacts and document any utilization of the Site during construction, the following activities will be conducted during construction: <ul> <li>Education of all construction personnel, as described above, including installation of signs along the perimeter of the construction site alerting personnel as to the crocodile's protected status under federal law; instructions to avoid injury, harassment, or killing of any crocodiles; and contact numbers to inform FPL Environmental Specialists of any crocodile observations. </li> <li>Monitoring surveys will be conducted within the construction areas weekly. Both day and night surveys will be performed, and any crocodiles within the Site will be live-captured through non-harmful means and released to the canals.</li> </ul></li></ul>

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 91 of 92

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No.	<b>USFWS Comment</b> [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>construction zone by a contractor trained by FPL's Environmental Specialists. Observations of any crocodile signs or individual crocodiles will be documented and immediately reported to the supervising contractor and FPL's Environmental Specialists. If crocodiles are observed within the active construction zone, all work will cease immediately and the individuals will be live-captured through non-harmful means, processed and released. Minimization of traffic disturbance and installation of wildlife underpasses and small-diameter mesh fencing along the primary access road, as described in Section 6.1.2 (Constraints on Traffic, Maintenance, and Construction), will occur to during the construction phase. Spoils material from the Site will be transported via truck using the roads adjacent to the Grand Canal. The use of the Grand Canal roads ensures that traffic associated with the transport of spoils materials will be routed so as to avoid disturbance of nesting sanctuaries.</li> <li>Spoils material will be deposited along the Grand Canal berms and the berm on the southern boundary of the cooling canals (see Figure 6), avoiding areas of crocodile nesting habitat and juvenile nursery areas. Trucks transporting spoils materials will abide by the vehicular constraints outlined in this plan.</li> <li>Preparation of monthly monitoring reports for submittal to USFWS and FWC summarizing results of the weekly dav/night surveys conducted within the Site as well as</li> </ul>

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the USFWS DEIS Comment Letter Dated July 15, 2015 L-2015-253 Attachment 1 Page 92 of 92

No.	USFWS Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		results of the daily surveys conducted within the active construction zone."
		Reference – ML 14217A138

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
1	Page 4, Water Quality and Water Supply Concerns – Surface Water, Paragraph 1, 2 <sup>nd</sup> sentence:	The Units 6 & 7 Project is proposed to utilize reclaimed water for cooling, with saline groundwater as a backup source. Units 3&4 utilize the industrial wastewater facility (IWF) for cooling purposes, not freshwater.
	"The EPA has concerns regarding the <b>project's fresh</b> <b>water supply requirements</b> , 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."	Use of reclaimed water for cooling by the Project is a beneficial and cost-effective means of increasing the use of reclaimed water from Miami-Dade County (County) and will enable the County to meet approximately one-half of its water use permit and outfall elimination requirements. In the absence of reuse opportunities, all or a significant portion of this treated domestic wastewater would likely continue to be discharged to the ocean or deep injection wells. This reuse of reclaimed water will provide environmental benefits by reducing the volume of wastewater discharged by the County. In addition to this beneficial reuse, the cooling system for Turkey Point Units 6 & 7 will utilize cooling towers as an effective way of reducing the amount of water required, since the water can be recycled or "cycled" through the cooling towers multiple times.
		Reference – Turkey Point Units 6 &7 FPL Reclaimed Water Treatment Facility Location Analysis, February 28, 2012
		Freshwater requirements for both Units 3&4 and proposed Units 6 & 7 are limited to potable water provided by Miami Dade County. This small allocation does not significantly affect supplies for drinking water, agricultural, or environmental purposes, nor would it affect saltwater intrusion.
		As discussed in SCA RAI Response 5-MDC-C-2-23(k), the Units 6 & 7 Project will increase annual average freshwater contributions to the

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 2 of 71

Na	EDA Comment [held tout enalied for emphasis]	EPI Observation [hold text applied for amphasis]
NO.	EPA Comment [bold text applied for emphasis]	FPL Observation [boid text applied for emphasis]
		surface water and groundwater hydrologic system by approximately 0.6 MGD.
2	Page 4, Water Quality and Water Supply Concerns – Surface Water, Paragraph 2, 2 <sup>nd</sup> sentence: "Page 2-66 states that the most important factors contributing to the regional intrusion of saltwater from the ocean into the aquifer are <b>rerouting o</b> ?" <b>sheet flow to</b> <b>drainage canals and groundwater pumping</b> ."	No rerouting of sheet flow to drainage canals is proposed as part of the Units 6 & 7 Project. The Project's backup water supply, saline groundwater from beneath Biscayne Bay, is not analogous to groundwater pumping from inland freshwater aquifers which have the potential to influence saltwater intrusion. The Units 6 & 7 Project does not include any activities that contribute to saltwater intrusion – see the attached Groundwater Model for details regarding the radial collector well backup water supply.
3	Page 4, Water Quality and Water Supply Concerns – Surface Water, Recommendations, Paragraph 2: "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."	The Unit 6 & 7 Project does not propose to utilize the IWF for cooling. The IWF does not connect to or release to any surface waters; the perimeter berm does not contain breaches. A water balance for the IWF was submitted as part of the Combined Operating License Environmental Report and Site Certification Applications (see SCA Section 4.5 and ER Sections 3.3 and ER 3.4.1); discussion of seepage and changes in evaporative losses is provided in the Annual Post-Uprate Monitoring Report for Units 3 & 4 Uprate Project As discussed in SCA RAI Response 5-MDC-C-2-23(k), the Units 6 & 7 Project will increase annual average freshwater contributions to the surface water and groundwater hydrologic system by approximately 0.6 MGD.

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 3 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
4	Page 5, Section 404 CWA Permitting, Paragraph 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 <b>The EPA is still unclear on the total</b> <b>extent and type of permanent impacts which will occur</b> <b>due to this activity.</b> Please clarify."	<ul> <li>The acreages referenced in DEIS Section 2.2.2.3 are reflective of the entire width of the pipeline corridors, not the area of actual temporary disturbance. No permanent wetland impacts are proposed as a result of pipeline installation.</li> <li>The Project's USACE permit application and associated August 2012 Mitigation Plan Rev. 2 (USACE Supplement) specify the acreage of temporary wetland impact associated with installation of the reclaimed and potable water pipelines: <ul> <li>Reclaimed Water Pipeline = 43.6 acres</li> <li>Potable Water Pipeline = 0 acres</li> </ul> </li> <li>The potable water pipeline will be installed within the existing median of SW 137<sup>th</sup> Ave, avoiding wetland impacts, and then will be installed underneath the construction access roadway improvement corridor to reach the Units 6 &amp; 7 Site, avoiding additional wetland impacts.</li> </ul>
5	Page 5, Section 404 CWA Permitting, Paragraph 4: "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. <b>Please clarify this issue</b>	Conditions of Certification Section B.VI.C.3.b addresses the contingency plan for emergency water allocation: " <u>Emergency Withdrawals</u> Any withdrawals in excess of the withdrawals authorized under this Certification shall require prior SFWMD approval. The SFWMD may grant such approval for any emergency withdrawals less than 90 days in duration without modifying these Conditions of Certification. SFWMD approval shall be based on the non-procedural requirements of Chapter 40E-2, F.A.C."

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 4 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	with a detailed explanation of contingency plans in the FEIS."	
6	Page 6, Paragraph 2: "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."	The approximately 52-acre laydown area located on the western portion of the Units 6 & 7 Site within the IWF will be required following construction in order to provide for equipment staging and parking during refueling outages for the lifetime of the facility. Impacts associated with filling a portion of the IWF for the laydown area are to be mitigated through mangrove restoration and preservation within the Everglades Mitigation Bank In addition, FPL's Turkey Point Units 6 & 7 Mitigation Plan, Rev 2., section 2.3.1 states, "Wetlands within the Units 6 & 7 Site have low functional value. The area is wholly isolated within the boundaries of the industrial wastewater treatment facility, with no connection to Biscayne Bay for over 35 years." Reference –August 2012 Mitigation Plan, Rev 2 (USACE Supplement), § 2.3.1.
7	Page 6, Paragraphs 3 through 5:	Data in referenced DEIS tables presented on corridor basis, rather than impact basis. Wetland impact acreages for each of the referenced project
	General comment requesting specific wetland impact	teatures are presented in the Project's USACE permit application and

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 5 of 71

		·
No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	acreages for pipelines, access roadways, and transmission	<ul> <li>associated August 2012 Mitigation Plan Rev. 2 (USACE Supplement):</li> <li>Reclaimed Water Pipeline (43.6 ac.);</li> <li>Radial Collector Well Delivery Pipeline (3 ac.);</li> <li>Treated Reclaimed Water Delivery Pipeline (0 ac.);</li> <li>Potable Water Pipeline (0 ac.)</li> <li>Access Roadways (81.6 ac.)</li> <li>West Consensus Transmission Corridor/West Preferred Corridor (≤308 ac.)</li> <li>East Transmission Corridor (0.06 ac.)</li> </ul>
8	Page 6, Paragraph 7, last sentence: <i>"These include impacts to high quality, tidal mangrove wetlands."</i>	No permanent impacts to tidal wetlands are proposed. Impacts to mangrove wetlands are limited to areas that are isolated due to historical roadway and berm construction, with the exception of approximately 3 acres of temporary mangrove impact associated with the radial collector well delivery pipeline. These areas will be restored following pipeline installation.
9	Page 6, last sentence, through Page 7, Paragraphs 1 through 3: Comments regarding presence of mangrove, sawgrass, and submerged aquatic vegetation (SAV) aquatic resources of national importance (ARNI) associated with the Units 6 & 7 Project	Rationale provided for consideration of mangrove, sawgrass, and seagrass as ARNI is not valid for the areas proposed for impact during construction of the Units 6 & 7 Project. Areas of mangrove and sawgrass wetlands associated with the Project are isolated, within and/or adjacent to an existing industrial facility, and do not provide the storm buffer, water quality, fish nursery, and wildlife functions typical of undisturbed, tidal mangroves and sawgrass wetlands.
		Areas of submerged aquatic vegetation within the Project's 0.1-acre area of dredge associated with the barge unloading area are limited to 0.004 ac of two species of seagrass, <i>Thalassia</i> and <i>Halodule</i> , no occurrence of <i>Ruppia</i> . Seagrasses within the IWF ( <i>Halodule</i> and <i>Ruppia</i> ) do not

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 6 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		provide the ARNI functions described as they are not connected to Biscayne Bay.
10	Page 8, Paragraph 2, Recommendations, last sentence: "The FEIS should include a mitigation plan which details how the proposed mitigation is in compliance with the Federal Compensatory Mitigation Rule, dated April 2008."	Section 5.0 of the August 2012 Mitigation Plan Rev. 2 (USACE Supplement) describes the Plan's compliance with the USACE Compensatory Mitigation for Losses of Aquatic Resources, Final Rule(Federal Register Vol. 73, No. 70, April 10, 2008), including discussion of the 12 components presented in 33 CFR 332.4(c)(2-13).
11	Page 8, Paragraph 4:	Construction of the Project will impact approximately 0.004 acres of SAV within the barge unloading basin area.
	"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."	Benthic surveys of the area above the radial collector well laterals were conducted in 2009, including seagrass and benthic invertebrate sampling. The resulting reports were included in the October 2009 Site Certification Application Completeness Responses – Plant and Non-Transmission Associated Facilities. No impacts to SAV in these areas are proposed.
		A seagrass survey was conducted within the area of the turning basin proposed for dredging in 2008, resulting in approximately 0.004 acres of sparse <i>Thalassia</i> and <i>Halodule</i> . Prior to construction, FPL will resurvey the barge basin expansion area for the presence of benthic resources. Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to avoid and minimize impacts to benthic resources. Condition of Certification, Section B. VII.O.7. states, "FPL shall avoid and minimize impacts to benthic resources and be responsible for mitigation of unavoidable adverse impacts to benthic resources (i.e. corals, sponges, or seagrasses) that may result from the dredging, expansion and/or operation of the barge basin. Prior to

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## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 7 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		construction in the barge basin, FPL shall survey the barge basin expansion site for the presence of benthic resources. If the expansion of the barge basin will result in adverse impacts to benthic resources, FPL shall provide a post certification mitigation plan to compensate for unavoidable impacts to benthic resources in the barge basin."
1		Reference – Condition of Certification Section B. VII.O.7
		As stated in Section 3.3.6.1 of the Site Certification Application, areas of remnant canals comprise approximately 8 acres within the Units 6 & 7 Site; approximately 80 percent of the canals contain submerged aquatic vegetation, principally widgeon grass, with shoal grass ( <i>Halodule wrightii</i> ) and green algae ( <i>Batophora, Caulerpa</i> , and <i>Acetabularia</i> spp.) also present. Since the IWF is not connected to surface waters of Biscayne Bay, the submerged aquatic vegetation within the IWF does not provide the typical functions of SAV.
12	Page 8, last paragraph, Numeric Nutrient Criteria (NNC), 1 <sup>st</sup> sentence: <i>"The FEIS should include detailed information regarding impacts associated with potential exceedances of the NNC."</i>	The Unit 6 & 7 Project does not propose to utilize the IWF for cooling. The IWF does not connect to or release to any surface waters and based on recent Units 3 & 4 Uprate studies, there is no evidence or reason to expect that IWF water is entering surface waters of the Bay through the groundwater system. NNC is not applicable. Furthermore, the NNC criteria were in place at the time of site certification, which is state water quality certification.
	Page 9, Paragraph 7:	
	<i>"EPA acknowledges that there are no current exceedances of the NNC.</i> <b>However, the DEIS</b>	

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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." Page 10, Paragraph 1: "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."	
13	Page 8, first sentence:	Transmission is discussed in the DEIS – Sections 2.2.2; 2.4.1.4; 2.4.2.2; 2.7.3; 3.3.1.18; 4.1.2; 4.3.1.2; 4.3.2.2; 5.1.2; 5.3.1.2; 5.3.2.2
	"However, many of the associated and connected actions, such as construction of the <b>transmission lines</b> , are not	In addition, the December 2011 and September 2013 responses to
	considered in the NRC's EIS."	requests for additional information from the USACE provide detailed analysis of transmission route selection and impact analysis.
14	Page 8, Recommendations, Paragraph 4:	In response to request from the USACE (USACE letter dated June 21,

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	"The FEIS should <b>include a wetland jurisdictional</b> <b>determination</b> , so that a complete review of wetland impacts can be determined."	2010), FPL signed a Preliminary Jurisdictional Determination for the Units 6 & 7 Project in 2010 (FPL letter dated July 10, 2012), and is providing mitigation to offset the functional loss of all impacted wetlands and surface waters as USACE-jurisdictional wetlands.
15	Page 9, Paragraph 3: "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."	As described in 2014 Turkey Point Annual Post-Uprate Monitoring Report for Units 3 & 4 Uprate Project, data indicate there is no discernable effects of the IWF on Biscayne Bay surface water quality. Data indicate there is no measurable contribution of nutrients to Biscayne Bay that can be attributed to the IWF.
16	Page 9, Paragraph 4: "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	Water in the aquifer underlying the Turkey Point facility is not an underground source of drinking water. The TDS concentration is naturally (without any influence from the IWF) above 10,000 mg/l. The closest USDW within this aquifer that could supply drinking water is approximately 4 miles inland from the Turkey Point facility. Wastewater discharges to the IWF from the Units 6 & 7 Project do not represent additional flow to the IWF that might cause an impact to the USDW or Biscayne Bay. Stormwater runoff into the IWF after construction of Units 6 & 7 will be approximately 1% less than the current runoff (see Stormwater Management Plan, SCA Completeness Round 4,

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	the SOWA), given the existing hydrologic connection between the IWF and groundwater."	page 16, 2/15/2011).
	Page 9, Paragraph 6:	Foundation dewatering has been minimized through engineering controls, and groundwater modeling shows that most of the dewatering effluent will originate from the IWF canals. Consequently, there will be no adverse
	"The DEIS discusses operational surface water	impacts beyond the IWF and impacts within the IWF will be temporary
	quality impacts associated with the IWF (page 5-19,	and limited (see 4-2SFWMD-B-30(26) rev 2 Nov 2012 and 4-2SFWMD-
	5.2.1.4). The DEIS individually examines the surface	B-46(46)(c) (2/24/2011).
	water quality impacts associated with excavation	
	dewatering, stormwater discharge, muck spoil runoff	Muck spoil runoff will be released back to the IWF from which it
	and drift deposition. However, the DEIS does not	originated. Consequently, there is no additional water added to the IWF.
	holistically and additively analyze these additional	The de-mucking process will be conducted in limited areas sequentially.
	stresses to the IWF. Also, the NRC does not discuss	Runoff will be treated in settling basins before release to the IWF. The
	these additional wastewater stresses to the IWF and	potential impacts of nutrient loading to the IWF from de-mucking has
	potential impacts to the underlying groundwater."	been addressed in SCA RAI Response 2SFWMD-B-92(78) and
		2SFWMD-B-29(23) including associated tables and figures. The
		response to second round completeness question SFWMD-B-92(78)
	Page 10, Paragraph 2, Recommendations:	includes a description of the evaluation and results. In summary, muck
		from selected sampling locations was analyzed for ammonia, TKN,
	"The FEIS should describe how the additional wastewater	nitrate, nitrite, total phosphorus (TP), and total organic carbon (TOC).
	discharges to the IWF could potentially impact the	The samples were also analyzed by the SPLP method to determine
	Biscayne Aquifer, potentially increase NNC levels within	potential nutrient concentrations from rainfall runoff and inflitration. The
	Biscayne Bay and the potential for the algal bloom to	results of the nutrient loading analysis and the conservative nature of
	expand beyond the IWF."	the calculations indicate that the maximum nutrient loadings would be
	David 11 David to 0 <sup>nd</sup>	small. As a result, no adverse environmental impact to the IVVF is
	Page 11, Paragraph 5, 2 <sup>m</sup> sentence:	expected from excavating the muck or from placing the muck on the
	"Also, the FEIS should provide more detail regarding	existing upland spoll areas within the industrial wastewater facility.

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	the dewatering and stormwater activities (including types of pollutants, volumes, types of BMPs and stormwater-retention basins). 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."	Reference – SCA Completeness response (2 <sup>nd</sup> round) SFWMD-B- 92(78) See also FPL Observation to EPA comment No. 23 below.
17	Page 10 – Sole source aquifer and salinity issues: EPA is concerned that the proposed project may result in further migration of the hypersaline plume.	The Project's primary water supply (reclaimed water) and backup water supply (radial collector wells) will not induce migration of water to the west. Project wastewater discharges to the IWF from Units 6 & 7 do not represent additional flow to the IWF that might cause an adverse impact to the USDW or Biscayne Bay, as discussed above. Modeling results indicate approximately 2.0% of the water withdrawn by the RCWs originates from the IWF. However, this flow is not induced by operation of the RCW, rather it is intercepted by the RCWs as it flows north and east.
18	Page 10, last paragraph: "However, there are concerns that <b>FPL could eventually</b> 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,	FPL's agreement with Miami-Dade County is for up to 90 MGD of reclaimed water. Units 6 & 7 only require 60 MGD. More than sufficient quantities of reclaimed water are available; there is no basis for requiring more water from the backup source. No freshwater withdrawals are proposed.

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<b>.</b>	EPA Comment [bold text applied for emphasis]	
	in the event that adverse circumstances arise and backup	-
	should address contingency plans in detail."	
	Page 11, Paragraph 1:	
	"Concerns exist that future circumstances, such	
	require freshwater withdrawals that could	
	potentially impact water quantity and quality, and	
	intrusion into groundwater supplies. Furthermore,	
	radial collector wells could potentially contribute to	
	increased hypersalinity."	
	Page 11, Paragraph 4:	
	"The DEIS individually views the surface water quality	
	impacts associated with excavation dewatering,	
	disposition, but does not holistically and additively	
	analyze these additional stresses to the IWF. Also, the	
	stresses to the IWF, and potential impacts to the	
	underlying groundwater. The DEIS notes that the impacts	
	impacts related to the hypersalinity plume. The EPA is	
	concerned that these additional wastewater activities	ļ

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 13 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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 issues, however, the extent to which the additional waters will alleviate the hypersalinity levels in the plume is unclear."	
19	Page 11, last paragraph, Recommendations:	The Project's primary water supply (reclaimed water) and backup water supply (radial collector wells) will not induce migration of water to the west
	are planned to remedy the serious issues that exist with	
	hypersalinity migration."	Project wastewater discharges to the IWF from Units 6 & 7 do not represent additional flow to the IWF that might cause an adverse impact to the USDW or Biscayne Bay.
		Water quality in the IWF is being addressed through separate regulatory agency review not associated with the Units 6 & 7 Project.

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 14 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
20	Pages 12&13 – <b>UIC issues:</b>	The UIC exploratory well has been drilled and tested, as required by the State UIC Program. Please see SCA Appendix 10.2.8 - UIC Exploratory
	<ul> <li>No adequate confining zone has been shown</li> </ul>	Well Permit Application.
	<ul> <li>FPL has not produced documentation to delineate karst features</li> </ul>	The Upper Floridan Aquifer is not proposed to be used as a source for cooling water for Units 6 & 7.
	<ul> <li>Upper Floridan is proposed to be used as a source of cooling water</li> </ul>	Adequate and sufficient confinement has been shown to exist, as the Class I UIC Permit was issued July 2013. Please see Turkey Point Units 6 & 7 Final Order, Appendix II, for Class I UIC Permit.
	<ul> <li>Discussion of problems with MDWSD South District UIC</li> </ul>	
	<ul> <li>Based on EPA's review, there is no information to show that sufficient confinement exists to meet UIC regulatory requirements for Class I wells.</li> </ul>	
	<ul> <li>Recommendations – planned timeline for permitting UIC wells, and planning for surface discharge of effluents in the event that delays occur in the permitting process</li> </ul>	
21	Page 13, Paragraph 3:	The Unit 6 & 7 Project's proposed water use will not induce migration of water to the west.
	"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	Water quality in the IWF is being addressed through separate regulatory agency review not associated with the Units 6 & 7 Project.
# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 15 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	Biscayne sole source aquifer."	
22	Page 14, Paragraph 2, 2 <sup>nd</sup> and 3 <sup>rd</sup> sentences: "EPA is concerned that the <b>radial collector wells (RCWs)</b> <b>could impact the hydrology of BNP, and potentially</b> <b>impact tidal cycles and inflow of freshwater towards the</b> <b>national parks and the aquatic preserve.</b> 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."	Because the NRC/USGS model was intended to assess regional effects and therefore had a coarse scale, there were limitations on the ability of the model to precisely locate various features of the Project to the appropriate resolution. For example, the model's grid size made it impossible to locate the RCW system entirely offshore when running the model, even though the system will be constructed entirely offshore. Because of the model's limitations, it resulted in an apparent overestimation of the effect of groundwater withdrawals from the RCW on freshwater volumes along the park's shoreline and within the park.
	Page 14, Paragraph 6, Recommendations:	The NRC/USGS model is conservative in the sense that it overestimates the extent of drawdown due to the coarse resolution in the model and the very high transmissivity (nearly 2 million ft <sup>2</sup> /d) <sup>1</sup> relative to site- specific values obtained during FPL aquifer testing and because it assumed continuous operation of the RCWs, rather than the limited use authorized by the Conditions of Certification.
	"Additionally, <b>EPA recommends NRC and USACE</b> 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	The FPL model results are also conservative, in that they assumed continuous operation of the RCWs, when in fact the Conditions of Certification limit RCW use to no more than 60 days in any 12 month period.

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 16 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	impacts associated with the RCW. EPA recommends these commitments be reflected in the ROD."	The FPL model, (Groundwater Model Development and Analysis, Units 6 & 7 Dewatering and Radial Collector Well Simulations Revision 3, Bechtel Power Corporation December 2012) quantifies impacts along shoreline to a higher degree than the NRC/USGS model. Figures 59 and 60 of the FPL groundwater modeling report show that the predicted steady state extent of drawdown impact due to pumping the radial collector wells is limited to offshore for drawdowns greater than 0.5 ft with a very limited onshore component of the 0.1 ft drawdown contour (essentially the FPL plant site).
- - -		Reference – <sup>1</sup> Lohmann, M.A., Swain, E.D., Wang, J.D., and Dixon, Joann, 2012, Evaluation of effects of changes in canal management and precipitation patterns on salinity in Biscayne Bay, Florida, using an integrated surface-water/groundwater model: U.S. Geological Survey Scientific Investigations Report 2012–5099, 94 p.
		The FPL model demonstrates that the RCWs will utilize saline groundwater approximately 20-40 feet beneath the bottom of Biscayne Bay. The extremely low intake velocity (0.00002 ft/sec) through the substrate will not affect tidal cycles or freshwater flow into Biscayne Bay.
		The radial collector wells will withdraw water from a saline aquifer that will be recharged from the surface. The revised [groundwater] model indicates similar results as the prior model with regard to the source of water reporting to the radial collector well system: approximately 97.8 percent of the aquifer recharge will originate from the boundaries representing Biscayne Bay, approximately 2.0 percent will originate from the boundaries representing the cooling canal system and approximately

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 17 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		0.2 percent will be from boundaries representing precipitation onshore. Therefore, the radial collector wells will not withdraw fresh groundwater. The radial collector wells will have no adverse impact on that portion of the Biscayne Aquifer that supplies fresh drinking water. The induced seabed velocity calculated by the revised model is still very small, approximately 0.00002 ft/sec (6.2 X 10-4 cm/sec).
		Reference – Groundwater Model Development and Analysis, Units 6 & 7 Dewatering and Radial Collector Well Simulations Revision 3, Bechtel Power Corporation December 2012
		Conditions of Certifications issued by the Siting Board on 5/19/14 require development and implementation of a Radial Collector System Monitoring Plan for the purpose of monitoring potential adverse impacts to ecological and water quality resources of Biscayne Bay and adjacent nearshore areas resulting from the construction and operation of the radial collector well system. If adverse impacts are identified as a result of such monitoring, additional measures shall be required to evaluate, abate or mitigate such impacts.
		<ul> <li>Monitoring under the Radial Collector System Monitoring Plan is required as listed below;</li> <li>Two years prior to the onset of RCW system construction.</li> <li>During RCW construction.</li> <li>Two years after Turkey Point Units 6 &amp; 7 commercial operation date (COD) and including the first two RCW operational events. If two RCW operational events do not occur within the two year post-construction period, one year of quarterly monitoring shall be</li> </ul>

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 18 of 71

No.	EPA Comment [bold text applied for emphasis]	<b>FPL Observation</b> [bold text applied for emphasis] conducted following the first two RCW operational events.
		Reference – Conditions of Certification Section B. I.
23	Page 14, Paragraph 3: "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. Also, 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."	<ul> <li>See FPL Observation to EPA comment No. 22 above for discussion of Units 6 &amp; 7 wastewater discharges.</li> <li>No adverse impacts will occur to ENP, BNP and BBAP from cooling tower drift deposition associated with the Turkey Point Units 6 &amp; 7 Project. This includes both drift deposition to the surfaces within the ENP, BNP and BBAP and air pollutant emissions of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) and PM<sub>2.5</sub> within those areas. This conclusion was based on information submitted for approval of the Site Certification (PA 03-45A3) and the federally approved Prevention of Significant Deterioration (PSD) Permit issued by FDEP (Reference FDEP Project No. 02500003-013-AC; PSD-FL-409). The analyses demonstrate that atmospheric deposition will not have an adverse effect on water quality or terrestrial areas.</li> <li>Please see: <ul> <li>Site Certification Application Sections 6.1.4 and Appendix 10.2.5.</li> <li>SCA Completeness Responses:         <ul> <li>FDEP-II-B-53, FDEP-II-B-85, FDEP-II-B-86 and FDEP-VI-D-1.</li> <li>SWFWMD-B-65, SWFWMD-B-66, SWFWMD-B-68, and SWFWMD-B-94.</li> </ul> </li> </ul></li></ul>

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Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 19 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>MDC-B-3 and MDC-G-3,</li> <li>FFWCC-D-1.</li> <li>2SFWMD-B-65(63), 2SFWMD-B-65(64), 2SFWMD-B-66(65), 2SFWMD-B-68(67) 2SFWMD-B-69(68)</li> <li>2MDC-B-3</li> <li>2SFWMD-13-65(64)(c)</li> <li>3MDC-B-3</li> <li>4MDC-B-3</li> <li>BNP-5, BNP-11, BNP-37 and BNP-38</li> </ul>
24	Page 15 – 3 <sup>rd</sup> paragraph : "The FEIS should clarify whether the NRC anticipates that the proposed project will continue to use water from L31 E to augment waters for the IWF, and if so, what the impacts would be to the L31 N 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 L31 E 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 L31 E 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."	<ul> <li>2BNP-31, 2BNP-32 and 2BNP-33</li> <li>Water quality in the IWF is being addressed through separate regulatory agency review not associated with the Units 6 &amp; 7 Project.</li> <li>No withdrawals from L-31E allowed when flow is &lt;254 cubic feet per second , the amount required for the Nearshore Central Biscayne Bay, in accordance with the CERP Biscayne Bay Coastal Wetlands restoration project. From the SFWMD permit conditions:</li> <li>FPL is prohibited from withdrawing and using water from the L-31 E Canal System that is reserved for fish and wildlife by Rule 40E-10.061, Florida Administrative Code (FAC), for the Nearshore Central Biscayne Bay. The only water available for use as authorized by this permit is that water which would otherwise be discharged to tide through the S-20F, S-20G, and S-21A structures and is sufficiently in excess of the flows reserved for protection of fish and wildlife in Rule 40E-10.061, FAC.</li> <li>No adverse impacts to the BBCW or Biscayne Aguifer result from Units 6</li> </ul>

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 20 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		& 7 Project. The Project's mitigation plan includes over 800 acres of wetland restoration, enhancement, and preservation within the BBCW project area, significantly contributing to regional conservation efforts.
	·	
	· · ·	
25	<ul> <li>Page 16 – Radioactivity and Nuclear Waste:</li> <li>Tritium migrating into hydrologic complex</li> <li>Storage of spent fuel in the event of flooding</li> </ul>	Radiological Impacts from underground injection of Units 6 & 7 effluents are thoroughly and conservatively described in Section 5.9 "Radiological Impacts of Normal Operations" in the DEIS. Under a monitoring plan ordered by FDEP, tritium is used as a tracer to determine the extent to which saltwater intrusion might be attributable to IWF operation. This is discussed extensively in Section 2.3 "Water" of the DEIS.
		Under the NRC's recent "Continued Storage of Spent Fuel" rule and GEIS (Sept 2014), the environmental impact of on-site storage of spent fuel following shutdown is considered generically. The rule is available at 79 Federal Register 56238. The Draft EIS considers the impacts of the onsite storage of spent fuel during the licensed life of the reactors in Section 6.1.6.
26	Page 17 – Air Impacts:	The methodology for determining PM2.5 emission was based on particle sizing from mechanical draft cooling towers developed by Electric Power

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	<ul> <li>Unclear on assumptions for pm 2.5 emissions</li> <li>Connection between cooling tower drift and IWF salinity</li> <li>CALPUFF analysis not included in DEIS appendices</li> <li>Presence of ammonia/ammonia salts</li> </ul>	Research Institute (EPRI) and the total dissolved solids (TDS) concentration in the circulating water system when using salt water. The air impacts for PM2.5 were determined using the EPA approved AERMOD dispersion and meteorological data from FDEP. This information was presented in detail in the PSD application that was used to support the issuance of the PSD permit by FDEP for the Turkey Point Units 6 & 7 Project in May 2010 (FDEP Project No. 0250003-013-AC, PSD-FL-409). EPA has approved FDEP's PSD regulations and FDEP implements the federally required PSD program in Florida. (Note: EPA's PSD regulations in 40 CFR parts 51 and 52 have been adopted by reference by FDEP.)
		No impacts will occur to the IWF from cooling tower drift deposition associated with the Turkey Point Units 6 & 7 Project based on the analyses provided for the SCA approval. The amount of deposition would be immeasurable, as detailed in the PSD application.
		For air permitting and deposition in the SCA, AERMOD was used. This is an appropriate EPA-approved model (40 CFR 51 Appendix W).
		No adverse impacts will occur from ammonia/ammonia salts associated with cooling tower drift deposition from the Turkey Point Units 6 & 7 Project. The ammonia/ammonia salts concentration as nitrogen will be less than 1 ppm (as nitrogen) in either treated reclaimed water or saltwater from the radial collector wells. The cooling tower drift is limited to 0.0005% of the circulating water flow (99.9995% efficiency) pursuant to the PSD permit and the maximum deposition at any location is reduced by 450 times based on deposition modeling. (References are cited

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 22 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		above.)
27	Page 20 – Climate Change: "The Turkey Point site is in a low-lying, flood-prone, (Section 2.2.1.4, p. 2-6) coastal area at or near sea level. It is <b>often</b> <b>flooded by tides or freshwater runoff</b> (Section 2.4.1.1, p. 2-74)."	The Units 6 & 7 Site is not flooded by tides or freshwater runoff. It does often contain standing water as it is contained within the IWF and water levels vary depending upon operations of the existing units. In addition the IWF is surrounded by perimeter berms and has no direct tidal connection.
28	Page 21 – Stormwater Management Design Event: "EPA recommends NRC provide some supporting environmental information justifying the sufficiency of a 25-year, 72-hour design storm event for this facility in this area."	The 25-year 72-hour design storm meets the requirements of the South Florida Water Management District and Miami-Dade County for this facility.
29	Page 22 – Stormwater Management Cooling Canals: "Reportedly, storm surge can range up to 20 feet and last a day in known extreme cases. 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."	Sea level rise projections, storm surge, wave run-up and tidal variations were considered in evaluating flood levels and site elevations. The proposed site elevation provides protection from storm surge.
30	Page 22 – Sea Level Rise and Regional Stormwater Management: <i>"EPA recommends NRC discuss whether these canals, UIC</i>	The regional canal system is not part of the proposed project. While the regional canals may be impacted by sea level rise, they will not impact the Units 6 & 7 project, nor will the Project impact the canals.

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 23 of 71

No	EPA Commont [hold toxt applied for emphasis]	EPI Observation [bold text applied for emphasis]
	wells, and the four proposed radial collector wells, will <b>act</b>	The UIC wells and the RCWs will not act as conduits to transport
	influence of sea level rise into the proposed facility. As	wells have engineering controls such as valves that prevent any
	NRC has noted, the drainage canals also provide a conduit	unwanted intrusion.
	66). Additionally, the analysis should include the combined	
	effects of sea level rise combined storm surge and a heavy	
	precipitation event."	
31	Page 27 – Alternatives Analysis, Recommendations:	Alternative sites selected for comparative review in the NRC NEPA
		process are subjected to a detailed sequential two-part test to determine
	"Given the environmental concerns at the Turkey Point site,	whether any of them are "obviously superior" to the proposed site (U.S.
	particularly regarding the Biscayne sole source aquifer,	Nuclear Regulatory Commission, NUREG-1555, Environmental Standard
	public drinking water supply well concerns,	Review Plan, Section 9.3, Site Selection Process, Revision 1, July 2007).
	hypersalinity and radionuclide migration issues,	The test requires NRC to first determine whether "there are
	proximity of two national parks, Biscayne Bay Aquatic	environmentally preferred sites," and, it so, then consider the "economics,
	Preserve, and the issues described in EPA's Section	technology, and institutional factors among the environmentally preferred
	404 CVVA comment letters in addition to the other	sites to see if any is obviously superior to the proposed site". The
	Issues detailed above, the reason for the environmental	proposed site prevails if there is no obviously superior site.
	preference for the Turkey Point site is unclear.	Places and EPL's October 2011 Section 404/b)(1) Alternatives Analysis
.	The DEIS states that the alternative leastions are constally	for additional information for desumantation of the rationals for selection
	The DETS states that the alternative locations are generally	of the Turkey Point site as the proferred site and least environmentally
	site is preferred. The FEIS should further clarify and	demaging practicable alternative
	document the rationale that was used particularly regarding	damaging practicable alternative.
	evaluation of viewshed issues and operational analyses "	

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 24 of 71

		CDL Observetters [held text explicit for emphasis]
NO.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
32	Page 27 – Monitoring and Adaptive Management:	As described previously, the current operations of the IWF are not impacted by the Units 6 & 7 Project. Stormwater runoff from the Units 6 &
	"EPA is concerned about the numerous environmental	7 Project areas that are within the IWF after development will be less than
	issues and sustainability related to the project, particularly	for current site conditions. Therefore, water levels in the IWF will not
	the current operations of the IWF. The development of	increase following a storm runoff event after the Units 6 & 7 Project is
	the hypersalinity plume, the recent uprate waiver for	constructed. Water quality in the IWF is being addressed through
	salinity and temperature, and pumping of water from	separate regulatory agency review not associated with the Units 6 & 7
	the L31 E canal and other sources to the IWF cause	Project.
	concern that the IWF may not be ecologically viable in	
	the long term. EPA is concerned that the need to place	Sea level rise projections, storm surge, wave run-up and tidal variations
	additional water into the IWF in order for it to remain	were considered in evaluating flood levels and site elevations.
	functional is not a long term solution, since <b>the IWF is</b>	
	needed for the proposed project. EPA is particularly	Units 3 & 4 Uprate monitoring and SFWMD L-31E permit monitoring
	concerned regarding the drainage of Unit 6 and 7's	plans are in place and include adaptive management plans to respond to
	construction and post-construction stormwater into the	potential environmental impacts.
	existing IWF, especially considering the numerous issues	
	related to the current operations of the IWF.	Turkey Point Units 6 & 7 Conditions of Certification require
		implementation of a Radial Collector Well System Monitoring Plan
	Given these uncertainties, as well as uncertainties related to	including adaptive management to respond to potential environmental
	climate change (especially increases in storms and sea	impacts.
	level rise, operations of the RCVV, and possible exacerbation	
	of the hypersalinity plume), EPA believes that a monitoring	
	and adaptive management plan is needed to prepare for	
	any tuture, unforeseen environmental issues related to the	
	construction and operation of Units 6 and 7.	
33	Page 5, Paragraphs 6 and 7, Page 6, Paragraph1:	The NRC's Atomic Safety and Licensing Board made clear earlier in the
	•	Turkey Point proceeding in the context of sea level rise, that NEPA
		requires agencies to assess the impact of the proposed action on the

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 25 of 71

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NO.	EPA Comment [boid text applied for emphasis]	FPL Observation [boid text applied for emphasis]
	<i>"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</i>	environment, not the impact of the environment on the proposed action (LBP-11-06).
	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.	Sea level rise projections, storm surge, wave run-up and tidal variations were considered in evaluating flood levels and site elevations necessary for physical protection of the proposed units. These considerations are discussed in detail in the proposed final safety analysis report included with the COL application. The proposed site elevation provides protection from storm surge.
	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.	The FPL projected sea level rise for the NRC application period (2022 to 2063) is 1 foot. That is the linear projection for about 125 years at the current rate of sea level rise. This 1 foot amount is well within the nonlinear projections as given by various climate models. The base of the plant is going to be set at 26 feet above the North American Vertical Datum of 1988. This elevation accounts for both sea level rise projected for the NRC application period and for the worst-case storm scenario.
	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,	The estimate of one foot of sea level rise over the life of the Project is reasonable and scientifically supportable. Maul, Vol 55, pp 84-95; Jacobs, Vol. 3, pp 54-56 (SCA Transcript); FSAR, Cola Revision 6, Part 2 (12/1/14); Site Certification Recommended Order at ¶¶27-28.
	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	DEIS Appendix I, Section I.3.5, Traffic states, "The review team determined that the operations-related impacts of traffic would be moderate. While the long-term effects of global climate change would have a deleterious impact on the current level of infrastructure in the area, the review team believes it is not

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	and clarify the effectiveness of proposed measures to protect the facility from storm surges and rising sea level."	unreasonable to expect decision makers in the area to incrementally adapt to the climate change effects (e.g., sea-level rise) by incorporating mitigating measures that would prevent the deterioration of infrastructure services (e.g., raising the elevation of roads). Such adaptive measures would impose significant costs on local communities, the funds for which would either have to come from increased revenues (taxes and tolls) or be diverted from other expenses (maintenance, personnel, services). Consequently, the review team expects that if the physical changes predicted by the GCRP report (GCRP 2014-TN3472) were to occur, the traffic-related impacts on the local communities would increase."
		Final Safety Analysis Report (FSAR), COLA Revision 6, Part 2, states, In calculating, the appropriate elevation for placement of the Unit 6 & 7 structures, FPL looked at the historical sea level rise based on the NOAA tide station at Miami Beach. Using those values, FPL then extended the values for the life of the plant to project sea level rise in the life of the plant. An approximately 1 foot rise in sea level over the life of the project was predicted as a result of that analysis, and this assumption of a 1-foot rise was included in design modeling (using NOAA's peer-reviewed SLOSH model) used to develop the final grade elevation for the building foundation to assure that safe operation and maintenance of the project would not be adversely affected by sea level rise or storm surge. The final design elevation of 25.5 feet NAVD 88 above mean sea level will accommodate the probable maximum hurricane, plus storm surge, plus an estimated one-foot rise in sea level (The maximum water surface elevation including wave run-up at the plant is estimated to be 24.8 feet NAVD 88). Actual plant floor

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4

No.	EPA Comment [bold text applied for emphasis]		FPL Obse	ervation [bold te	ext applied fo	or emph	asis]
		elevation elevation and oper the safety maximun Referenc Part 2	s will be one ; the design nings of all sa y functions o n hurricane ( e – Final Sa	e-half foot higher grade including afety-related fac f the plant are n PMH)-induced f fety Analysis Re	r than the fin the elevatio cilities at 26 f not impacted flooding. eport (FSAR	al desig n of floc eet NA\ by the   ), in CO	n ground or entrances /D 88. Thus, probable LA Revision 6,
34	Page 6, Paragraphs 3- 5:	A summa of-way ar	ary of worst- re shown in I	case wetland im Vitigation Plan	pacts for the Table 2-5 be	e transm low.	nission line right-
	"Section 4.1.1.2. Pipelines (pg. 4-9) Table 4-3: Outlines	-		TABLE 2	2-5		
	major land use acreages for the ninelines but is not		CONCEPTUAL	TRANSMISSION LINE	 E CORRIDOR RIG	HTS-OF-WA	AY
	alogn on the energies are af wetlende to be imported		WETL	AND FUNCTIONAL AS	SESSMENT SUMA	14RV	
'	clear on the specific acres of wellands to be impacted.	r			Ectimated		<u>,</u>
	Please provide more detail about wetland impacts for				Maximum	Average	Estimated
	this activity, to be consistent with the format illustrated in			Wetland Types	Wetland Impact	UMAM	Functional Loss
	Table 4-1 of the DEIS for the Turkey Point site	Corridor	Segment	(FLUCFCS Codes)	(Acres)		
		West	1B	617, 641	23.65	0.83	19.63
		West	1C	617, 641	19.89	0.83	16.51
	Section 4.1.1.3, Access Roadways (pg. 4-9) Table 4-4:	West	1D	617, 619, 641, 643	44.76	0.70	31.33
	Outlines major land use acreages for access road	West	2	617 619 641	2.70	0.60	1.02
	improvement but is not clear on the specific series of	West	3B	617, 619, 641, 643	102.63	0.80	82.10
	improvement but is not clear on the specific acres of	West	3C	617, 618, 619, 641	55.95	0.83	46.44
	wetlands to be impacted. Please provide more detail	West	4	617, 619, 641, 643	27.69	0.70	19.38
	about wetland impacts for this activity, to be consistent	West	5A 5B	<u>619, 631, 641, 643</u>	1.00	0.70	0.74
	with the format illustrated in Table 1.1 of the DEIS for		Levee Substation	013, 011, 013	0.20		
		West	Expansion	619, 641	7.50	0.70	5.25
	the Turkey Point Site.	West	Tanuanu Trail	641	1.63	0.80	130
		Tr Col	Krome Avenue				
	Section 412 Transmission-Line Corridors and	West	Access Corridor	619, 641	0.20	0.70	0.14
	Appropriated Aroon (ng. 115) Tobles 15 and 16;	East	6	612	0.06	0.83	0.05
	Associated Areas ( $\mu g. 4-15$ ) raples 4-5 and 4-6.	l	L	UIAL	308		

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No.	EPA Comment [bold text applied for emphasis]		FF	PL Observation [bold t	ext app	lied for	emphasis	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."	Re <sup>-</sup> (US A s are	ference – I SACE Sup summary o shown be	FPL Turkey Point Units plement) f wetland impacts for p low, as modified from I	6 & 7 M ipelines Mitigatic	Mitigatio and ro on Plan	on Plan R adway im Table 2-4	ev. 2 provements 1:
				TABLE 2 ASSOCIATED NON-TRANS WETLAND FUNCTIONA	-4 (modified MISSION L L ASSESSN	l) INEAR FA IENT SUM	CILITIES MARY	
			FLUCFCS Code	Wetland Type	UMAM Score	Impac Direct	t Acreage Temporary	Functional Loss (Credits)
				Reclaimed Water	· Pipelines*	Corridor		
			241-W	Wet Palm Tree Nursery	0.27	-	0.16	N/A*
			510/511	Canals/ Ditches	0.50	-	1.7	0.02*
			612/612-B	Mangroves /Dwarf Mangroves	0.77	-	19.51	2.14*
			612/619	Mangrove/Exotic Wetland Hardwoods	0.60	-	4.47	0.36*
1			617	Mixed Wetland Hardwoods	0.70	-	8.34	0.84*
			619	Exotic Wetland Hardwoods	0.50	-	2.31	N/A*
			641	Freshwater Marshes	0.70	-	7.09	0.07 <b>°</b>
				SUBTOTAL			43.6	3.4*
		Í –		Temporary Construction Acc	ess Road In	provement	Corridor	·
			510/511/534	Canals/ Ditches/ Reservoirs	0.50	7.3		3.7
			612-B	Dwarf Mangroves	0.77	7,5		5.8
			617	Mixed Wetland Hardwoods	0.70	9.1	<u> </u>	6.4
			617/641	Mixed Wetland Hardwoods/Freshwater Marshes	0.77	5.6		4.3
1			619	Exotic Wetland Hardwoods	0.60	4.2		2.5
			641	Freshwater Marshes	0.80	47.9		38.3
				SUBTOTAL		\$1.6		61
				TOTAL		S1.6	43.6	64.4
			Loss of function replaced through provided.	onal value for temporary impacts ass gh in-situ restoration. Mittigation cred	ociated with its to offset	reclaimed time lag ass	water pipeline i ociated with in-	installation will be situ restoration are

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Reference – FPL Turkey Point Units 6 & 7 Mitigation Plan Rev. 2 (USACE Supplement)
35	Page 9, Paragraphs 1 and 2: "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.)"	With regards to the statement , "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," please note, tidal head fluctuations in monitoring wells do not equate to "tide-induced flow between" A fluctuating hydraulic connection (i.e., pressure fluctuation) does not prove a hydrologic (mass transfer) connection. See also FPL Observation to EPA comments Nos.15 and 16 above.

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
36	<ul> <li>Page 11, Paragraph 2 and 3:</li> <li>"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 1.73 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."</li> </ul>	As described in SCA Table 4.6-1 (Rev.1) construction-related wastewater and dewatering water will be routed to the existing industrial wastewater facility and/or disposed as industrial wastewater in the deep injection wells. Reference –Turkey Point Units 6 & 7, SCA Amendment, November 2012
	pollutants of stormwater and wastewater to be placed in the IWF (page 5-19); however, <b>the</b>	Round 4, page 24, 2/15/2011, describes the BMP's to be implemented during construction in the plant area. The measures in the plan can be

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 31 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
No.	<b>EPA Comment</b> [bold text applied for emphasis] 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)."	FPL Observation [bold text applied for emphasis] expected to prevent adverse impacts to water quality due to storm water or dewatering discharges associated with construction of the Project. Section 10.2.8 states, "10.8.2 Erosion and Sediment Control This section describes the effort to minimize erosion and retain sediment in order to control the nonpoint source pollutants associated with the construction activities. Erosion control measures such as silt fences, hay bales, etc. will be installed during the construction phase to intercept and detain small amounts of sediment from disturbed areas during construction, and to decrease the velocity of sheet flows and low-to moderate level channel flows (Reference 6). Temporary basins/traps with a controlled stormwater release structure will be installed as necessary to detain sediment-laden runoff from disturbed areas. The best locations for the temporary sediment basins are generally low areas and natural drainage way below disturbed areas (Reference 6). Plant Area As the fill activity begins on the plant area, temporary sediment basins will be placed to trap the sediment-laden runoff from a disturbed area to the temporary sediment basins, temporary diversion dikes may be constructed (Reference 6).
		The center of the plant area will become the high point of the Site after

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 32 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		the fill activity is completed (Figure 6). As the plant area is being filled, temporary fill diversions may be placed to divert the stormwater runoff away from the exposed slopes surrounding the plant area to a stabilized outlet or the temporary sediment basins. The temporary fill diversion will provide some slope protection on a daily basis until the final elevations are reached and a more permanent measure can be constructed (Reference 6)."
		Reference 6- Environmental Resource Permit Information Manual Volume IV, Environmental Resource Regulation Department South Florida Water Management District, 2010.
		In addition, below are the various stormwater related Conditions of Certification.
		Conditions of Certification, Section A.V.B.3., 4. and 6. state,
	·	"3. NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP)
		Any storm water discharges associated with construction activities in a Certified Area shall be in accordance with all applicable provisions of Chapter 62-621, F.A.C. A Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP) must be obtained as applicable."
		"4. NPDES Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity.
		Any storm water discharges associated with industrial activity in a

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 33 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Certified Area shall be in accordance with all applicable provisions of Chapter 62-621, F.A.C"
		"6. NPDES Generic Permit for Discharges from Concrete Batch Plants
		Prior to discharges from concrete batch plants which meet the criteria specified in DEP Document 62-621.300(3)(a), (excluding Part III when using any new batch plants and excluding Part II when using any existing batch plants) the Licensee must first obtain coverage under the Generic Permit for Discharges from Concrete Batch Plants. This generic permit also constitutes authorization to construct and operate closed-loop recycling vehicle/equipment washing facilities at concrete batch plants. New and existing concrete batch plants which do not qualify for coverage or do not choose to be covered under this generic permit shall apply for an individual wastewater permit on the appropriate form listed in Rule 62-620.910, F.A.C., and in the manner established in Chapter 62-620, F.A.C. DEP Document number 62-621.300(3)(a) contains specific design and operating requirements for discharges from wastewater and stormwater management systems at concrete batch plants."
		Reference – Conditions of Certification, Section A.V.B.3., 4, and 6. Condition of Certification, Section A.XXVI.B. state,
		<ul> <li>"B. Surface Water Management Systems (SWMS)</li> <li>1. Information regarding surface water management systems (SWMS) will be reviewed for consistency with the applicable</li> </ul>

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 34 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		non-procedural requirements of Part IV of Chapter 373, F.S. following submittal of Form 62-330.060(1) to the appropriate office of the Department.
		2. All construction, operation, and maintenance of the SWMS(s) for the Certified Facilities shall be as set forth in the plans, specifications and performance criteria contained in the SCA and other materials presented during the certification proceeding, post-certification submittals, and as otherwise approved. If there are additional applicable requirements identified for construction, operation and/or maintenance of an approved SWMS, those requirements shall be incorporated into a SWMS Plan for that system and included in Attachment B (Surface Water Management System Plans). Any alteration or modification to the SWMS Plan or the SWMS as certified requires prior Department post-certification review.
		3. To allow for stabilization of all disturbed areas, immediately prior to construction, during construction, and for the period of time after construction of the SVVMS(s) for a Certified Facility or a portion of a Certified Facility, the Licensee shall implement and maintain erosion and sediment control best management practices, such as silt fences, berms, set- backs, erosion control blankets, mulch, sediment traps, polyacrylamide (PAM), temporary grass seed, permanent sod, and floating turbidity screens to retain sediment on-site and to prevent violations of state water quality standards. These devices shall be installed, used, and maintained at all locations where the possibility of transferring suspended solids into a receiving waterbody to which state surface water quality standards apply exists due to the licensed work and shall remain in place at all locations until

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 35 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		construction in that location is completed and soils are permanently stabilized. All best management practices shall be in accordance with the guidelines and specifications described in <i>the State of Florida</i> <i>Erosion and Sediment Control Designer and Reviewer Manual</i> (Florida Department of Transportation and Florida Department of Environmental Protection, by HydroDynamics Incorporated in cooperation with Stormwater Management Academy, June 2007) unless a project- specific erosion and sediment control plan is approved as part of this certification. If project-specific Conditions require additional measures during any phase of construction or operation to prevent erosion or control sediments beyond those specified in the approved erosion and sediment control plan, the Licensee shall implement additional best management practices as necessary, in accordance with the guidelines and specifications in <i>the State of Florida Erosion and Sediment Control Designer and Reviewer Manual</i> . The Licensee shall correct any erosion or shoaling that causes adverse impacts to the water resources as soon as practicable. Once project construction is complete in an area, including the re-stabilization of all side slopes, embankments and other disturbed areas, and before conversion to the operation and maintenance phase, all silt screens and fences, temporary baffles, and other materials that are no longer required for erosion and sediment control shall be removed. 4. The Licensee shall complete construction of all aspects of the SWMS described in the ERP Application Form submitted as part of a SCA, postcertification submittal, amendment, or modification, including water quality treatment features, and discharge
		control racing prior to use of the portion of a Certified Facility being

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 36 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		served by the surface water management system.
		5. At least 48 hours prior to the commencement of construction of any new surface water management system for any part of a Certified Facility authorized by this certification, the Licensee shall submit to the SED a written notification of commencement using a "Construction Commencement Notice" (DEP Form 62-330.350(1), F.A.C.), indicating the actual start date and the expected completion date.
		6 Each phase or independent portion of the approved system must be completed in accordance with the approved plans and these COC prior to the operation of the portion of the Certified Facility being served by the surface water management system.
		7. Within 30 days, or such other date as agreed to by DEP and the Licensee, after completion of construction of a SWMS, the Licensee shall submit to the SCO and the SED a written statement of completion and certification by a registered professional engineer (P.E.), or other appropriate registered professional, as authorized by law, utilizing the required "As-Built Certification and Request for Conversion to Operation Phase" (DEP Form 62-330.310(1), F.A.C.,). Additionally, if deviations from the approved drawings are discovered, the As-Built Certification must be accompanied by a copy of the approved drawings with deviations noted.
		8. Any substantial deviation from the approved drawings, exhibits, specifications or COC, may constitute grounds for revocation or enforcement action by the Department.
		9. Prior to converting a construction phase surface

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		water management system to an operation phase surface water management system, the Licensee shall submit to the Department an "As-Built Certification and Request for Conversion to Operation Phase" (DEP Form 62-330.310(1), F.A.C. or a "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" (DEP Form 62-330.310(2), F.A.C), whichever is applicable. The operation phase of any new SWMS approved by the Department shall not become effective until the Licensee has complied with the requirements of the COC herein, the Department determines the system to be in compliance with the approved plans, and the entity approved by the Department accepts responsibility for operation and maintenance of the system.
		10. The DEP District ERP Section must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or surface waters of the State, a written dewatering plan must be submitted to and approved by the Department prior to the dewatering event."
		Reference – Conditions of Certification, Section A.XXVI.B.
		Condition of Certification, Section B.II.A.2., states, "2. Specific Surface Water Management Conditions Applicable to non-linear facilities
		a. The Licensee shall submit final paving, grading and drainage plans for all of the proposed elements of the project including the Units 6&7 Project facilities, including but not limited to the reclaimed water facility. This will also include stormwater calculations for all of the different project areas including a complete

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 38 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		acreage breakdown of total area, building area, preserve/pervious area, parking/roadway area and other impervious coverage as well as sufficient site grading details which support the grading assumptions in Tables 24 & 25 of Appendix 10.8 Rev 1 of the SCA, as updated on February 2011. Plans shall include final stormwater management details and shall confirm that runoff from the potentially oil contaminated areas will be routed to an oil/water separator prior to release into the industrial waste water treatment facility or discharge to surface waters of the State.
		b. Licensee shall comply with the applicable non-procedural requirements of and Chapter 62-302, F.A.C for treatment of runoff from the Units 6 & 7 plant area. Licensee shall provide relevant calculations if such treatment under those provisions is required.
		c. All construction, operation, and maintenance of the surface water management system(s) (SWMS) for the Certified Facilities shall be as set forth in the plans, specifications and performance criteria contained in the Application and other materials presented during the certification proceeding, post-certification submittals, and as otherwise approved. If specific requirements are necessary for construction, operation and/or maintenance of an approved SWMS, those requirements shall be incorporated into a SWMS Plan for that system. Pursuant to Section A, General Conditions, XXVI Environmental Resources, B Surface Water Management Systems (SWMS) paragraph (2), any required SWMS Plan shall be included in Attachment B to these Conditions. Any updates to
		the plan shall be submitted to the Department and reviewed in

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 39 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		accordance with Section A, General Conditions, XIX Procedures for Post-Certification Submittals."
		Reference – Condition of Certification, Section B.II.A.2.
37	Page 16, Threatened and Endangered Species, Paragraphs 1 and 2: "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 <b>American crocodile, Smalltooth Sawfish, Nassau</b> <b>Grouper, manatees and sea turtles.</b> 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."	No adverse impacts to the Nassau grouper are expected due to the avoidance of areas of essential fish habitat, limited area of in-water work within areas that do not provide suitable habitat for the Nassau grouper, and utilization of best management practices to isolate the construction area with turbidity curtains, silt screens, and/or other erosion and turbidity control measures. With regards to the sawfish, this species occurs in peninsular Florida; but is relatively common only in the Everglades region at the southern tip of the state. The Project is not located within the federally-designated critical habitat for the smalltooth sawfish and the small (0.1-acre) area of in-water work within the existing barge turning basin is not an area that provides suitable habitat for the smalltooth sawfish. The DEIS Appendix F -3 (NMFS BA) Section 5.3.5 Occurrence and Status in the Project Area, states "FPL (2014-TN4058) has indicated that Smalltooth Sawfish have been observed in Biscayne Bay and the Biscayne Bay Aquatic Preserve, but no individuals were collected during the Card Sound study described in Section 3.2.2 of this report. This species is considered to be relatively scarce along the east coast of Florida in comparison to documented occurrences on the west coast of Florida in comparison to documented occurrences on the west coast of Florida, Florida Bay, and the Florida Keys (NOAA 2010-TN1724). Sawfish sighting data provided by FMNH (FMNH 2014-TN3250) from approximately 1890 to 2012 shows only 18 sightings in the southern portion of Biscayne Bay (Figure 5-5). Of these, only one (NSED_0283)

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 40 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		occurred near Turkey Point in 1975/1976. Given the habitat preferences for this species described by NOAA (2010-TN1724), sawfish, if present near the Turkey Point site, would likely be juveniles using the nearshore mangrove communities to avoid predation."
		Regarding manatees, they occur within fresh, brackish, or salt water habitats; and are affected by water temperatures. The project will not have any affect on water temperature in the bay and is not located within an area designated as critical manatee habitat. The only area of in-water work is within the barge unloading expansion area, where FPL will follow FWC and MDC manatee protection guidelines.
		<ul> <li>Regarding sea turtles, (loggerhead, green turtle, leatherback, hawksbill) <i>Caretta caretta, Chelonia mydas, Dermochelys coriacea, Eretmochelys imbricata</i></li> <li>Potential Habitat within Miami Dade County - Oceanic waters, nests on coastal sand beaches; documented nesting within sand beaches of BNP, Key Biscayne, Golden Beach, Miami Beaches, Virginia Key, Fisher Island, and Cape Florida State Park</li> <li>No documented occurrence at Turkey Point Units 6 &amp; 7 Plant or Along Associated Facilities</li> <li>Potential Impact to Listed Species from Turkey Point Units 6 &amp; 7 Plant and Associated Facilities -Not likely, no impacts within suitable habitat, no nesting in vicinity of Project</li> </ul>
		Reference – Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species, November 2012

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 41 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
No.	EPA Comment [bold text applied for emphasis]	<b>FPL Observation</b> [bold text applied for emphasis] Regarding crocodiles, as stated in FPL's Turkey Point Units 6 & 7 Threatened and Endangered Species Evaluation and Management Plan, Section 4.1, "Although the Site ( <i>plant area and laydown areas to the west</i> ) is located within the USFWS-designated critical habitat area for the crocodile, historical monitoring of the crocodile population within the cooling canals indicates occasional observations of basking crocodiles along the perimeter of the Site, but no utilization of the Site for nesting. Crocodiles are not known to habitually utilize the Site for foraging or nesting due to the lack of suitable nesting substrate, altered and highly variable hydrology, and limited food supply. The features that attract crocodiles to the cooling canal system include the elevated berms that provide a lee side regardless of wind direction, an ample food supply, the shallow water canals bordered by deeper canals that allow movement to and from the area, and the presence of freshwater ponds within a hyper- saline environment. The southwest corner of the cooling canal system is an area where crocodiles have a wide variety of habitats available. Within 75 meters, crocodiles can choose between the hypersaline environment of the cooling canals, the salinity of Biscayne Bay, and the freshwater of the interceptor ditch. These conditions are unique to the cooling canals and are not present within the Site.
		The Site is primarily devoid of vegetation and experiences frequent episodic changes in hydroperiod, making it undesirable for crocodile foraging or nesting. Due to the lack of consistent hydroperiod, food
		sources for crocodiles are relatively scarce within the Site. Crocodile nesting does not take place in this area due to the lack of suitable nesting substrate as well as potential aversion to human disturbance
		associated with the existing Turkey Point generating facilities."

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 42 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		The Crocodile Conservation and Monitoring Plan is described in Section 6.1.5. This section addresses specific actions to be taken prior to the initiation of clearing, during construction, and following construction to ensure that adverse impacts to the crocodiles are avoided, including traffic minimization. Section 6.1.5 states, "The conservation and monitoring plan for the Project addresses specific actions to be taken prior to the initiation of clearing, during construction, and following construction to ensure that adverse impacts to the crocodiles are avoided. The conservation and monitoring plan for the Project addresses specific actions to be taken prior to the initiation of clearing, during construction, and following construction to ensure that adverse impacts to the crocodiles are avoided. The conservation and monitoring plan is designed to ensure that the crocodiles will not be adversely impacted as a result of the Project. The plan involves the continuation of the existing Turkey Point Threatened and Endangered Species Management Program, expansion of the scope to include the Site, and the addition of specific actions pre-construction, during construction, and post-construction as follows:
		<ul> <li>Pre-clearing surveys will be conducted throughout the Site to locate any individual crocodiles utilizing the Site. Day and night surveys will be conducted twice monthly at the Site prior to initiation of construction activities. Individuals may be live-captured by non-harmful means by authorized FPL personnel and relocated to the cooling canals. Captured crocodiles will be processed and held only long enough to transport them to a suitable release site within the canals.</li> <li>The existing American crocodile protection/education plan will be utilized to include the Project for all construction personnel to follow. A program of lectures, brochures, videos, and</li> </ul>

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>informational signs will be utilized for all construction personnel to become familiar with the crocodile's protected status under federal law. Information included in the education materials will include, at a minimum:         <ul> <li>a. A description of the American crocodile, its habitat and behavior, and protective status under federal law;</li> <li>b. Instructions not to injure, harass, or kill this species;</li> <li>c. A description of the appearance of crocodile signs, such as tail drags and claw marks, by which construction personnel become familiar with the identification of crocodile utilization of the construction areas;</li> <li>d. Directions to cease clearing activities if crocodiles sufficient time to move away from the Site prior to resuming clearing; and</li> <li>e. Telephone numbers of FPL Environmental Specialists to be contacted immediately upon observation of any crocodiles and/or crocodile signs in the construction areas.</li> </ul> </li> <li>Preparation of a pre-construction monitoring report for submittal to the USFWS and FWC. The monitoring report will include a summary of all surveys, documentation of any crocodiles and/or crocodile signs observed, summaries of any relocations conducted, and identification of any relocated individuals.</li> </ul>
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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		It is likely that intense human activity during construction will discourage crocodile utilization of the Site and vicinity. A perimeter wall will be installed around the plant area in the early phases of construction and should prevent crocodile intrusion into that area. In addition, to avoid adverse impacts and document any utilization of the Site during construction, the following activities will be conducted during construction:
		<ul> <li>including installation of signs along the perimeter of the construction site alerting personnel as to the crocodile's protected status under federal law; instructions to avoid injury, harassment, or killing of any crocodiles; and contact numbers to inform FPL Environmental Specialists of any crocodile observations.</li> <li>Monitoring surveys will be conducted within the construction areas</li> </ul>
		weekly. Both day and night surveys will be performed, and any crocodiles within the Site will be live-captured through non- harmful means and released to the canals.
		<ul> <li>Daily monitoring surveys will be conducted in the active construction zone by a contractor trained by FPL's Environmental Specialists. Observations of any crocodile signs or individual crocodiles will be documented and immediately reported to the supervising contractor and FPL's Environmental Specialists. If crocodiles are observed within the active construction zone, all</li> </ul>
		work will cease immediately and the individuals will be live- captured through non-harmful means, processed and released. Minimization of traffic disturbance and installation of wildlife

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>underpasses and small-diameter mesh fencing along the primary access road, as described in Section 6.1.2 (Constraints on Traffic, Maintenance, and Construction), will occur to during the construction phase. Spoils material from the Site will be transported via truck using the roads adjacent to the Grand Canal. The use of the Grand Canal roads ensures that traffic associated with the transport of spoils materials will be routed so as to avoid disturbance of nesting sanctuaries. Spoils material will be deposited along the Grand Canal berms and the berm on the southern boundary of the cooling canals (see Figure 6), avoiding areas of crocodile nesting habitat and juvenile nursery areas. Trucks transporting spoils materials will abide by the vehicular constraints outlined in this plan.</li> <li>Preparation of monthly monitoring reports for submittal to USFWS and FWC summarizing results of the weekly day/night surveys conducted within the active construction zone."</li> </ul>
		Reference – ML 14217A138
		In addition, Section 6.2.1 of the Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species (ML 123390437) submitted to the NRC on 11/30/2012 provides details of the existing FPL crocodile management program and the Project's proposed species-specific conservation and monitoring measures to avoid, minimize, and mitigate for any impacts to threatened and endangered species as listed below; "FPL initiated a formal comprehensive crocodile management program

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>for the industrial wastewater facility in the early 1980s, consisting of a combination of the following: <ul> <li>Habitat preservation and creation of habitat suitable for crocodile nesting and basking.</li> <li>Establishment of exclusion zones at known nesting sites (nest sanctuaries</li> <li>Daytime and nighttime monitoring surveys to document nesting activity and utilization of the industrial wastewater facility.</li> <li>Capture and tagging of hatchlings using American Veterinary Identification Devices (AVID) microchip technology.</li> <li>Relocation of hatchlings to low-salinity habitat during early life stages to increase survival.</li> <li>Recapture, monitoring, and release of individuals to document growth and survival."</li> </ul> </li> </ul>
		directly benefit the crocodile, FPL also has enacted an extensive crocodile awareness program to educate the public as to the status of the crocodile in south Florida. All of these existing activities will continue throughout the construction and operation phases of the new Units 6 & 7."
		Assessment for Six Listed Species (ML 123390437) submitted to the NRC on 11/30/2012 provides details of the crocodile population monitoring as listed below; "Monitoring of the number and location of nests, production of hatchlings, and their growth and survival has been conducted within the

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Turkey Point Plant property since 1978. Surveys are conducted to identify nest locations, nest sites are revisited during the hatching period, and each hatchling is captured, permanently marked for identification, measured, weighed, sexed, and released. Permanent identification through American Veterinary Identification Device allows for the recapture of individuals after several years to document survival and growth rates. Surveys are conducted throughout the year, with different surveys conducted in different seasons based on crocodile behavior and life history. The population monitoring program at the Plant involves surveys conducted during the breeding, nesting, hatching, and juvenile phases of the crocodile's life cycle, as well as ongoing surveys documenting crocodile activities."
		Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to incorporate wildlife protection features into the roadway design for all segments of the temporary access roads south of SW 344 <sup>th</sup> Street. Along SW 359 <sup>th</sup> Street and along the portions of SW 117 <sup>th</sup> Avenue and SW 137 <sup>th</sup> Avenue that are to be constructed south of SW 344 <sup>th</sup> Street, wildlife exclusion fencing shall be installed and shall include small mesh material, such as silt fencing, of appropriate mesh size and height to provide an exclusion barrier for reptiles and other small animals. The SW 359 <sup>th</sup> Street temporary roadway shall accommodate a minimum of two (2) wildlife underpasses west of the L-31E levee, one of which must be constructed between SW 137 <sup>th</sup> Avenue and SW 117 <sup>th</sup> Avenue and the other between SW 117 <sup>th</sup> Avenue and the L-31E borrow canal. The bridge over the L-31E borrow canal may serve as one of the wildlife underpasses provided that the plans demonstrate it has been appropriately designed for this purpose. These underpasses shall be of

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		adequate design and shall be constructed to facilitate the safe passage of all wildlife known to occur or to potentially occur in this area during all times of the year, including but not limited to deer, Florida panthers, bobcats, snakes, American crocodiles, and amphibians. A minimum of three (3) crocodile underpasses shall also be provided along the temporary access road immediately north of the cooling canal system. The required underpasses shall be positioned to provide safe access to the habitat.
		Reference – Conditions of Certification Section B. VII.H.3.
		In addition, FPL will create the Sea Dade Canal Crocodile Sanctuary as part of the Project's additional mitigation activities described in its Mitigation Plan Section 3.5 which states, "As part of the Project's additional mitigation activities, the Sea Dade Canal Crocodile Sanctuary involves creation of wetlands impacted by historical dredging and filling, topographic grading and planting, creation of low-salinity ponds for juvenile crocodile refugia, and creation of habitat conditions with suitable nesting substrate specifically benefitting the federally threatened American crocodile ( <i>Crocodylus acutus</i> ). The approximately 6.4-acre area is located southwest of the industrial wastewater treatment facility, adjacent to the Sea Dade Canal and an existing meteorological tower (Figure 17)."
		"The proposed Sea Dade Canal Crocodile Sanctuary is currently comprised of previously filled uplands, open water borrow ponds, mixed hardwood wetlands, dwarf red mangrove marsh, and sawgrass marsh (Figure 18) adjacent to the Sea Dade Canal. An access road leads to a

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		meterological tower on the eastern edge of the site. Areas of forested wetland are vegetated with a mixture of red mangrove, white mangrove, buttonwood, poisonwood, and the threatened species locust berry ( <i>Byrsonima lucida</i> )."
		"The target community is modeled after the successful crocodile sanctuary created upon previously filled land within the EMB in 2008. A post-enhancement conceptual design is presented in Figure 19. Upland areas will be topographically graded to restore wetland hydrology and planted with a variety of native species such as buttonwood, bay cedar ( <i>Suriana maritima</i> ), Florida silver palm ( <i>Coccothrinax argentata</i> ), willow bustic ( <i>Sideroxylon salicifolium</i> ), muhly grass ( <i>Muhlenbergia capillaries</i> ), and railroad vine ( <i>Ipomea pes-capri</i> ) to create a mosaic of habitats, including saline lagoon areas connecting to the Sea Dade Canal, isolated low-salinity ponds, and crocodile nesting areas utilizing a proven mixture of peat,marl, and sand. In addition to providing a nesting sanctuary for crocodiles, the area will provide potential foraging habitat for wading birds, including wood storks, through the creation of shallow freshwater ponds suitable for tactile feeding."
		Reference – FPL Mitigation Plan (ML12269A222)
38	Page 17, Air Quality ,Paragraphs 3 and 4: "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 pactians. The englycip indicator that CAL PLIEE	Plume modeling of the interaction of the cooling towers associated with the Turkey Point Units 6 & 7 and the Turkey Point Unit 5 (combined cycle unit) is not necessary. Detailed air modeling of emissions of particulate matter with an aerodynamic diameter of 10 microns or less ( $PM_{10}$ ) and $PM_{2.5}$ was provided as part of the Prevention of Significant Deterioration (PSD) application for Turkey Point Units 6 & 7. The detailed modeling followed EPA modeling requirements for PSD air

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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-I, 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	quality impact analyses in 40 CFR Part 51 Appendix W. The Florida Department of Environmental Protection (FDEP) is the approved agency for PSD review in Florida and its regulations and program have been approved by EPA for this purpose. The air quality impact analysis determined that the air quality impacts were well below the "significant impact levels" for PM <sub>10</sub> and PM <sub>2.5</sub> . This means the impacts of the cooling towers were de minimis and no further modeling, including plume interaction and cumulative analysis, is necessary. Moreover, the maximum PM <sub>2.5</sub> impacts were 23 times lower than the significant impact levels for PM <sub>2.5</sub> . FDEP issued a final PSD permit that included agency and public notice of their technical analysis and draft permit. Reference – FDEP Project No. 02500003-013-AC; PSD-FL-409
	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."	
39	Page 17, Socioeconomic and Environmental Justice , Paragraph 5, Page 21, Paragraphs 1 and 2:	A summary of the community outreach process is included in SCA Chapter1, Section 1.8, which states,
	"We note the distinction in the DEIS between temporary	"FPL recognizes the importance of collaborating with the community before, during and after the licensing process for projects needed to
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No	EDA Commont [bold toxt applied for amphasia]	EDI Observation [hold text applied for emphasis]
140.	construction impacts and longer term exerction impacts	rrc Observation [pold text applied for emphasis]
	However, since the facility's construction is likely to be	working with the local community surrounding the Turkey Point plant for
	underway for seven years, these impacts may be	many years. The community outreach process for this Project has been
	considered significant for the local communities. Issues	comprehensive to include various activities focused on communicating
	regarding traffic congestion, socioeconomic impacts,	EPL sent approximately 100 000 letters to customers within a 10 mile
	concern the local communities as well as operational	radius of Turkey Point plant informing them of FPL's proposal to build
1	impacts related to these matters, should be fully clarified	additional nuclear units. This mailing was followed by over 33
	in the FEIS, pursuant to our comments.	community presentations over the next year to about 600 community
	Ma understand that the NDC second include withouting	feedback from the public.
	we understand that the NRC cannot include miligation measures in the licenses that do not pertain to safety	
	and security. However, the EPA encourages the	Beginning in April 2009, FPL's community outreach team went back to
	project team and the applicant to continue coordinating	were able to address questions concerning plant design, transmission
	with the communities that will be impacted by the	lines, fill sources and water supply. There were also presentations made
	public outreach strategy to inform residents of the risks	to several new organizations and their feedback was received.
	and impacts as a result of the proposed project. In	The community outreach process involved meeting with community
	particular, potential traffic impacts and emergency	leaders, local government officials, regulatory agencies and other
	preparedness measures should be coordinated with	interested individuals. Starting in September 2007 and continuing into
	iocal communities.	2009, FPL hosted eight meetings with representatives of various
		Point Plant. The goal of these meetings was to seek opportunities to
		complement or enhance regulatory agency goals and objectives for the
		area while identifying fill source, water supply and wetlands mitigation
		opportunities for the Project. Representatives of the following agencies
		nave participated in these meetings: South Fionda water Management

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		District, Florida Department of Environmental Protection, Miami-Dade County Environmental Resource Management, Miami-Dade County Planning and Zoning, Army Corps of Engineers, U. S. Fish and Wildlife Services, Biscayne National Park and Everglades National Park.
		As part of FPL's community outreach process for the Project, nine open houses were held in late 2008 in strategic areas in Miami-Dade County to discuss the Project with a focus on the potential Turkey Point transmission line routes and to gain feedback from the community. Residents were notified of the open houses on November 11, 2008, when FPL sent approximately 260,000 letters to customers within a ½ mile on either side of the potential routes identified for the associated transmission lines.
		At the open houses, customers were able to review maps, interactive displays and exhibits about the Project. They were also able to ask questions and provide input directly to members of the FPL Project team. The open houses were a valuable resource for the Project team in selecting the preferred routes. There were several other ways for residents to communicate with FPL concerning the Project besides attending open houses including an e-survey, a Project toll-free phone number, and a Project e-mail Every step in the process included extensive contact with federal, state, regional and local governments and agencies informing them of next steps and gathering feedback.
		In keeping with the collaborative process of this project, FPL also formed a community working group in early 2009 to continue reaching out to the community and to better understand their questions and

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		concerns about the Project. This is a diverse group of interested stakeholders and opinion leaders from the community. Project updates will continue to be provided to the group so that the group may inform FPL of topics of interest. This forum also provides the participants with the opportunity to share Project information with their groups and communities."
		Reference – Turkey Point Units 6 & 7, Site Certification Application, June 2009
		In addition, as stated in FPL's Turkey Point Units 6 & 7 Public Outreach Notebook, "As part of the PPSA process, FPL invited other parties to submit alternates to FPL's proposed transmission corridors. In June 2011, FPL sent a letter to interested stakeholders notifying recipients that two alternate corridors had been filed. The notice explained the process for review of alternate corridors and included a map of the two proposed alternate corridors. In 2012 several parties requested and additional opportunity to submit alternate transmission corridors and there additional corridors were submitted into the review process."
		Reference – FPL's Turkey Point Units 6 & 7 Public Outreach Notebook
40	Page 18, Environmental Justice, Paragraph 4, 2 <sup>nd</sup> Sentence:	See also FPL Observation to EPA comments Nos. 39 and 42.
	"We encourage the project team to continue coordinating	

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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."	
41	Page 19, Meaningful Engagement, Paragraph 2 and 3: "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 low-income 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	See also FPL Observation to EPA comments Nos. 39 and 42.

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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."	
42	Page 19, EJ Impacts, Paragraph 5, 2 <sup>nd</sup> Sentence and Paragraph 6: <i>"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.</i>	See also FPL Observation to EPA comment No. 39 above. FPL commissioned an economic and fiscal study of the impacts of transmission lines on property values and commercial businesses. Fishkind & Associates, <i>Economic and Fiscal Impacts of FPL's Proposed</i> <i>Transmission Lines Supporting Turkey Units</i> 6 & 7 (May 29, 2013), which was submitted to the state during site certification proceedings. That study concluded little to no impact on the economic as a result of construction of transmission lines in either commercial (i.e., "areas of high economic activity") or residential areas. Specifically the study found: "The empirical studies generally conclude that transmission lines have little or no impact on residential property values. Furthermore, when small impacts were observed, these generally dissipate with time.
	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	distance or placement of the transmission line structures." Pg. 11. "Despite the large number of studies, none were found that analyzed the potential impact of transmission lines on commercial property values. One study of agricultural property and one of recreational land were found, but none for any other land use except residential. The lack of any study of impact on commercial properties is consistent with the notion that there is no such impact. Economic theory

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No	<b>FPA Comment</b> [bold text applied for emphasis]	<b>FPL Observation</b> [hold text applied for emphasis]
	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."	and practical development experience support the conclusion that no such impact is likely. Commercial establishments locate to serve their customers. Access, visibility, competition, and the volume of spendable income in the relevant trade area determine commercial locations. <b>Transmission lines are not a factor according to economic theory</b> <b>or business practice.</b> " Pg. 11 (emphasis added).
		After presentation of expert substantial testimony and evidence concerning the economic effects of the transmission lines during the state site certification hearing, the Administrative Law Judge concluded that: The Davis-Miami transmission line in the FPL East Preferred Corridor will have no quantifiable effect on property values of adjacent properties. The evidence supports a finding that transmission lines will not adversely affect nonresidential property values. Also, the more persuasive evidence shows that the effect on residential property values will be de minimis and below the levels that could be quantified to a reasonable degree of certainty. Accordingly, the placement of the proposed Davis-Miami transmission line within the FPL East Preferred Corridor will have little, if any, effect on the economy of the area or the fiscal situation of the municipalities. SCO RO ¶454. Impact on the values of residential or commercial properties adjacent to the transmission lines would be nominal. SCO RO ¶778 Source: Excerpts from State Site Certification Proceedings Recommended Order and hearing.
43	Page 20, National Historic Preservation Act (NHPA), Paragraphs 4 and 5:	Condition of Certification, Section B.V., applicable to plant and non- transmission associated facilities states, <b>"V. DEPARTMENT OF STATE – DIVISION OF HISTORICAL</b>

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	"Recommendations: Compliance with Section 106 of the National Historic Preservation Act (NHPA) 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"	A. Except to the extent already completed, the Licensee shall conduct a survey of sensitive cultural resource areas, as determined in consultation with DHR. A qualified cultural resources consultant will identify an appropriate work plan for this project based on a thorough review of the Certified Area. Prior to beginning any field work, the work plan will be reviewed in consultation with DHR. Upon completion of the survey, the results will be compiled into a report which shall be submitted to DHR. If practicable, sites considered to be eligible for the National Register shall be avoided during construction of the project and access roads, and subsequently during maintenance. If avoidance of any discovered sites is not practicable, impact shall be mitigated through archaeological salvage operations or other methods acceptable to DHR, as appropriate. B. If historical or archaeological artifacts or features are discovered at any time within the Certified Area, the Licensee shall notify the SED and DHR, R.A. Gray Building, 500 S. Bronough Street, Rm 423, Tallahassee, Florida 32399-0250, telephone number (850) 487-6333, and the MDC Office of Historic Preservation at (305) 375- 4958). The Licensee shall consult with DHR to determine appropriate action." Below are all the various historical and archeological resources Condition of Certification applicable to transmission facilities. Condition of Certification, Section C.IV., states, " <b>IV. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES</b> A. Except to the extent already completed, the Licensee shall conduct a survey of sensitive cultural resource areas, as

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis] determined in consultation with DHR. A qualified cultural resources consultant will identify an appropriate work plan for this project based on a thorough review of the Certified Area. Prior to beginning any field work, the work plan will be reviewed in consultation with DHR. Upon completion of the survey, the results will be compiled into a report which shall be submitted to DHR. If practicable, sites considered to be eligible for the National Register shall be avoided during construction of the project and access roads, and subsequently during maintenance. If avoidance of any discovered sites is not practicable, impact shall be mitigated through archaeological salvage operations or other methods acceptable to DHR, as appropriate. B. If historical or archaeological artifacts or features are discovered at any time within the Certified Area, the Licensee shall notify the SED and DHR, R.A. Gray Building, 500 S. Bronough Street, Rm 423, Tallahassee, Florida 32399-0250, telephone number (850) 487-6333, and Miami Dade County Office of Historic Preservation (at 305-375-4958) and the Licensee shall consult with DHR to determine appropriate action." Condition of Certification, Section C.VII.E., states, "E. Cultural and Archeological Resources 1. In the final design of the certified transmission lines, to the extent practicable, a. For the Davis-Miami transmission line, FPL
		shall avoid or minimize impacts to County-designated, known historic and archaeological sites and cultural resources that are identified by completion of a cultural resources survey. If any impact to a historic or archaeological site cannot be avoided completely, the Licensee shall conduct an Effects Analysis, and consult with DHR and MDC to identify

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 59 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		appropriate action and mitigation, if necessary; and b. For the Clear Sky-Levee and Clear Sky- Pennsuco transmission lines, FPL shall avoid or minimize impacts to County-designated and known historic and archaeological sites, and cultural resources that are identified by completion of a cultural resources survey. If any impact to a historic or archaeological site cannot be avoided completely, the Licensee shall conduct an Effects Analysis, and consult with DHR and MDC to identify appropriate action and mitigation, if necessary. 2. FPL shall provide as a post-certification submittal final design drawings demonstrating compliance with these requirements. 3. FPL shall provide copies to MDC of any surveys or reports made to the Division of Historical Resources (DHR)."
		Condition of Certification, Section C.VIII.G., states, <b>"G. Historic Preservation:</b> 1. In the final design of the certified transmission line, to the extent practicable, for the proposed transmission line to be located within the CCG, FPL shall avoid or minimize impacts to CCG- designated, known historic and archaeological sites and cultural resources that are identified by completion of a cultural resources survey. If any impact to a historic or archaeological site cannot be avoided completely, the Licensee shall conduct an Effects Analysis, and consult with DHR and the CCG to identify appropriate action and mitigation, if necessary. 2. FPL shall provide as a post-certification submittal

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 60 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		final design drawings demonstrating compliance with these requirements. 3. FPL shall provide copies to the CCG of any surveys or reports made to the Division of Historical Resources (DHR)."
		Condition of Certification, Section C.X.A., states, <b>"A. Archaeological Resource Preservation</b> To the extent that any portion of the Davis-Miami 230-kV transmission line is located within the City of Miami, FPL shall comply with the following conditions: 1. In the final design of the transmission line, to the extent practicable, for the Davis-Miami transmission line, FPL shall avoid or minimize impacts to City-designated, known archaeological sites and cultural resources, within the final right-of-way, that are identified by completion of a cultural resources survey. If any impact to an archaeological site cannot be avoided completely, the Licensee shall conduct an Effects Analysis, and consult with DHR and the City to identify appropriate action and mitigation, if necessary. 2. FPL shall provide copies to the City as a post- certification submittal final design drawings demonstrating compliance with these requirements. 3. FPL shall provide copies to the City of any surveys or reports made to the Division of Historical Resources (DHR). 4. In Archaeological Conservation Areas within the final right-of-way in any certified corridor within the City of Miami, FPL shall conduct archaeological shovel testing if necessary and monitoring of any ground-disturbing activities during construction of the certified
		transmission line."

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 61 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		Condition of Certification, Section C.X. I., states, <b>"I. Historic Resource Preservation</b> 1. In the final design of the transmission line, to the extent practicable, for the Davis-Miami transmission line, FPL shall avoid or minimize impacts to City-designated, known historic sites and cultural resources, within the final right-of-way, that are identified by completion of a cultural resources survey. If any impact to a historic site cannot be avoided completely, the Licensee shall conduct an Effects Analysis, and consult with DHR and the City to identify appropriate action and mitigation, if necessary. 2. FPL shall provide copies to the City as a post- certification submittal final design drawings demonstrating compliance with these requirements. 3. FPL shall provide copies to the City of any surveys or reports made to the Division of Historical Resources (DHR)."
44	Page 5, Section 404 CWA Permitting, Paragraph 5: "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 plant area will be surrounded by the MSE to the north, east and west. The MSE wall is a concrete wall, backfilled on the island side with Category II fill. The plant area does not have a "three-sided earthen berm" separating it from surrounding water bodies. The wall is designed to protect the plant area, from projected sea level rise, extreme precipitation events, storm surge and wave run up. See FSAR 2.4.5. for additional information. The makeup water reservoir will be located on the south side of the plant area. As described in ER Section 3.9.1.7. (below), the makeup water reservoir is a reinforced concrete structure located on the south side of the plant area and partially along the east and west side of the plant area forming the exterior walls of the reservoir. In summary, the

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Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 62 of 71

No	<b>FPA Comment</b> [bold text applied for emphasis]	<b>FPI</b> Observation [bold text applied for emphasis]
NO.	Page 22, Sea Level Rise and Regional Stormwater Management, Paragraph 4, 2 <sup>nd</sup> Sentence:	entire plant area will be protected on all sides by a reinforced concrete wall.
	"EPA recommends this analysis include the stability of the proposed 218-acre, 26-foot elevated, land island having a three-sided earthen berm." Page 23, Sea Level Rise and Land Subsidence, Paragraph 2: "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."	<ul> <li><u>ER Section 3.9.1.7</u></li> <li>3.9.1.7 Makeup Water Reservoir, Cooling Towers, and Makeup Water Supply Pipelines</li> <li>The makeup water reservoir (a reinforced concrete structure with a footprint of approximately 37 acres) would be located in the south end of the plant area. Six (6) mechanical draft cooling towers (three per unit) would be installed over the reservoir to maximize size of the reservoir. Site preparation, excavation and construction of the reservoir would include the following: <ul> <li>The south perimeter of the plant area would be stabilized similar to the remainder of the plant area perimeter by driving sheet piles into the Miami Limestone Formation. In addition to restraining the return canals, this sheet piling would function as sacrificial formwork when the reservoir exterior wall is poured and only the exposed portion above approximate elevation 0.0 NAVD 88 would be removed.</li> <li>After stabilizing the canals, the muck behind the sheet piles would be excavated to the top of the Miami Limestone Formation and placed in the designated spoils areas.</li> <li>General area dewatering would not be required as the surface of the excavated area would be sealed by tremie concrete (if required) to minimize in-leakage of ground water. Local dewatering in the area of the deeper cooling tower foundations would be required and pressure</li> </ul></li></ul>

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 63 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		<ul> <li>grouting might be required to facilitate this dewatering.</li> <li>Concrete would be placed over the excavated area to form the reservoir base slab. The top of the base slab would be at elevation –2.0 feet NAVD 88. Reinforced concrete walls would then be constructed with the top elevation at 24.0 feet NAVD 88.</li> </ul>
	<ul> <li>Page 20, Climate Change, Greenhouse gases (GHG), Sea Level Rise, Paragraph 7 and Page 21, Paragraph 1:</li> <li><i>"Florida Power &amp; Light proposes to build the proposed action on a filled "island"</i> (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 4.1.1.1, pp. (4-4) – (4-6)). This 218-acre 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).</li> </ul>	The cooling canals and the plant area are at approximately the same elevation and therefore the plant area will be approximately 26 feet above the existing cooling canals.
	Additionally, this land island is to be enclosed by a stabilized earth perimeter wall on the north,	

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 64 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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."	
45	Page 21, Climate Change Adaptation, Paragraph 3, 2 <sup>nd</sup> Sentence: "Additionally, EPA recommends NRC use available sea- level rise and storm-surge models to quantify 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."	See FPL Observation to EPA comment No. 33 above.
46	Page 24, Sea Level Rise and Land Subsidence, Paragraphs 2 and 3: <i>"Recommendations: EPA has concerns regarding</i> <i>estuary and habitat impacts related to lengthy</i> <i>periods of droughts. In particular, the potential for</i> <i>increased salinity in existing brackish water</i>	The Conditions of Certifications issued by the Siting Board on 5/19/14 limit water withdrawals from the RCWs to only when reclaimed water is not available in the quantity or the quality required and for up to 60 days and withdraw a maximum volume of 7,465 MG in any consecutive 12 month period. These three conditions must be met in order to be allowed to withdraw water from the RCWs.

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 65 of 71

No	<b>FPA Comment</b> [bold text applied for emphasis]	<b>FPI Observation</b> [bold text applied for emphasis]
	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. 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. EPA recommends that this impact analysis also consider extended periods of drought, characteristic of the southeast U.S."	<ul> <li>Reference – Conditions of Certification B. VI.C.2.b.i.(1) and (3) respectively.</li> <li>In addition, the Conditions of Certifications listed below address emergency withdrawals and water withdrawals for operational and periodic system testing.</li> <li>Conditions of Certification, Section B.VI.C.3.b. states, "Emergency Withdrawals Any withdrawals in excess of the withdrawals authorized under this Certification shall require prior SFWMD approval. The SFWMD may grant such approval for any emergency withdrawals less than 90 days in duration without modifying these Conditions of Certification. SFWMD approval shall be based on the non-procedural requirements of Chapter 40E-2, F.A.C."</li> <li>Conditions of Certification B. VI.C.2.b.i.(2), states, "Prior to Units 6 &amp; 7 commercial operation, Licensee shall be authorized to withdraw water from the RCWs to perform operational tests of RCW caissons and laterals for the purposes of determining flow within laterals and caissons, verifying system components are meeting design requirements and testing to ensure that the systems necessary to run Units 6 &amp; 7 on the back-up water source work properly, including the gradual switch from reclaimed water to saltwater from the RCW system."</li> <li>Conditions of Certification B. VI.C.2.b.i.(4), states, "Licensee shall be authorized to operate the RCW system for periodic testing and system integrated testing purposes."</li> </ul>

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 66 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	· · · · · · · · · · · · · · · · · · ·	Reference – Conditions of Certification B. VI.C.2.b.i.(2) and (4) respectively
		Additionally, any increase in the permitted use of RCWs as a replacement for reclaimed water would require a modification of the Conditions of Certification issued for the RCWs, and availability of reclaimed water and groundwater will be addressed at that time.
47	Page 24, Greenhouse Gases (GHGs), Paragraphs 6 and 7 and Page 25, Paragraph 1:	GHG emissions are reduced significantly over other energy alternatives to meet FPL's baseload generation needs.
	<ul> <li>"Recommendations: EPA recommends that the NRC address the following in its FEIS:</li> <li>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.</li> <li>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."</li> <li>Whether the GHG emissions analysis in the DEIS addresses the GHG emissions associated with decommissioning the existing 2 nuclear power</li> </ul>	Reference – FPL 404(b)(1) Analysis (October 2011) s. 3.2 ; Turkey Point Unites 6&7 COL Application Part 3 — ML 14311A270 Environmental Report (Rev. 6), s. 9.2"

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 67 of 71

NI -		CDL Observation likely to the likely for every basis.
NO.	EPA comment [bold text applied for emphasis]	<b>FPL Observation</b> [bold text applied for emphasis]
	plants (Units 3 and 4), in addition to the new ones	
	decommissioning of units 3 and 4 also be included	
	as part of the GHG cumulative-effects analysis."	
48	Page 25, Indirect and Cumulative Impacts, Paragraphs 3-7:	See FPL Observation to EPA comments Nos. 2, 3, 12, 15, 16, 17, 19, 22, 23, 24, 30 and 31 above.
	(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	
	the area surrounding the open interval of the	· ·
	withdrawal wells, eventually resulting in surface water impacts.	
	FPA 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	
	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	

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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. <b>The</b> westward movement of the plume as a result of	

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No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	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."	
49	<ul> <li>Page 26, Transmission Line Impacts, Paragraphs 1-3:</li> <li>"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).</li> <li>EPA is concerned with the lack of information in the DEIS regarding the National Park Services" (NPS) DEIS (Acquisition of Florida Power &amp; 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.</li> </ul>	Please note, NPS's Acquisition of FPL land in the East Everglades Expansion Area DEIS did not address the West Consensus Corridor. In its Final Order, the Siting Board adopted the conclusion of the Administrative Law Judge to certify the West Consensus Corridor, with the FPL West Preferred Corridor as the second choice if a Right-of-Way within the West Consensus Corridor cannot be secured in a timely manner and at a reasonable cost. The West Consensus Corridor is largely outside ENP boundaries. Condition of Certification Section C. XVI. requires FPL to work with MDLPA and SFWMD to allow access to and placement of transmission line structures in property under their control and east of the L-31 N canal (outside of Everglades National Park). In areas where this is not possible, FPL shall only use the minimum amount of land west of the L- 31 N canal (inside the current boundaries of Everglades National Park) that is necessary to build and maintain the structures, and FPL shall return to installing structures to the east side of the L-31 N canal at the first available and practicable location.
	Recommendations: The FEIS should clarify the impacts to	Condition of Certification Section C. XVI.states, "A. For the West Consensus Corridor/MDLPA No. 2, FPL shall

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No.         EPA Comment [bold text applied for emphasis]         FPL Observation [bold text applied for emphasis]           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."         build and maintain all structures to the east of the L-31 N canal (outside Certification Order can no longer be appealed, or within one year from the date FPL requests such commitment in writing, whichever is later: 1. The affected MDLPA member companies will allow access to and placement of transmission line structures in the affected member-company-owned or company-controlled property within the West Consensus Corridor/MDLPA No. 2 east of L-31 N as provided in the Agreement between the MDLPA and FPL regarding the Western Transmission Corridor Portion of the FPL's Turkey Point 6 & 7 Power Plant Site Certification Application dated August 30, 2013; and 2. SFWMD will allow placement of structures (and use of its property for access) on its property in Segment 1 of Attachment W within the West Consensus Corridor/MDLPA No. 2, adjacent to Everglades National Park, and property neosary to transition the transmission facilities to or from MDLPA member company-owned or company-controlled property, in addition to any other conditions of certification. Application dated October 25, 2013 (included as Specific Condition C.XVI.A.1, but SFWMD be unable or unwilling to approve the commitment set forth in paragraph Specific Condition C.XVI.A.2., FPL shall build and maintain all structures to the east of the L-31 N canal (outside of Everglades National Park) in accordance with Specific Conditions C.VI.F.3.f.ii and iii, recognizing the need for accommodating <th></th> <th></th> <th></th>			
<ul> <li>the Everglades (particularly to the Everglades National Park) associated with the Western Preferred Coridor, and better describe the NPS land exchange DEIS. Efforts MDLPA and SFWMD within one year from the date that a final Site everglades national Park) if the following commitments are made by made to avoid impacts to the extent feasible, and to effectively mitigate impacts where they are unavoidable."</li> <li>build and maintain all structures to the east of the L-31 N canal (outside Everglades National Park) if the following commitments are made by made to avoid impacts to the extent feasible, and to effectively mitigate impacts where they are unavoidable."</li> <li>build and maintain all structures to the east of the L-31 N canal (outside PL requests such commitment in writing, whichever is later: <ol> <li>The affected MDLPA member companies will allow access to and placement of transmission line structures in the affected member-company-controlled property within the West Consensus Corridor Portion of the FPL's Turkey Point 6 &amp; 7 Power Plant Site Certification Application dated August 30, 2013; and 2. SFWMD will allow placement of structures (and use of its property for access) on its property in segment 1 of Attachment W within the West Consensus Corridor/MDLPA No. 2, adjacent to Everglades National Park, and property necessary to transition the transmission facilities to or from MDLPA member company-owned or company-controlled property, in addition to any other conditions of certification, including those made a part of the FPL/SFWMD Alternate Corridor Styluation dated October 25, 2013 (included as Specific Condition C.VVI.F.3.f.ii and ii).</li> <li>B. Should MDLPA make the commitment set forth in specific Condition C.VVI.F.3.f.ii and iii).</li> </ol></li></ul>	No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
	NO.	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."	build and maintain all structures to the east of the L-31 N canal (outside Everglades National Park) if the following commitments are made by MDLPA and SFWMD within one year from the date that a final Site Certification Order can no longer be appealed, or within one year from the date FPL requests such commitment in writing, whichever is later: 1. The affected MDLPA member companies will allow access to and placement of transmission line structures in the affected member-company-owned or company-controlled property within the West Consensus Corridor/MDLPA No. 2 east of L-31 N as provided in the Agreement between the MDLPA and FPL regarding the Western Transmission Corridor Portion of the FPL's Turkey Point 6 & 7 Power Plant Site Certification Application dated August 30, 2013; and 2. SFWMD will allow placement of structures (and use of its property for access) on its property in Segment 1 of Attachment W within the West Consensus Corridor/MDLPA No. 2, adjacent to Everglades National Park, and property necessary to transition the transmission facilities to or from MDLPA member company-owned or company-controlled property, in addition to any other conditions of certification, including those made a part of the FPL/SFWMD Alternate Corridor Stipulation dated October 25, 2013 (included as Specific Conditions C.VI.F.3.f.ii and iii). B. Should MDLPA make the commitment set forth in Specific Condition C.XVI.A.1., but SFWMD be unable or unwilling to approve the commitment set forth in paragraph Specific Condition C.XVI.A.2., FPL shall build and maintain all structures to the east of the L-31 N canal (outside of Everglades National Park) in accordance with Specific Conditions C.VI.F.3.f.ii and iii, recognizing the need for accommodating

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the EPA DEIS Comment Letter Dated July 17, 2015 L-2015-253 Attachment 2 Page 71 of 71

No.	EPA Comment [bold text applied for emphasis]	FPL Observation [bold text applied for emphasis]
		C. Should SFWMD make the commitment set forth in Specific Condition C.XVI.A.2., but MDLPA be unable or unwilling to make the commitment set forth in Specific Condition C.XVI.A.1., FPL shall build and maintain all structures to the east of the L-31 N canal (outside of Everglades National Park) upon receiving the written agreement of SFWMD for the construction, operation and maintenance of transmission structures and the need for accommodating canal crossings. D. Any use by FPL of SFWMD right-of-way in these areas described above will be subject to necessary accommodations by FPL for SFWMD's operation and maintenance of the Central and Southern Flood Control System ("C&SF System"), as determined by SFWMD, and as generally reflected in the Specific Condition C.VI.A through C.VI.F. FPL shall comply with Specific Condition C.VI.B regarding the maintenance of, and avoidance of harmful interference with or adverse impacts to, the South Florida Water Management District Communication System and Facilities ("WMDCSF"). E. In areas where FPL is unable to build and maintain its structures east of the L-31 N canal (outside of Everglades National Park), FPL shall only use the minimum amount of land west of the L-31 N canal (inside the current boundaries of Everglades National Park) that is necessary to build and maintain the structures, and FPL shall return to installing structures to the east side of the L-31 N canal at the first available and practicable location "
		Reference – Condition of Certification Section C. XVI.

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 1 of 139

		EDL Observation DOW Taning [hold for tambind for evenhagin]
1 NO.	NPS Comment [bold text applied for emphasis]	There is receiven a model that can answer all questions related to
	NFS letter dated // 1// 15, Fage 2, 5 paragraph, 1 sentence	a proposed action
	Hydrologic Modeling	
Ì	"The NPS is concerned that <b>numerous assessments in the</b>	Each model may have strengths and weaknesses and there is a
	DEIS rely upon hydrologic models, whose scale and extent	need to choose which tools are most appropriate to perform
	were too large to adequately determine localized	specific tasks. Both the regional model developed by the
	environmental effects of the proposed action on NPS	NRC/USGS and the local model developed by FPL were used to
	resources. "	assess hydrological impacts associated with the Project. The
]		NRC/USGS model had specific objectives that were more
		regional in nature than the local scale that NPS appears to be
		interested in. The model developed by FPL has a much finer
		scale (100 $\pi$ resolution) than the NRC/USGS model (1600 $\pi$
		environmental impacts. The EPI model is constant density
}		which is conservative (model shows a greater impact) in
		determining amount of flow from the cooling canal system. Both
		models support the conclusion that the RCWs will not cause
		negative environmental impacts. The reference for the FPL
		model is:
		Groundwater Model Development and Analysis: Units 6 & 7
ł		Dewatering and Radial Collector Well Simulations, Revision 3,
		Bechtel Power Corporation, December 2012.
2	NPS letter dated //1//15, Page 2, 3 <sup>rd</sup> paragraph, 2 <sup>rd</sup> sentence	Because the NRC/USGS model was intended to assess regional
	Hudrologia Madaling	effects and therefore had a coarse scale, there were limitations
	"Although the model utilized by the NPC answered some	the Project to the appropriate resolution. For example, the
	auestions related to the effect of the proposed action on the	model's grid size made it impossible to locate the RCW system
	regional hydrologic system. the scale of the model used by	entirely offshore when running the model even though the
		- on anony on one of the third and the deal, of on a long of the

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 2 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	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	system will be constructed entirely offshore. Because of the model's limitations, it resulted in an apparent overestimation of the effect of groundwater withdrawals from the RCW on freshwater volumes along the park's shoreline and within the park.
	adverse impacts at the site of withdrawal on seagrass beds and seagrass faunal and benthic communities."	The NRC/USGS model is conservative in the sense that it overestimates the extent of drawdown due to the coarse resolution in the model and the very high transmissivity (nearly 2 million ft <sup>2</sup> /d) <sup>1</sup> relative to site-specific values obtained during FPL aquifer testing and because it assumed continuous operation of the RCWs, rather than the limited use authorized by the Conditions of Certification.
		The FPL model results are also conservative, in that they assumed continuous operation of the RCWs, when in fact the Conditions of Certification limit RCW use to no more than 60 days in any 12 month period.
		The FPL model, described in response to (1), quantifies impacts along shoreline to a higher degree than the NRC/USGS model. Figures 59 and 60 of the FPL groundwater modeling report show that the predicted steady state extent of drawdown impact due to pumping the radial collector wells is limited to offshore for drawdowns greater than 0.5 ft with a very limited onshore component of the 0.1 ft drawdown contour (essentially the FPL plant site).
		Reference – <sup>1</sup> Lohmann, M.A., Swain, E.D., Wang, J.D., and

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 3 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		Dixon, Joann, 2012, Evaluation of effects of changes in canal management and precipitation patterns on salinity in Biscayne Bay, Florida, using an integrated surface-water/groundwater model: U.S. Geological Survey Scientific Investigations Report 2012–5099, 94 p.
		A mesocosm study conducted at Turkey Point in 2013, showed no evidence of an adverse impact on seagrass productivity from RCW operation. This study evaluated potential impacts over a three month period; as the COC limits operation of the RCWs to no more than 60 days in any 12 month period, this study was conservative in its approach.
		Reference – Land-Based Mesocosm Project to Evaluate Potential Radial Collector Well Impacts to Seagrass, Atkins, April 2013
		In addition, Conditions of Certifications issued by the Siting Board on 5/19/14 require development and implementation of a Radial Collector System Monitoring Plan for the purpose of monitoring potential adverse impacts to ecological and water quality resources of Biscayne Bay and adjacent nearshore areas resulting from the construction and operation of the radial collector well system. If adverse impacts are identified as a result of such monitoring, additional measures shall be required to evaluate, abate or mitigate such impacts.
		Reference – Conditions of Certification Section B. I.

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 4 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		Condition of Certification Section B. I.B.1.c.,d. and e. require specific benthic and seagrass monitoring be included as part of the Radial Collector System Monitoring Plan. Condition of Certification Section B. I.B.1.c.,d. and e. state,
		c. In order to accurately assess potential impacts to listed species dependent on resources within Biscayne Bay, pre-construction (baseline) monitoring, construction monitoring, and post-construction monitoring, as defined above, of seagrass cover and benthic fauna shall be conducted within the area surrounding the Turkey Point peninsula encompassed by the extent of the RCW laterals. Two monitoring control sites shall be located in seagrass beds within five miles of the Turkey Point peninsula.
		i. Seagrass and benthic monitoring shall be conducted quarterly during the pre- construction, construction, and post-construction monitoring periods. The following methodologies shall be used during pre- construction, construction, and post-construction monitoring.
		ii. Seagrass Monitoring Methodology: A series of 30 linear transects surrounding the Turkey Point peninsula shall be established, evenly spaced within the area encompassed by the extent of the RCW laterals. Each transect shall be 300 meters in length, with sampling stations at the shoreward and seaward ends of each transect and at 25- meter intervals in between for a total of twelve sampling locations per transect. Within each control site, ten 300-meter transects shall be established with sampling stations at 50-meter intervals

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 5 of 139

No	NDS Comment [hold text applied for amphasia]	EDI Observation BCW Tanics [hold taxt applied for emphasis]
		for a total of seven sampling locations per transect. At each sampling station, a 0.25-m <sup>2</sup> PVC quadrat shall be randomly placed on the bottom three times. All seagrass species present within the quadrats shall be identified, and their percent cover visually estimated using Braun Blanquet or another approved methodology. All in-water observations shall be conducted by biologists with considerable practicable experience working in the seagrass communities of south Florida.
		iii. Benthic Fauna Monitoring Methodology: Ten benthic fauna sampling stations shall be established within the area encompassed by the RCW laterals, and 10 sampling stations shall be located within the control sites. Three replicate benthic samples shall be collected at each station, using a diver-operated core sampler with a surface area of 225 cm. Each sample shall be rinsed in the field using a 0.5 mm mesh bucket sieve and preserved in separate sample containers with a 10 percent buffered formalin solution. Laboratory taxonomic analysis shall include organism enumeration and identification to the lowest practicable taxon.
		d. The Licensee shall be required to submit regular monitoring reports. All reports shall include all data and statistical analyses resulting from the monitoring requirements.
		i. Timing. During the pre- construction monitoring period, the construction monitoring period, and the post-construction monitoring period, as defined above, the Licensee shall prepare a report after each year (365

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# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 6 of 139

Ne	NDS Comment [hold text emplied for emphasie]	CDL Observation DOW Tanics likely text annlied for emphasical
INO.	NPS Comment [bold text applied for emphasis]	days) of monitoring activity ("annual reports"). Reports shall be submitted to the DEP SCO and FWC for review within 90 days following the completion of the annual monitoring periods.
		ii. Additional requirement for post construction monitoring. During the post-construction monitoring period, the reports shall summarize all data and statistical analyses collected to date and provide an analysis comparing those monitoring data to the control data and to the pre- construction monitoring (baseline) data.
		e. If the DEP SCO and FWC determines that the comparison of pre-construction (baseline) monitoring and construction monitoring or post-construction monitoring data indicate statistically significant adverse impact to the fish and wildlife resources of Biscayne Bay resulting from RCW construction and/or operation activities, then additional measures shall be required to evaluate or to abate such impacts. These measures may include enhanced monitoring, modeling, or mitigative measures.
		Reference – Condition of Certification Section B. I.B.1.c., d. and e.
3	NPS letter dated 7/17/15, Page 2, 3 <sup>rd</sup> paragraph, 3 <sup>rd</sup> sentence	New data are always becoming available during the development
	Hydrologic Modeling	or models and it is necessary to establish the time and database that will be used for a given model application. The NRC/USGS
	"The NRC should utilize newer data available from NPS and	model (Lohmann, 2012) was an off-the-shelf model that was
	the South Florida Water Management District to improve	already calibrated and ready (with minor modification) to consider
	the extent, scale, and calibration of the models to accurately	the FPL application, which was performed in Lohmann, (2014).

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	evaluate the appropriate spatial extent of these potential impacts on park resources."	The FPL model was in the process of development when data from the EPU monitoring plan started to become available in 2010. Specifically, the EPU boring data were reviewed to confirm that the stratigraphy originally specified in the model was appropriate, high flow zones confirmed during EPU drilling were included in the FPL model, and new bathymetric data were also included. The current version of the FPL model is: Groundwater Model Development and Analysis: Units 6 & 7 Dewatering and Radial Collector Well Simulations, Revision 3, Bechtel Power Corporation, December 2012.
	· · · · · · · · · · · · · · · · · · ·	Lohmann, M.A., Swain, E.D., Wang, J.D., and Dixon, Joann, 2012, Evaluation of effects of changes in canal management and precipitation patterns on salinity in Biscayne Bay, Florida, using an integrated surface-water/groundwater model: U.S. Geological Survey Scientific Investigations Report 2012–5099, 94 p.
		Lohmann, M.A., 2014, Estimated effects of proposed radial collector well pumpage near Turkey Point Nuclear Facility, Miami- Dade County, Florida: U.S. Geological Survey Administrative Report XXXX–XXXX, xx p.
		Conditions of Certification issued by the Siting Board on 5/19/14 require a 72 hour test and a 30 day test be run after completing construction of the first caisson and laterals. The data collected during these tests will be used to validate the groundwater model, as described in the Conditions of Certification listed below, thus, newer data will be incorporated into the model in the future.

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 8 of 139

No	NPS Commont [bold text applied for emphasic]	EPI Observation PCW/Tenics [hold text applied for emphasis]
<b>NO.</b>		Conditions of Certification, Section B.VI.C.2.b.iii.(2), states, "The RCWT shall be conducted for a minimum of 72 hours. The RCWT shall include a background period of at least three (3) days prior to pumping, and at least eight (8) hours of recovery following pumping, or until the water levels return to their pre-test levels. Following the test and data collection, Licensee shall analyze the data using appropriate groundwater hydraulic techniques. Licensee shall use this data and initially configure the existing groundwater model (originally calibrated parameters and boundary conditions) to simulate the RCWT using the recorded pumping rates and lateral distributions. The modeled steady-state drawdowns will be compared to observed steady- state drawdowns to confirm the accuracy of the original model. If necessary, the model will then be recalibrated (by parameter and boundary condition adjustment) to approximate observed drawdowns during the RCWT. The recalibrated model will then be run to confirm conclusions of the original model."
		Conditions of Certification, Section B.VII.P.6.a.ii., states, "The RCWT shall be conducted for a minimum of 72-hours. The RCWT shall include a background period of at least three (3) days prior to pumping, and at least eight (8) hours of recovery following pumping, or until the water levels return to their pre-test levels. Water quality (conductivity, temperature, pH, dissolved oxygen, chloride and water elevation) will be sampled during the 72 hour test. Water quality will be sampled in the caisson and in onsite monitor wells MW-1 through MW-5 [or replacement well(s) at nearby location(s)] and existing tri-zone monitor wells (TPGW- 1, TPGW-10, and TPGW-12). Water elevation will be recorded

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 9 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		at two additional well locations, one in wetlands near the vicinity of the RWTF, and one in wetlands west of the L-31E borrow canal. The purpose of this initial 72 hour pump testing is: 1) to confirm information provided on aquifer characteristics and modeling predictions submitted by FPL in this application as they relate to the causal effects on water resources, and 2) to use these data to correct or improve the model as necessary to ensure accurate simulation of conditions and impacts including predictive ability of the model. Following the test and data collection, Licensee shall analyze the data using appropriate groundwater hydraulic techniques. Licensee shall use this data and initially configure the existing groundwater model (originally calibrated parameters and boundary conditions) to simulate the RCWT using the recorded pumping rates and lateral distributions. The modeled steady-state drawdowns will be compared to observed drawdowns to confirm the accuracy of the original model. If necessary, the model will then be recalibrated (by parameter and boundary condition adjustment) to approximate observed drawdowns during the RCWT. The recalibrated model will then be run to confirm conclusions of the original model. The Licensee shall provide copies of the 72 hour test results to DEP, SFWMD and MDC in addition to other agencies."
		Conditions of Certification, Section B.VII.P.6.a.iii., states, "Subsequent to the 72-hour pumping test, initial full scale testing of the first completed well shall consist of a 30 day pumping period at the average expected single caisson pumping rate for the full Radial Collector Wellfield operations. The Radial Collector Well Monitoring Plan shall include measuring the

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 10 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		pumping rate and flows from individual laterals, seepage (either
		by meters installed in the bay bottom substrate or an alternative
		approved method). The purpose of this 30 day pump testing is to:
		1) to generate sufficient hydrologic and water quality data to
		confirm that one well operating at full capacity would not result in
		adverse impacts, further defined herein as Harm in Section
		B.VII.P.1. above, to the Biscayne Aquifer or to ecological or water
		resources in the surrounding wetlands or bay areas resulting
		from the operation of the well field and to confirm information
		provided on aquifer characteristics and modeling predictions
		submitted by FPL in this application as they relate to the causal
		effects on water resources, and 2) to inform the design or further
		refinement in design of the long term component of the Radial
		Collector Well monitoring based on the data generated from the
		Initial stan-up testing phase and 5) to verify the amount of time
		hecessary for full recovery of the aquifer and suffounding water
		bodies after this initial test and 4) to use these data to correct of
		improve the model as necessary to ensure accurate simulation of
		The long term monitoring component shell generate sufficient
		hydrologic and water quality data pacessary to evaluate and
		applies that full acade anaration of the Redial Collector Well
		would not result in adverse impacts, further defined herein as
		Harm in Section B VII P 1, above to the Biscavne Aquifer or to
		ecological or water resources in the surrounding wetlands or hav
		areas and to confirm aquifer characteristics and modeling
		predictions submitted in the application as they relate to the
		causal effects on these water resources, and to provide actual
		data at a scale sufficient to verify output of the model "
		data at a scale sufficient to verify output of the model.

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 11 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	· · · · · · · · · · · · · · · · · · ·	Reference – Conditions of Certification Section B.VI.C.2.b.iii and Section B.VII.P.6.a.ii and iii.
4	NPS letter dated 7/17/15, Page 2, 3 <sup>rd</sup> paragraph, 4 <sup>th</sup> sentence <i>Hydrologic Modeling</i> <i>"Furthermore, the model should better characterize</i> <i>operations of the RCWs and the relative localized impacts</i> <i>of the resulting movement of the hypersaline plume</i> that <i>presently exists from the operation of the Industrial Wastewater</i> <i>Facility (IWF or cooling canals) used to cool the existing facility</i> <i>on surface and ground waters, as well as the relative effects</i> <i>of sea-level rise on operations of the RCW system."</i>	Results presented in the FPL model report indicate that only about 2.0 percent of the water supplying the radial collector wells originates from boundaries representing the cooling canal system (see Table 11). Water drawn towards the radial collector well system will remain at depth within the salt water (G-III) aquifer due to the placement of the radial collector well laterals approximately 25 to 40 ft below the seabed and due to its higher density relative to saltwater. Therefore, intermittent pumping of the radial collector wells is not expected to adversely affect the groundwater beneath the cooling canals.
		See also FPL Observation to NPS RCW Topics comment No. 9 below.
		With regard to the relative effects of sea level rise, one of the sensitivity simulations in the FPL model evaluated a steady state high level water condition that had water levels over 1 foot higher than the base case simulation. This simulation replicates the results of typical estimates of sea level rise and showed no adverse impacts.
		The estimate of one foot of sea level rise over the life of the Project is reasonable and scientifically supportable. Maul, Vol 55, pp 84-95; Jacobs, Vol. 3, pp 54-56 (SCA Transcript); FSAR, Cola Revision 6, Part 2 (12/1/14); Site Certification Recommended Order at ¶¶27-28.

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
5	NPS letter dated 7/17/15, Page 3, 1 <sup>st</sup> paragraph, 1 <sup>st</sup> sentence	The Conditions of Certifications issued by the Siting Board on
		5/19/14 limit water withdrawals from the RCWs to only when
	Extended Operation of the RCWs	reclaimed water is not available in the quantity or the quality
	"The NPS is concerned about the potential for adverse impacts	required and for up to 60 days and withdraw a maximum volume
	to park resources from <b>continued and extended operation of</b>	of 7,465 MG in any consecutive 12 month period. These three
	the RCWs, particularly operating scenarios involving either	conditions must be met in order to be allowed to withdraw water
	the combination of RCW water with the primary wastewater	from the RCWs. These conditions also apply when using RCWs
	supply or using RCW water in place of reused wastewater	water in combination with reclaimed water.
	for the primary source of cooling."	
		Reference – Conditions of Certification B. VI.C.2.b.i.(1) and (3)
		respectively.
		In addition, the Conditions of Contifications listed below address
		In addition, the Conditions of Certifications listed below address
		emergency withdrawais and water withdrawais for operational
		and periodic system testing.
		Conditions of Certification, Section B.VI.C.3 b. states
		"Emergency Withdrawals Any withdrawals in excess of the
		withdrawals authorized under this Certification shall require prior
		SEWMD approval. The SEWMD may grant such approval for any
		emergency withdrawals less than 90 days in duration without
		modifying these Conditions of Certification SEWMD approval
		shall be based on the non-procedural requirements of Chapter
		40E-2 FAC."
		Conditions of Certification B. VI.C.2.b.i.(2), states.
		"Prior to Units 6 & 7 commercial operation. Licensee shall be
		authorized to withdraw water from the RCWs to perform
		operational tests of RCW caissons and laterals for the purposes

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 13 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		of determining flow within laterals and caissons, verifying system components are meeting design requirements and testing to ensure that the systems necessary to run Units 6 & 7 on the back-up water source work properly, including the gradual switch from reclaimed water to saltwater from the RCW system."
		Conditions of Certification B. VI.C.2.b.i.(4), states, "Licensee shall be authorized to operate the RCW system for periodic testing and system integrated testing purposes."
		Reference – Conditions of Certification B. VI.C.2.b.i.(2) and (4) respectively
6	NPS letter dated 7/17/15, Page 3, 1 <sup>st</sup> paragraph, 2 <sup>nd</sup> sentence	See FPL Observation to NPS RCW Topics comment No. 4 above.
	<i>Extended Operation of the RCWs</i> <i>"More specifically, the NPS is concerned that the DEIS does</i> <i>not contain information to evaluate whether the operation</i> <i>of the RCW could draw the subterranean hypersaline plume</i> <i>further eastward into Biscayne NP."</i>	
7	NPS letter dated 7/17/15, Page 3, 1 <sup>st</sup> paragraph, 3 <sup>rd</sup> sentence <i>Extended Operation of the RCWs</i> <i>"The NPS recommends that additional scenarios that extend</i> <i>the period of RCW operation</i> and vary IWF stages and salinity should be assessed with an appropriately scaled model to quantify this uncertain risk to Biscayne NP."	For conservatism, the FPL model assumed RCW would operate 24 hour/day, 7 days/week, 365 days/year and the model results showed no adverse impact. The NRC/USGS model also considered a scenario involving constant pumping of the RCW. It has already been noted in Response 2 that the NRC/USGS model is conservative (overestimates) with respect to extent of impact and nearshore drawdown.
		The Conditions of Certifications issued by the Siting Board on 5/19/14 limit water withdrawals from the RCWs to only when

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 14 of 139

No.	NPS Comment [bold text applied for emphasis]	<b>FPL Observation - RCW Topics</b> [bold text applied for emphasis] reclaimed water is not available in the quantity or the quality required and for up to 60 days and withdraw a maximum volume of 7,465 MG in any consecutive 12 month period.
		Reference – Conditions of Certification Section B. VI.C.2.b.i.(1) and (3) respectively.
8	NPS letter dated 7/17/15, Page 3, 2 <sup>nd</sup> paragraph, 1 <sup>st</sup> sentence 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."	See FPL Observation to NPS RCW Topics comment No. 24 below for "construction activities" impacts No adverse impacts will occur to ENP, BNP and BBAP from cooling tower drift deposition associated with the Turkey Point Units 6&7 Project. This includes both drift deposition to the surfaces within the ENP, BNP and BBAP and air pollutant emissions of particulate matter with an aerodynamic diameter of 10 microns or less (PM <sub>10</sub> ) and PM <sub>2.5</sub> within those areas. This conclusion was based on information submitted for approval of the Site Certification (PA 03-45A3) and the federally approved Prevention of Significant Deterioration (PSD) Permit issued by FDEP (Reference FDEP Project No. 02500003-013-AC; PSD-FL- 409). The analyses demonstrate that atmospheric deposition will not have an adverse effect on water quality or terrestrial areas.
		<ul> <li>Please see:</li> <li>Site Certification Application Sections 6.1.4 and Appendix 10.2.5</li> <li>SCA Completeness Responses: <ul> <li>FDEP-II-B-53, FDEP-II-B-85, FDEP-II-B-86 and FDEP-VI-D-1.</li> </ul> </li> </ul>

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 15 of 139

No	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		<ul> <li>SWFWMD-B-65, SWFWMD-B-66, SWFWMD-B-68, and SWFWMD-B-94.</li> <li>MDC-B-3 and MDC-G-3,</li> <li>FFWCC-D-1.</li> <li>2SFWMD-B-65(63), 2SFWMD-B-65(64), 2SFWMD-B-66(65), 2SFWMD-B-68(67) 2SFWMD-B-69(68)</li> <li>2MDC-B-3</li> <li>2SFWMD-13-65(64)(c)</li> <li>3MDC-B-3</li> <li>4MDC-B-3</li> <li>BNP-5, BNP-11, BNP-37 and BNP-38</li> <li>2BNP-31, 2BNP-32 and 2BNP-33</li> </ul> The Unit 6 & 7 Project does not propose to utilize the IWF for cooling. The IWF does not connect to or release to any surface waters; and based on recent Units 3&4 Uprate studies, there is no evidence or reason to expect that IWF water is entering surface waters of the Bay through the groundwater system.
		Regarding temperature impacts to Biscayne Bay from radial collector wells, SCA Completeness Response to SFWMD-B-55 (1 <sup>st</sup> Round) states, "Biscayne Bay is vertically well-mixed in most locations most of the time. This has been confirmed using temperature data from three long-term monitoring stations (SFWMD, DBHYDRO Database, Stations BB-41, BB-44 and BB-45), which are located around Turkey Point in Biscayne Bay, about 2 to 5 miles apart from each other. The data shows no statistically significant vertical or horizontal mean temperature differences. If significant
# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 16 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		spatial gradients are not present, then a withdrawal cannot cause a significant change in temperature. Therefore, the recharge from Biscayne Bay that is induced by the radial collector wells will have no adverse impact on the water temperatures in Biscayne Bay. "
		Reference – SCA Completeness Response to SFWMD-B-55 (1 <sup>st</sup> Round)
		See FPL Observation to NPS RCW Topics comment No. 4 above regarding "movement of IWF waters related to RCW operation."
		See FPL Observation to NPS RCW Topics comment No. 10 below for salinity impacts of RCWs.
		See FPL Observation to NPS RCW Topics comment No. 24 below for muck management activities.
9	NPS letter dated 7/17/15, Page 3, 2 <sup>nd</sup> paragraph, 2 <sup>nd</sup> sentence	The current high salinity and temperature in the Cooling Canal System (CCS) is a temporary situation that is being addressed by
	Water Quality Impacts and the Industrial Wastewater	revisions to the maintenance of the CCS and remedial activities
1	"Recent developments relating to the operation of the IWF were	actions will result in lowering salinity and temperature and in turn
	not analyzed in the DEIS. <b>The hyper-salinity and temperature</b>	decreasing the driving head from base of CCS due to decrease in
	in the IWF, including the use of regional system water	density. The CCS freshening action will result in better water
	under recent orders, must be evaluated as part of the past, present, and future cumulative impacts "	quality than has been historically present in the CCS. Salihity
	present, and nature cumulative impacts.	Units 6 & 7: they are solvable independent of Turkey Point Units
		6 & 7 and are not exacerbated by the two new units.
10	NPS letter dated 7/17/15, Page 3, 2 <sup>nd</sup> paragraph, 5 <sup>th</sup> sentence	A mixing chamber model was used by FPL to evaluate the

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 17 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	Water Quality Impacts and the Industrial Wastewater Facility (IWF) "Fundamentally, the NPS is concerned that the operation of the RCW s 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."	potential impacts of RCW operations on salinity in Biscayne Bay. Data from various monitoring stations in the vicinity of the Turkey Point peninsula (BB41, BISC 122, BISC 101 and BNP 12) was used in the salinity impact analyses. The results of these analyses are discussed in the Turkey Point Units 6 & 7 Radial Collector Well Summary (Rev 1.) Section, Hydrologic and Salinity Impacts of Radial Collector Well Operation. Using data from BNP 12B, the average and median salinity value increases by only approximately 0.1 psu (0.3 percent) within 1/2 mile of the radial collector wells (Scenario 1) and by less than 0.02 psu (0.06 percent) within one mile (Scenario 2). These salinity impact analyses from multiple stations demonstrate that operation of the radial collector wells will have no adverse impact on salinity levels in Biscayne Bay and the change in salinity would have no adverse impact on the estuarine biota that is already acclimated to a salinity variation between 13 ppt and 40 ppt. Reference – Turkey Point Units 6 & 7 Radial Collector Well Summary (Rev 1.) See also FPL Observation to NPS RCW Topics comments Nos. 4, 7, 14, 15, and 16. In addition, a mesocosm study conducted at Turkey Point in 2013, showed no evidence of an adverse impact on seagrass productivity from RCW operation.
		Fotential Natial Collector Well Impacts to Seagrass, Atkins, April

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No.	NPS Comment [bold text applied for emphasis]	<b>FPL Observation - RCW Topics</b> [bold text applied for emphasis] 2013
11	NPS letter dated 7/17/15, Page 4, 1 <sup>st</sup> paragraph, 2nd sentence Analysis of Impacts to Comprehensive Everglades Restoration Plan (CERP) Projects and the Biscayne Bay Coastal Wetlands (BBCW) 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 masses related to RCW operations."	As stated in response to completeness questions (4 <sup>th</sup> round) MDC-C-6, "The modeling study conducted by the U.S. Army Corps of Engineers (USACE) for the Biscayne Bay Coastal Wetlands Study, Alternative O, Tentative Selected Plan Evaluation (July 2007) (BBCW Phase 1 Draft Integrated PIR and EIS, Appendix A, Attachment A-1, March 2010)* shows that in the area of the Turkey Point peninsula the CERP Project will have very little or no impact on the salinity. According to the USACE modeling, the CERP salinity benefits will occur further north in Biscayne Bay." In addition, results of the mixing chamber model analysis described in response 10 above show that using data from BNP 12B, the average and median salinity value increases by only approximately 0.1 psu (0.3 percent) within 1/2 mile of the radial collector wells (Scenario 1) and by less than 0.02 psu (0.06 percent) within one mile (Scenario 2). See also FPL Observation to NPS RCW Topics comments Nos. 1, 2, 3, 4, 7, 14, 15 and 16. Same as 2 above - The USGS model appears to overestimate the <i>removal or moderation of freshwater along the shoreline of the park and the removal of water within the park through groundwater withdrawal at the RCW s.</i> As noted above in Response 2, the DEIS hydrologic modeling conservatively overestimates potential impact of the RCWs on nearshore salinity levels.

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
12	NPS letter dated 7/17/15, Page 3, 3 <sup>rd</sup> paragraph <i>Climate Change and Sea-Level Rise</i> <i>"The NPS is concerned that the DELS does not include a</i>	DEIS Appendix I, Section I.3.2. Hydrology states, "Sea-level rise will also push the freshwater–seawater interface further inland. This will put further stresses on freshwater
	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. <b>As an</b>	would use reclaimed wastewater for most of its water needs, this would not alter the impact of the plant."
	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."	"As discussed in Section I.2, precipitation amounts in South Florida are projected to shift in different directions in different seasons. Even if total precipitation increases, if the majority of this increase is in response to intense storms it would not result in a proportional increase in recharge to groundwater. The increase in temperature may also increase evapotranspiration, thereby further reducing recharge. The review team determined that overall recharge to the Biscayne Bay aquifer may be reduced as a result of climate change. However, because the proposed plant would use reclaimed wastewater for most of its water needs, this would not alter the plant's impact on the environment.
		"The review team could not determine whether an increase in temperature or changes in precipitation patterns would result in any change in the supply of wastewater for the plant's cooling system. Given the abundance of wastewater in this region, the review team determined that a sufficient supply of wastewater would remain available." See also FPL Observation to NPS RCW Topics comment No. 4 above.

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
13	NPS letter dated 7/23/15, Page 1, 2 <sup>nd</sup> paragraph, 2 <sup>nd</sup> sentence	See FPL Observation to NPS RCW Topics comment s Nos. 1, 2 10 and 11 above.
	1) <u>Water Modeling</u>	
	"Although the models 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,	· ·
l	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."	
14	NPS letter dated 7/23/15, Page 1, 2 <sup>nd</sup> paragraph, 3 <sup>nd</sup> sentence	The objective of an Aquiter Performance Test (APT) is to derive
		aquiter parameters which may then be used for projection of
	1) <u>Water Modeling</u> "The DEIS recommines that each of the medale used to	Impacts, analytically of by numerical modeling. It is not necessary
	The DEIS recognizes that each of the Models used to	to pump at capacity to obtain a response from which to derive
	evaluate the effects of the Unit 6 and 7 construction and	rate than to be utilized in a proposed project: running the test at
	operation (especially RCW operation) has shortcomings that	full capacity would require construction of the entire pumping
	next this limitation stoms from model calibration with crucial	system The draft APT plan was provided and discussed with
	data being derived from a single seven day. Aquifer	SFWMD and MDC and ultimately approved by SFWMD prior to
	Parformanas Tast During this par-replicated short-term	conducting the APT. Running the APT for 7 days was sufficient
	test numning rates were less than 10% of that proposed	because the drawdown went to steady state in a matter of hours
	for the RCW and some monitoring equipment failures	to a day (much less than 7 days).
	occurred "	
	occurrea.	

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No.         NPS Comment [bold text applied for emphasis]         FPL Observation - RCW Topics [bold text applied for emphasis]           Conditions of Certification issued by the Sting Board on 5/19/14 require a 72 hour test and a 30 day test be run after completing construction of the first caisson and laterals. The data collected during these tests will be used to validate the groundwater model.           15         NPS letter dated 7/23/15, Page 1, 4 <sup>th</sup> paragraph         See also FPL Observation to NPS RCW Topics comments Nos. 1, 2, 3, 4, 7, 14, 15 and 16.           15         NPS letter dated 7/23/15, Page 1, 4 <sup>th</sup> paragraph         See also FPL Observation to NPS RCW Topics comments Nos. 1, 2, 3, 4, 7, 14, 15 and 16.           17         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."         The ussest ent of impact is almost entirely restricted to an area where the groundwater is saline; specification of the model in terms of saline water is consistent with the water that is in infiltrated, and most affected by the RCW. Further, Figure 61 and supporting text indicate that 97.8 percent of the water pumped by the RCW originates in Biscayne Bay, which is a saltwater body. With only 2.2 percent of the water originating from non-saltwater bodies, the constant density assumption used			
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<u>USGS Model</u> "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: accompanying report identified limitations that included:		commissioned additional modeling by the USGS."	plant site). This extent of impact is almost entirely restricted to an
<u>USGS Model</u> "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: "In terms of saline water is consistent with the water that is pumped, infiltrated, and most affected by the RCW. Further, Figure 61 and supporting text indicate that 97.8 percent of the water pumped by the RCW originates in Biscayne Bay, which is a saltwater body. With only 2.2 percent of the water originating from non-saltwater bodies, the constant density assumption used			area where the groundwater is saline; specification of the model
<i>"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:</i> pumped, inflitrated, and most affected by the RCW. Further, Figure 61 and supporting text indicate that 97.8 percent of the water pumped by the RCW originates in Biscayne Bay, which is a saltwater body. With only 2.2 percent of the water originating from non-saltwater bodies, the constant density assumption used		USGS Model	in terms of saline water is consistent with the water that is
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: http://www.companying.		"The USGS model is a regional model, with a model grid	pumped, inflitrated, and most affected by the RCVV. Further,
accompanying report identified limitations that included: from non-saltwater bodies, the constant density assumption used		too coarse to accurately simulate conditions within and	water numbed by the RCW originates in Riscavne Ray, which is a
accompanying report identified limitations that included: from non-saltwater bodies, the constant density assumption used		under the IWF or adjacent to the RCWs. The model's	saltwater body. With only 2.2 percent of the water originating
		accompanying report identified limitations that included:	from non-saltwater bodies, the constant density assumption used

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	1) the sizing of the model cells in 500 x 500 grids; 2)	by FPL is appropriate for assessment of impact due to the RCW.
	simulating surface water as a single layer with a single	
	salinity value; and 3) an inability of the model to track	Note that the FPL model offers a finer discretization (100 ft) than
	the ultimate sources of water that flow to the RCWs.	the NRC/USGS model (500 m or 1640 ft). This amounts to the
	The report recommended that finer spatial discretization	FPL model having 1640/100 x 1640/100 = 267 finite difference
	and additional evaluation tools, such as particle tracking,	cells for each NRC/USGS finite difference cell.
	were needed to estimate and evaluate RCW water	
	sources, and that additional simulations of extreme dry	Note that the FPL model is capable of tracking the ultimate
	periods, wet periods, and effects from regional	sources of water (see Figure 61 and supporting text in the FPL
	restoration efforts were needed in order to fully	modeling report).
	represent RCW effects on the system."	
		Note that the FPL model simulated extreme low (-1.40 ft
		NAVD88) and extreme high (0.09 ft NAVD88) water level periods
		conservatively as steady state simulations as a part of the
		sensitivity analysis.
		In some both a final widle and a second widle address which a
		In sum, both a fine-grid and a coarse-grid model assuming
		continuous operation of the RCVVs demonstrated no significant
16	NPS lotter dated 7/22/15, Page 2, 1 <sup>st</sup> paragraph	See EDL Observation to NDS DOW Tenion comment No 2 above
	1) Water Modeling	for a discussion regarding availability of other data for calibration
	IISGS Model	In addition, Conditions of Certification issued by the Siting Board
	"This model utilized calibration data from 1997-	on 5/19/14 require a 72 hour test and a 30 day test he run after
	2004: however, newer groundwater data is	completing construction of the first caisson and laterals. The data
	available that would improve model calibration and	collected during these tests will be used to validate the
	validation. This data includes:	groundwater model, thus newer data will be incorporated into the
	Salinity temperature and denth data collected at	model in the future.
	15-minute intervals as nart of the NPS salinity	
	monitoring network	

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	• Data from South Florida Water Management District	Evaluation of the effects of fine scale hourly to daily salinity or
	(SFWMD) Comprehensive Everglades Restoration	temperature changes should be done using the raw data or some
	Plan (CERP) wells in the area.	other type of model that is specifically designed to address the
	Conductivity, temperature, and depth data collected	causes of salinity or temperature changes on this fine of a
	hourly as part of the Turkey Point Units 3 and 4	scale. The existing groundwater flow models generally use daily
	Uprate Monitoring efforts.	or longer timesteps, which have been found to be sufficient to
	These data show that average values do not represent	address most drawdown and salt water intrusion problems. It
	the conditions that most effect biots in Discoving Pay	has generally been assumed that these short-term cycles (tides)
	which is better represented by finer cools bourty to doily	or changes superimpose on the longer term (daily-weekly) effects
	which is belief represented by filler scale houry to daily	of the RGW.
	sammy and temperature values.	The mixing chamber model described in 10 above, shows slight
		moderating of salinities in Biscavne Bay due to RCW operations
17	NPS letter dated 7/23/15 Page 2 2 <sup>nd</sup> paragraph 8 <sup>th</sup> sentence	Figure 1 of the NPS letter shows a Tritium concentration of 16
		(units not shown) in the shallow port of TPGW-10, which is the
	"Empirical findings from past work. such as the distribution	well closest to Turkey Point and the proposed RCW. This is the
	and trends of tritium concentrations, have established that	second lowest of twenty one Tritium concentrations shown
	IWF waters are found in near-surface shallow groundwater	around the Turkey Point site (TPGW-11 shallow is the lowest,
	(25 to 30ft. deep) in wetlands adiacent to Biscavne Bav	with a concentration of 13). Both of these concentrations are so
	(Figure 1). The NPS is concerned that since this is the	low that they do not register in the column of Figure 1 labeled
	same depth at which RCW intake pipes are expected to	"estimated percent of IWF water". A small amount of IWF water
	be located, that it is possible for IW/F water to impact	on a flowpath beneath Biscayne Bay will be captured by the
	resources within Biscavne National Park (NP)."	RCW, as indicated in Figure 61 of the FPL modeling report. Note
		that the hypersaline water from the IWF will sink because it has a
		higher density. The effect of density may be seen in Figure 1 in
		that the higher Tritium concentrations (likely associated with
	•	higher salt concentrations and densities) are found in the deeper
		ports of the monitoring wells.

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No	NDS Comment [hold toxt applied for amphasia]	EDI Observation BCW Tenios [hold text applied for emphasis]
INO.	NPS Comment [bold text applied for emphasis]	The Project's primary water supply (reclaimed water) and backup water supply (radial collector wells) will not induce migration of water to the west.
		Project wastewater discharges to the IWF from Units 6 & 7 do not represent additional flow to the IWF that might cause an adverse impact to the USDW or Biscayne Bay.
		Water quality in the IWF is being addressed through separate regulatory agency review not associated with the Units 6 & 7 Project.
		Thus, it is highly unlikely for IWF water to negatively impact resources within Biscayne Bay."
		Sea also Nos. 4, 8 and 9 above.
18	NPS letter dated 7/23/15, Page 2, 3 <sup>rd</sup> paragraph	See FPL Observation to NPS RCW Topics comments Nos. 2, 4 and 9 above.
	"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	
	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	

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	changes in salinity and other impacts to near shore resources that occur within Biscayne NP in the vicinity of the RCWs."	
19	NPS letter dated 7/23/15, Page 2, 4 <sup>th</sup> paragraph	See FPL Observation to NPS RCW Topics comments Nos. 4, 5, 11 and 12 above.
	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.	The NRC/USGS model is conservative in the sense that it overestimates the extent of drawdown due to the coarse resolution in the model and the very high transmissivity (nearly 2 million $ft^2/d)^1$ relative to site-specific values obtained during FPL aquifer testing and because it assumed continuous operation of the RCWs, rather than the limited use authorized by the Conditions of Certification.
	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."	The FPL model, described in response to (1), quantifies impacts along shoreline to a higher degree than the NRC/USGS model. Figures 59 and 60 of the FPL groundwater modeling report show that the predicted steady state extent of drawdown impact due to pumping the radial collector wells is limited to offshore for drawdowns greater than 0.5 ft with a very limited onshore component of the 0.1 ft drawdown contour (essentially the FPL plant site).
		Reference – <sup>1</sup> Lohmann, M.A., Swain, E.D., Wang, J.D., and Dixon, Joann, 2012, Evaluation of effects of changes in canal management and precipitation patterns on salinity in Biscayne Bay, Florida, using an integrated surface-water/groundwater model: U.S. Geological Survey Scientific Investigations Report

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		2012–5099, 94 p.
		Additionally, any increase in the permitted use of RCWs as a replacement for reclaimed water would require a modification of the Conditions of Certification issued for the RCWs, and availability of reclaimed water and groundwater will be addressed at that time.
20	NPS letter dated 7/23/15, Page 3, 1 <sup>st</sup> paragraph	The continuous pumping of the RCWs is not permitted by the Conditions of Certification.
	2) Evaluation and Analysis of the Extended Operation of the RCW "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."	<ul> <li>The Conditions of Certifications issued by the Siting Board on 5/19/14 limit water withdrawals from the RCWs to only when reclaimed water is not available in the quantity or the quality required and for up to 60 days and withdraw a maximum volume of 7,465 MG in any consecutive 12 month period. These three conditions must be met in order to be allowed to withdraw water from the RCWs. These conditions also apply when using RCWs water in combination with reclaimed water.</li> <li>Reference – Conditions of Certification B. VI.C.2.b.i.(1) and (3) respectively.</li> <li>In addition, the Conditions of Certifications listed below address emergency withdrawals and water withdrawals for operational and periodic system testing.</li> <li>Conditions of Certification, Section B.VI.C.3.b. states, "Emergency Withdrawals Any withdrawals in excess of the withdrawals authorized under this Certification shall require prior</li> </ul>

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 27 of 139

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		SFWMD approval. The SFWMD may grant such approval for any emergency withdrawals less than 90 days in duration without modifying these Conditions of Certification. SFWMD approval shall be based on the non-procedural requirements of Chapter 40E-2, F.A.C."
		Conditions of Certification B. VI.C.2.b.i.(2), states, "Prior to Units 6 & 7 commercial operation, Licensee shall be authorized to withdraw water from the RCWs to perform operational tests of RCW caissons and laterals for the purposes of determining flow within laterals and caissons, verifying system components are meeting design requirements and testing to ensure that the systems necessary to run Units 6 & 7 on the back-up water source work properly, including the gradual switch from reclaimed water to saltwater from the RCW system."
		Conditions of Certification B. VI.C.2.b.i.(4), states, "Licensee shall be authorized to operate the RCW system for periodic testing and system integrated testing purposes."
		Reference – Conditions of Certification B. VI.C.2.b.i.(2) and (4) respectively
	·	The effect of this assumption in the modeling tends to overestimate potential impacts of the RCWs.
21	NPS letter dated 7/23/15, Page 3, 1 <sup>st</sup> paragraph, 3 <sup>rd</sup> sentence	See FPL Observation to NPS RCW Topics comment No. 9 above.
	2) <u>Evaluation and Analysis of the Extended Operation of</u> <u>the RCW</u>	

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	"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."	
22	<ul> <li>NPS letter dated 7/23/15, Page 3, 3<sup>rd</sup> paragraph</li> <li>3) Evaluation of Water Quality Impacts and Associated Cumulative Impacts from the IWF</li> </ul>	No wastestreams from Turkey Point Units 6 & 7 will be routed to the IWF, with the exception of stormwater from the island which currently goes to the IWF, and dewatering water from construction.
	"The NPS is concerned that <b>the DEIS does not fully</b> analyze water quality impacts to NPS resources, especially cumulative impacts associated with the IWE	See also FPL Observation to NPS RCW Topics comment No. 9 above.
	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	The Units 6 & 7 Site is not flooded by tides or freshwater runoff. It does often contain standing water as it is contained within the IWF and water levels vary depending upon operations of the existing units. In addition the IWF is surrounded by perimeter berms and has no direct tidal connection.

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	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.	
23	NPS letter dated 7/23/15, Page 3, 4 <sup>th</sup> paragraph	See EPL Observation to NPS RCW Topics comments Nos. 1, 2
		and 10 above.
	3) Evaluation of Water Quality Impacts and Associated	
	Cumulative Impacts from the IWF	
	"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	
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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	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,	
	into the park as a result of the RRCW 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."	
24	NPS letter dated 7/23/15, Page 4, 1 <sup>st</sup> paragraph	Wastewater discharges to the IWF from the Units 6 & 7 Project do
	2) Evolution of Mater Quality Impacts and Associated	not represent additional flow to the IVVF that might cause an
	3) Evaluation of water Quality Impacts and Associated	ME after construction of Units 6 & 7 will be approximately 1% less
	"The DEIS concludes that changes in the hydrology and	than the current runoff (see Stormwater Management Plan SCA
	chemistry of the IWF caused by construction of Unit 6 and 7	Completeness Round 4, page 16, 2/15/2011).
	will not impact Biscavne NP and Biscavne Bay. We have	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	concerns regarding the methodology used to draw this	Foundation dewatering has been minimized through engineering
	conclusion and how pulses of nutrients and dissolved	controls, and groundwater modeling shows that most of the
	organic matter from dewatering and stored muck could	dewatering effluent will originate from the IWF canals.
	potentially move toward the bay, thereby increasing the	Consequently, there will be no adverse impacts beyond the IVVF
	risk of near-shore algal blooms. Our concerns regarding	and impacts within the IVVF will be temporary and limited (see 4-

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	the impact of Units 6 and 7 construction activities are now heightened by changes in IWF hydrologic management.	2SFWMD-B-30(26) rev 2 Nov 2012 and 4—2SFWMD-B-46(46)(c) (2/24/2011).
	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	Conditions of Certification issued by the Siting Board on 5/19/14 require spoils be placed on Spoil Areas A and C, located along the east and west berms of the Grand Canal, to the greatest extent practicable. If spoils are placed on Area B, (southern berm of the cooling canal system) 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 IWF. Conditions of Certification Section B. VII.C.2. states,
	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."	"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."
		Conditions of Certification Section B. VII.C.7. states,
•		"Except as provided in Condition 8 below, <i>Materials</i> that have not been tested may be permanently stored or disposed at Spoil Area B, provided the licensee implements protective measures to prevent runoff from Spoil Area B entering offsite wetlands, groundwater or surface waters to the south of the cooling canal system (CCS). Such protective measures shall incorporate the design of the "Area B Conceptual Spoils Management Area," included as Attachment N. Design details for the protective

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
		measures shall be submitted to RER-DERM for review prior to implementation and shall include the following:
		<ul> <li>f. The dimensions and storage capacity of Spoils Area B</li> <li>g. Calculations indicating that the proposed protective measures are capable of retaining and controlling predicted storm water runoff from the <i>Material</i> stockpile such that overflow into the adjacent offsite wetlands and surface waters to the south of the CCS is minimized to the extent practicable.</li> <li>h. Details of the design and discharge capacity of any drainage pipe for routing runoff back into the cooling canal system</li> <li>i. Long term maintenance plan for any swale areas</li> <li>j. Details of long term strategies to be implemented (in addition to sloping) to prevent stockpile erosion and the potential for runoff of sediments into the wetlands and other surface waters to the south of the CCS at concentrations that results in adverse impacts (applicable numeric and narrative water quality standards)."</li> </ul>
		Reference – Conditions of Certification Section B. VII.C.2.and 7.
		The potential for stored muck to increase the nutrient concentration in the IWF was evaluated during the Site Certification Completeness process. The response to second

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# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 33 of 139

No	NPS Comment [bold text applied for emphasis]	FPI Observation - RCW Topics [bold text applied for emphasis]
		round completeness question SFWMD-B-92(78) includes a
		description of the evaluation and results. In summary, muck from
		selected sampling locations was analyzed for ammonia, TKN,
		nitrate, nitrite, total phosphorus (TP), and total organic carbon
		(IOC). The samples were also analyzed by the SPLP method to
		adtermine potential nutrient concentrations from rainfall runon
		the conservative nature of the calculations indicate that the
		maximum nutrient loadings would be small. As a result, no
		adverse environmental impact to the IWF is expected from
		excavating the muck or from placing the muck on the existing
		upland spoil areas within the industrial wastewater facility.
		Reference – SCA Completeness response (2 <sup>nd</sup> round) SFWMD-
		B-92(78)
		As described in 2014 Turkey Point Annual Post I Inrate Monitoring
		Report for Units 3 & 4 Uprate Project, data indicate there is no
		discernable effects of the IWF on Biscayne Bay surface water
		quality. Data indicate there is no measurable contribution of
		nutrients to Biscayne Bay that can be attributed to the IWF.
25	NPS letter dated 7/23/15, Page 10, 3 <sup>ra</sup> paragraph, 2 <sup>na</sup> sentence	See FPL Observation to NPS RCW Topics comments Nos. 2 and
	6) Analysis of Impacts to CEPP Projects and the PPCM	10 above.
	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	

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
	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"	
26	NPS letter dated 7/23/15, Page 10, 4 <sup>th</sup> paragraph	See FPL Observation to NPS RCW Topics comments Nos. 2 and
		10 above.
	6) Analysis of Impacts to CERP Projects and the BBCW	
	Project	
	"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 Valer Resources Development Act of	
	of 59 percent of the appual coastal structure discharge	
	from the S 122 S 21 S 21A and S 20E structures into	
	Riscavne Bay Anticinated environmental herefite	
	include, among other things, improving the probability	
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No.	NPS Comment [bold text applied for emphasis]	FPL Observation - RCW Topics [bold text applied for emphasis]
•	that the water within 500 meters from the shoreline will meet a desired salinity concentration of less than 20 psu."	

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 36 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
<b>No.</b>	NPS Comment [bold text applied for emphasis] NPS letter dated 7/23/15, Page 15, 1 <sup>st</sup> paragraph 8) Consideration of Threatened and Endangered Fauna and Flora "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	FPL Observation – T & E Topics [bold text applied for emphasis] Please note, this comment references conclusions reached in the "DEIS for the Acquisition of FPL Land in the East Everglades Expansion Area," which pertains to the West Preferred and West Secondary Corridors. In its Final Order, the Siting Board adopted the conclusion of the Administrative Law Judge to certify the West Consensus Corridor, with the FPL West Preferred Corridor as the second choice if a Right-of-Way within the West Consensus Corridor cannot be secured in a timely manner and at a reasonable cost. Use of the West Consensus Corridor (MDLPA 2 Corridor) reduces the probability of potential impacts to the federally endangered wood stork and Everglade snail kite. As stated in ML13311A105 regarding wood storks, "The MDLPA 2 Corridor is located east of all 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 published by the U.S. Fish & Wildlife Service (USFWS) (Ogden, 1990)."
	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."	In 2010, FPL conducted a risk assessment to evaluate the potential effects on wood storks of the West Preferred and West Secondary Corridors. Please note, this assessment did not include the West Consensus Corridor because this corridor was not identified at that time. It is anticipated the risks would be less

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		for the West Consensus Corridor which is located further east from the known wood stork colonies. The risk assessment was submitted with the responses to the 5th round transmission completeness questions in "Ecological Risk Assessment of Potential Impacts of Turkey Point Units 6 & 7 West Corridor Transmission Lines on Wood Storks", Pandion, July 2010. An Addendum to this report was submitted on September 2010.
		<ul> <li>Section 2 of the Addendum states,</li> <li>"The collision risks to Wood Storks are addressed in detail in the Risk Assessment (see Section 4.3 Specific Injury/Mortality Risk Assessment). The presented characterization of risk is based on a thorough review of both the Wood Stork literature and avian collision literature (see Section 6 – Selected Literature [Cited or Reviewed]). Based on the weight of evidence regarding Wood Stork biology and the predicted interactions of Wood Storks with transmission lines and in particular with FPL's proposed West Corridor transmission lines, the following characterizations of collision risk were concluded:</li> <li>6. Limited collisions are anticipated because of behavioral avoidance of collisions reported and/or supported by</li> </ul>
		<ul> <li>relevant studies of Wood Storks, visibility of the proposed transmission lines, documented acclimation of Wood Storks to transmission lines in their nesting area and range in Florida and the Southeast, and the few reported local incidents of collisions;</li> <li>7. Because of variable exposure/effects, different levels of risk for collisions will occur to individual Wood Storks</li> </ul>

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		emphasis]depending upon:a. Their life stage – adults, fledglings, juveniles and immatures. Specifically, there will be differential exposure to young fledgling birds versus adults based on their behavior,b. Their life history – courtship, nest building, fledgling 
		After nesting dispersal exposure will be a function of the direction and distance of dispersal and proximity
	· · · ·	hydrological foraging conditions Wood Storks may

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		<ul> <li>remain in the Everglades, while in seasons with poor hydrological foraging conditions Wood Storks may fly to better foraging areas outside of the Everglades.,</li> <li>c. Temporal variables – daily, seasonal, and annual, and</li> <li>d. Proximity to the lines the Risk Assessment shows there will be higher risks from the Secondary Corridor than the Preferred Corridor due to the closer proximity to the colonies and corresponding higher exposure to nesting Wood Storks;</li> <li>8. No threats to the survivability of the four colonies from collisions will occur;</li> <li>9. No negative impacts to population and CERP Targets will occur; and</li> <li>10. The overall risks are of moderate potential (limited and local mortality, no population effects).</li> </ul>
		These conclusions are further elaborated in the full Risk Assessment (see Risk Assessment Section 4.3). These conclusions were developed without consideration of mitigative measures that may be implemented to reduce the risk to nesting and foraging Wood Storks. Such mitigative measures will further reduce the risks characterized in the Risk Assessment. The Risk Assessment, including this Addendum, will form a partial basis for the risk management decisions for implementation of such measures. The Risk Assessment, including this Addendum, does not consider the opportunity for risk reduction and avoidance by

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		implementation of any mitigative measures, as is discussed in Section 5 below and Section 4.3.6 of the Risk Assessment. The Risk Assessment will form a partial basis for decisions on risk reduction and avoidance through mitigative measures."
		Reference – Ecological Risk Assessment of Potential Impacts of Turkey Point Units 6 & 7 West Corridor Transmission Lines on Wood Storks, Pandion, July 2010, submitted with the responses to the 5th round transmission completeness questions and Addendum dated September 23, 2010
	7 . · ·	See also FPL Observation to NPS T & E Topics comment No. 3 below.
2	NPS letter dated 7/23/15, Page 15, 2 <sup>nd</sup> paragraph	In its Final Order, the Siting Board adopted the conclusion of the Administrative Law Judge to certify the West Consensus
	8) <u>Consideration of Threatened and Endangered Fauna</u> and Flora	Corridor, with the FPL West Preferred Corridor as the second choice if a Right-of-Way within the West Consensus Corridor cannot be secured in a timely manner and at a reasonable cost.
	"The proposed powerlines could also harm snail kites, which forage by flying over suitable marsh babitat at an	Use of the West Consensus Corridor (MDLPA 2 Corridor)
	elevation of 10-16 feet above vegetation. Like wood	endangered wood stork and Everglade snail kite.
	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	Regarding Everglade snail kite mortality due to power line collisions for the West Preferred Corridor. Section 5.5 of the
	(230 kV) and 140-160 feet (500 kV). Because the snail kite	Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species (ML 123390437) submitted to the NRC on
	individuals may have population-level impacts. We suggest	11/30/2012 states, "The literature, as well as FPL's own bird mortality database, has not documented snail kite mortality due to

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
	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. 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."	collisions with powerlines. This is probably attributable to the low and hovering style flight behavior of foraging birds, as well as their keen eyesight. Snail kite collisions are therefore not considered a potential impact of this Project." Please note, this assessment did not include the West Consensus Corridor because this corridor was not identified at that time. It is anticipated the risks would be less for the West Consensus Corridor which is located further east. As stated in ML13311A105, "The Everglade snail kite is commonly observed foraging in the Everglades National Park (ENP) and Water Conservation Area (WCA) 3B, north and south of Tamiami Trail. There has been historical nesting occurring west of FPL's Preferred Corridor (NPS, 2010). The MDLPA 2 Corridor is located to the east of these historical nesting locations, and outside of the federally designated critical habitat for the Everglade snail kite (USFWS, 1977)."
		Reference – ML123390437 and ML13311A105 Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to conduct an Everglades snail kite survey when the project site is within the snail kite consultation area and suitable habitat is present. In the event that surveys determine that a project transmission line has the potential to impact snail kites, measures identified in the conditions of certification will be used to minimize and mitigate for these impacts.
		Conditions of Certification Section C.III.G. states,

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]	
		"1. A survey (USFWS South Florida Ecological Services Office Draft Snail Kite Survey Protocol, May 18, 2004) is necessary when the project site is within the snail kite consultation area and suitable habitat is present. The following criteria can be used to judge the adequacy of the habitat for snail kites.	
		<ul> <li>Appropriate foraging habitat present [paspalidum (<i>Paspalidium geminatum</i>), spikerushes (<i>Eleocharis spp.</i>), panicum (<i>Panicum spp.</i>), or beakrushes (<i>Rhynchospora</i> <i>spp.</i>)].</li> </ul>	
		• Perching and/or nesting substrate present, i.e., [willows ( <i>Salix caroliniana</i> ), melaleuca ( <i>Melaleuca quinquenervia</i> ), or pond cypress ( <i>Taxodium ascendens</i> )]; or [sawgrass ( <i>Cladium jamaicense</i> ), cattail ( <i>Typha spp.</i> ), giant bullrush ( <i>Scirpus validus</i> ), or reed ( <i>Phragmites australis</i> )], respectively.	
		<ul> <li>Appropriate water depth (0.2-1.3 m deep) under nesting substrate.</li> <li>Nesting substrate an adequate distance (&gt;150 m) from upland.</li> <li>Proximity of nearest wading bird colony.</li> </ul>	
		2. If suitable habitat is present or snail kites are reported on the transmission line right-of-way, the following survey procedures shall be used to document their occurrence. To maximize the chances of finding snail kites the survey shall be	

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		conducted in January to May during the breeding season. A visual survey of suitable habitat shall be made for birds and nests.
		A boat may be needed for the survey as the best nesting habitat may be a considerable distance (> 150 m) from uplands. Check small trees, such as, willow, melaleuca, and pond cypress along the open water edge for nests or perching birds. If snail kites are observed, then nests can be located through the bird's behavior. When flushed from a nest the adult tends to circle upward, whereas non-nesting birds that are flushed fly more horizontally away from the disturbance (Bennetts et al. 1988). Nests also can be found by following kites carrying sticks, adults carrying apple snails, aerial courtship displays, vocalizations of adults or begging calls of the young, and through a thorough search of areas where adults are repeatedly observed (Bennetts et al. 1988).
-		3. In the event that surveys determine that a project transmission line has the potential to impact snail kites, the following measures shall be used to minimize and mitigate for these impacts.
		<ul> <li>FPL and FWC will meet to discuss the specific issues and mitigation alternatives.</li> <li>FPL will then provide a detailed mitigation plan to address the specific impacts, which must be reviewed and approved by FWC, and be consistent with all other COCs</li> </ul>

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 44 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]		
		<ul> <li>or federal permit conditions.</li> <li>FPL will provide a monitoring report after a designated period to document effectiveness of the mitigation plan.</li> <li>Corrective action alternatives will be determined and implemented if necessary. Reference: Bennetts, R.E., M.W. Collopy, and S.R. Beissinger. 1988. Nesting ecology of Snail Kites in Water Conservation Area 3A. Department of Wildlife and Range Science, University of Florida, Gainesville. Florida Cooperative Fish and Wildlife Research Unit, Technical Report No. 31, 174 p."</li> <li>Reference – Conditions of Certification Section C.III.G.</li> </ul>		
		In addition, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to identify the baseline conditions which may indicate the potential for impacts to wood storks and other wading birds, and to help quantify potential mitigation for such impacts by performing pre-construction flight surveys, post – construction Mitigation Effectiveness Study and providing the results to FWC. Please see FPL Observation to NPS T & E Topics comment No. 3 below for condition language.		
		and 5 of DEIS Appendix F-2 (Biological Assessment for the US Fish and Wildlife Services).		
3	NPS letter dated 7/23/15, Page 15, 3 <sup>rd</sup> paragraph	See also FPL Observation to NPS T & E Topics comment No. 1 above.		
	8) Consideration of Threatened and Endangered Fauna			

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
	<b>and Flora</b> "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	Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to coordinate with FWC and conduct surveys for the listed species that may occur within the transmission line ROW. Condition of Certification, Section C. III.B. states, "B. General Listed Species Survey
	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. During nesting season	1. Prior to conducting detailed surveys, the Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain the current listed species (in accordance with Article IV, Section 9 of the Florida Constitution and Rule 68A-27, F.A.C.) and follow the current survey protocols for these listed species that may occur within the transmission line ROW, and implement appropriate buffers as defined by the listed species' survey protocols.
	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	2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact mitigation methodologies."
	that considering the elevated collision risk of wood	Reference – Condition of Certification, Section C. III.B.
	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	In addition, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to identify the baseline conditions which may indicate the potential for impacts to wood storks and other wading birds, and to help quantify potential mitigation for such impacts by performing pre-construction flight surveys, post – construction Mitigation Effectiveness Study and providing the

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
	cause increased risk of collision. Over time, this mortality may result in measurable population declines. 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."	results to FWC as listed below Conditions of Certification Section C.III.F states, "In order to identify the baseline conditions which may indicate the potential for impacts to wood storks and other wading birds, and to help quantify potential mitigation for such impacts, FPL will perform the following pre- and post-construction studies:
		1. Pre-construction follow flight surveys shall be conducted during nesting for the currently known wood stork colonies along Tamiami Trail (East 1, East 2, and West) and the 3B Mud East Colony using fixed wing aircraft. The follow flight surveys shall be conducted both prior to and during the fledging period. The surveys would ascertain flight line corridors for the wood storks in terms of direction, numbers of birds, and altitudes. These data would be compared to existing data for the Tamiami Trail and 3B-Mud East colonies collected to date. The survey design shall be submitted to FWC for review prior to implementation.
		2. A post-certification, pre-clearing aerial survey shall be conducted via fixed wing or rotary wing aircraft, between the months of December and May, once it is confirmed by FWC, USFWS or SFWMD that wading birds are nesting in the area of the proposed transmission line right-of-way. The surveys shall employ a series of two transects, along each side of the right-of- way. To minimize disturbance to the colonies, the flight(s) shall

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No.         NPS Comment [bold text applied for emphasis]         FPL Observation – T & E Topics [bold text applied for emphasis]		FPL Observation – T & E Topics [bold text applied for emphasis]
		be conducted at altitudes no less than 300 feet.
		a. This survey shall identify any wood stork/wading bird colonies in addition to any found from agency records that may be affected within one-half mile of the project ROW.
		b. Center locations of all wood stork and wading bird colonies shall be delineated with a Wide Area Augmentation System (WAAS) enabled Global Positioning System (GPS) unit.
		c. All wood stork and wading bird colonies shall be ground inspected, as aerial identification of intermediate-sized and dark-plumaged wading birds (little blue heron, tricolored heron, glossy ibis) is difficult at best and because they tend to nest below the vegetation canopy, making species identification all but impossible. To avoid flushing birds from their nests, identification of species shall be made using binoculars and surveys shall follow the protocols in Rodgers and Smith (1995).
		Reference: Rodgers, J.A., and H.T. Smith. 1995. Set-back distances to protect nesting bird colonies from human disturbance in Florida. <i>Conservation Biology</i> 9:89-99.
		3. For the currently known wood stork colonies along Tamiami Trail (East 1, East 2, and West) and the 3B Mud East Colony, and for any newly identified wood stork colonies within one-half mile from the corridor as a result of the above- referenced, post-certification pre-clearing survey, FPL shall

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
	- -	implement the following measures: a. Flight Diverters - FPL will install spiral corkscrew design bird flight diverters (or other mutually agreeable design flight diverters) on the Overhead Ground Wires (OGW) of each transmission line from a point one-half mile south of the Tamiami Trail colonies to a point one half mile north of the 3B Mud East Colony, and between points one half mile in either direction from any newly identified colonies. The point one-half mile shall be identified from the actual colony boundary to adhere to the USFWS Wood Stork Guidelines for activities within the primary boundary. Flight diverters have been shown to reduce
		mortality and will be installed according to the manufacturers' instructions. b. FPL will also install perch discouragers at transmission structure pole tops and arms to address risks from nest building and streamers (defecation) and reduce the exposure and potential risk of electrocutions.
		c. Mitigation Effectiveness Study - FPL will fund a monitoring study during the first wood stork nesting season after construction along the marked stretch of the transmission lines near the currently known wood stork colonies, similar to the study performed by Frederick and Deng (1997) on the FPL Levee-Midway Transmission Line. The results will be used to determine effectiveness of wood storks (and other wading birds) in avoiding the new transmission line facilities, and especially if effectiveness of marked sections of lines is

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 49 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]	
		significantly different from unmarked lines.	
		Reference: Frederick, P. and Deng, J. 1997. Bird-Strike Mortality on the Everglades Section of the Levee- Midway Powerline. Florida Power & Light Co. 27 pp.	
		The surveys shall generally be performed as follows:	
		<ul> <li>(1) Specific study protocols</li> <li>including mortality monitoring and sampling biases protocols will be developed in conjunction with FWC, USFWS, and SFWMD biologists using Avian Power Line Interaction Committee (APLIC) guidelines for mitigating bird collisions with power lines.</li> <li>(2) Surveys will be conducted on a regular frequency sufficient to detect mortality, such as every other day, in the mornings and in the evenings.</li> <li>(3) Any dead or injured birds found will be identified, located with GPS, and collected for necropsy (if dead).</li> <li>(4) Surveys will be conducted along the marked stretch of transmission line right-of-way in 100m transects with each transect separated by 100m</li> </ul>	
		identified in the pre-construction follow-flight surveys. Transect	
	· · · · · · · · · · · · · · · · · · ·	width shall include the right of- way width and any visible dimension on either side.	
		(5) Observations of flight behavior	
		of any birds crossing the lines will also be recorded. A protocol for visual observations similar to the Frederick and Deng studies will	

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		be developed.
		d. Post-survey Review - After the Mitigation Effectiveness Study has been conducted, the results will be presented to FWC. If mortality to wood storks reasonably related to collisions with the transmission lines is documented to impact the wood stork population and as determined by the USFWS Biological Opinion, FPL and the Study Investigator will meet with FWC to discuss the results of the Mitigation Effectiveness Study. The populations considered in determining impacts will be the four colonies (Tamiami East I, East 2, and West, and the 3B Mud East) and other colonies formed within one-half mile of the transmission right-of-way, based on the SFWMD's annual wading bird survey that year. If in the judgment of the FWC the wood stork population of the four colonies that year was not within "ten-year average" ranges, FPL may be required to resurvey the right-of-way in that vicinity during an additional nesting season. If the post-survey review shows that mortality to wood storks within the colonies due to collision with the transmission lines exceeds that portion of the colonies' population that is allowed by the USFWS Biological Opinion, additional mitigation measures such as, but not limited to, different configurations or greater density of flight diverters, or additional monitoring, or a combination may be required by FWC."
4	NPS letter dated 7/23/15, Page 16, 1 <sup>st</sup> paragraph	With regards to avian surveys conducted, SCA Completeness

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]			
	8) <u>Consideration of Threatened and Endangered Fauna</u> and Flora "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	Response 3MDC-A-23 "The information provid Responses includes res- studies conducted at th species occurrence bas- correspondence with th and data from the USF Conservation Commiss Inventory (FNAI). The a- suitable habitat provide listed species occurrent the Site and associated and dates, includes the Source Turkey Point Units 6 & 7 SCA and Appendix 10.7.1.3	(Third Round) states, ed in the SCA and Comple sults of multi-season field s e Site and surrounding vici sed upon availability of suit e US Fish and Wildlife Ser WS, Florida Fish and Wildli ion (FWC), and Florida Na assessment of potential util s a conservative evaluation ce. A summary of surveys facilities, including source following: Type of Survey Field reconnaissance of plant, wildlife, and fish species, including T&E Reconnaissance – DERM visit Crocodile nest surveys	teness urveys, past nity, anticipated able habitat, vice (USFWS), fe tural Areas ization of n of potential conducted at , type of survey, Date August 2007, November 2007, June through September 2008 August 2007 Annually - 1978 to present	
	Consulted."		,		
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No.	NPS Comment [bold text applied for emphasis]	FPL Observation	<b>- T &amp; E Topics</b> [bold tex emphasis]	t applied for
		Threatened and Endangered Species Surveys of Existing Transmission Corridors and Planned Transmission Corridors and Water Pipeline Corridor, Turkey Point Property Associated with Units 6 & 7	T&E species survey (pedestrian/vehicular)	April and June 2008
		Threatened and Endangered Fauna Species Survey of Planned Transmission Corridors Levee to Pennsuco and Davis to Miami, Turkey Point Property Associated with Units 6 & 7	T&E wildlife survey (pedestrian/vehicular)	March 2009

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No.	NPS Comment [bold text applied for emphasis]	FPL Observatior	u – T & E Topics [bold text emphasis]	applied for
		Avian Surveys of the Turkey Point Property Associated with Units 6 & 7	Pedestrian and vehicular avian surveys of cooling canal system and spoil disposal areas, Units 6 & 7 Site, proposed nuclear administration/training building and parking area, radial collector well area, water treatment facility area, and portion of the proposed construction access road immediately west of the cooling canal system	March and June 2009
		Mammal Trapping and Herpetology Surveys, Turkey Point Property Associated with Units 6 & 7	Small mammal live- trapping; reptile survey (minnow traps, cover boards); reconnaissance	April 2009

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 54 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation	– <b>T &amp; E Topics</b> [bold text emphasis]	applied for
		Fish Surveys of the Turkey Point Property Associated with Units 6 & 7	Cast net, seine, minnow trap surveys at several locations: cooling canals, mangrove wetlands, access road ditch, return canal, dead-end canal, remnant canals and shallow flats of Units 6 & 7 Site	June 2009
		Turkey Point Unit 5 Expansion Project SCA Final Environmental Impact Statement Related to Operation of Turkey Point Plant, Dockets No. 50-250 and 50-251, Washington D.C. (US Atomic Energy Commission, 1972)	Field reconnaissance of plant, wildlife, and fish species, including T&E Turkey Point area - trap sampling and gill netting of fish Trawl sampling in South Biscayne Bay and Card Sound Terrestrial ecology surveys	April, July, and October 2003 August 1970 October 1970 February and May 1972
		TP Annual Non- radiological Environmental Monitoring Report 1980	Gill nets and minnow traps in cooling canals, comparison to Biscayne Bay/Card Sound	January through December 1980

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		Reference – SCA Completeness Response 3MDC-A-23 (Third Round)
		Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to coordinate with FWC and conduct surveys for the listed species that may occur within the transmission line ROW.
		Condition of Certification, Section C.III.B.states,
		<ul> <li>"B. General Listed Species Survey <ol> <li>Prior to conducting detailed surveys, the</li> <li>Licensee shall coordinate with the Florida Fish and Wildlife</li> <li>Conservation Commission (FWC) to obtain the current listed</li> <li>species (in accordance with Article IV, Section 9 of the Florida</li> <li>Constitution and Rule 68A-27, F.A.C.) and follow the current</li> <li>survey protocols for these listed species that may occur within the</li> <li>transmission line ROW, and implement appropriate buffers as</li> <li>defined by the listed species' survey protocols.</li> </ol> </li> </ul>
	, ,	2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact mitigation methodologies."
		Reference – Condition of Certification, Section C. III.B.
		Conditions of Certification issued by the Siting Board on 5/19/14

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for
		require FPL to conduct an Everglades snail kite survey when the project site is within the snail kite consultation area and suitable habitat is present. In the event that surveys determine that a project transmission line has the potential to impact snail kites, measures identified in the conditions of certification will be used to minimize and mitigate for these impacts. See FPL Observation to NPS T & E Topics comment No.2 above for condition language.
	·	Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to identify the baseline conditions which may indicate the potential for impacts to wood storks and other wading birds, and to help quantify potential mitigation for such impacts by performing pre-construction flight surveys, post –construction Mitigation Effectiveness Study and providing the results to FWC. See FPL Observation to NPS T & E Topics comment No.3 above for condition language.
		Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to coordinate with FWC and conduct surveys for the listed species that may occur within the plant and non-transmission project areas.
		Condition of Certification, Section B. IV.B.states, "B. General Listed Species Survey 1. Prior to conducting detailed surveys, the Licensee shall coordinate with the Florida Fish and Wildlife

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 57 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		Conservation Commission (FWC) to obtain and follow the current listed species (in accordance with Article IV, Section 9 of the Florida Constitution and Rule68A-27, FAC) and follow the current survey protocols for these listed species that may occur within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way, as well as implement appropriate buffers within FPL property or rights of way as defined by the listed species' survey protocols.
-		2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact avoidance, minimization, or mitigation methodologies."
		Reference – Conditions of Certification, Section B. IV.B Condition of Certification, Section B. IV.C states
		"C. Specific Listed Species Surveys Before land clearing and construction activities within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way occur, the Licensee shall conduct an assessment for listed species which shall note all habitat, occurrence or evidence of listed species. Listed species to be included in this survey shall include the bald eagle and those species listed as threatened, or species of special concern by the FWC or those listed as endangered or

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 58 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		surveys shall be conducted during the reproductive or "active" season for each species that falls before the projected clearing activity schedule unless otherwise approved by the FWC or USFWS. For species that are difficult to detect, the Licensee may make the assumption that the species is present and plan appropriate avoidance/mitigation measures after consultation with FWC. The Licensee will submit avoidance/mitigation measures for FWC post-certification review and approval at least 60 days prior to commencing clearing or construction activities within the surveyed area.
		1. This survey shall be conducted in accordance with USFWS/FWC guidelines and methodologies by a person or firm that is knowledgeable and experienced in conducting flora and fauna surveys for each potentially occurring listed species.
		2. This survey shall identify any wading bird colonies within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way that may be affected.
		3. This survey shall identify locations of breeding sites, nests, and burrows for listed wildlife species. Nests and burrows shall be recorded with GPS coordinates, identified on an aerial photograph, and submitted with the final listed species report. Although nests and burrows may be recorded individually with GPS, the FWC prefers that any applicable protection radii surrounding groups of nest sites and

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		burrows be included on a site specific basis, rather than around individual nests and burrows, and be physically marked so that clearing and construction shall avoid impacting them.
		4. This survey shall include an estimate of the acreage and percent cover of each existing vegetation community (Florida Land Use, Cover and Forms Classification System, or FLUCFCS, at the third degree of detail) of each community that is contained within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way prior to land clearing and construction activities using GIS. Examples of such wildlife-based habitat classification schemes include Florida's State Wildlife Action Plan (FWC 2005), Descriptions of Vegetation and Land Cover Types (FWC 2004), or Natural Communities Guide (FNAI 1990)."
		Reference – Conditions of Certification, Section B. IV.C
		Condition of Certification, Section B. IV.F., identifies required surveys and mitigation measures to be implemented for shorebirds. The condition states,
		<ul> <li>"F. Shorebirds</li> <li>1. Surveys shall be conducted in potential shorebird nesting habitat within the Turkey Point Units 6 &amp; 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way to identify and document the presence of nesting</li> </ul>

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		seabirds and shorebirds (shorebird) included in the attached list. Nesting shorebird surveys shall be conducted by trained individuals (Shorebird Observer) with proven shorebird identification skills and avian survey experience. Credentials of the Shorebird Observer will be submitted to the FWC South Region Species Conservation Biologist (See Section A, Condition XVIII. Agency Addresses) for review and approval at least 2 weeks before commencing clearing or construction activities. Shorebird Observers will use the following survey protocols:
		a. Shorebird Observers must review and become familiar with the general information and data collection protocol outlined on the FWC's Florida Shorebird Database website (www.FLShorebirdDatabase.org). An outline of data to be collected, including downloadable field data sheets, is available on the website.
		b. The nesting season is April 1 – September 1 for seabirds, but flightless young may be present through September. The American oystercatcher may initiate nesting as early as March 15. Nesting season surveys must begin on the first day of nesting season (March 15 in areas where American oystercatchers have historically nested, or April 1 elsewhere) or 10 days prior to commencing clearing or construction activities (including surveying activities and other pre-construction presence), whichever is later. Surveys must be conducted through August or until all nesting activity has concluded, whichever is later. If the survey results determine that no listed species are found and no nesting is occurring, and

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 61 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		clearing or construction commences prior to the next nesting season, then no additional surveys are required in the survey area, with the exception of ground nesting species, which must be surveyed for daily pursuant to the remainder of these conditions.
		Nesting season surveys shall be conducted in all potential shorebird nesting habitat within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way boundaries that may be impacted by construction or pre-construction activities during the nesting season.
		c. During the pre-construction and construction, surveys for detecting new nesting activity in shorebird nesting habitat will be completed on a daily basis prior to movement of equipment, operation of construction vehicles, or other activities that could potentially disrupt nesting behavior or cause harm to the birds or their eggs or young.
	·	d. Surveys shall be conducted by walking the length of all nesting habitat within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way and visually inspecting, using binoculars or spotting scope, for the presence of shorebirds exhibiting nesting behavior.
		i. If an ATV or other vehicle is needed to cover large project areas, operators will adhere to the FWC's Best Management Practices for Operating Vehicles on the

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 62 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		Beach (Attachment E). The vehicle must be operated at a speed <6 mph and be run at or below the high-tide line. The Shorebird Observer will stop at no greater than 200 meter intervals to visually inspect for nesting activity.
		e. Once any nest is confirmed by the presence of a scrape, eggs, or young, the Shorebird Observer will notify the Regional Biologist (See Section A, Condition XVIII. Agency Addresses) within 24 hours. All breeding and nesting activity will be reported to the Florida Shorebird Database website within one week of data collection.
		2. If nesting behavior is observed within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way, the Licensee shall establish a 300 ft-wide buffer zone around any location within FPL property or rights of way where shorebirds have been engaged in nesting behavior, including territory defense. All construction-related disturbances shall be prohibited in this buffer zone.
	,	a. The width of the buffer zone shall be increased if birds appear agitated or disturbed by construction.
		b. Any modifications to the 300 ft-wide buffer must be approved by the Regional Biologist (See Section A, Condition XVIII. Agency Addresses) before being implemented.
		c. No construction activities, movement of construction vehicles, or stockpiling of equipment shall be

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 63 of 139

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No.	NPS Comment [bold text applied for emphasis]	<b>FPL Observation – T &amp; E Topics</b> [bold text applied for emphasis]
		allowed within a buffer zone. d. Heavy equipment and other construction vehicles shall not be operated near nest locations when flightless chicks are present outside a buffer zone. If movement of construction vehicles or equipment is necessary, it must be accompanied by the shorebird observer who will insure no flightless birds are in the path of a moving construction vehicle and no tracks capable of trapping flightless young remain.
		3. Where practicable, the Licensee will mitigate for loss of shorebird habitat in consultation with FWC.
		a. For least terns, areas of gravel substrate throughout the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non- transmission facilities rights of way, including significantly disturbed areas, may provide suitable nesting habitat. Least terns are known to use artificial nesting sites such as dredged material deposits. The existing cooling canals as part of the industrial wastewater system may contain such habitat. As mitigation for loss of least tern habitat, the Licensee will consider identifying and enhancing/creating least tern habitat in appropriate areas within the Turkey Point Site, such as, but not limited to, areas in the industrial wastewater facility. The Licensee may contact the appropriate FWC Regional Biologist when considering location and appropriate methods of enhancement or restoration as needed.
	· ·	b. For shorebirds utilizing mudflat

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habitat, the Licensee will consider mitigation through preservation, restoration, enhancement, or a combina of similar habitat within the Everglades Mitigation Ban location deemed as appropriate in consultation with th Reference – Condition of Certification, Section B. IV.F All areas of impact will be fully mitigated in accordance and federal requirements. The approved Turkey Poin 7 Mitigation Plan includes over 800 acres of wetland re enhancement, and preservation upon FPL-owned pro combined with purchase of credits from the NPS' Hole Donut mitigation bank and the Everglades Mitigation E representing enhancement and restoration of approxir 1,700 acres of additional wetlands. Conditions of Certification, Section B (II)(A)(1), states, "The Turkey Point Units 6 & 7 Wetland Mitigation Plan submitted by the Licensee on July 21, 2011 for the Un project includes a plan to fully offset the functional loss	sis] FPL Observation – T & E Topics [bold text applied for emphasis]	NPS Comment [bold text applied for emphasis]	No.
Reference – Condition of Certification, Section B. IV.F         All areas of impact will be fully mitigated in accordance and federal requirements. The approved Turkey Point 7 Mitigation Plan includes over 800 acres of wetland re enhancement, and preservation upon FPL-owned pro combined with purchase of credits from the NPS' Hole Donut mitigation bank and the Everglades Mitigation E representing enhancement and restoration of approxin 1,700 acres of additional wetlands.         Conditions of Certification, Section B (II)(A)(1), states, "The Turkey Point Units 6 & 7 Wetland Mitigation Plan submitted by the Licensee on July 21, 2011 for the Un project includes a plan to fully offset the functional loss	habitat, the Licensee will consider mitigation through preservation, restoration, enhancement, or a combination thereof, of similar habitat within the Everglades Mitigation Bank or other location deemed as appropriate in consultation with the USFWS."		
All areas of impact will be fully mitigated in accordance and federal requirements. The approved Turkey Point 7 Mitigation Plan includes over 800 acres of wetland re enhancement, and preservation upon FPL-owned pro combined with purchase of credits from the NPS' Hole Donut mitigation bank and the Everglades Mitigation E representing enhancement and restoration of approxin 1,700 acres of additional wetlands. Conditions of Certification, Section B (II)(A)(1), states, "The Turkey Point Units 6 & 7 Wetland Mitigation Plan submitted by the Licensee on July 21, 2011 for the Un project includes a plan to fully offset the functional loss	Reference – Condition of Certification, Section B. IV.F.		
Conditions of Certification, Section B (II)(A)(1), states, "The Turkey Point Units 6 & 7 Wetland Mitigation Plan submitted by the Licensee on July 21, 2011 for the Un project includes a plan to fully offset the functional loss	All areas of impact will be fully mitigated in accordance with state and federal requirements. The approved Turkey Point Units 6 & 7 Mitigation Plan includes over 800 acres of wetland restoration, enhancement, and preservation upon FPL-owned properties combined with purchase of credits from the NPS' Hole in the Donut mitigation bank and the Everglades Mitigation Bank, representing enhancement and restoration of approximately 1,700 acres of additional wetlands.		
required by 62-345, F.A.C., to all impacts to jurisdictio wetlands remaining after minimization and avoidance jurisdictional wetlands has been demonstrated. The T Units 6 & 7 Wetland Mitigation Plan is incorporated an herein pursuant to Section A, General Conditions, XX Environmental Resources, C. Wetland and Other Surf Impacts paragraph (2) as Attachment C. Mitigation wil	Conditions of Certification, Section B (II)(A)(1), states, "The Turkey Point Units 6 & 7 Wetland Mitigation Plan Rev 2 submitted by the Licensee on July 21, 2011 for the Unit 6 & 7 project includes a plan to fully offset the functional loss, as required by 62-345, F.A.C., to all impacts to jurisdictional wetlands remaining after minimization and avoidance to those jurisdictional wetlands has been demonstrated. The Turkey Point Units 6 & 7 Wetland Mitigation Plan is incorporated and attached herein pursuant to Section A, General Conditions, XXVI Environmental Resources, C. Wetland and Other Surface Water Impacts paragraph (2) as Attachment C. Mitigation will be in		

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		approved by the Department."
		Regarding avian use of the mud flat area within the industrial wastewater treatment facility, FPL has incorporated specific activities in the Turkey Point Units 6 & 7 Mitigation Plan to compensate for the loss of mud flat habitat for shorebirds in three different areas:
		Everglades Mitigation Bank Assessment Area 10 In consultation with the Florida Fish and Wildlife Conservation Commission and Miami Dade County, FPL has committed to enhancement and preservation of an approximately 170-acre parcel of sparsely vegetated mud flat habitat located immediately to the southeast of the industrial wastewater treatment facility within the Everglades Mitigation Bank as described in Conditions of Certification Section B.IV.F.3.b.and Section B.VII.O.6., listed below.
		Conditions of Certification Section B.IV.F.3.b. states, "Where practicable, the Licensee will mitigate for loss of shorebird habitat in consultation with FWC.
	·	b. For shorebirds utilizing mudflat habitat, the Licensee will consider mitigation through preservation, restoration, enhancement, or a combination thereof, of similar habitat within the Everglades Mitigation Bank or other location deemed as appropriate in consultation with the USFWS."

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		Reference – Conditions of Certification Section B.IV. F.3.b.
		Conditions of Certification Section B.VII.O.6. states, "FPL shall mitigate for loss of shorebird habitat through credits obtained for the restoration and preservation of approximately 170 acres of similar habitat within the Everglades Mitigation Bank. These mitigation credits shall be permanently deducted from the EMB ledger and dedicated to Turkey Point 6 & 7 Project. Five credits obtained from this area shall be used solely to offset the loss of shorebird habitat and shall not be included within the credits necessary to offset mangrove or wetland impacts."
		Reference – Conditions of Certification Section B.VII.O.6.
		<u>Northwest Restoration Site</u> "Mitigation activities will restore the native vegetative community composition and enhance the hydrologic regime within the area, targeting conditions typical of a shallow sawgrass marsh/marl prairie community with mangroves and scattered tree islands. The majority of the Northwest Restoration Site will be restored to native sawgrass marsh, with areas of mangrove swamp, mixed wetland hardwood tree islands, and relatively open marl prairie areas supporting periphyton mat communities specifically beneficial for wading birds and shorebirds.
		The Northwest Restoration Site is located within areas that historically supported marl prairie, with hydroperiods ranging between three and seven months and having relatively shallow

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		water depth of approximately 4 inches. The network of mosquito ditches has facilitated colonization by Australian pine; backfilling the network of ditches should moderately elevate the water level within the marsh, discouraging recolonization by Australian pine. Removal of exotic species of vegetation and supplemental planting, if necessary, will be utilized to maintain the target community."
		<u>SW 320th Street Restoration Site</u> "The target communities for the SW 320th Street Restoration Site are freshwater marsh and mixed wetland hardwood wetlands dominated by native species typical of the historical condition. Areas of exotic wetland hardwoods and palm tree nurseries will be restored to freshwater marsh, while the exotic wetland hardwood/mixed wetland hardwood forest along the eastern portion of the site will be restored to a native mixed wetland hardwood community. Control of exotic species of vegetation will facilitate regeneration of desirable wetland vegetation from the
		the target communities. The anticipated vegetative community composition associated with freshwater marsh systems include a variety of herbaceous species such as spikerush, sawgrass, arrowhead, beaksedges ( <i>Rhynchospora</i> spp.), camphorweed, leather fern, and pickerelweed ( <i>Pontederia cordata</i> ), as well as occasional shrubs and small trees such as buttonwood, willow, coco plum, and buttonbush. Within the restored freshwater marsh, sparsely-vegetated areas of exposed substrate will be

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## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 68 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		wetland hardwood areas will include a variety of native canopy and shrub species, such as buttonwood, myrsine, coco plum, white mangrove, willow, and dahoon holly, with an understory dominated by sawgrass."
		Reference – FPL Mitigation Plan (ML12269A222)
		In addition, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to mitigate for shorebird habitat impacts as described below.
		Conditions of Certification Section B.IV.F.3.b. states, "Where practicable, the Licensee will mitigate for loss of shorebird habitat in consultation with FWC.
	:	b. For shorebirds utilizing mudflat habitat, the Licensee will consider mitigation through preservation, restoration, enhancement, or a combination thereof, of similar habitat within the Everglades Mitigation Bank or other location deemed as appropriate in consultation with the USFWS."
		Reference – Conditions of Certification Section B.IV.F.3.b.
		Conditions of Certification Section B.VII.O.6. states, "FPL shall mitigate for loss of shorebird habitat through credits obtained for the restoration and preservation of approximately 170 acres of similar habitat within the Everglades Mitigation Bank. These mitigation credits shall be permanently deducted from the EMB ledger and dedicated to Turkey Point 6 & 7 Project.

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No.	NPS Comment [bold text applied for emphasis]	<b>FPL Observation – T &amp; E Topics</b> [bold text applied for emphasis]
		Five credits obtained from this area shall be used solely to offset the loss of shorebird habitat and shall not be included within the credits necessary to offset mangrove or wetland impacts."
		Reference – Conditions of Certification Section B.VII.O.6.
		Please note, on March 17, 2014 FPL informed the NRC of its intent to remove the FPL owned fill source from the project.
		Reference – ML14078A052
5	NPS letter dated 7/23/15, Page 16, 2 <sup>nd</sup> paragraph <u>Risks to Threatened and Endangered Species in Biscayne</u> <u>Bay</u> "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. <b>For example, it is currently unknown if the proposed</b> <b>expansion will result in substantial changes to the water</b> <b>quality and/or temperature of water in Biscayne Bay in</b> <b>the vicinity of the cooling canals.</b> It is possible that alterations to water quality and/or temperature could affect the relative incident and prevalence of Fibropapillomatosis	The Unit 6 & 7 Project does not propose to utilize the IWF for cooling. The IWF does not connect to or release to any surface waters and based on recent Units 3&4 Uprate studies, there is no evidence or reason to expect that IWF water is entering surface waters of the Bay through the groundwater system. As described in 2014 Turkey Point Annual Post-Uprate Monitoring Report for Units 3 & 4 Uprate Project, data indicate there is no discernable effects of the IWF on Biscayne Bay surface water quality. Data indicate there is no measurable contribution of nutrients to Biscayne Bay that can be attributed to the IWF. Wastewater discharges to the IWF from the Units 6 & 7 Project do not represent additional flow to the IWF that might cause an impact to the USDW or Biscayne Bay. Stormwater runoff into the IWF after construction of Units 6 & 7 will be approximately 1% less than the current runoff (see Stormwater Management Plan, SCA Completeness Round 4, page 16, 2/15/2011).

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
	(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."	Foundation dewatering has been minimized through engineering controls, and groundwater modeling shows that most of the dewatering effluent will originate from the IWF canals. Consequently, there will be no adverse impacts beyond the IWF and impacts within the IWF will be temporary and limited (see 4-2SFWMD-B-30(26) rev 2 Nov 2012 and 4—2SFWMD-B-46(46)(c) (2/24/2011). Muck spoil runoff will be released back to the IWF from which it originated. Consequently, there is no additional water added to the IWF. The de-mucking process will be conducted in limited areas sequentially. Runoff will be treated in settling basins before release to the IWF. The potential impacts of nutrient loading to the IWF from de-mucking has been addressed in SCA RAI Response 2SFWMD-B-92(78) and 2SFWMD-B-29(23) including associated tables and figures. The response to second round completeness question SFWMD-B-92(78) includes a description of the evaluation and results. In summary, muck from selected sampling locations was analyzed for ammonia, TKN, nitrate, nitrite, total phosphorus (TP), and total organic carbon (TOC). The samples were also analyzed by the SPLP method to determine potential nutrient concentrations from rainfall runoff and infiltration. The results of the nutrient loading analysis and the conservative nature of the calculations indicate that the maximum nutrient loadings would be small. As a result, no adverse environmental impact to the IWF is expected from excavating the muck or from placing the muck on the existing upland spoil areas within the industrial wastewater facility.

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		Reference – SCA Completeness response (2 <sup>nd</sup> round) SFWMD- B-92(78)
		No adverse impacts will occur to ENP, BNP and BBAP from cooling tower drift deposition associated with the Turkey Point Units 6 & 7 Project. This includes both drift deposition to the surfaces within the ENP, BNP and BBAP and air pollutant emissions of particulate matter with an aerodynamic diameter of 10 microns or less (PM <sub>10</sub> ) and PM <sub>2.5</sub> within those areas. This conclusion was based on information submitted for approval of the Site Certification (PA 03-45A3) and the federally approved Prevention of Significant Deterioration (PSD) Permit issued by FDEP (Reference FDEP Project No. 02500003-013-AC; PSD-FL-409). The analyses demonstrate that atmospheric deposition will not have an adverse effect on water quality or terrestrial areas.
		Please see:
		<ul> <li>Site Certification Application Sections 6.1.4 and Appendix 10.2.5</li> <li>SCA Completeness Responses:         <ul> <li>FDEP-II-B-53, FDEP-II-B-85, FDEP-II-B-86 and FDEP-VI-D-1.</li> <li>SWFWMD-B-65, SWFWMD-B-66, SWFWMD-B-68, and SWFWMD-B-94.</li> <li>MDC-B-3 and MDC-G-3,</li> <li>FFWCC-D-1.</li> </ul> </li> </ul>

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<ul> <li>2SFWMD-B-65(63), 2SFWMD-B-65(64), 2SFWMD-B-68(65), 2SFWMD-B-68(65), 2SFWMD-B-68(68)</li> <li>2MDC-B-3</li> <li>2SFWMD-13-65(64)(c)</li> <li>3MDC-B-3</li> <li>4MDC-B-3</li> <li>BNP-5, BNP-11, BNP-37 and BNP-38</li> <li>2BNP-31, 2BNP-32 and 2BNP-33</li> <li>Regarding temperature impacts to Biscayne Bay from radial collector wells, SCA Completeness Response to SFWMD-B-55 (1<sup>st</sup> Round) states,</li> <li>"Biscayne Bay is vertically well-mixed in most locations most of the time. This has been confirmed using temperature data from three long-term monitoring stations (SFWMD, DBHYDRO Database, Stations BB-41, BB-44 and BB-45), which are located around Turkey Point in Biscayne Bay, about 2 to 5 miles apart from each other. The data shows no statistically significant vertical or horizontal mean temperature differences. If significant spatial gradients are not present, then a withdrawal cannot cause a significant change in temperature. Therefore, the recharge from Biscayne Bay that is induced by the radial collector wells will have no adverse impact on the water temperatures in Biscayne Bay."</li> </ul>	No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
			<ul> <li>empnasisj</li> <li>2SFWMD-B-65(63), 2SFWMD-B-65(64), 2SFWMD-B-69(68)</li> <li>2MDC-B-3</li> <li>2SFWMD-13-65(64)(c)</li> <li>3MDC-B-3</li> <li>4MDC-B-3</li> <li>4MDC-B-3</li> <li>BNP-5, BNP-11, BNP-37 and BNP-38</li> <li>2BNP-31, 2BNP-32 and 2BNP-33</li> </ul> Regarding temperature impacts to Biscayne Bay from radial collector wells, SCA Completeness Response to SFWMD-B-55 (1 <sup>st</sup> Round) states, <ul> <li>"Biscayne Bay is vertically well-mixed in most locations most of the time. This has been confirmed using temperature data from three long-term monitoring stations (SFWMD, DBHYDRO Database, Stations BB-41, BB-44 and BB-45), which are located around Turkey Point in Biscayne Bay, about 2 to 5 miles apart from each other. The data shows no statistically significant vertical or horizontal mean temperature differences. If significant spatial gradients are not present, then a withdrawal cannot cause a significant change in temperature. Therefore, the recharge from Biscayne Bay that is induced by the radial collector wells will have no adverse impact on the water temperatures in Biscayne Bay." Reference – SCA Completeness Response to SFWMD-B-55 (1<sup>st</sup> Round)</li></ul>

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		A mixing chamber model was used by FPL to evaluate the potential impacts of RCW operations on salinity in Biscayne Bay. Data from various monitoring stations in the vicinity of the Turkey Point peninsula (BB41, BISC 122, BISC 101 and BNP 12) was used in the salinity impact analyses. The results of these analyses are discussed in the Turkey Point Units 6 & 7 Radial Collector Well Summary (Rev 1.) Section, Hydrologic and Salinity Impacts of Radial Collector Well Operation. Using data from BNP 12B, the average and median salinity value increases by only approximately 0.1 psu (0.3 percent) within 1/2 mile of the radial collector wells (Scenario 1) and by less than 0.02 psu (0.06 percent) within one mile (Scenario 2). These salinity impact analyses from multiple stations demonstrate that operation of the radial collector wells will have no adverse impact on salinity levels in Biscayne Bay and the change in salinity would have no adverse impact to a salinity variation between 13 ppt and 40 ppt.
		Reference – Turkey Point Units 6 & 7 Radial Collector Well Summary (Rev 1.)
		With regards to the sawfish, this species occurs in peninsular Florida; but is relatively common only in the Everglades region at the southern tip of the state. The Project is not located within the federally-designated critical habitat for the smalltooth sawfish and the small (0.1-acre) area of in-water work within the existing barge turning basin is not an area that provides suitable habitat for the smalltooth sawfish.

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 74 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		The DEIS Appendix F -3 (NMFS BA) Section 5.3.5 Occurrence and Status in the Project Area, states "FPL (2014-TN4058) has indicated that Smalltooth Sawfish have been observed in Biscayne Bay and the Biscayne Bay Aquatic Preserve, but no individuals were collected during the Card Sound study described in Section 3.2.2 of this report. This species is considered to be relatively scarce along the east coast of Florida in comparison to documented occurrences on the west coast of Florida, Florida Bay, and the Florida Keys (NOAA 2010-TN1724). Sawfish sighting data provided by FMNH (FMNH 2014-TN3250) from approximately 1890 to 2012 shows only 18 sightings in the southern portion of Biscayne Bay (Figure 5-5). Of these, only one (NSED_02883) occurred near Turkey Point in 1975/1976. Given the habitat preferences for this species described by NOAA (2010-TN1724), sawfish, if present near the Turkey Point site, would likely be juveniles using the nearshore mangrove communities to avoid predation."
		The Project is not expected to adversely impact nearshore mangroves. See also FPL Observation to NPS Mitigation Topic comment No. 2 and FPL Observation to NPS RCW Topic comments Nos.8 and 9.
		Regarding manatees, they occur within fresh, brackish, or salt water habitats; and are affected by water temperatures. The project will not have any affect on water temperature in the bay and is not located within an area designated as critical manatee

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		habitat. The only area of in-water work is within the barge unloading expansion area, where FPL will follow FWC and MDC manatee protection guidelines.
6	<ul> <li>NPS letter dated 7/23/15, Page 17, 1<sup>st</sup> paragraph</li> <li>8) <u>Consideration of Threatened and Endangered Fauna and Flora</u></li> <li>Florida Panther "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 </li> </ul>	<ul> <li>manatee protection guidelines.</li> <li>BDA Environmental Consultants, Estimated Impacts to Florida Panthers Habitat, Turkey Point Units 6 &amp; 7 Project, April 2013, page 13 states,</li> <li>"The roadway improvements are proposed in an area at the urban fringe of the Primary Zone where telemetry and mortality records indicate that panthers have occurred infrequently within the area over the last 20 years. Installation of wildlife crossings to accommodate future movements of Florida panthers are not warranted in this area due to the small area of potentially suitable habitats north and east of the roadways. If panthers do eventually occur in the area, they are likely to safely cross the new roads at the anticipated traffic volumes if wide road shoulders are maintained to eliminate concealment cover and promote visibility, panther crossing signs are installed, and low speed limits are established. Moreover, training should be given to project personnel to be aware of and avoid Florida panthers and other listed species of wildlife."</li> </ul>
	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."	to Florida Panthers Habitat, Turkey Point Units 6 & 7 Project, April 2013. Submitted with 3 <sup>rd</sup> Round Completeness Responses, April 5, 2010. Conditions of Certification issued by the Siting Board on 5/19/14

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		require FPL to incorporate wildlife exclusion fencing and wildlife underpasses in the roadway design as described below.
		underpasses in the roadway design as described below. Conditions of Certification Section B. VII.H.3. states, "Pursuant to MDC Resolution No. Z-56-07, FPL shall to incorporate wildlife protection features into the roadway design for all segments of the temporary access roads south of SW 344 <sup>th</sup> Street. Along SW 359 <sup>th</sup> Street and along the portions of SW 117 <sup>th</sup> Avenue and SW 137 <sup>th</sup> Avenue that are to be constructed south of SW 344 <sup>th</sup> Street, wildlife exclusion fencing shall be installed and shall include small mesh material, such as silt fencing, of appropriate mesh size and height to provide an exclusion barrier for reptiles and other small animals. The SW 359 <sup>th</sup> Street temporary roadway shall accommodate a minimum of two (2) wildlife underpasses west of the L-31E levee, one of which must be constructed between SW 137 <sup>th</sup> Avenue and SW 117 <sup>th</sup> Avenue and the other between SW 117 <sup>th</sup> Avenue and the L-31E borrow canal. The bridge over the L-31E borrow canal may serve as one of the wildlife underpasses provided that the plans demonstrate it has been appropriately designed for this purpose. These underpasses shall be of adequate design and shall be constructed to facilitate the safe passage of all wildlife known to
		occur or to potentially occur in this area during all times of the year, including but not limited to deer, Florida panthers, bobcats,
		snakes, American crocodiles, and amphibians. A minimum of three (3) crocodile underpasses shall also be provided along the
		temporary access road immediately north of the cooling canal system. The required underpasses shall be positioned to provide

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		safe access to the habitat."
		Reference – Conditions of Certification Section B. VII.H.3.
		In addition, FWC conditions require active or passive wildlife protection measures be implemented as described below.
		Conditions of Certification Section B.IV.I. states, "1. The Licensee shall take proper precautions during clearing and construction to protect panthers from accidental injury due to conditions within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way during construction.
		a. Construction policies and practices identified by the FWC to protect panthers shall be used by the Licensee whenever feasible. These include:
		iii. Limiting speeds on access roads to 45 mph or less and adjust trucking activities and material delivery schedule within the panther consultation area to reduce speeds at dawn and dusk.
		iv. Conducting frequent and unannounced site inspections to monitor for compliance with the above.
		<ul> <li>Any panther observations (dead or alive) made by</li> <li>Licensee's employees or contractors shall be verified by a</li> <li>qualified expert agreed to by FWC and reported to FWC within 24</li> </ul>

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		hours.
		2. The Licensee shall take proper precautions during construction and plant operations to protect panthers from accidental injury due to vehicle collisions along access roadways in the panther consultation area as defined by the USFWS (Attachment G), including SW 359 <sup>th</sup> Street, SW 137 <sup>th</sup> Avenue, and SW 117 <sup>th</sup> Avenue.
	· · · · ·	a. Speeds on access roads shall be limited to 45 mph or less. Passive measures shall be implemented to enforce slower speeds and shall include lighted speed signage, speed bumps, and slow speed zones at dawn and dusk, and panther crossing signage.
		b. In lieu of the passive measures identified in this condition, the Licensee may choose to use exclusionary fencing along the length of SW 359th Street between SW 117th Avenue and SW 137th Avenue to prevent accidental injury and/or panther mortality due to vehicle collisions.
		c. Any panther observations (dead or alive) made by Licensee's employees or contractors shall be verified by a qualified expert agreed to by FWC and reported to FWC within 24 hours.
	·	3. The Licensee shall construct at least one (1) wildlife underpass and associated fencing to facilitate north-south movement across SW 359 <sup>th</sup> Street.
		a. The underpass shall be located between 117th Avenue

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
	· · · · ·	and 137th Avenue in an appropriate location for use by panthers. The Licensee shall consult with FWC during placement of the underpass.
		b. The underpass shall be of appropriate size and design to facilitate panther movement. The Licensee shall consult with FWC during design of the underpass."
		Reference – Conditions of Certification Section B.IV.I.
7	NPS letter dated 7/23/15, Page 17, 2 <sup>nd</sup> paragraph	Section 6.2.1 of the Turkey Point Units 6 & 7 Federal Biological
	<ul> <li>8) Consideration of Threatened and Endangered Fauna and Flora</li> <li>American Crocodile</li> <li>"The current status of American Crocodiles within Biscayne Bay and nearby areas of South Florida is well below</li> <li>restoration targets set by CERP. The overall crocodilian</li> </ul>	Assessment for Six Listed Species (ML 123390437) submitted to the NRC on 11/30/2012 provides details of the existing FPL crocodile management program and the Project's proposed species-specific conservation and monitoring measures to avoid, minimize, and mitigate for any impacts to threatened and endangered species as listed below;
	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	<ul> <li>"FPL initiated a formal comprehensive crocodile management program for the industrial wastewater facility in the early 1980s, consisting of a combination of the following:</li> <li>Habitat preservation and creation of habitat suitable for crocodile nesting and basking.</li> <li>Establishment of exclusion zones at known nesting sites (nest sanctuaries</li> <li>Daytime and nighttime monitoring surveys to document nesting activity and utilization of the industrial wastewater facility.</li> </ul>

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
	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."	<ul> <li>Capture and tagging of hatchlings using American Veterinary Identification Devices (AVID) microchip technology.</li> <li>Relocation of hatchlings to low-salinity habitat during early life stages to increase survival.</li> <li>Recapture, monitoring, and release of individuals to document</li> </ul>
		growth and survival." "In addition to the monitoring and habitat enhancement activities that directly benefit the crocodile, FPL also has enacted an extensive crocodile awareness program to educate the public as to the status of the crocodile in south Florida. All of these existing activities will continue throughout the construction and operation phases of the new Units 6 & 7."
		Section 6.2.1.3 of the Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species (ML 123390437) submitted to the NRC on 11/30/2012 provides details of the crocodile population monitoring as listed below;
		"Monitoring of the number and location of nests, production of hatchlings, and their growth and survival has been conducted within the Turkey Point Plant property since 1978. Surveys are conducted to identify nest locations, nest sites are revisited during the hatching period, and each hatchling is captured,
		permanently marked for identification, measured, weighed, sexed, and released. Permanent identification through American Veterinary Identification Device allows for the recapture of individuals after several years to document survival and growth

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No	NPS Comment [bold text applied for emphasis]	<b>FPI</b> Observation – T & F Tonics (bold text applied for
	in o comment [bold text applied for emphasis]	emphasis]
	· · ·	rates. Surveys are conducted throughout the year, with different surveys conducted in different seasons based on crocodile behavior and life history. The population monitoring program at the Plant involves surveys conducted during the breeding, nesting, hatching, and juvenile phases of the crocodile's life cycle, as well as ongoing surveys documenting crocodile activities."
		In addition, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to incorporate wildlife protection features into the roadway design for all segments of the temporary access roads south of SW 344 <sup>th</sup> Street. Along SW 359 <sup>th</sup> Street and along the portions of SW 117 <sup>th</sup> Avenue and SW 137 <sup>th</sup> Avenue that are to be constructed south of SW 344 <sup>th</sup> Street, wildlife exclusion fencing shall be installed and shall include small mesh material, such as silt fencing, of appropriate mesh size and height to provide an exclusion barrier for reptiles and other small animals. The SW 359 <sup>th</sup> Street temporary roadway shall accommodate a minimum of two (2) wildlife underpasses west of the L-31E levee, one of which must be constructed between SW 137 <sup>th</sup> Avenue and SW 117 <sup>th</sup> Avenue and the other between SW 117 <sup>th</sup> Avenue and the L-31E borrow canal. The bridge over the L-31E borrow canal
,	· · · ·	plans demonstrate it has been appropriately designed for this purpose. These underpasses shall be of adequate design and shall be constructed to facilitate the safe passage of all wildlife
		known to occur or to potentially occur in this area during all times of the year, including but not limited to deer, Florida panthers,

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for
		emphasis] bobcats, snakes, American crocodiles, and amphibians. A minimum of three (3) crocodile underpasses shall also be provided along the temporary access road immediately north of the cooling canal system. The required underpasses shall be positioned to provide safe access to the habitat.
		Reference – Conditions of Certification Section B. VII.H.3.
		Regarding mitigation, FPL will create the Sea Dade Canal Crocodile Sanctuary as part of the Project's additional mitigation activities described in its Mitigation Plan Section 3.5 which states, "As part of the Project's additional mitigation activities, the Sea Dade Canal Crocodile Sanctuary involves creation of wetlands impacted by historical dredging and filling, topographic grading and planting, creation of low-salinity ponds for juvenile crocodile refugia, and creation of habitat conditions with suitable nesting substrate specifically benefitting the federally threatened American crocodile ( <i>Crocodylus acutus</i> ). The approximately 6.4- acre area is located southwest of the industrial wastewater treatment facility, adjacent to the Sea Dade Canal and an existing meteorological tower (Figure 17)."
		"The proposed Sea Dade Canal Crocodile Sanctuary is currently comprised of previously filled uplands, open water borrow ponds, mixed hardwood wetlands, dwarf red mangrove marsh, and
		sawgrass marsh (Figure 18) adjacent to the Sea Dade Canal. An access road leads to a meterological tower on the eastern edge of the site. Areas of forested wetland are vegetated with a mixture

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		of red mangrove, white mangrove, buttonwood, poisonwood, and the threatened species locust berry ( <i>Byrsonima lucida</i> )."
		"The target community is modeled after the successful crocodile sanctuary created upon previously filled land within the EMB in 2008. A post-enhancement conceptual design is presented in Figure 19. Upland areas will be topographically graded to restore wetland hydrology and planted with a variety of native species such as buttonwood, bay cedar ( <i>Suriana maritima</i> ), Florida silver palm ( <i>Coccothrinax argentata</i> ), willow bustic ( <i>Sideroxylon salicifolium</i> ), muhly grass ( <i>Muhlenbergia capillaries</i> ), and railroad vine ( <i>Ipomea pes-capri</i> ) to create a mosaic of habitats, including saline lagoon areas connecting to the Sea Dade Canal, isolated low-salinity ponds, and crocodile nesting areas utilizing a proven mixture of peat, marl, and sand. In addition to providing a nesting sanctuary for crocodiles, the area will provide potential foraging habitat for wading birds, including wood storks, through the creation of shallow freshwater ponds suitable for tactile feeding."
	NDC letter deted 7/02/45 Dere 47 219 percente	Reference – FPL Mitigation Plan (ML12269A222)
ð	NPS letter dated //23/15, Page 17, 3 paragraph	on continuous RCW pumping. The review team noted that the
	8) <u>Consideration of Threatened and Endangered Fauna</u>	actual duration of pumping would not be continuous because the
	and Flora	FDEP permit conditions require that pumping be limited to 60
	American Crocodile	increases or decreases under the continuous RCW numping
	"The NPS encourages the NRC to clarify in revisions to the	scenario occur in a relatively small area north of Turkey Point.
	DEIS that crocodiles utilize Biscayne Bay and thus move in	See also FPL Observation to NPS RCW Topic comment Nos. 7

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
	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."	emphasis] and 10. DEIS Section 5.3.2 states, "The review team's examination of time series indicated that variations in salinity from continuous pumping were mostly within ±1 psu, with only transient increases to near 2 psu (Appendix G, Figure G-9). When the review team examined the spatial distribution results at the time when salinity time-series differences had an increase (10/3/2003), the increase (which was less than +2 psu) was found to occur in a relatively small area north of Turkey Point (Appendix G, Figure G-10). When the review team examined the spatial distribution results at the time when salinity time-series differences had a decrease (10/25/2004), the decrease (which was greater than -2 psu) was also found to occur in a relatively small area north of Turkey Point (Appendix G, Figure G-11). These results show that the variation in salinity was minimal with continuous RCW pumping. The review team noted that the actual duration of pumping would not be continuous because the FDEP permit conditions require that pumping be limited to 60 days or less per year (State of Florida 2014-TN3637). A shorter duration would allow time for the groundwater system to recover following RCW pumping and limit the entrainment of saltwater from Biscayne Bay. Therefore, the effect on Biscayne Bay salinity from any permitted pumping would be much reduced from the already minimal salinity change predicted by the USGS modeling analyses."
		Reference – DEIS Section 5.3.2

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		Because the NRC/USGS model was intended to assess regional effects and therefore had a coarse scale, there were limitations on the ability of the model to precisely locate various features of the Project to the appropriate resolution. For example, the model's grid size made it impossible to locate the RCW system entirely offshore when running the model, even though the system will be constructed entirely offshore. Because of the model's limitations, it resulted in an apparent overestimation of the effect of groundwater withdrawals from the RCW on freshwater volumes along the park's shoreline and within the park.
		The USGS model discussed in the DEIS appears to overestimate the 1) impacts from removal or moderation of freshwater along the shoreline and 2) extent of the area of groundwater removal. The USGS model uses very coarse grid spacing (1620 ft) and a very high transmissivity. Consequently the model indicates a larger area of impact than will actually occur.
		In addition, a mixing chamber model was used to evaluate the potential impacts of RCW operations on salinity in Biscayne Bay. Data from various monitoring stations in the vicinity of the Turkey Point peninsula was used in the salinity impact analyses namely stations; BB41, BISC 122, BISC 101 and BNP 12. The results of these analyses is discussed in the Turkey Point Units 6 & 7 Radial Collector Well Summary (Rev 1.), Section, Hydrologic and Salinity Impacts of Radial Collector Well Operation. Using data

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		from BNP 12B, the average and median salinity value increases by only approximately 0.1 psu (0.3 percent) within 1/2 mile of the radial collector wells (Scenario 1) and by less than 0.02 psu (0.06 percent) within one mile (Scenario 2). These salinity impact analyses from multiple stations demonstrate that operation of the radial collector wells will have no adverse impact on salinity levels in Biscayne Bay and the change in salinity would have no adverse impact on the estuarine biota that is already acclimated to a salinity variation between 13 ppt and 40 ppt. Reference – Turkey Point Units 6 & 7 Radial Collector Well Summary (Rev 1.)
		Conditions of Certification Section B. I.A.1.a states.
		"Radial Collector Well System Monitoring Plan (RCWSMP)
		a. Licensee shall implement a RCWSMP to confirm that no adverse impacts occur to ecological and water resources or to the biological values of Biscayne Bay Aquatic Preserve and nearshore areas resulting from the construction and operation of the RCW system. The data collected from the RCWSMP will help monitor the effects, if any, of RCW system operations on seagrass, shoreline vegetation within the area of influence, benthic and macroalgae communities <b>and on near- shore salinity</b> and water quality above the RCW laterals. The RCWSMP shall be incorporated as Attachment D to these Conditions."

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
	· · · · · · · · · · · · · · · · · · ·	Reference – Conditions of Certification Section B. I.A.1.a.
		In addition, a mesocosm study conducted at Turkey Point in 2013, showed no evidence of an adverse impact on seagrass productivity from RCW operation. This study evaluated potential impacts over a three month period; as the COC limits operation of the RCWs to no more than 60 days in any 12 month period, this study was conservative in its approach.
		Reference – Land-Based Mesocosm Project to Evaluate Potential Radial Collector Well Impacts to Seagrass, Atkins, April 2013
		In addition, FPL will create the Sea Dade Canal Crocodile Sanctuary as part of the Project's additional mitigation activities described in its Mitigation Plan Section 3.5 which states, "As part of the Project's additional mitigation activities, the Sea Dade Canal Crocodile Sanctuary involves creation of wetlands impacted by historical dredging and filling, topographic grading and planting, creation of low-salinity ponds for juvenile crocodile refugia, and creation of habitat conditions with suitable nesting substrate specifically benefitting the federally threatened American crocodile ( <i>Crocodylus acutus</i> ). The approximately 6.4- acre area is located southwest of the industrial wastewater treatment facility, adjacent to the Sea Dade Canal and an existing meteorological tower (Figure 17)."
		"The proposed Sea Dade Canal Crocodile Sanctuary is currently comprised of previously filled uplands, open water borrow ponds,
# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 88 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		mixed hardwood wetlands, dwarf red mangrove marsh, and sawgrass marsh (Figure 18) adjacent to the Sea Dade Canal. An access road leads to a meterological tower on the eastern edge of the site. Areas of forested wetland are vegetated with a mixture of red mangrove, white mangrove, buttonwood, poisonwood, and the threatened species locust berry ( <i>Byrsonima lucida</i> )."
		"The target community is modeled after the successful crocodile sanctuary created upon previously filled land within the EMB in 2008. A post-enhancement conceptual design is presented in Figure 19. Upland areas will be topographically graded to restore wetland hydrology and planted with a variety of native species such as buttonwood, bay cedar ( <i>Suriana maritima</i> ), Florida silver palm ( <i>Coccothrinax argentata</i> ), willow bustic ( <i>Sideroxylon salicifolium</i> ), muhly grass ( <i>Muhlenbergia capillaries</i> ), and railroad vine ( <i>Ipomea pes-capri</i> ) to create a mosaic of habitats, including saline lagoon areas connecting to the Sea Dade Canal, isolated low-salinity ponds, and crocodile nesting areas utilizing a proven mixture of peat, marl, and sand. In addition to providing a nesting sanctuary for crocodiles, the area will provide potential foraging habitat for wading birds, including wood storks, through the creation of shallow freshwater ponds suitable for tactile feeding."
		Reference – FPL Mitigation Plan (ML12269A222)
1		See also FPL Observation to NPS T & E Topic comment No. 7 above.

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
9	<ul> <li>NPS letter dated 7/23/15, Page 17, 4<sup>th</sup> paragraph</li> <li>8) <u>Consideration of Threatened and Endangered Fauna</u> and Flora</li> <li>Eastern Indigo Snake "The NPS continues to be concerned with potential impacts to the Eastern indigo snake. Increased traffic during</li> </ul>	Various sections of the Turkey Point Units 6 & 7 Federal Biological Assessment for Six Listed Species (ML 123390437) submitted to the NRC on 11/30/2012 describe protection measures to be implemented for the protection of the Eastern indigo snake, namely ; Section 5.2 "The Project is expected to have minimal effects on the eastern indigo snake are its habitate on the Site is leasted on a portion of
	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	Indigo snake or its habitat, as the Site is located on a portion of the Plant property where indigo snakes have not been observed and/or habitat is not present. " Section 6.2.2 "Adverse impacts to the eastern indigo snake will be minimized through traffic control and wildlife fencing along construction access roads as discussed in Section 8.0, wildlife training of all Project contractors, posting of informational signage, and continued presence of native habitat adjacent to areas of proposed construction."
	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."	<ul> <li>"FPL will comply with the USFWS (2004b) standard protection measures for eastern indigo snakes, including posting of informational signs along the access roads to contain the following information, at a minimum:</li> <li>A description and photograph of the eastern indigo snake, its habits, and protection under federal law.</li> <li>Instructions not to injure, harm, harass, or kill this species.</li> <li>Directions to cease clearing activities and allow the</li> </ul>

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 90 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		<ul> <li>species sufficient time to move away from the Site on its own before resuming clearing.</li> <li>Telephone numbers of pertinent agencies to be contacted if a dead individual is encountered. The dead specimen should be thoroughly soaked in water and then frozen.</li> <li>Construction personnel will receive mandatory wildlife training to include identification of protected species potentially occurring within the construction areas/access roads and notice to stop work and notify FPL environmental managers if eastern indigo snakes are observed within the work area."</li> </ul>
		Section 6.1.2 "Surveys will be conducted for eastern indigo snakes consistent with the requirements of USFWS, FWC, and approved conditions of certification."
		Conditions of Certification issued by the Siting Board on 5/19/14 require listed species surveys be conducted prior to clearing and steps be taken to avoid, minimize or mitigate potential species impacts as listed below.
		Conditions of Certification Section B.IV.B. states,
	· · · · · · · · · · · · · · · · · · ·	"B. General Listed Species Survey 1.Prior to conducting detailed surveys, the Licensee shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to obtain and follow the current listed species

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 91 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		(in accordance with Article IV, Section 9 of the Florida Constitution and Rule 68A-27, FAC) and follow the current survey protocols for these listed species that may occur within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way, as well as implement appropriate buffers within FPL property or rights of way as defined by the listed species' survey protocols.
		2.Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those detailed surveys shall be provided to FWC in a report, and coordination shall occur with the FWC on appropriate impact avoidance, minimization, or mitigation methodologies."
		Conditions of Certification Section B.IV.C. states,
		"C. Specific Listed Species Surveys Before land clearing and construction activities within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way occur, the Licensee shall conduct an assessment for listed species which shall note all habitat, occurrence or evidence of listed species. Listed species to be included in this survey shall include the bald eagle and those species listed as threatened, or species of special concern by the FWC or those listed as endangered or threatened by U.S. Fish and Wildlife Service (USFWS). Wildlife surveys shall be conducted during the reproductive or "active"

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		season for each species that falls before the projected clearing activity schedule unless otherwise approved by the FWC or USFWS. For species that are difficult to detect, the Licensee may make the assumption that the species is present and plan appropriate avoidance/mitigation measures after consultation with FWC. The Licensee will submit avoidance/mitigation measures for FWC post-certification review and approval at least 60 days prior to commencing clearing or construction activities within the surveyed area.
		1.This survey shall be conducted in accordance with USFWS/FWC guidelines and methodologies by a person or firm that is knowledgeable and experienced in conducting flora and fauna surveys for each potentially occurring listed species.
		2. This survey shall identify any wading bird colonies within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way that may be affected.
		3. This survey shall identify locations of breeding sites, nests, and burrows for listed wildlife species. Nests and burrows shall be recorded with GPS coordinates, identified on an aerial photograph, and submitted with the final listed species report. Although nests and burrows may be recorded individually with GPS, the FWC prefers that any applicable protection radii surrounding groups of nest sites and burrows be included on a site specific basis, rather than around individual nests and burrows, and be physically marked so that clearing and

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 93 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		construction shall avoid impacting them.
		4. This survey shall include an estimate of the acreage and percent cover of each existing vegetation community (Florida Land Use, Cover and Forms Classification System, or FLUCFCS, at the third degree of detail) of each community that is contained within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way prior to land clearing and construction activities using GIS. Examples of such wildlife-based habitat classification schemes include Florida's State Wildlife Action Plan (FWC 2005), Descriptions of Vegetation and Land Cover Types (FWC 2004), or Natural Communities Guide (FNAI 1990)."
	· · · · · · · · · · · · · · · · · · ·	Conditions of Certification Section B.IV.D. states, "D. Listed Species Locations Where any suitable habitat or evidence is found of the presence of listed species, including but not limited to those specified in E-J below, within the Turkey Point Units 6 & 7 Site, associated non-
	·	linear facilities, and associated linear non-transmission facilities rights of way, the Licensee shall report those locations to, and confer with, the FWC or FWS as appropriate to determine whether additional pre-clearing surveys are warranted, and to identify potential mitigation, or avoidance recommendations. If pre-clearing surveys are required by FWC and FWS as appropriate and as specified in these conditions of certification,
		they shall occur in the reproductive season prior to the anticipated date for the start of construction within the Turkey Point Units 6.8.7 Site, associated non linear facilities, and

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i.

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		associated linear non-transmission facilities rights of way. The Licensee shall not construct in areas where evidence of listed species was identified during the initial survey until the particular listed species issues have been resolved as follows:
		1.Listed Wildlife Species:
		If listed wildlife species are found, their presence shall be reported to the DEP SCO, the FWC, and the USFWS.
		2.Species Management Plan:
		If total avoidance of state-listed wildlife species is not feasible, the Licensee shall consult with the FWC to determine the steps appropriate for the species involved to avoid, minimize, mitigate, or otherwise appropriately address potential impacts. For wildlife species, these steps shall be memorialized in a Species Management Plan and submitted to the FWC for review and approval."
		In addition, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to incorporate wildlife protection features into the roadway design for all segments of the temporary access roads south of SW 344 <sup>th</sup> Street. Along SW 359 <sup>th</sup> Street and along the portions of SW 117 <sup>th</sup> Avenue and SW 137 <sup>th</sup> Avenue that are to be constructed south of SW 344 <sup>th</sup> Street, wildlife exclusion fencing shall be installed and shall include small mesh material, such as silt fencing, of appropriate mesh size and height to provide an exclusion barrier for reptiles and other small animals. The SW 359 <sup>th</sup> Street temporary roadway shall accommodate a

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 95 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – T & E Topics [bold text applied for emphasis]
		minimum of two (2) wildlife underpasses west of the L-31E levee, one of which must be constructed between SW 137 <sup>th</sup> Avenue and SW 117 <sup>th</sup> Avenue and the other between SW 117 <sup>th</sup> Avenue and the L-31E borrow canal. The bridge over the L-31E borrow canal may serve as one of the wildlife underpasses provided that the plans demonstrate it has been appropriately designed for this purpose. These underpasses shall be of adequate design and shall be constructed to facilitate the safe passage of all wildlife known to occur or to potentially occur in this area during all times of the year, including but not limited to deer, Florida panthers, bobcats, snakes, American crocodiles, and amphibians. A minimum of three (3) crocodile underpasses shall also be provided along the temporary access road immediately north of the cooling canal system. The required underpasses shall be positioned to provide safe access to the habitat.
		Reference – Conditions of Certification Section B. VII.H.3.

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Transmission Topics [bold text applied for emphasis]
1	NPS letter dated 7/17/15, Page 1, 2 <sup>nd</sup> paragraph "FPL has submitted a Combined Construction and Operating License application to the NRC to build two additional nuclear reactors (Units 6 and 7) at the Turkey Point power plant facility in Homestead, Florida. The Turkey Point power plant complex is located adjacent to Biscayne National Park (Biscayne NP) and two miles south of the park's visitor center and headquarters. Additionally, Everglades National Park (Everglades NP) is located 15 miles west of the plant and would also be impacted by the project. Other proposed infrastructure includes the construction of additional access roads, bridges, a reclaimed water treatment facility, reclaimed and potable water pipelines, radial collector wells (RCW) and associated pipelines, expansion of an existing barge basin, and two separate powerline corridors, the westernmost of which is currently proposed within and adjacent to Everglades NP. The eastern powerline corridor would be built within a small portion of Biscayne NP where FPL has an existing powerline easement."	In its Final Order, the Siting Board adopted the conclusion of the Administrative Law Judge to certify the West Consensus Corridor, with the FPL West Preferred Corridor as the second choice if a Right-of-Way within the West Consensus Corridor cannot be secured in a timely manner and at a reasonable cost. In addition, Condition of Certification Section C. XVI. requires FPL to work with MDLPA and SFWMD to allow access to and placement of transmission line structures in property under their control and east of the L-31 N canal (outside of Everglades National Park). In areas where this is not possible, FPL shall only use the minimum amount of land west of the L-31 N canal (inside the current boundaries of Everglades National Park) that is necessary to build and maintain the structures, and FPL shall return to installing structures to the east side of the L-31 N canal at the first available and practicable location. Condition of Certification Section C. XVI.states, "A. For the West Consensus Corridor/MDLPA No. 2, FPL shall build and maintain all structures to the east of the L-31 N canal (outside Everglades National Park) if the following commitments are made by MDLPA and SFWMD within one year from the date that a final Site Certification Order can no longer be appealed, or within one year from the date FPL requests such commitment in writing, whichever is later: 1. The affected MDLPA member companies will allow access to and placement of transmission line structures in the affected member-company-owned or company-

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Transmission Topics [bold text applied for emphasis]
		controlled property within the West Consensus Corridor/MDLPA No. 2 east of L-31 N as provided in the Agreement between the MDLPA and FPL regarding the Western Transmission Corridor Portion of the FPL's Turkey Point 6 & 7 Power Plant Site Certification Application dated August 30, 2013; and 2. SFWMD will allow placement of structures (and use of its property for access) on its property in Segment 1 of Attachment W within the West Consensus Corridor/MDLPA No. 2, adjacent to Everglades National Park, and property necessary to transition the transmission facilities to or from MDLPA member company-owned or company-controlled property, in addition to any other conditions of certification, including those made a part of the FPL/SFWMD Alternate Corridor Stipulation dated October 25, 2013 (included as Specific Conditions C.VI.F.3.f.ii and iii. B. Should MDLPA make the commitment set forth in Specific Condition C.XVI.A.1., but SFWMD be unable or unwilling to approve the commitment set forth in paragraph Specific Condition C.XVI.A.2., FPL shall build and maintain all structures to the east of the L-31 N canal (outside of Everglades National Park) in accordance with Specific Conditions C.VI.F.3.f.ii and iii, recognizing the need for accommodating canal crossings.
		C. Should SFWMD make the commitment set forth in Specific Condition C.XVI.A.2., but MDLPA be unable or unwilling to make the commitment set forth in Specific Condition C.XVI.A.1., FPL shall build and maintain all structures to the east

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Transmission Topics [bold text applied for emphasis]
		of the L-31 N canal (outside of Everglades National Park) upon receiving the written agreement of SFWMD for the construction, operation and maintenance of transmission structures and the need for accommodating canal crossings.
		D. Any use by FPL of SFWMD right-of-way in these areas described above will be subject to necessary accommodations by FPL for SFWMD's operation and maintenance of the Central and Southern Flood Control System ("C&SF System"), as determined by SFWMD, and as generally reflected in the Specific Conditions C.VI.A through C.VI.F. FPL shall comply with Specific Condition C.VI.B regarding the maintenance of, and avoidance of harmful interference with or adverse impacts to, the South Florida Water Management District Communication System and Facilities ("WMDCSF").
		E. In areas where FPL is unable to build and maintain its structures east of the L-31 N canal (outside of Everglades National Park), FPL shall only use the minimum amount of land west of the L-31 N canal (inside the current boundaries of Everglades National Park) that is necessary to build and maintain the structures, and FPL shall return to installing structures to the east side of the L-31 N canal at the first available and practicable location."
		Reference – Condition of Certification Section C. XVI.
2	NPS letter dated 7/23/15, Page 12, 2 <sup>nd</sup> paragraph	With respect to the comments on the status of the Site Certification proceedings in Florida, the statement "Until there is a non-appealable Final Order, EPL does not have the State
	1) Description of the Affected Environment, Especially	a non-appealable rinal Order, recloves not have the State,

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Transmission Topics [bold text applied for emphasis]
	Relating to the State of Florida Site Certification Process 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 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	regional, and local approvals needed to use the West Preferred Corridor as the backup location for its western transmission lines" is not correct. The State of Florida Site Certification process is complete; the Certification Final Order is final. The appeal by MDC and three municipalities of the Final Order to the District Court of Appeal does not stay the Certification Order. FPL currently has the State, regional and local approvals needed to use the West Preferred Corridor as the backup location for its west transmission lines, should it not be able to secure the land interests needed for the use of the West Consensus Corridor.
3	<ul> <li>NPS letter dated 7/23/15, Page 12, 3<sup>rd</sup> paragraph</li> <li>7) <u>Description of the Affected Environment, Especially</u> <u>Relating to the State of Florida Site Certification Process</u></li> <li>"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</li> </ul>	The State of Florida Site Certification process is complete; the Certification Final Order is final. The appeal by MDC and three municipalities of the Final Order to the District Court of Appeal does not stay the Certification Order. FPL currently has the State, regional and local approvals needed to use the West Preferred Corridor as the backup location for its west transmission lines, should it not be able to secure the land interests needed for the use of the West Consensus Corridor.

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Transmission Topics [bold text applied for emphasis]
	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	
	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-31N canal (outside of ENP), the FO directs that FPL shall only use the minimum amount of land west of theL-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. <b>The Siting Board's certification</b>	

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Transmission Topics [bold text applied for emphasis]
1	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."	
4	NPS letter dated 7/23/15, Page 13, 2 <sup>nd</sup> paragraph 7) <u>Description of the Affected Environment. Especially</u> <u>Relating to the State of Florida Site Certification Process</u> <u>Section2.2.2.1 Western Corridors</u> "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-31 N 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	The acreage reference in this comment represents the maximum acreage needed for the entire corridor, not the acreage needed for the final right of way within that corridor. ER Subsection 4.3.2.4states, "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."
5	<ul> <li><i>described in the NRC's EIS.</i></li> <li>NPS letter dated 7/23/15, Page 13, 3<sup>rd</sup> paragraph</li> <li>7) <u>Description of the Affected Environment. Especially</u> <u>Relating to the State of Florida Site Certification Process</u></li> </ul>	The acreage reference in this comment represents the maximum acreage needed for the entire corridor, not the acreage needed for the final right of way within that corridor.

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 102 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Transmission Topics [bold text applied for emphasis]
	<u>Section2.2.2.1 Western Corridors</u> "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	ER Subsection 4.3.2.4states, "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." The State of Florida Site Certification process is complete; the Certification Final Order is final. The appeal by MDC and three municipalities of the Final Order to the District Court of Appeal does not stay the Certification Order. FPL currently has the State, regional and local approvals needed to use the West Preferred Corridor as the backup location for its west transmission lines, should it not be able to secure the land interests needed for the use of the West Consensus Corridor.

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Transmission Topics [bold text applied for emphasis]
	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-31 N 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 (FPL2013- TN2941) "	
6	NPS letter dated 7/23/15, Page 13, 4 <sup>th</sup> paragraph 7) <u>Description of the Affected Environment, Especially</u> <u>Relating to the State of Florida Site Certification Process</u> <u>Section2.2.2.1 Western Corridors</u> "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	Please note, NPS's Acquisition of FPL land in the East Everglades Expansion Area DEIS did not address the West Consensus Corridor. In its Final Order, the Siting Board adopted the conclusion of the Administrative Law Judge to certify the West Consensus Corridor, with the FPL West Preferred Corridor as the second choice if a Right-of-Way within the West Consensus Corridor cannot be secured in a timely manner and at a reasonable cost. The West Consensus Corridor is largely outside ENP boundaries. Condition of Certification Section C. XVI. requires FPL to work

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Transmission Topics [bold text applied for emphasis]
	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.)"	<ul> <li>with MDLPA and SFWMD to allow access to and placement of transmission line structures in property under their control and east of the L-31 N canal (outside of Everglades National Park). In areas where this is not possible, FPL shall only use the minimum amount of land west of the L-31 N canal (inside the current boundaries of Everglades National Park) that is necessary to build and maintain the structures, and FPL shall return to installing structures to the east side of the L-31 N canal at the first available and practicable location.</li> <li>See also FPL Observation to NPS Transmission Topic comment No. 1 above for additional information.</li> </ul>

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – CEC Topics [bold text applied for emphasis]
1	NPS letter dated 7/23/15, Page 5, 3 <sup>rd</sup> paragraph, 4 <sup>th</sup> sentence	Reclaimed water will not be "put back into the IWF." Reclaimed water used in the cooling tower will be disposed of via
	Release of Chemicals of Emerging Concern CCECs)	Underground Injection wells (UIC).
	"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, <b>reclaimed water put back into the IWF,</b> as well as the addition from the drift may have an effect. Some of these	
	contaminants are endocrine disruptors, which cause effects	
	reproductive effects at very low concentrations. The DEIS	
	reclaimed water that not only exceed toxicological benchmarks	
	and EPA water quality criteria, but also those that	
	only impact the wood stork and crocodile, but other species	
	foraging in the project area as well."	
2	NPS letter dated 7/23/15, Page 6, 2 <sup>nd</sup> paragraph	The referenced text from the DEIS pertains to herbicide use for
	Release of Chemicals of Emerging Concern CCECs)	transmission line vegetation control. Conditions of Certifications issued by the Siting Board on 5/19/14, Section C. V. states,

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – CEC Topics [bold text applied for emphasis]
	<ul> <li>"Page 5-136</li> <li>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 herbicide would be used at a time or in conjunction with other chemicals, or whether any of the 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."</li> </ul>	"Only herbicides registered by the U.S. Environmental Protection Agency and the Florida Department of Agriculture and Consumer Services be used at certified facilities. Herbicide applications will be in accordance with label directions and will be carried out by a licensed applicator, in compliance with all federal, state and local regulations. Herbicide applications shall be selectively applied to targeted vegetation. Broadcast application of herbicide shall not be used unless effects on non- targeted vegetation are minimized." Reference – Conditions of Certification Section C. V.

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Sea Level Rise Topics [bold text applied for emphasis]
1	<ul> <li>NPS letter dated 7/23/15, Page 6, 4<sup>th</sup> paragraph, 3<sup>rd</sup> sentence</li> <li>4) Evaluation of Sea-Level Rise, Future Hurricanes and Storms, and Climate Change Impacts</li> <li>"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."</li> </ul>	Sea level rise projections, storm surge, wave run-up and tidal variations were considered in evaluating flood levels and site elevations necessary for physical protection of the proposed units. These considerations are discussed in detail in the proposed final safety analysis report included with the COL application. The proposed site elevation provides protection from storm surge.
2	<ul> <li>NPS letter dated 7/23/15, Page 6, 5<sup>th</sup> paragraph, 3<sup>rd</sup> sentence</li> <li>4) Evaluation of Sea-Level Rise, Future Hurricanes and Storms, and Climate Change Impacts</li> <li>"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</li> </ul>	DEIS Appendix I, Section I.3.2 Hydrology states, "Climatological changes are not expected to affect the anticipated hydrologic alterations resulting from station operation, or influence (or lead to) plant operations impacts on other water uses and users. Sea-level rise will result in greater depth of Biscayne Bay near the Turkey Point site. Because of the current very shallow conditions of Biscayne Bay in this vicinity even a modest increase in sea level may help to improve circulation (reducing the hypersalinity of water entering the radial collector well system). However, circulation is also controlled by flow conditions away from the site. The review team presumed that the cooling canals' water surface elevation would likely also

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NPS Comment [bold text applied for emphasis]	FPL Observation – Sea Level Rise Topics [bold text applied for emphasis]
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."	rise in response to the rise in sea level. This rise would increase the volume of water in the canals, but it is not expected to appreciably change the gradient between Biscayne Bay and the cooling canals. Therefore, no change in the interface between the canals and the Bay is expected."
NPS letter dated 7/23/15, Page 7, 1 <sup>st</sup> paragraph	The FPL-projected sea level rise for the NRC application period (2022 to 2063) is 1 foot. That is the linear projection for about
<i>4) Evaluation of Sea-Level Rise, Future Hurricanes and Storms, and Climate Change Impacts</i>	125 years at the current rate of sea level rise. This 1 foot amount is well within the nonlinear projections as given by various climate models. The base of the plant is going to be set at 26
"The rate of sea-level rise in the region of the IWF is currently 2.4 mm/year and increasing. Projections by the	feet above the North American Vertical Datum of 1988. This elevation accounts for both sea level rise projected for the NRC
Intergovernmental Panel on Climate Change (IPCC Fifth Assessment, 13.5, 2013) show coastal water levels gaining	application period and for the worst-case storm scenario.
between 0.40 and 0.63 m by the end of the century, with	
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 IWE contaminants	
	NPS Comment [bold text applied for emphasis] 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." NPS letter dated 7/23/15, Page 7, 1 <sup>st</sup> paragraph 4) Evaluation of Sea-Level Rise, Future Hurricanes and Storms, and Climate Change Impacts "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

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Sea Level Rise Topics [bold text applied for emphasis]
	to Biscayne NP (by decreasing these contaminants and the connectivity between the IWF facility and Bay waters), should be in place."	
4	NPS letter dated 7/23/15, Page 7, 2 <sup>nd</sup> paragraph	DEIS Appendix I, Section I.3.5, Traffic states, "The review team determined that the operations-related
	<i>4) Evaluation of Sea-Level Rise, Future Hurricanes and Storms, and Climate Change Impacts</i>	impacts of traffic would be moderate. While the long-term effects of global climate change would have a deleterious impact on the current level of infrastructure in the area, the review team
	"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	believes it is not unreasonable to expect decision makers in the area to incrementally adapt to the climate change effects (e.g., sea-level rise) by incorporating mitigating measures that would prevent the deterioration of infrastructure services (e.g., raising the elevation of roads). Such adaptive measures would impose significant costs on local communities, the funds for which would either have to come from increased revenues (taxes and tolls) or be diverted from other expenses (maintenance, personnel, services). Consequently, the review team expects that if the physical changes predicted by the GCRP report (GCRP 2014-TN3472) were to occur, the traffic-related impacts on the local communities would increase."
	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	DEIS Appendix I, Section I.3.2. Hydrology states, "Sea-level rise will also push the freshwater-seawater interface
	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."	resources inland. However, because the proposed Units 6 and 7 would use reclaimed wastewater for most of its water needs, this would not alter the impact of the plant."

## Proposed Turkey Point Units 6 and 7 Docket Nos: 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 110 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Sea Level Rise Topics [bold text applied for emphasis]
		"As discussed in Section I.2, precipitation amounts in South Florida are projected to shift in different directions in different seasons. Even if total precipitation increases, if the majority of this increase is in response to intense storms it would not result in a proportional increase in recharge to groundwater. The increase in temperature may also increase evapotranspiration, thereby further reducing recharge. The review team determined that overall recharge to the Biscayne Bay aquifer may be reduced as a result of climate change. However, because the proposed plant would use reclaimed wastewater for most of its water needs, this would not alter the plant's impact on the environment. "
		"The review team could not determine whether an increase in temperature or changes in precipitation patterns would result in any change in the supply of wastewater for the plant's cooling system. Given the abundance of wastewater in this region, the review team determined that a sufficient supply of wastewater would remain available."
5	NPS letter dated 7/23/15, Page 8, 1 <sup>st</sup> paragraph	Generic EIS (GEIS) issued last September for the NRC's 'Continued Storage of Spent Fuel' rule addressed this subject for
	<i>4)</i> Evaluation of Sea-Level Rise, Future Hurricanes and Storms, and Climate Change Impacts	Units 6 & 7 (i.e., GEIS analysis and conclusions are incorporated by rule into the Units 6 & 7 EIS).
	"Because the NPS is required to manage parks for "future generations," we recommend that a revised DEIS <b>provide</b>	Excerpt from GEIS page 4-84, Section 4.18.1.2 "Design Basis Events in Dry Cask Storage Systems"

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Sea Level Rise Topics [bold text applied for emphasis]
	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."	"Under current NRC regulations applicable to dry cask storage facilities, the NRC requires that the vendor or licensee include design parameters on the ability of the storage casks and spent fuel storage facilities to withstand severe weather conditions such as hurricanes, tornadoes, and floods. NRC-licensed spent fuel storage facilities are designed to be robust. They are evaluated to ensure that performance of their safety systems, structures, and components is maintained in response to natural phenomena hazards. In the event of impacts induced by climate change, such as sea-level rise, which occurs gradually over long periods of time, the NRC regulations (e.g., 10 CFR 72.172, "Corrective action") requires licensees to implement corrective actions to identify and correct conditions adverse to safety." Excerpt from GEIS page 4-90, Section 4.18.2.2 - "Severe Accidents in Dry Cask Storage Systems and DTSs"
		"In general, the effects of floods on dry cask storage systems can include cask sliding, tip-over, and blockage of ventilation ports by water and silting of air passages. Other effects include water scouring below ISFSI foundations, burial under debris, and severe temperature gradients resulting from rapid cooling from immersion in water (NRC 2007f). However, based on the relatively slow rate of change in flood risk over time, the NRC is confident that any regulatory action that may be necessary will be taken in a timely manner to ensure the safety of dry cask storage systems. If climate change influences on sea-level rise create conditions adverse to safety, the NRC has sufficient time to require licensees to implement corrective actions to identify

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Sea Level Rise Topics [bold text applied for emphasis]
		and correct conditions adverse to safety. Some of the specific corrective actions that could be taken include elevating the existing ISFSI, relocating dry casks to higher ground onsite, or transporting the spent fuel to a different site."

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
1	NPS letter dated 7/23/15, Page 8, 4 <sup>th</sup> paragraph <b>5)</b> <u>Analysis of Visual, Lighting, and Noise Impacts</u> "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. <sup>1</sup> 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."	As further discussed in observation 2, below, viewshed impacts resulting from the Project, including the transmission line structures, have been adequately analyzed and addressed. ER Figures 3.1.5 and 3.1.6 are visual renderings of the Units from the transportation corridor (344 <sup>th</sup> Street) and Biscayne Bay respectively, and evidence and expert testimony adduced at the state site certification hearing demonstrated the Project will not have a significant adverse visual impact on either the BMP or ENP. Additional analysis such as a visual analysis or photosimulation, are unwarranted.
2	NPS letter dated 7/23/15, Page 8, 6 <sup>th</sup> paragraph 5) Analysis of Visual. Lighting. and Noise Impacts	Regarding visual impacts of the Eastern Corridor on BNP and along US 1, SCA Section E9.4.6 states, "Table E9.3.6-3 previously listed scenic, cultural, or natural landmarks found within or near the East Preferred Corridor. One

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
	<i>"FPL's Eastern Corridor would include the addition of a 230 kV (up to 90ft. 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 160ft. tall) and one 230 kV (up to 90ft. 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."</i>	such landmark contained in the corridor, BNP, is already crossed by FPL's existing multi-circuit 230-kV transmission line right-of- way leaving the Turkey Point plant property. The new line placed immediately adjacent to the existing transmission lines within FPL's existing right-of-way will not adversely affect the character of this resource." "The 230-kV line to be installed along portions of the U.S. 1/Metrorail transportation corridor generally will be taller than other structures in the area. While the transmission line will be visible along this transportation corridor, the elevated rail structures, urban development density, and primarily commercial nature of the development fronting this transportation corridor are well suited to accommodate this additional infrastructure. The existing land use designations and zoning districts fronting the U.S. 1/Metrorail corridor predominantly allow for denser, transit-oriented development."
		Reference – SCA Section E9.4.6 Regarding visual impacts of the West Preferred Corridor, SCA Section W9.4.6 states, "The West Preferred Corridor involves a proposed land exchange to move the existing FPL right-of-way further eastward to collocate with the SFWMD L-30/31N Canal right-of-way along the eastern edge of the ENP and WCA-3B." "If the proposed transmission lines are located within the West Preferred Corridor, they will be located along the L-30/31N Canal

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
		access road, a limited access road. The views of possible future transmission facilities from Tamiami Trail will be combined with views with other existing development such as the Miccosukee Casino and the pump station on the L-29 Canal, thereby further minimizing adverse impacts on ENP visitor experience (Parsons, 2008)."
		Reference – SCA Section W9.4.6
		Visual impacts to the ENP associated with the western transmission lines were addressed by the Administrative Law Judge in the Recommended Order on Site Certification, at ¶¶ 690-97 and supporting testimony and evidence. Relative to Everglades National Park (ENP), the presence of the ENP was considered in the comparison of the alternate corridors and in the selection of the FPL West Preferred Corridor because it potentially harbors more listed wildlife species and is the subject of various government-funded restoration projects. FPL balanced proximity to both existing and planned urban development/adjacent land use considerations, engineering considerations, and environmental considerations/effect on environmentally sensitive areas in comparing the western transmission line corridors and attempted to achieve the best balance of all of those considerations in selecting its preferred corridors. The presence of the ENP was one factor in the analysis. FPL assessed the visibility of the proposed transmission line structures from various vantage points. The

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
		Preferred or the West Consensus corridor would not be visible to visitors at the ENP Shark Valley Visitor's Center Observation Tower, which is approximately 16.7 miles west of the L-31N levee. At an airboat vantage point within the ENP approximately 3.44 miles west of the L-31N levee, existing structures in the area, such as the Miccosukee Indian Casino and numerous radio and cell towers, are visible, but the proposed transmission lines in the West Preferred Corridor would be barely visible on the horizon and not visible at all in the West Consensus Corridor. Transmission lines are not uncommon in rural areas. The location, construction, operation, and maintenance of the proposed western transmission lines in the west alternate corridors will not cause significant adverse effects to scenic or recreational values. SCO, RO ¶¶690, 694-97
		Regarding impacts on park visual resources evaluated in NPS's Acquisition of FPL land in the East Everglades Expansion Area DEIS, please note this document did not address the West Consensus Corridor. In its Final Order, the Siting Board adopted the conclusion of the Administrative Law Judge to certify the West Consensus Corridor, with the FPL West Preferred Corridor as the second choice if a Right-of-Way within the West Consensus Corridor cannot be secured in a timely manner and at a reasonable cost. The West Consensus Corridor is largely outside ENP boundaries Regarding visual impacts of the West Consensus Corridor

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
		addition of these new structures would alter the viewscape; however, the visibility would be reduced with increased distance. At the present time, most of the views into the ENP from the Tamiami Trail are obstructed by vegetation growing along the highway. In addition, the MDLPA 2 Corridor turns east approximately one mile south of the Tamiami Trail boundary of ENP, further reducing potential visual impacts of the transmission facilities."
		Reference – ML13311A105
		Relative to visual impacts associated with the eastern transmission lines within the Eastern Preferred Corridor, the Administrative Law Judge found that aesthetics in the affected communities would not be unduly impacted given that the transmission lines would be "just one of many urbanized vertical elements in the landscape. Any aesthetic impacts from the proposed transmission lines would be no different in kind from those normally experienced every day in settings like those proposed for the transmission lines." SCO RO ¶¶ 396-399. See also Gilbert, T. pp. 8294-95.
		Additionally, FPL has agreed to certain conditions that will minimize any adverse visual impacts associated with the placement, construction and maintenance of the transmission line within the Eastern Preferred Corridor. For example, upon completion of transmission line construction, FPL has agreed to restore the entire area disturbed or affected by the work to their

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
		original or equal condition that existed prior to the work. COC Section C.VII.P (MDC); COC Section C.VIII.D (City of Coral Gables); COC Section C.X.C, G (COM).
		Following construction of the transmission lines, FPL will work with MDC and CCG to discuss the ability to co-locate public recreational trails and the provision for bicycle and pedestrian access or the allowance of other public uses within the transmission line rights-of-way. COC Section C.VII.U (MDC); COC Section C.VIII.D (CCG).
	· · · · ·	These conditions were agreed upon with the relevant governmental agencies, and the site certification order found that FPL was willing and able to comply with these conditions of certification. SCO RO ¶¶ 752-53. Construction of the proposed Davis-Miami transmission line in the Eastern Preferred Corridor will comply with the applicable non-procedural requirements of the local governments in which it will be located and FPL repair or restore any damage to public ROW caused by construction or maintenance of transmission lines. SCO RO ¶ 466.
		Relative specifically to visual impacts on BNP The plant site will be located within FPL's existing Industrial Wastewater Treatment Facility at FPL's existing Turkey Point power facility. Because five power generation units already exist on the Turkey Point plant property, construction of Units 6 & 7 would pose only a slight alteration of the regional viewscape. The change in viewscape could be restored after plant operations cease and the facilities

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
		are decommissioned. FPL Environmental Report at s. 10.2.1.
		Additionally, wetlands adjacent to BNP are proposed to be preserved as part of mitigation. (FPL Mitigation Plan, Rev. 2 (July 2011). Part of FPL's proposed wetland mitigation is the Northwest Restoration Site, which consists of several FPL- owned parcels totaling 238 acres located adjacent to the L-31E Canal approximately 2 miles northwest of the Units 6 & 7 Site and directly west of the BNP. Restoration and enhancement of these parcels will be achieved through the removal of exotic species of vegetation, removal of ditches and grading to restore natural topography and enhance hydrology, and preservation through a conservation easement. The area is uniquely positioned adjacent to the entrance to the BNP, which provides the opportunity for the incorporation of passive public recreation opportunities within the area such as boardwalks, bird observation areas, and environmental education. The location of the Northwest Mitigation Site in close proximity to the BNP will provide Park visitors with the opportunity to explore a restored sawgrass marsh, marl prairie, and mangrove ecosystem. In addition, the Site's location within the proposed Biscayne - Everglades Greenway would allow for potential incorporation into the Greenway's overall plan to provide a network of bicycle trails and walkways between the two parks. FPL August 2012 Mitigation Plan, Rev. 2 (USACE Supplement). Bullock Vol. 6, pp 746-748
3	NPS letter dated 7/23/15, Page 9, 2 <sup>nd</sup> paragraph	See FPL Observation to NPS Noise and Visual Topic comment No. 2 above.

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
	5) Analysis of Visual, Lighting, and Noise Impacts	
	"If powerlines are built in FPL's West Preferred Corridor, they would be located west of the L-31N levee road on roadless wetlands currently inside Everglades NP (not east of the canal on SW187th 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-31N Canal (Figure 59 on page 361) and looking northwest from the L-31 N Canal (Figure 63 on page 369), and looking west on Tamiami Trail (Figure 61 on page 365)."	
4	NPS letter dated 7/23/15, Page 10, 1 <sup>st</sup> paragraph	SCA sections 5.7 and 6.7 describe noise impact analysis for site
I		preparation, construction and operations.
	5) Analysis of Visual. Lighting. and Noise Impacts	
	"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,	SCA section 5.7 states, "The construction period noise predictions for the Project were developed using the CadnaA (Computer Aided Noise Abatement) computer model, a computerized software program for calculation, presentation, assessment and prediction of environmental noise (DataKustik, 2006 et seq.)." "The noise level during site preparation at the nearest public receptor (Homestead Bayfront Park, S7) is predicted to be 38.4

Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 121 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
	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."	dBA. During the daytime, the calculated SPLs would range from 41.4 to 49.7 dBA with background L90 and Leq SPLs." "During the nighttime, the calculated SPLs would range from 42.4 to 47.8 dBA with background L90 and Leq SPLs."
		"The predicted noise level of facility construction at the nearest public receptor (Homestead Bayfront Park, S7) is predicted to be 34.0 dBA. During the daytime, the calculated SPLs would range from 39.7 to 49.5 dBA with background L90 and Leq SPLs." "During nighttime, the calculated SPLs would range from 41.2 to 47.4 dBA with background L90 and Leq SPLs."
		"The difference between the predicted noise levels with background L90 and Leq, and background L90 and Leq at monitoring locations beyond the FPL Turkey Point Plant property, is approximately 3 dBA or less during the daytime and less than 1.5 dBA during the nighttime. A 1.5-dBA difference in SPLs is generally not noticeable by human hearing. In addition, the typical uncertainty in environmental noise observations due to temporal changes in noise sources is 3 dBA."
		"Based on the results of the noise impact analysis, the maximum predicted noise levels from the construction of the Project will not produce any unreasonably loud, excessive, unnecessary or unusual noise and will comply with the applicable Miami-Dade County noise ordinance."
		Reference – SCA Section 5.7

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 122 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
		SCA section 6.7 states, "The predicted SPL due to the operation of Units 6 & 7 at the Homestead Bayfront Park (Site 7) is predicted to be 35.4 dBA. During the daytime, the calculated SPLs would range from 40.1 to 49.6 dBA with background L90 and Leq SPLs." "During the nighttime, the calculated SPLs would range from 41.5 to 47.5 dBA with background L90 and Leq SPLs." "The difference between the predicted noise impacts with background L90 and Leq, and background L90 and Leq at monitoring locations beyond the FPL Turkey Point Plant Property is 1.8 dBA or less during the daytime and 1.2 dBA or less during the mighttime A 1.9 dBA difference in SPI a in generally not
		noticeable by human hearing. In addition, the typical uncertainty in environmental noise observations due to temporal changes in noise sources is 3 dBA."
		"Based on the results of the noise impact analysis and the comparison to municipal numerical standards, the predicted noise levels from the operation of Units 6 & 7 will not produce any unreasonably loud, excessive, unnecessary or unusual noise and will comply with the applicable Miami-Dade County noise ordinance."
		Reference – SCA Section 6.7
		Additional information was submitted in ML14336A346,

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Noise and Visual Impacts Topics [bold text applied for emphasis]
		"Assessment of Certain Potential Construction Noise and Vibration Impact on Threatened and Endangered Aquatic Species" 2014.
#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 124 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
1	NPS letter dated 7/23/15, Page 20, 2 <sup>nd</sup> paragraph <b>10) Mitigation</b> 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 150ft. tall) and one 230 kV (up to 105 ft. tall) powerline. FPL's eastern corridor would contain a single 230 kV (up to 90ft. 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."	Regarding visual impacts of the Eastern Corridor on BNP, SCA Section E9.4.6 states, "Table E9.3.6-3 previously listed scenic, cultural, or natural landmarks found within or near The East Preferred Corridor. One such landmark contained in the corridor, BNP is already crossed by FPL's existing multi-circuit 230-kV transmission line right-of- way leaving the Turkey Point plant property. The new line placed immediately adjacent to the existing transmission lines within FPL's existing right-of-way will not adversely affect the character of this resource." Reference – SCA Section E9.4.6 See also FPL Observation to NPS Noise and Visual Topic comments Nos. 2 and 3. Relative specifically to visual impacts on BNP, the plant site will be located within FPL's existing Industrial Wastewater Treatment Facility at FPL's existing Turkey Point power facility. Because five power generation units already exist on the Turkey Point plant property, construction of Units 6 & 7 would pose only a slight alteration of the regional viewscape. The change in viewscape could be restored after plant operations cease and the facilities are decommissioned. FPL Environmental Report at s. 10.2.1.
		preserved as part of mitigation. (August 2012 Mitigation Plan,

#### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 125 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
		Rev. 2 (USACE Supplement). Part of FPL's proposed wetland mitigation is the Northwest Restoration Site, which consists of several FPL-owned parcels totaling 238 acres located adjacent to the L-31E Canal approximately 2 miles northwest of the Units 6 & 7 Site and directly west of the BNP. Restoration and enhancement of these parcels will be achieved through the removal of exotic species of vegetation, removal of ditches and grading to restore natural topography and enhance hydrology, and preservation through a conservation easement. The area is uniquely positioned adjacent to the entrance to the BNP, which provides the opportunity for the incorporation of passive public recreation opportunities within the area such as boardwalks, bird observation areas, and environmental education. The location of the Northwest Mitigation Site in close proximity to the BNP will provide Park visitors with the opportunity to explore a restored sawgrass marsh, marl prairie, and mangrove ecosystem. In addition, the Site's location within the proposed Biscayne - Everglades Greenway would allow for potential incorporation into the Greenway's overall plan to provide a network of bicycle trails and walkways between the two parks (August 2012 Mitigation Plan, Rev. 2 (USACE Supplement).
2	NPS letter dated 7/23/15, Page 20, 4 <sup>th</sup> paragraph	Please refer to Mitigation Topic observation 7 for an accurate
	10) Mitigation	linear facilities. Approximately 250 acres of wetlands are
		proposed to be impacted for construction of the Nuclear Island.
	Units 6 & 7 Site	which is contained entirely within FPL's existing industrial
	"The Nuclear Island, which includes Units 6 and 7 and	wastewater treatment facility. The wetlands within the industrial
		wastewater treatment facility are low in functional value. (August

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
	other reactor buildings, would encompass approximately 300 acres, most of which are mud flat wetlands that	2012 Mitigation Plan, Rev. 2 (USACE Supplement) (§2.3.1).
	provide important bird habitat. As discussed, nitrogen and phosphorus organics from the muck could further	See also FPL Observation to NPS RCW Topic comment No. 24.
	<b>degrade the IWF.</b> 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	Regarding avian use of the mud flat area within the industrial wastewater treatment facility, FPL has incorporated specific activities in the Turkey Point Units 6 & 7 Mitigation Plan to compensate for the loss of mud flat habitat for shorebirds in three different areas:
	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."	Everglades Mitigation Bank Assessment Area 10 In consultation with the Florida Fish and Wildlife Conservation Commission and Miami Dade County, FPL has committed to enhancement and preservation of an approximately 170-acre parcel of sparsely vegetated mud flat habitat located immediately to the southeast of the industrial wastewater treatment facility within the Everglades Mitigation Bank as described in Conditions of Certification Section B.IV.3.b.and Section B.VII.O.6., listed below.
		Conditions of Certification Section B.IV.F.3.b. states, "Where practicable, the Licensee will mitigate for loss of shorebird habitat in consultation with FWC.
		b. For shorebirds utilizing mudflat habitat, the Licensee will consider mitigation through preservation, restoration, enhancement, or a combination thereof, of similar habitat within the Everglades Mitigation Bank or other location deemed as

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 127 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
		appropriate in consultation with the USFWS."
		Reference – Conditions of Certification Section B.IV.F.3.b.
		Conditions of Certification Section B.VII.O.6. states, "FPL shall mitigate for loss of shorebird habitat through credits obtained for the restoration and preservation of approximately 170 acres of similar habitat within the Everglades Mitigation Bank. These mitigation credits shall be permanently deducted from the EMB ledger and dedicated to Turkey Point 6 & 7 Project. Five credits obtained from this area shall be used solely to offset the loss of shorebird habitat and shall not be included within the credits necessary to offset mangrove or wetland impacts."
		Reference – Conditions of Certification Section B.VII.O.6.
		Northwest Restoration Site "Mitigation activities will restore the native vegetative community composition and enhance the hydrologic regime within the area, targeting conditions typical of a shallow sawgrass marsh/marl prairie community with mangroves and scattered tree islands. The majority of the Northwest Restoration Site will be restored to native sawgrass marsh, with areas of mangrove swamp, mixed wetland hardwood tree islands, and relatively open marl prairie areas supporting periphyton mat communities specifically beneficial for wading birds and shorebirds.

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 128 of 139

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
		The Northwest Restoration Site is located within areas that historically supported marl prairie, with hydroperiods ranging between three and seven months and having relatively shallow water depth of approximately 4 inches. The network of mosquito ditches has facilitated colonization by Australian pine; backfilling the network of ditches should moderately elevate the water level within the marsh, discouraging recolonization by Australian pine. Removal of exotic species of vegetation and supplemental planting, if necessary, will be utilized to maintain the target community."
		<u>SW 320th Street Restoration Site</u> "The target communities for the SW 320th Street Restoration Site are freshwater marsh and mixed wetland hardwood wetlands dominated by native species typical of the historical condition. Areas of exotic wetland hardwoods and palm tree nurseries will be restored to freshwater marsh, while the exotic wetland hardwood/mixed wetland hardwood forest along the eastern portion of the site will be restored to a native mixed wetland hardwood community. Control of exotic species of vegetation will facilitate regeneration of desirable wetland vegetation from the seed bank, supplemented by planting as necessary to achieve the target communities. The anticipated vegetative community composition associated with freshwater marsh systems include a variety of herbaceous species such as spikerush, sawgrass, arrowhead, beaksedges ( <i>Rhynchospora</i> spp.), camphorweed, leather fern, and pickerelweed ( <i>Pontederia</i>
		spp.), camphorweed, leather fern, and pickerelweed ( <i>Pontederia cordata</i> ), as well as occasional shrubs and small trees such as

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
		buttonwood, willow, coco plum, and buttonbush. Within the restored freshwater marsh, sparsely-vegetated areas of exposed substrate will be created to provide potential shorebird foraging habitat. Mixed wetland hardwood areas will include a variety of native canopy and shrub species, such as buttonwood, myrsine, coco plum, white mangrove, willow, and dahoon holly, with an understory dominated by sawgrass."
		Reference – FPL Mitigation Plan (ML12269A222)
		In addition, Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to mitigate for shorebird habitat impacts as described below.
		Conditions of Certification Section B.IV.F.3.b. states, "Where practicable, the Licensee will mitigate for loss of shorebird habitat in consultation with FWC.
		b. For shorebirds utilizing mudflat habitat, the Licensee will consider mitigation through preservation, restoration, enhancement, or a combination thereof, of similar habitat within the Everglades Mitigation Bank or other location deemed as appropriate in consultation with the USFWS."
		Reference – Conditions of Certification Section B.IV.F.3.b.
		Conditions of Certification Section B.VII.O.6. states, "FPL shall mitigate for loss of shorebird habitat through credits obtained for the restoration and preservation of approximately

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No. NPS Comm	nent [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
		170 acres of similar habitat within the Everglades Mitigation Bank. These mitigation credits shall be permanently deducted from the EMB ledger and dedicated to Turkey Point 6 & 7 Project. Five credits obtained from this area shall be used solely to offset the loss of shorebird habitat and shall not be included within the credits necessary to offset mangrove or wetland impacts."
		Reference – Conditions of Certification Section B.VII.O.6.
		With regards to the statement <i>"nitrogen and phosphorus organics from the muck could further degrade the IWF"</i> , the potential for stored muck to increase the nutrient concentration in the IWF was evaluated during the Site Certification Completeness process. The response to second round completeness question SFWMD-B-92(78) includes a description of the evaluation and results. In summary, muck from selected sampling locations was analyzed for ammonia, TKN, nitrate, nitrite, total phosphorus (TP), and total organic carbon (TOC). The samples were also analyzed by the SPLP method to determine potential nutrient concentrations from rainfall runoff and infiltration. The results of the nutrient loading analysis and the conservative nature of the calculations indicate that the maximum nutrient loadings would be small. As a result, no adverse environmental impact to the IWF is expected from excavating the muck or from placing the muck on the existing

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
3	NPS letter dated 7/23/15, Page 21, 2 <sup>nd</sup> paragraph <b>10) Mitigation</b> 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 <b>2.5 miles of pipeline construction would involve new land</b> <b>disturbance, and the pipeline would affect 326 acres,</b> <b>including 184 acres of wetlands.</b> The reclaimed water pipeline would include approximately 9 miles of new pipeline, approximately 2.5 miles of which would be in a new pipeline, approximately 2.5 miles of which would be in a new pipeline corridor. According to the DEIS, approximately 1,886 ac of <b>upland, forested, and wetland habitats would be affected</b> <b>as well as mangrove swamp, mixed wetland hardwoods,</b> <b>shrub and brushland, wetland shrubs, freshwater marsh,</b> <b>mixed rangeland, and herbaceous prairie.</b> The NPS encourages land protection and restoration efforts, such as those under EEL (described above), to offset the pipeline- related impacts."	The acreages referenced in DEIS Section 2.2.2.3 are reflective of the entire width of the pipeline corridors, not the area of actual temporary disturbance. No permanent wetland impacts are proposed as a result of pipeline installation. The Project's USACE permit application and associated August 2012 Mitigation Plan Rev. 2 (USACE Supplement) specify the acreage of temporary wetland impact associated with installation of the reclaimed and potable water pipelines: • Reclaimed Water Pipeline = 43.6 acres • Potable Water Pipeline = 0 acres The potable water pipeline will be installed within the existing median of SW 137 <sup>th</sup> Ave, avoiding wetland impacts, and then will be installed underneath the construction access roadway improvement corridor to reach the Units 6 &7 Site, avoiding additional wetland impacts.
4	NPS letter dated 7/23/15, Page 21, 3 <sup>rd</sup> paragraph <b>10</b> ) <i>Mitigation</i>	Construction of the Project will impact approximately 0.004 acres of SAV within the barge unloading basin area. A seagrass survey was conducted within the area of the turning

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
	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 90ft. by 150ft. would be excavated on the	basin proposed for dredging in 2008, resulting in approximately 0.004 acres of sparse <i>Thalassia</i> and <i>Halodule</i> . Prior to construction, FPL will resurvey the barge basin expansion area for the presence of benthic resources.
	northwest edge of the existing barge-turning basin resulting in a total disturbed area of 130ft. by 250ft. or 0.75 ac The expansion of the barge-unloading facility would require dredging a 4,356 ft <sup>2</sup> (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."	Conditions of Certification issued by the Siting Board on 5/19/14 require FPL to avoid and minimize impacts to benthic resources. Condition of Certification, Section B. VII.O.7. states, "FPL shall avoid and minimize impacts to benthic resources and be responsible for mitigation of unavoidable adverse impacts to benthic resources (i.e. corals, sponges, or seagrasses) that may result from the dredging, expansion and/or operation of the barge basin. Prior to construction in the barge basin, FPL shall survey the barge basin expansion site for the presence of benthic resources. If the expansion of the barge basin will result in adverse impacts to benthic resources, FPL shall provide a post certification mitigation plan to compensate for unavoidable impacts to benthic resources in the barge basin."
L		Reference – Condition of Certification Section B. VII.O.7
5	NPS letter dated 7/23/15, Page 22, 1 <sup>st</sup> paragraph	As stated in ER Section 4.3.1.1, "Construction of the heavy haul road would result in land disturbance, but would mostly occur on
	10) Mitigation	previously disturbed land on the Turkey Point property and, therefore would not impact terrestrial habitats".
	Access Roads	"Existing roads within the Turkey Point Plant property would be
	"According to the DEIS, "approximately 3.3 miles of existing	improved to provide a heavy haul road for transportation of large
	unpaved roads would be paved to provide access to the site."	area."

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
	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 retum 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."	In addition, these areas are outside of the Florida Panther Focus Area (PFA). BDA Environmental Consultant, Estimated Impacts to Florida Panthers Habitat, Turkey Point Units 6 & 7 Project, April 2013, page 13 states, "The roadway improvements are proposed in an area at the urban fringe of the Primary Zone where telemetry and mortality records indicate that panthers have occurred infrequently within the area over the last 20 years. Installation of wildlife crossings to accommodate future movements of Florida panthers are not warranted in this area due to the small area of potentially suitable habitats north and east of the roadways. If panthers do eventually occur in the area, they are likely to safely cross the new roads at the anticipated traffic volumes if wide road shoulders are maintained to eliminate concealment cover and promote visibility, panther crossing signs are installed, and low speed limits are established. Moreover, training should be given to project personnel to be aware of and avoid Florida panthers and other listed species of wildlife." Reference –BDA Environmental Consultants, Estimated Impacts to Florida Panthers Habitat, Turkey Point Units 6 & 7 Project, April 2013. Submitted with 3 <sup>rd</sup> Round Completeness Responses, April 5, 2010.
		Conditions of Certification issued by the Siting Board on 5/19/14

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
	NPS Comment [bold text applied for emphasis]	require FPL to incorporate wildlife protection features into the roadway design. Condition of Certification Section B. VII.H.3 states, "Pursuant to MDC Resolution No. Z-56-07, FPL shall incorporate wildlife protection features into the roadway design for all segments of the temporary access roads south of SW 344 <sup>th</sup> Street. Along SW 359 <sup>th</sup> Street and along the portions of SW 117 <sup>th</sup> Avenue and SW 137 <sup>th</sup> Avenue that are to be constructed south of SW 344 <sup>th</sup> Street, wildlife exclusion fencing shall be installed and shall include small mesh material, such as silt fencing, of appropriate mesh size and height to provide an exclusion barrier for reptiles and other small animals. The SW 359 <sup>th</sup> Street temporary roadway shall accommodate a minimum of two (2) wildlife underpasses west of the L-31E levee, one of which must be constructed between SW 117 <sup>th</sup> Avenue and the the plans demonstrate it has been appropriately designed for this purpose. These underpasses shall be of adequate design and shall be of acquitted to facilitate the safe passage of all wildlife
		shall be constructed to facilitate the safe passage of all wildlife known to occur or to potentially occur in this area during all times of the year, including but not limited to deer, Florida panthers,
	·	bobcats, snakes, American crocodiles, and amphibians. A minimum of three (3) crocodile underpasses shall also be provided along the temporary access road immediately north of the cooling canal system. The required underpasses shall be
		positioned to provide safe access to the habitat."

## Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 135 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
		Reference – Condition of Certification Section B. VII.H.3
		In addition, FWC conditions require active or passive wildlife protection measures be implemented as described below.
		Conditions of Certification Section B.IV.I.states, "1. The Licensee shall take proper precautions during clearing and construction to protect panthers from accidental injury due to conditions within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non- transmission facilities rights of way during construction.
		a. Construction policies and practices identified by the FWC to protect panthers shall be used by the Licensee whenever feasible. These include:
		v. Limiting speeds on access roads to 45 mph or less and adjust trucking activities and material delivery schedule within the panther consultation area to reduce speeds at dawn and dusk.
		vi. Conducting frequent and unannounced site inspections to monitor for compliance with the above.
		b. Any panther observations (dead or alive) made by Licensee's employees or contractors shall be verified by a qualified expert agreed to by FWC and reported to FWC within 24 hours.

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 136 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
		2. The Licensee shall take proper precautions during construction and plant operations to protect panthers from accidental injury due to vehicle collisions along access roadways in the panther consultation area as defined by the USFWS (Attachment G), including SW 359 <sup>th</sup> Street, SW 137 <sup>th</sup> Avenue, and SW 117 <sup>th</sup> Avenue.
		a. Speeds on access roads shall be limited to 45 mph or less. Passive measures shall be implemented to enforce slower speeds and shall include lighted speed signage, speed bumps, and slow speed zones at dawn and dusk, and panther crossing signage.
		b. In lieu of the passive measures identified in this condition, the Licensee may choose to use exclusionary fencing along the length of SW 359th Street between SW 117th Avenue and SW 137th Avenue to prevent accidental injury and/or panther mortality due to vehicle collisions.
		c. Any panther observations (dead or alive) made by Licensee's employees or contractors shall be verified by a qualified expert agreed to by FWC and reported to FWC within 24 hours.
		3. The Licensee shall construct at least one (1) wildlife underpass and associated fencing to facilitate north-south movement across SW 359 <sup>th</sup> Street.
		a. The underpass shall be located between 117th Avenue and 137th Avenue in an appropriate location for use by panthers. The Licensee shall consult with FWC during placement of the

### Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 137 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
		underpass.
		b. The underpass shall be of appropriate size and design to facilitate panther movement. The Licensee shall consult with FWC during design of the underpass."
1		Reference – Conditions of Certification Section B.IV.I.
		Please see the two Conditions of certification listed below with regards to roads <i>creating impediments for restoring hydrological flows;</i>
		Condition of Certification Section B. VII.B. 2.a.states,
		"Within 2 years following the construction of Turkey Point Units 6 & 7, except as otherwise agreed to by FPL and MDC and in accordance with Ordinance No. 10-26:
		a. All temporary roadway improvements on publicly owned rights-of-way shall 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 shall be returned to the minimum roadway width required to provide maintenance to FPL facilities and shall not be more than two lanes (18 foot drivable width)."
		Condition of Certification Section B. VII.B.7.states,

# Proposed Turkey Point Units 6 and 7 Docket Nos. 52-040 and 52-041 FPL Observations on the NPS DEIS Comment Letters Dated July 17 and July 23, 2015 L-2015-253 Attachment 3 Page 138 of 139

No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
		"FPL shall demonstrate through plans in a post certification submittal how the construction access roadway design will accommodate a planned conveyance feature to transfer water southward from the Florida City Canal, along the existing canal located on the west side of SW 137 Avenue, to rehydrate wetlands in the Model Lands Basin."
		Reference – Condition of Certification Section B. VII.B. 2.a.and 7.
6	NPS letter dated 7/23/15, Page 22, 2 <sup>nd</sup> paragraph, 4 <sup>th</sup> sentence	Conditions of Certifications issued by the Siting Board on 5/19/14 require development and implementation of a Badial
	10) Mitigation	Collector System Monitoring Plan for the purpose of monitoring
	RCWs located below Biscayne Bay, offshore Turkey Point "We also strongly encourage the development of a comprehensive monitoring and adaptive management plan to ensure that any operational problems are judiciously addressed."	potential adverse impacts to ecological and water quality resources of Biscayne Bay and adjacent nearshore areas resulting from the construction and operation of the radial collector well system. If adverse impacts are identified as a result of such monitoring, additional measures shall be required to evaluate, abate or mitigate such impacts.
		Reference – Conditions of Certification Section B. I.
7	NPS letter dated 7/23/15, Page 22, 3 <sup>rd</sup> paragraph	FPL's Turkey Point Units 6 & 7 Mitigation Plan, Rev 2., page 4, last paragraph states
	10) Mitigation	
	Pre-treatment building associated with the reclaimed and potable water pipelines "Location of the reclaimed water treatment facility is on 43	"The project and associated non-linear facilities (i.e., nuclear administration building, training building, parking area, FPL reclaimed water treatment facility, radial collector wells and delivery pipelines, and equipment barge unloading area) will

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No.	NPS Comment [bold text applied for emphasis]	FPL Observation – Mitigation Topics [bold text applied for emphasis]
	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."	result in approximately 320 acres of permanent wetlands impact, 6.4 acres of temporary wetland impacts and 3 acres of secondary impacts. The majority of this impact (approximately 250 acres) is associated with the Units 6 & 7 site, which is wholly contained within the IWF." In addition, FPL's Turkey Point Units 6 & 7 Mitigation Plan, Rev 2., section 2.3.1 states, "Wetlands within the Units 6 & 7 Site have low functional value. The area is wholly isolated within the boundaries of the industrial wastewater treatment facility, with no connection to Biscayne Bay for over 35 years." August 2012 Mitigation Plan, Rev 2 (USACE Supplement), § 2.3.1. Reference – ML1226A222, FPL Turkey Point Units 6 & 7 Mitigation Plan, Rev 2. Please note, NPS proposed mitigation for the approximately 250 acres wetlands impact for the Unit 6 & 7 site ( <i>"Nuclear island"</i> ) is included in 1 above.