STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: FLORIDA POWER & LIGHT COMPANY TURKEY POINT UNITS 6 & 7 POWER PLANT SITING APPLICATION NO. PA 03-45A3	)	Case No. 09-3575EPP

RECOMMENDED ORDER

Pursuant to notice, this matter was heard before the Division of Administrative Hearings by its assigned Administrative Law Judge, D.R. Alexander, on July 8-11, 15-19, 22-26, 29-31, August 1, 2, 5-9, 26-28, September 16-19, and October 1-3, 2013, in Miami, Florida. In addition, public testimony sessions were conducted in Homestead, Coral Gables, and Miami, Florida.

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STATEMENT OF THE ISSUES

The issues are (1) whether the Governor and Cabinet, sitting as the Siting Board, should issue certification to Florida Power & Light Company (FPL) to construct and operate a 2,200 megawatt (MW) nuclear electrical generating facility and associated facilities, including electrical transmission lines, to be located in Miami-Dade County (County), and if so, what conditions should be imposed; (2) whether the Siting Board should direct the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees) to grant FPL three separate easements over state-owned lands for certain Project features; and (3) whether the Siting Board should approve FPL's request for a variance from section 24-43.1(6), Miami-Dade County Code (MDC), to allow use of the on-site package sanitary treatment

plant and other on-site cooling water and wastewater treatment and disposal in lieu of connecting the Project to a public sanitary sewer line for treatment and disposal of these waters by the County.

PRELIMINARY STATEMENT

This proceeding arose under section 403.501, et seq., Florida Statutes (the PPSA), and requires the Siting Board to determine whether to approve, approve with modifications or conditions, or deny FPL's request to construct and operate two new nuclear generating units (Units 6 and 7) and supporting facilities on an approximately 300-acre site within FPL's existing Turkey Point plant property, as well as new electrical transmission lines and other off-site associated linear and non-linear facilities. FPL has proposed approximately 88.7 miles of transmission line corridors: 52 miles in the West Preferred Corridor and 36.7 miles in the East Preferred Corridor. An alternate western transmission line corridor (the West Secondary Corridor) was withdrawn by FPL on the last day of the hearing. All facilities will be located in the County. Except for the City of Miami, which opposes all aspects of the Project, the primary focus of the parties is on the location of the proposed transmission line corridors and conditions of certification.

On September 13, 2011, the Department of Environmental Protection (Department) found the plant and non-transmission

portions of the application complete. On August 7, 2012, the Department issued a Project Analysis Report (PAR) on the transmission line portion of the project, recommending certification of FPL's proposed transmission lines, subject to conditions of certification. A PAR was issued on March 4, 2013, recommending certification of the plant and non-transmission portion of the Project, subject to conditions of certification.

In accordance with section 403.509(6), FPL is also requesting that the Siting Board direct the Board of Trustees to issue a public easement on sovereign submerged lands in the Biscayne Bay Aquatic Preserve for a series of radial collector well laterals beneath the bottom of Biscayne Bay, a public easement for a subaqueous transmission line crossing of the Miami River, and an easement over an approximately four-acre upland easement in the western transmission corridors.

On April 11, 2008, the Florida Public Service Commission (PSC) issued an affirmative need determination order for the Project.

When filing its application, FPL exercised its option pursuant to section 403.5064(1)(b) to allow the filing of alternate transmission line corridors. The Village of Pinecrest (Pinecrest) and City of Coral Gables (Coral Gables) jointly filed a notice of an alternate 21.35-mile corridor to FPL's proposed eastern transmission line corridor, and the Miami-Dade

Limestone Products Association (MDLPA) and the National Parks Conservation Association (NPCA) filed alternate corridors for FPL's proposed western transmission lines. MDLPA later filed a notice of two additional alternate corridors for FPL's proposed western transmission lines. Together with the transmission line corridors proposed by FPL, the alternate corridors proposed by Pinecrest/Coral Gables, MDLPA, and NPCA are "corridors proper for certification" as that term is used in sections 403.503(11) and 403.522(10). Consistent with its normal practice, the Department made no comparative evaluation of the proposed corridors. The Department has issued its Supplemental PARs on the alternate transmission line corridors proposing conditions of certification.

Pursuant to section 403.50665(2), the County issued its "Determination Regarding Land Use and Zoning Consistency of Proposed Turkey Point Units 6 & 7 and Associated Facilities." Following public notice, no person challenged that determination.

Pursuant to section 403.508(3)(b), FPL and the Department are parties to this certification proceeding. During the course of this case, the Board of Trustees, Florida Department of Transportation (DOT), and Miami-Dade County Expressway Authority (MDX) were added as parties. In addition, the Florida Fish & Wildlife Conservation Commission (FWC), South Florida Water

Management District (SFWMD), South Florida Regional Planning Council (SFRPC), the County, Monroe County, Coral Gables, City of Doral (Doral), Pinecrest, City of Miami, City of South Miami (South Miami), Town of Medley (Medley), Coconut Grove Village Council, and Friends of the Everglades filed notices of intent to be parties. Friends of the Everglades later withdrew from the proceeding.

The following parties filed Motions to Intervene and were granted intervention: Kendale Homeowners' Association; MDLPA; NPCA; Limonar Development, Inc. and Wonderly Holding, Inc. (Limonar); Vecellio & Grogan d/b/a White Rock Quarries (White Rock Quarries); and Kendall Federation of Homeowners Associations, Inc. No party has disputed the standing of any other party to participate in this certification proceeding.

All notices required by law were timely published by FPL, the Department, and the proponents of alternate corridors in accordance with section 403.5115 and Florida Administrative Code Rule 62-17.281. All direct written notices required by law were timely mailed in accordance with subsections 403.5115(6) and (7). All statutory precedents to the certification hearing in this proceeding have been completed.

Prior to, during, and after the certification hearing, FPL and several agencies and parties entered into stipulations that resolved certain issues between those parties, and in most

cases, agreed to various conditions of certification. FPL entered into bilateral stipulations with the following agencies and/or parties: the Department, Department of Economic Opportunity, DOT, FWC, SFWMD, SFRPC, Village of Palmetto Bay, the County, MDX, Coral Gables, City of Homestead, City of Florida City, City of Miami, and MDLPA. See FPL Ex. 20.

Pursuant to the stipulation with MDLPA, FPL is now seeking certification of the "West Consensus Corridor" as its preferred western corridor -- a corridor that combines portions of its West Preferred Corridor with portions of one of the alternate corridors proposed by MDLPA. As noted above, FPL is no longer seeking certification of its West Secondary Corridor.

At the final hearing, FPL presented the live testimony of 24 witnesses in its case-in-chief and six witnesses in rebuttal. By stipulation, the pre-filed written testimony and exhibits of eight FPL witnesses were received into evidence with affidavits attesting to their veracity. The pre-filed testimony and exhibits were provided to all parties and made available for public review at seven local libraries, pursuant to rule 62-17.141(3). FPL Exhibits 1-28, 30-32, 34-64, 66-70, 72-75, 78-92, 94-104, 106-134, 138-148, 150-234, 236-240, 243, 245-247, 249-278, 280-302, 309-337, 340-391, 401, 402, 405-415, and 418-430 were admitted into evidence. Pinecrest and Coral Gables jointly called five witnesses to testify in their case-in-chief

and two witnesses in rebuttal; Coral Gables/Pinecrest Exhibits 1-5, 12, 13, 15, 20, 22, 23, 27, 33-35, 37-39, 51, 63-70, and 72-78 were admitted into evidence. Coral Gables called one witness to testify; Coral Gables Exhibits 1, 3, 5, 7, 8, 18, 53, 54, 63-66, 80, and 94 were admitted into evidence. Pinecrest presented the testimony of one witness; Pinecrest Exhibits 1, 2, 5, 8, and 11 were admitted into evidence. NPCA called seven witnesses to testify in its case-in-chief; NPCA Exhibits 1, 4, 6, 7-10, 12, 13, 15, 17, 18, 25, 40, 43, 49, 51, 55-59, and 63-66 were admitted. MDLPA presented one witness in its case-in-chief; MDLPA Exhibits 1, 3, and 5-9 were admitted into evidence. The Department called one witness; DEP Exhibits 1-5 and 7 were admitted into evidence. SFWMD presented the testimony of three witnesses; SFWMD Exhibits 2-4 and 13 were admitted. The County presented the testimony of five witnesses; Exhibits 1, 5-7, 9-14, 20, 22-24, and 32-41 were admitted into evidence. The City of Miami presented the testimony of 12 witnesses; City of Miami Exhibits 7, 8, 11, 28-31, 38, 50, 59-62, 69, 74, 75, and 100-103 were admitted into evidence. Limonar called one witness to testify; Limonar Exhibits 2, 26, 36, and 40 were admitted into evidence.

Pursuant to section 403.508(4)(b), more than 150 members of the public testified or offered comments at six publicly-noticed sessions in Homestead, Coral Gables, and Miami. Several

exhibits and comment letters were also received from members of the public.

Finally, the undersigned has granted FPL's request for official recognition of the Recommended and Final Orders entered in Case No. 08-2727EPP, In re: Progress Energy Florida Levy Nuclear Project Units 1 and 2, 2009 Fla. ENV LEXIS 151 (Fla. DOAH May 15, 2009), 2009 Fla. ENV LEXIS 150 (Fla. Siting Bd. Aug. 26, 2009), and specifically those portions of the Orders which confirm that the United States Nuclear Regulatory Commission (NRC) has exclusive jurisdiction over the subject of radiological safety; and the City of Miami's request for official recognition of United States Census Bureau data for certain tracts of property on which transmission corridors have been proposed in the City of Miami, Pinecrest, Coral Gables, the County, and South Miami. After proposed recommended orders were filed, FPL and the Department requested that official recognition be taken of the franchise agreements between FPL and Florida City, South Miami, City of Miami, Medley, and Coral Gables. Coral Gables, South Miami, and City of Miami filed responses in opposition to the request. The Joint Motion for Official Recognition is denied.

A Transcript of the hearing (60 volumes of hearing transcript, plus six volumes for the public testimony sessions) has been filed. Proposed Findings of Fact and Conclusions of

Law were submitted jointly by FPL and the Department, jointly by Coral Gables and Pinecrest, and jointly by NPCA and the County. Separate filings were made by the City of Miami and SFWMD. Limonar has joined in those portions of FPL and the Department's Joint Proposed Recommended Order that relate to the "West Transmission Lines"; it also submitted additional findings of fact. MDLPA has joined in those portions of FPL and the Department's Joint Proposed Recommended Order solely as they relate to "the Western Consensus Corridor and other alternates to the western transmission line corridor." All filings have been carefully considered in the preparation of this Recommended Order.

FINDINGS OF FACT

I. An Overview of the Project

1. FPL is a subsidiary of NextEra Energy, Inc. As a regulated utility, FPL is granted an exclusive franchise by the PSC to provide reliable and cost-effective electric service to customers within its service territory in Florida. FPL's service territory covers all or parts of 35 Florida counties and serves approximately nine million customers. It has 14 electrical generation sites in Florida and an electrical transmission line system of approximately 6,500 miles.

2. FPL proposes to construct, operate, and maintain two new 1,100 MW (net) nuclear electrical generating units (Units 6

and 7) and supporting facilities on an approximately 300-acre site (site) within its existing Turkey Point plant property, as well as new transmission lines and other off-site associated linear and non-linear facilities (the Project). This is FPL's single largest project of this magnitude in over 40 years.

3. The Project includes the following proposed non-transmission line associated facilities: a laydown area; a nuclear administration building; a training building; a parking area; a FPL reclaimed water treatment facility; a reclaimed water pipeline corridor; radial collector well system and associated pipelines; an equipment barge unloading area; corridors for construction access roads and bridges; and a potable water pipeline corridor.

4. The Project also includes the on-Site Clear Sky electrical substation, expansion of the Levee electrical substation, two access-only transmission line corridors, and proposed corridors for the following transmission lines:

a. Clear Sky-Turkey Point transmission line: a 230-kV line from the proposed Clear Sky substation to the existing Turkey Point substation on the Turkey Point plant property;

b. Clear Sky-Davis and Davis-Miami transmission lines: a 230-kV line from the proposed Clear Sky substation to the existing Davis substation in southeast Miami-Dade County, and another 230-kV line from the Davis substation to the existing

Miami substation in downtown Miami, just north of the Miami River, in FPL's East Preferred Corridor;

c. Clear Sky-Levee No. 1 and No. 2 transmission lines: two 500-kV lines from the proposed Clear Sky substation to the Levee substation in west Miami-Dade County in the West Consensus Corridor or, as a back-up, in FPL's West Preferred Corridor; and

d. Clear Sky-Pennsuco transmission line: a 230-kV line from the proposed Clear Sky substation to the existing Pennsuco substation in northwest Miami-Dade County, also in the West Consensus Corridor or, as a back-up, in FPL's West Preferred Corridor.

5. FPL has proposed to locate these transmission lines in approximately 88.7 miles of transmission line corridors: 52 miles in the West Preferred Corridor (or 51 miles in the West Secondary Corridor) and 36.7 miles in the East Preferred Corridor. FPL is now seeking certification of the West Consensus Corridor -- a combination of an alternate corridor proposed by MDLPA and FPL's West Preferred Corridor -- as its preferred western corridor. FPL is also seeking certification of the original West Preferred Corridor to serve as a back-up to the West Consensus Corridor should a contiguous right-of-way (ROW) be unable to be timely achieved within that West Consensus Corridor or if a right-of-way cannot be obtained in a cost-

effective manner. FPL is no longer seeking certification of the West Secondary Corridor.

6. On April 11, 2008, the PSC issued its affirmative need determination for the Project in Final Order No. PSC-08-0237-FOF-EI. That Order was not appealed and is now final. By that Order, the PSC found that there is a need for the Project taking into account the need for electric system reliability and integrity; the need for fuel diversity and supply reliability; the need for base load generating capacity; the need for adequate electricity at a reasonable cost; and whether the Project is the most cost-effective alternative available. In making its determination of need, the PSC also found that there are no renewable energy sources and technologies or conservation measures reasonably available to FPL which might mitigate the need for Units 6 and 7. The PSC's need determination remains in legal effect and requires annual monitoring of the feasibility of construction of the Project. Reconsideration of that determination is neither permissible nor appropriate in this proceeding.

7. Section 366.93 allows for the PSC's annual reviews and cost recovery for nuclear plant construction. The nuclear cost recovery process includes an annual hearing to review past, current, and subsequent year costs for the Project. The PSC's annual review considers "a detailed analysis of the long-term

feasibility of completing the power plant." Fla. Admin. Code R. 25-6.0423(5)(c)5. The PSC has annually approved FPL's requested nuclear cost recovery, and it has recognized and accepted the projected in-service dates for Units 6 and 7 of 2022 and 2023, respectively.

8. In association with the Project, FPL has obtained from the Department an Air Construction/Prevention of Significant Deterioration Permit; Exploratory Well and Dual Zone Monitoring Well Permit; an Underground Injection Control (UIC) well construction and operational testing permit; Federal Aviation Administration (FAA) approvals for the Units 6 and 7 containment buildings; County Unusual Use Approval for a nuclear power plant and ancillary structures and equipment; an amendment to the County's Comprehensive Development Master Plan (CDMP) to allow roadway improvements to accommodate construction traffic; and a County zoning approval for the Radial Collector Well System, Reclaimed Water Treatment Facility (RWRF), and other various requests. Pending approvals for the Project include the Combined Operating License (COL) from the NRC; a Section 404 Dredge and Fill permit from the United States Army Corps of Engineers; and an Industrial Wastewater Permit modification from the Department.

9. FPL has submitted three amendments to its application. The first amendment primarily removed the proposed FPL-owned

fill source from the application. The second amendment updated information presented in the original submittal of the application and completeness responses; it did not materially affect the environmental impact analysis or the conclusions presented. The third amendment related to two minor revisions in the previously-submitted groundwater model and corresponding groundwater modeling report. FPL also submitted errata to the second amendment, correcting page and appendix numbering issues.

10. FPL has engaged in an extensive public outreach program for the Project, including among other things, direct mailings, newspaper notices, nine open houses, agency workshops, numerous presentations and meetings, a public survey, periodic e-mail updates to local and state agencies, a website, and toll free telephone number. The public outreach program activities provided the public and agency representatives opportunities to informally voice preferences on transmission line corridor selection and Project concerns. The application was available for public review at seven public libraries and at FPL and Department offices.

11. All notices required by law were timely published by FPL, the Department, and the proponents of alternate transmission line corridors in accordance with section 403.5115 and rule 62-17.281. Proofs of publication were timely provided to the Department in accordance with rule 62-17.281(12). All

direct written notices required by law were timely mailed, and lists of landowners and residences notified were timely submitted to the Department in accordance with subsections 403.5115(6) and (7). The Department sent direct mailings for the sovereign submerged lands easements for the radial collector well laterals and Miami River crossing in accord with section 253.115 and rule 18-21.005(3).

II. Plant and Non-Transmission Line Associated Facilities

A. Generally

12. FPL's Turkey Point plant property is located in unincorporated southeast Miami-Dade County, east of Florida City and the City of Homestead, and bordered by Biscayne Bay to the east. The existing 9,400-acre plant site consists of two nominal 400-MW natural gas/oil-fired steam electric generating units (Units 1 and 2), two nominal 800-MW nuclear units (Units 3 and 4), and a nominal 1,150-MW natural gas-fired combined-cycle unit (Unit 5). Units 3, 4, and 5 are certified under the PPSA. Units 1 and 2 pre-date the PPSA and are not certified.

13. The Site for Units 6 and 7 is south of Units 3 and 4 and occupies approximately 300 acres within the existing permitted industrial wastewater facility.

14. Proposed Units 6 and 7 are two 1,100-MW nuclear electric generating units. The principal structures are the nuclear reactors, a containment building, a shield building, an

auxiliary building, a turbine building, an annex building, a diesel generator building, and other related buildings. Each unit will include two standby diesel generators, two ancillary diesel generators, and one diesel-driven fire pump.

15. FPL has selected the Westinghouse AP1000 as the plant design for Units 6 and 7. The Westinghouse design has been certified by the NRC as complying with federal regulations. This design incorporates the latest technology and advanced safety features.

16. The NRC oversees the construction, safety, and operation of all nuclear units in the United States, including the transport and handling of nuclear fuel. Construction and operation of Units 6 and 7 require separate approval by the NRC. As part of the federal permitting process for nuclear power plants, FPL submitted a COL application to the NRC. The NRC is currently reviewing that application. As least one party in this case, the NPCA, has intervened in the NRC proceeding and opposes federal approval. The process for obtaining the state site certification under the PPSA is separate from the NRC approval process. Certification is not dependent upon prior issuance of the NRC's approval.

17. In addition to the two reactor units, other Project facilities include six cooling towers with a makeup water reservoir, a blowdown sump, tanks, a sanitary wastewater

treatment plant, electrical transformers, and various buildings. A new electrical switchyard/substation, named Clear Sky, will also be located on the Site, and a laydown area will be located on the far western portion of the Site. New nuclear administration and training buildings, along with a parking area, will be located just north of the Units 6 and 7 Site. Other Project-related features to be located within the existing FPL Turkey Point plant property include the RWTF, a portion of the reclaimed water pipeline, radial collector well caissons and delivery pipelines, portions of new access roads to be used during Project construction, a portion of the potable water pipeline, and an equipment barge unloading area.

18. The new units will use reclaimed water supplied by the County as the primary source of cooling water. This water will be supplied by a reclaimed water pipeline and will receive further treatment in the RWTF. That treatment facility will be located northwest of the Units 6 and 7 Site. When reclaimed water is not available in sufficient quantity and quality to meet the Project's water needs, cooling water will be supplied from a radial collector well system to be installed northeast of the Units 6 and 7 Site. The laterals for that well system will extend from the FPL plant property out beneath Biscayne Bay.

19. In accordance with Condition 4 of County Resolution Z-56-07, as amended by Resolution Z-1-13, FPL will not use the Biscayne Aquifer as a primary source of cooling water for Units 6 and 7.

20. The foundation for the nuclear units will include engineered fill and reinforced concrete that supports the containment building and auxiliary building. Site preparation will require removing the existing muck (organic layer) down to the initial rock layer. This muck is unsuitable for use in the foundation. The Site will then be backfilled with approximately 7.8 million cubic yards of structural fill (aggregate) to a finished grade of approximately 25.5 feet North American Vertical Datum of 1988 (NAVD 88) above mean sea level that will support power plant and ancillary facility construction. The design elevation of the plant floor is 26 feet NAVD 88. An additional three million cubic yards of fill will be required for other plant facilities, including the administration and training buildings and the RWTF.

21. Material from excavation for the Site will be deposited on designated berms within the existing industrial wastewater facility or stock-piled on the Turkey Point plant property for other future uses. FPL will utilize best management practices to prevent erosion and sedimentation impacts during placement of the spoil materials on the berms to

protect nearby wetlands and surface waters. FPL will obtain the majority of fill from certified vendors.

22. In accordance with Condition 14 of County Resolution Z-56-07 and Condition 17 of County Resolution Z-1-13, all fill used on the two units and onsite facilities will be "clean fill" as defined in section 24-5, MDC. All fill material will comply with section 24-48.3(4), MDC.

23. FPL has prepared and submitted an earthwork and materials disposal plan to the reviewing agencies, including the County. FPL's earthwork and materials disposal plan is consistent with Condition 7 of County Resolution Z-56-07 and Condition 16 of County Resolution Z-1-13. FPL has fulfilled the requirements of those two conditions.

24. In accordance with Condition 21 of County Resolution Z-56-07, FPL has designed the Project to accommodate water level increases on the order of one foot or more to accommodate potential physical modifications and operational changes to County and State drainage canals.

25. Relative sea level is measured using tide or water level gauges to measure water levels with respect to tidal benchmarks. The hourly water level heights from the tide gauge are averaged to get a monthly or annual average. Using that information, the long-term change in the annual or monthly mean is determined over a period of decades or centuries. Relative

sea level is affected by vertical land motion; tectonic uplift; thermal expansion; glacial melt; ocean circulation; wind effects; changes in barometric pressure; and tides and tidal currents.

26. The Project has been designed to accommodate potential sea level rise during the life of the Project. The proposed finish floor elevation at the Units 6 and 7 plant area was selected by FPL based on the calculation of probable maximum storm surge and coincident wind-wave effects. FPL input a conservative estimate of one foot of sea level rise over the life of the plant to the "Sea, Lakes and Overland Surge from Hurricanes" (SLOSH) Biscayne Bay Basin model. The SLOSH model was used to predict a maximum storm surge elevation of 21 feet during a probable maximum hurricane near the Site. The maximum water level at the safety-related structures, including predicted maximum storm surge elevation and estimated storm-related wave run-up, is calculated to be 24.8 feet. The design elevation of the plant floor is 26 feet NAVD 88. Facilities to be located at this elevation include, among other Project components, the reactors, the electrical turbines, and the emergency diesel generators. Impacts on support facilities and services for the Project will be managed through final design and by pre-planning for storm effects. In addition, plant procedures will be focused on nuclear and personnel safety

during a hurricane and post-storm recovery. Plant safety-related functions will not be adversely affected by sea level change or storm events.

27. Based on available records from stations throughout the state -- Cedar Key, Fernandina Beach, Key West, Mayport, Miami Beach, Pensacola, and St. Petersburg -— sea level rise throughout Florida is tightly grouped around the level of 0.74 feet per century, with a very small standard deviation of plus or minus 0.07 feet per century. The nearest station with the longest (from 1913 to 2012) continuous sea level record to the Turkey Point Site is the Key West station; relative sea level rise there is 0.75 feet per century. Mathematically, the best explanation for the Key West relative sea level rise is a linear trend. There is no statistically significant evidence of acceleration in relative sea level rise at Key West. Given the available records in the area and the close grouping of values for sea level rise throughout the state, use of Key West records to project sea level rise at Turkey Point is appropriate.

28. FPL used a linear trend method in assessing the relative sea level change for the Project. The linear trend is generally accepted by the scientific community as an appropriate method for evaluating relative sea level change. The sea level rise projections used by FPL are reasonable and conservative. FPL's projection appropriately responds to various assessments

on sea level rise. 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 sea level rise.

29. The plant and non-transmission line portion of the Project will be built above the 100-year flood level, and will not increase erosion or create a flood hazard to others. The Project will be constructed outside of the coastal high hazard area to comply with applicable flood protection requirements.

30. The plant and non-transmission line portion of the Project has sufficient operational safeguards to protect the public welfare.

31. The Project will meet the electrical energy needs of the state in an orderly, reliable, and timely fashion.

32. The plant and non-transmission line portion of the Project will not adversely affect the public health, safety, welfare, or property of others.

B. Water and Use Treatment

i. Construction Dewatering

33. Excavation is required to construct the foundations of Units 6 and 7. Concrete diaphragm walls around each foundation excavation will minimize horizontal flow of groundwater into the excavation. In addition, a horizontal grouted barrier constructed below the bottom of each unit to the bottom of the

diaphragm walls will minimize vertical flow of groundwater into the excavation. Grout will be injected in a series of "primary" borings. Subsequent borings will then be drilled in between the primary borings. Three sets of borings are possible after the primary set -- secondary, tertiary, and quaternary. Each set is drilled and grout is injected until refusal occurs. Quaternary borings may not be required at all locations, only where continuing seepage is observed as the excavation progresses.

34. The diaphragm walls and grouting will minimize groundwater flow during construction to less than 100 gallons per minute (gpm) per unit, which will be controlled by sump pumps at the bottom of the foundation excavations. Dewatering effluent from construction of these facilities will be routed to the existing industrial wastewater facility or disposed in the underground injection wells. During the three-month grouting process, short-term maximum groundwater withdrawals from each unit will not exceed 1,000 gpm and average withdrawals will be 230 gpm. During the three-month excavation phase, the maximum groundwater withdrawals per unit will not exceed 1,000 gpm and average withdrawals will be about 400 gpm. These short-term withdrawals will be sequential, not simultaneous. During the 24-month foundation construction phase, the groundwater withdrawal rate for each unit will not exceed 100 gpm, and the maximum combined groundwater withdrawal rate (construction of

Unit 6 combined with grouting/excavation of Unit 7) will average about 430 gpm.

35. Construction dewatering will not cause adverse impacts to ground or surface water resources. The projected inland groundwater impacts, expressed as drawdown, will not extend beyond the cooling canal system that surrounds the Units 6 and 7 Site or cause a water resource concern.

36. No large-scale or area-wide dewatering is anticipated to be associated with construction of the cooling tower foundations, RWTF, the nuclear administration and training buildings, or parking area. However, local small-scale dewatering of these facilities and onsite pipelines may be required. Dewatering during construction of the radial collector wells will be limited to the caissons, which will be dewatered to allow for horizontal drilling of the well laterals.

37. Construction dewatering will not cause saltwater intrusion into areas where saltwater is not already present.

ii. Hydrologic Evaluations and Water Conservation

38. FPL submitted to the County an extensive and comprehensive hydrologic study for the Project as required by Condition 15 of County Resolution Z-56-07. FPL has fulfilled the requirements of that condition.

39. FPL submitted a complete description of all surface and groundwater practices at the existing Turkey Point Plant to

the County as required by Condition 16 of County Resolution Z-56-07. FPL has fulfilled the requirements of that condition.

40. FPL has submitted a water conservation plan for the Project. FPL will implement the County's water use efficiency manual.

iii. FPL Reclaimed Water Treatment Facility and Reclaimed Water Pipeline Corridor

41. The Project includes a RWTF. The proposed location for the RWTF is approximately 44 acres in size located northwest of the Site on the Turkey Point plant property. Pipelines will convey the treated reclaimed water from the RWTF to the cooling water makeup reservoir.

42. The RWTF will polish the reclaimed water to remove dissolved solids, nutrients, and mineral content that would otherwise negatively impact the efficient and reliable operation of the cooling reservoir, the cooling towers, and the circulating water system.

43. The treatment provided by the RWTF will allow FPL to utilize reclaimed water to the maximum extent possible. The treated water from the RWTF will comply with applicable Department requirements for use of reclaimed water in cooling towers. Operation of the RWTF and the use of reclaimed water will comply with applicable local government non-procedural requirements.

44. FPL has fulfilled the requirements of Condition 5 of County Resolution Z-56-07 through utilization of reclaimed water to the maximum extent possible and by conducting an evaluation of alternative water sources for the Project.

45. FPL and the County have entered into an agreement for the County to provide the reclaimed water. This reclaimed water use is a beneficial and cost-effective means of maximizing the use of reclaimed water from the County and helps the County meet its reclaimed water compliance requirements. In the absence of reuse opportunities, this treated domestic wastewater would likely continue to be discharged to the ocean or deep injection wells. The County is required to eliminate ocean outfalls and increase the amount of water that is reclaimed for environmental benefit and other beneficial uses.

46. The RWTF will be constructed at an elevation of 14 feet. This elevation is above the 100-year flood elevation of ten feet; will accommodate an additional one foot of increased water levels due to regional hydrologic restoration projects that affect the RWTF site; and will account for one foot of sea level rise. There will be a two-foot reserve capacity above any predicted water levels at the RWTF location.

47. FPL has proposed an approximately nine-mile reclaimed water pipeline corridor for delivery of reclaimed water from the Miami-Dade Water and Sewer Department's (MDWSD) South District

Wastewater Treatment Plant to the FPL RWTF. FPL selected the reclaimed water pipeline corridor to utilize, to the greatest extent practicable, existing infrastructure in order to minimize environmental impacts. The reclaimed water pipeline corridor is also co-located with an existing FPL overhead transmission line right-of-way (ROW) for most of its route. The pipeline corridor varies in width from 500 feet to one mile. The pipeline will be installed below ground level the entire length with subaqueous canal crossings. Open cutting or trenching will be utilized for the majority of the reclaimed water pipeline installation. Trenchless technologies will be used when crossing canals.

48. The reclaimed water pipeline will cross several SFWMD canals. When constructing the pipeline, FPL will avoid as much as practicable Biscayne Bay Coastal Wetland parcels, avoid longitudinal runs in the L-31 E canal right-of-way, and will use subaqueous crossings of SFWMD canals.

49. All reclaimed water pipeline canal crossings will be located, designed, and constructed consistent with applicable SFWMD non-procedural requirements, including the Criteria Manual for Use of Works of the District.

iv. Radial Collector Well System

50. The radial collector wells will be used as a backup source of cooling water. Radial collector wells have been used since the 1920s in commercial, industrial, and power plant

facilities, including another nuclear power plant. The wells will consist of four central caissons located on the Turkey Point peninsula. Up to 12 laterals will be directionally drilled from within each of the caissons horizontally at a distance of up to 900 feet beneath Biscayne Bay and at a depth of approximately 25 to 40 feet below the Bay bottom. The laterals will not extend beneath Biscayne National Park (BNP). The wells will be designed, sited, constructed, and operated to induce groundwater recharge from Biscayne Bay.

51. FPL has agreed to a condition of certification that would limit operation of the radial collector wells to 60 days in any consecutive 12-month period.

52. When using 100 percent salt water or saline water (based on 1.5 cycles of concentration in the cooling water system's cooling towers), Units 6 and 7 will use a maximum of 124.4 mgd. Each of the four wells will have a design capacity of 43.2 mgd. Operation of three wells will meet the plant make-up requirements, with the fourth well acting as a back-up.

53. The caissons for the radial collector wells will be installed within previously-filled upland areas of the Turkey Point peninsula. Construction of the radial collector wells will not result in any discharges to Biscayne Bay, other than construction-period stormwater run-off. Sedimentation barriers

or other best management practices will be implemented to limit potential impacts to surface water bodies.

54. The radial collector well laterals will be constructed using conventional rotary-type horizontal drilling with the drilling fluid consisting of formation water. The drilling will occur from inside the concrete caisson. The directional drilling for the laterals is designed to avoid "frac out," a situation where drilling mud enters a surface water body via a fracture or solution channel. Construction of the radial collector wells will not require dredging in Biscayne Bay.

55. The radial collector wells will be constructed and operated in accordance with all Department, SFWMD, and local government applicable non-procedural requirements related to well construction and monitoring. No explosives will be used during construction of the plant and non-transmission line portion of the Project, including during construction of the radial collector wells.

56. The radial collector well easement area is in the Biscayne Bay Aquatic Preserve. The radial collector well area includes the portion of the radial collector well system that will extend beneath State-owned submerged lands in Biscayne Bay.

57. The Department's Division of State Lands reviewed the information submitted by FPL regarding the radial collector well sovereign submerged lands easement and concluded that the

Project is in the public interest. The Division of State Lands recommended that the Siting Board direct the Board of Trustees to issue the sovereign submerged lands easement for the radial collector well system.

58. FPL owns the upland area adjacent to the requested easement for the radial collector wells. The radial collector wells will be designed and constructed to avoid restriction or infringement on riparian rights of adjacent upland landowners.

59. Construction and operation of the radial collector wells is a water-dependent activity. By the nature of the design and location, the radial collector well laterals cannot be reasonably constructed without going under the Biscayne Bay Aquatic Preserve.

60. The radial collector wells are "structures required for the installation or expansion of public utilities" and "reasonable improvements for public utility expansion," and are therefore specifically allowed by the Act that created the Biscayne Bay Aquatic Preserve. See § 258.397, Fla. Stat.

61. Construction and operation of the Project, including the radial collector well system, is consistent with the Biscayne Bay Aquatic Preserve Management Plan and is in the public interest.

v. Groundwater Modeling

62. FPL has conducted extensive groundwater modeling of the predicted impacts of the groundwater withdrawals associated with operation of the radial collector wells to supply cooling water. That modeling utilized the MODFLOW 2000 computational system. To support this modeling effort, FPL undertook an aquifer performance test (APT) at the Turkey Point peninsula to provide information on the potential yield from the water bearing units and to identify changes in existing water levels and water quality during pumping in the shallow aquifer at the location of the radial collector wells. The APT was undertaken in accordance with professional standards.

63. MODFLOW 2000 was developed by the United States Geological Survey. It is a widely accepted computer code for groundwater modeling. The groundwater modeling was conducted consistent with the applicable SFWMD non-procedural requirements.

64. The steady-state, constant-density, and three-dimensional groundwater model used conservative assumptions to produce an environmentally conservative assessment of potential environmental impacts.

65. In assessing the potential impacts associated with operation of the radial collector wells, the model considered water levels prior to radial collector well operation, water

level changes as a result of operating the radial collector wells, seabed approach velocity, and a breakdown of the sources of water that will be withdrawn by the radial collector wells. Seabed approach velocity is the velocity of the water just prior to entering the seabed above the radial collector wells.

66. The results of the groundwater model predict that the radial collector wells will withdraw water from a saltwater or saline aquifer that will be recharged from Biscayne Bay. FPL's model predicted that: (1) approximately 97.8 percent of the aquifer recharge will originate from boundaries representing Biscayne Bay; (2) approximately two percent will originate from boundaries representing the cooling canal system; and (3) approximately 0.2 percent will be from boundaries representing precipitation onshore. The modeling indicated that operation of the radial collector wells will not cause water from the existing cooling canal system to enter Biscayne Bay.

67. The seabed approach velocity is predicted to be a maximum rate of 0.00002 feet per second overlying the laterals. To put this in perspective, a one-foot, wind-driven wave on Biscayne Bay in five to six feet of water can induce a velocity of approximately one foot per second near the Bay bottom. This wave velocity is about five orders of magnitude greater than the velocity predicted to be induced by the radial collector wells. Additionally, the United States Environmental Protection

Agency's (EPA) benchmark for regulating potential impingement of species from intake structures that draw directly from the water column is 0.5 feet per second. This is 25,000 times higher than the seabed approach velocity predicted for the radial collector wells.

68. In terms of the predicted effect of operation of the radial collector wells, the maximum drawdown in groundwater levels of three feet occurs near the radial collector well laterals, located 25 to 40 feet below the Bay bottom. This drawdown reduces to one foot at a distance of 1,500 feet from the radial collector well caissons, and this level of drawdown is confined to off-shore of the Site. The 0.1 foot drawdown contour extends on-shore a maximum of 3,000 feet.

vi. Radial Collector Well Potential Impacts

69. FPL's proposed water uses will not cause harm to wetlands or other surface waters or cause pollution of water resources or degradation of surface or ground water quality.

70. Some of the areas contributing precipitation recharge to groundwater west of the radial collector wells contain wetlands. Water contributed to the radial collector wells from these areas is captured as it flows under natural conditions toward the coast. This water is not induced to flow from these areas by the operation of the radial collector wells; it would flow from these areas regardless of whether the radial collector

wells were pumping or not. The operation of the radial collector wells will not have an adverse impact to these wetlands.

71. Construction and operation of the radial collector wells will not adversely impact the ambient water quality of Biscayne Bay, including the Biscayne Bay Aquatic Preserve and BNP.

72. Construction and operation of the radial collector wells will not cause saltwater intrusion into areas where saltwater is not already present.

73. FPL conducted extensive simulation modeling of the potential salinity impact to Biscayne Bay from operation of the radial collector wells using a regional hydrodynamic model. The model used a bounding approach, simulating operation of the radial collector wells at drawdown rates both below and well above the design flow rate as sensitivity analyses. At the design flow rate, the model predicted that any changes to salinity in Biscayne Bay caused by operation of the radial collector wells would be immeasurable and imperceptible. Even at a simulated rate of 850 mgd, or nearly seven times the design flow rate of the radial collector wells, the predicted change in salinity in Biscayne Bay would be very slight. Operation of the radial collector wells will not adversely impact salinity levels in Biscayne Bay.

74. The design of the radial collector well system minimizes adverse impacts to fish and wildlife habitat, including endangered and threatened species habitat, and other natural or cultural resources in Biscayne Bay, including Biscayne Bay Aquatic Preserve.

75. Operation of the radial collector wells will not interfere with the ecology and aquatic life, regional fisheries, and recreational uses of Biscayne Bay.

76. Construction and operation of the radial collector wells will not adversely impact fish and wildlife, including threatened and endangered species, or their habitats.

77. FPL evaluated the potential entrainment and impingement impacts of the radial collector well system using particle drift modeling. The modeling considered conservatively bounded scenarios to evaluate potential impacts under varying levels of drawdown and natural environmental conditions. The modeling predicted that at the design flow rate of the radial collector wells, the expectation of entrainment and impingement impacts associated with the radial collector wells is zero. Even at 350 mgd, or more than double the design flow rate, the model predicted no entrainment or impingement of organisms. Operation of the radial collector wells will not result in impingement or entrainment of larvae or other biological particles.

78. FPL conducted a six-month long replicated mesocosm study to determine the impacts, if any, to seagrasses associated with the operation of the radial collector well system by simulating the downward movement of water into seagrass sediments. Mesocosms are generally accepted by the scientific community as an appropriate and accurate method of evaluating impacts to seagrasses. The study conservatively tested the potential stress to seagrass for three months, or one month longer than FPL would normally be allowed to operate the radial collector wells in any 12-month period.

79. The results of the mesocosm study showed that operation of the radial collector wells could result in a 95 percent reduction in porewater nutrient concentrations. Despite that potential reduction, there was no evidence of an adverse impact on seagrass productivity. Leaf turnover rates fell within the range of values expected for healthy seagrass meadows and cumulative biomass production rates showed that the seagrass continued to grow over the course of the entire experiment. There was no evidence of reduced cumulative biomass production rates. Results during the recovery period of the experiment showed that porewater nutrient concentrations were capable of increasing to the higher levels found prior to the imposition of the downward flux of waters into the bottom sediments.

80. Construction and operation of the radial collector wells will not adversely impact submerged land resources, including seagrasses and other benthic resources, and will not impact the County's potable water wellfields. Those wellfields are not within the area impacted by the withdrawals.

81. The radial collector wells are compatible with and will not detract from or adversely affect the natural conditions, propagation of fish and wildlife, and traditional recreational uses of Biscayne Bay, including Biscayne Bay Aquatic Preserve. Because the radial collector wells will not have an adverse impact on Biscayne Bay Aquatic Preserve, they will not contribute to a cumulative impact on the Preserve's natural system.

82. FPL has a demonstrated need for the proposed water uses. FPL has provided reasonable projections of the Project's water needs, quantities, and sources. FPL has legal control over the Project site and facilities, and the proposed uses of water are compatible with the current land use at the Project site.

83. FPL has a demonstrated demand for an alternative secondary or back-up cooling water source to be provided via the radial collector well system.

84. FPL's proposed water uses are not inconsistent with SFWMD-established minimum flows and levels and will not withdraw

water reserved under chapter 40E-10. They will not be harmful to water resources. They are reasonable-beneficial uses, will not interfere with present existing legal users, and are consistent with the public interest. The water withdrawals will not harm off-site land uses.

85. The Department, FWC, and SFWMD have proposed conditions of certification requiring monitoring of the impacts of the radial collector well system. FPL has agreed to those conditions as reflected in stipulations of the parties. FPL and the County have also stipulated to imposition of radial collector well system monitoring conditions. FPL's compliance with these agreed-upon conditions of certification fulfills its obligations under Conditions 3 through 12 of County Resolution Z-1-13.

vii. Potable Water and Potable Water Pipeline

86. Potable water from the MDWSD will be used as makeup water for the service water system (SWS) cooling system. The SWS is a much smaller system that dissipates heat from reactor components. Unlike the collector well system that can be designed to use saltwater or freshwater, the SWS must use freshwater. Assuming four cycles of concentration, the normal amount of potable water needed for the SWS is 0.7 mgd. The SWS normal water use is approximately one percent of the total plant water use when the collector well system is using reclaimed

water and approximately 0.6 percent when using saltwater. Potable water will also be used for the potable water system, fire protection system, de-mineralized water treatment system, and other miscellaneous uses.

87. The normal total amount of potable water needed for the Project is 1.3 mgd, including the water used in the SWS. The maximum amount of potable water needed is 3.7 mgd, including the SWS, potable water system, de-mineralized water system, equipment/floor washdown, and fire water system. It is highly unlikely that all of these streams will be at maximum capacity at the same time.

88. Potable water will be delivered to the Site via an approximately nine-mile proposed pipeline that will connect to the County potable water supply system. The potable water pipeline ROW will be located within or adjacent to existing or planned roads and ROWs. Typically, pipe installation takes place by excavation and backfill techniques.

89. SFWMD canals will be crossed by the potable water pipeline. Pipeline crossings of SFWMD canals will be located, designed, and constructed consistent with applicable SFWMD non-procedural requirements, including the Criteria Manual for Use of Works of the District.

viii. Wastewater Disposal

90. During the construction phase of the Project, wastewaters including dewatering effluent will be disposed by the injection wells or released to the cooling canal system. Construction site stormwater will be released to the cooling canal system. The cooling canal system is an existing permitted industrial wastewater facility. These releases will not cause adverse impacts to water quality.

91. During operation, the major wastewater streams associated with the Project are the circulating water system blowdown, the service tower blowdown, and effluent from the de-mineralized water treatment system. These and other smaller wastewater streams, except stormwater, will be collected in a lined blowdown sump along with other Project waste streams and then will be discharged to the deep injection wells. Operation of Units 6 and 7 will not utilize the existing industrial wastewater facility for cooling or wastewater disposal, except that stormwater will be routed to this facility.

92. The Project will not result in any discharge of industrial wastewaters to any jurisdictional surface waters during construction or operation. Construction and operation of the Project will not cause or contribute to violations of any applicable state and local surface or ground water quality standards.

93. It is not technically feasible to reuse Project wastewaters for discharge to the Biscayne Bay Coastal Wetlands Project.

94. In accordance with Condition 6 of County Resolution Z-56-07, FPL has prepared and submitted documentation comprising a wastewater discharge plan to the reviewing agencies, including the County.

ix. Underground Injection Well System

95. The proposed underground injection well system consists of 12 or 13 Class I industrial deep injection wells and six or seven dual zone monitoring wells. At least two of these injection wells will serve as back-up wells. These injection wells will be designed to meet applicable injection well design requirements, including incorporating measures to protect the wells against corrosion or damage resulting from native groundwater and the injected fluids. The wells will be periodically tested for mechanical integrity.

96. The underground injection wells will dispose of Site wastewaters into the Boulder Zone, which is within a geologic formation known as the Oldsmar formation approximately 3,000 feet below land surface. The water in the Boulder Zone has salinity close to that of sea water. The Boulder Zone is used extensively to dispose of wastewaters in Florida.

97. The Boulder Zone is located deep underground and separated and confined from the shallower aquifers that are classified and used as underground sources of drinking water in South Florida.

98. The Boulder Zone at the Turkey Point Plant is classified by the Department as a G-IV aquifer because it is a confined aquifer with no potable use and with a total dissolved solids (TDS) content of 10,000 milligrams per liter (mg/L) or greater. Except for a prohibition on injection of hazardous waste, no groundwater quality criteria, including thermal standards or limitations, apply to discharges into the Boulder Zone.

99. FPL analyzed the geology at the Turkey Point property to determine if it was suitable for disposal of wastewater through underground injection by constructing a 3,230-foot deep exploratory well. This exploratory well was authorized by a Department-issued underground injection control (UIC) permit, and it was constructed to the standards for a Class I injection well. On July 29, 2013, the Department issued UIC permit number 293962-002-UC, authorizing FPL to convert this exploratory well to an injection well to dispose wastewaters associated with the construction of Units 6 and 7. This converted exploratory well could also be used to dispose of industrial wastewater after

Units 6 and 7 become operational, subject to authorization for this purpose by the Department through another UIC permit.

100. FPL also constructed a dual zone monitoring well approximately 75 feet from the exploratory well, within the 150-foot maximum distance of the Department's UIC rules. The dual zone monitoring well allows for collection of groundwater samples from two separate subsurface intervals. Dual zone monitoring wells help determine whether there is adequate confinement of the injected fluid. Construction of the exploratory well and dual zone monitoring well was in accordance with applicable Department requirements and authorized by a permit.

101. During construction of the exploratory well, FPL conducted testing to determine the appropriate well casing setting depths, confirm the presence of an injection zone, and evaluate the confining characteristics of intervals overlying the injection zone. A report documenting this testing was prepared and provided to Department staff who agreed with the report's information and conclusions. This testing determined that the top of the injection zone occurs at a depth of approximately 2,915 feet below pad level and there is a confining unit of approximately 985 feet above the top of the injection zone. The injection zone is over 1,400 feet below the deepest potential underground source of drinking water as

defined by the Department. The injection zone is a confined aquifer with a total dissolved solids concentration greater than 10,000 mg/L. This injection zone is capable of receiving water at the proposed injection rate. Before beginning operational use of the injection wells, FPL will be required to further test the ability of the injection zone to receive the injected fluid.

102. The Department UIC rules required FPL to conduct an "area of review" analysis to ensure that there were no wells, springs, mines, faults, or other geological features that could provide a pathway to allow Turkey Point injected wastewater to migrate upwards into an underground source of drinking water. FPL's area of review analysis found no wells, springs, mines, faults, or other geological features that could provide a pathway to allow the Turkey Point injected wastewater to migrate upwards into a potential underground source of drinking water. The Department reviewed FPL's area of review analysis as part of the exploratory well permit.

103. To further ensure that the geology above the Boulder Zone was sufficient to confine the injected wastewater to the Boulder Zone, FPL performed a confinement analysis by comparing hydrogeologic data collected during the exploratory well testing to data from other injection wells. This data comparison, particularly comparing the sonic logs, demonstrated that the geology above the Boulder Zone has little evidence of

fracturing. This is indicative of effective vertical confinement.

104. Finally, although not required by the UIC rules, FPL performed a density-dependent groundwater flow modeling analysis to determine how the injected wastewater would move through the underground formations. This groundwater flow model considered the geology of the area, the differences in the density of the injected wastewater compared to the native groundwater, and simulated a period of 60 years of injection followed by 40 years of no injection for a total of 100 years. The groundwater flow model showed that even after 100 years the injected wastewater did not move out of the confining layer and did not move into any potential underground source of drinking water.

105. Additionally, the injected wastewater will not affect the mechanical integrity of the injection wells, will not jeopardize the integrity of the confining zone, and will not alter the hydrologic characteristics of the injection zone to the point of endangering the underground source of drinking water.

106. All of the testing, analysis, and modeling demonstrate that there is adequate confinement to prevent upward migration of the injected wastewater out of the injection zone. Also, the injection of this industrial wastewater will not modify the ambient water quality of other aquifers overlying the

injection zone, and the injection zone can receive wastewater at the rate proposed by FPL. Thus, injection of industrial wastewater from Units 6 and 7 will not cause or allow the movement of fluid into underground sources of drinking water that would cause a violation of drinking water standards or otherwise adversely affect the health of persons. Even after 100 years of plant operation, the injected wastewater will remain over 1,000 feet below the base of the underground source of drinking water.

107. The injection wells will be operated consistent with applicable injection pressure and fluid velocity requirements. The injection wells will also comply with applicable emergency discharge requirements. Through the underground injection control permitting process, FPL will be required to continually monitor these injection wells and report that information to the Department.

108. The wastewater discharged to the underground injection wells will not be hazardous as defined by chapter 62-730. Thus, the wastewater complies with the Department's Boulder Zone's G-IV aquifer requirements. Additionally, the wastewater is not a radioactive waste as defined by rule 62-528.200(54). Thus, the injection wells are considered Class I industrial injection wells under rule 62-528.300(1)(a)2.

109. Separate from this certification proceeding, FPL has obtained a permit to convert the Class V exploratory well to a Class I injection well. The permit to convert the exploratory well to a Class I injection well includes a requirement to operationally test the injection well for up to two years. The construction of the other underground injection wells will require a Class I UIC construction permit from the Department. That permit will contain a requirement to operationally test the injection wells for up to two years. This operational testing will allow FPL to further confirm that the underground injection control system operates as designed with no upward fluid migration. This operational testing period data will, in part, support FPL's application for one or more separate Class I UIC operating permits from the Department for the system. The operating permit must be renewed by the Department every five years. Class I UIC permits require periodic monitoring of the injection process and reporting of that monitoring information to the Department. Thus, the Department will continually oversee FPL's deep well injection system and will re-review the system every five years as part of the Class I operation permit renewal.

x. Stormwater/Surface Water Management

110. FPL has prepared and submitted to the reviewing agencies as part of its application a stormwater management plan

for construction and operation of the Project at the Site and for the associated non-linear facilities.

111. During construction of the Site and associated non-linear facilities, erosion control measures such as silt fences and hay bales will be used to decrease velocity of sheet flow and to control small amounts of sediment from disturbed areas in runoff. Temporary basins or sediment traps will be constructed to control runoff from larger disturbed areas. Temporary fill diversions will be used for slope protection and to divert runoff to sediment basins and stabilized outlets. Construction stormwater requirements will be addressed through compliance with rule 62-621.300(4) and other applicable agency regulations.

112. During operation, the stormwater management system is designed to release stormwater runoff from the Units 6 and 7 site into the existing permitted industrial wastewater facility. The stormwater runoff from the nuclear administration building, training building, and parking area will also be released to the industrial wastewater facility. The industrial wastewater facility currently has sufficient capacity and will not be impacted by stormwater runoff from the Project during operation.

113. All stormwater associated with industrial activity from the RWTF equipment area will be captured, treated as necessary, and reused within the reclaimed water treatment

process. Runoff from non-equipment areas will be routed to stormwater management facilities and released to local drainage.

114. Stormwater during construction and operation of the non-transmission linear facilities will be handled in accordance with applicable Department, SFWMD, and County non-procedural requirements. The proposed reclaimed water and potable water pipelines will be installed underground. The construction access roads will include stormwater management facilities designed to meet applicable Department standards. Runoff from the potentially oil-contaminated areas, such as the containment area for transformers and other oil-containing or handling equipment, will first be directed through an oil/water separator and then routed to the industrial wastewater facility.

115. There will be no adverse impacts from stormwater during construction, operation, or maintenance of the plant and non-transmission line portion of the Project.

116. Construction, operation, and maintenance of the stormwater management systems for the plant and non-transmission line portion of the Project will not cause adverse water quantity impacts to receiving waters and adjacent lands; will not cause flooding to on-site or off-site property; will not cause adverse impacts to existing surface water storage and conveyance capabilities; will not adversely affect the quality of any jurisdictional waters or result in a violation of any

water quality standards; will not cause adverse secondary impacts to water resources; and will not cause adverse impacts to any SFWMD water resources.

xi. Domestic/Sanitary Wastewater

117. Sanitary wastewater treatment for Units 6 and 7 will be provided by a new on-site package sanitary treatment plant. The sanitary treatment plant will be designed to process sanitary wastes from Units 1 through 7. This treatment plant will replace several existing septic tanks and an existing sanitary wastewater plant that serve Units 1 through 4 and that discharges to the surficial aquifer.

118. Units 6 and 7 will have a sanitary drainage system that will collect sanitary waste from plant restrooms and locker room facilities and carry this waste to the sanitary treatment plant where it will be processed. Effluent from the proposed sanitary treatment plant will be disposed through the underground injection wells in compliance with applicable regulations.

119. FPL is requesting that the final certification for the Project include approval for the use of the on-site package sanitary treatment plant and the other on-site cooling water and wastewater treatment and disposal facilities in lieu of connecting the Project to a public sanitary sewer line for treatment and disposal of these waters by the County. FPL has

requested a variance from section 24-43.1(6), MDC. No reviewing agency, including the County, objected to the requested variance. With the exception of this one requested variance, the Project will comply with all applicable non-procedural standards and requirements of all reviewing agencies.

120. A pipeline of the required length to connect to the MDWSD system for the flow generated by the Project would be below the desired minimum design velocity for the pipeline.

121. The sanitary wastewater treatment plant will provide secondary waste treatment and high level disinfection; it will be designed in accordance with sound engineering practice; and the design, construction, and operation of the sanitary wastewater facilities will be consistent with applicable Department and County non-procedural requirements.

C. Storage Tanks

122. The Project will include some above-ground storage tanks for petroleum products and for the storage of chemicals. Above-ground storage tanks will be inside buildings or covered and will have required secondary containment.

123. All storage tanks will be constructed, operated, and maintained according to the applicable requirements of chapters 62-761 and 62-762.

D. Air Emissions, Controls, Impacts, and Airspace

124. The sources of air emissions associated with the Project will include circulating water cooling towers and service water system cooling towers, standby diesel generators, ancillary diesel generators, diesel fire pumps, diesel fuel storage tanks, and general purpose diesel engines. There will also be air emissions associated with Site preparation and construction.

125. The Project will have six circulating water cooling towers to support the operation of the nuclear units, with three towers for each unit. The primary air emissions from Units 6 and 7 during operation are particulate matter (PM) and PM with an aerodynamic diameter of ten microns or less (PM_{10}) in the form of atmospheric drift. The primary source of the PM and PM_{10} emissions is the circulating water cooling towers. There will also be small amounts of PM and PM_{10} from the service water system cooling towers. There will be emissions of PM and PM_{10}, nitrogen oxides (NO_x), carbon monoxide, volatile organic compounds, and sulfur oxides from the use of emergency diesel generators.

126. Cooling tower drift will be controlled through the use of state-of-the-art cooling tower design including drift eliminators designed to limit drift to 0.0005 percent of the amount of water circulating through the cooling towers. The use

of high efficiency drift eliminators represents Best Available Control Technology as required by the EPA and Department. The water treatment levels and location and the operation of the cooling towers will comply with the Department's regulations for the use of reclaimed water in cooling towers.

127. The Department has issued Air Permit No. PSD-FL-409, Project No. 025003-013-AC. The Department found that the Project would not cause or significantly contribute to a violation of any ambient air quality standards. It also determined that the Project would comply with all applicable state and federal regulations.

128. Construction and operation of the Project will not have an adverse impact on air quality in the vicinity, including air quality in the Everglades National Park, BNP, or Big Cypress National Preserve.

129. There will be no adverse visibility, fogging, or icing impacts resulting from the operation of the Turkey Point Units 6 and 7 cooling towers.

130. "Drift" is made up of various sized water droplets containing minerals. These water droplets fall out of the cooling tower plume at various distances from the cooling tower and deposit materials. Deposition results when the solution drift falls to a surface such as the ground or water.

131. The constituents in treated reclaimed water will not result in adverse environmental impacts as a result of cooling tower deposition. FPL's deposition analysis considered the quality of the treated reclaimed water and the areas that may be potentially impacted by deposition. The results demonstrate that, while deposition of the various constituents can be calculated, the resulting concentrations of the constituents will be negligible and immeasurable.

132. The constituents in saltwater, when using the back-up cooling water source, will not result in adverse environmental impacts as a result of cooling tower deposition. FPL's deposition analysis considered the quality of water and the areas that may be potentially impacted. The results demonstrate that, while deposition of the various constituents can be estimated through modeling, the resulting concentrations of these constituents could not be measured since their concentrations are extremely small compared to natural variation, and concentrations of many constituents would be well below the detection limits of analytical methods. While the deposition of TDS is higher in the vicinity of the cooling towers than background deposition, that area consists of vegetation that is salt tolerant due to the close proximity to Biscayne Bay. Moreover, the resultant concentration from deposition is much lower than the levels found in the

environment and the use of saltwater would be short-term given the durational condition of certification to which FPL has agreed.

133. When using either treated reclaimed water or saltwater, air emissions from the Project will not have an adverse effect on natural resources, including surface waters and wetlands, in the vicinity of the Project. Atmospheric deposition from the operation of cooling towers associated with the Project will not degrade or lower ambient water quality in Biscayne Bay, including Biscayne Bay Aquatic Preserve and BNP.

134. Operation of Units 6 and 7 will avoid a considerable amount of air pollution emissions and greenhouse gases. Over a 40-year period of operation, Units 6 and 7 will avoid approximately 21,300 to 49,200 tons of NO_x, approximately 14,200 to 75,400 tons of sulfur dioxide, and at least 266 million tons of carbon dioxide emissions.

135. Open burning during Project construction will be conducted in accordance with applicable non-procedural requirements of state and local agencies.

136. FPL has complied with Condition 19 of County Resolution Z-56-07. FPL has obtained authorizations from the FAA for the Units 6 and 7 containment buildings. FPL will submit applications for FAA permits for the construction cranes prior to construction.

137. In accordance with Condition 18 of County Resolution Z-56-07, FPL has coordinated with the Homestead Air Reserve Base and is in compliance with Article XXXV, Homestead General Aviation Airport Zoning in sections 33-372 through 33-387, MDC.

138. The County is currently designated as being in attainment for all Ambient Air Quality Standards for all pollutants. The non-transmission line portion of the Project will comply with applicable state and local non-procedural requirements for control and protection of air quality.

139. The Project complies with applicable County non-procedural requirements related to air quality and all provisions of the County's CDMP related to air quality and air space. The air emissions associated with the non-transmission line portion of the Project are consistent with all applicable environmental regulations.

E. Equipment Barge Unloading Area

140. FPL currently has a barge delivery facility at the Turkey Point plant that is used for fuel oil delivery. The barge delivery facility is located at the north bank of the barge turning basin, east of the existing Units 1 and 2.

141. To allow for deliveries of Project components, equipment, and material during Project construction, the existing barge unloading area will be enlarged by excavation of uplands landward to approximately 90 feet by 150 feet, to a

depth of approximately nine feet. The excavation area will be isolated from surface waters with sheet piles or similar structures. FPL will implement other best management practices during this excavation to prevent impacts to surface waters.

142. The maximum draft of the barges to be used for delivery during construction is 6.5 feet. Normal operation of Units 6 and 7 will not require regular barge traffic.

143. Construction of the enlarged barge unloading area will not require any construction in Biscayne Bay or its natural tributaries.

F. Construction Access Roadways and Traffic Impacts

144. FPL is seeking certification for roadway improvements as associated linear facilities to the Project in order to accommodate peak construction traffic and provide access to Units 6 and 7 during construction. The roadways are those necessary to provide safe and secure access to the Project site.

145. Improvements will be made to approximately 3.5 miles of existing paved roadways by widening those roads from two lanes to four lanes. In addition, improvements will be made to seven miles of unpaved roads by constructing three or four paved lanes. Improvements will also be made to six intersections by adding new turn lanes.

146. The construction access roadway improvements include a new bridge over a SFWMD canal. This bridge will be located,

designed, and constructed consistent with applicable SFWMD non-procedural requirements, including the Criteria Manual for Use of Works of the District.

147. In addition to roadway segment and intersection improvements, traffic control in the form of traffic signals or police control will be required at several intersections during the peak morning and afternoon periods. These traffic control measures are only required at times of high traffic volume entering and leaving the Site during Project construction. In addition, roadway improvements south of Southwest 344th Street will be patrolled by security personnel.

148. The roadway and intersection improvements will be designed and constructed in accordance with applicable city, county, and state non-procedural requirements. The roadways will comply with the criteria established in the Traffic Circulation Element of the CDMP for the Project's construction access roads. The construction activities will involve the installation of silt fences, removal of vegetation, construction of drainage, removal of unsuitable soils, placement of road-base materials, laying asphalt, and striping. Typical road construction equipment will be used to construct the roadway improvements. The final design of the roadway improvements will maintain sheet flow across roadway alignments. The final design of the roadway improvements on the Turkey Point plant property

will account for increased water elevations of up to one foot planned as part of regional environmental restoration projects.

149. FPL will pay all costs associated with construction and removal of the construction access roads. Construction of the roadway improvements will commence no sooner than two years prior to the commencement of construction of the Project.

150. The roadway and intersection improvements are temporary and designed to accommodate traffic during the construction of the Project. Following construction, all temporary roadway improvements on publicly owned ROWs will be returned to the status of the roadway prior to the commencement of construction of the temporary roadways and roadway improvements. 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.

151. Roadway improvements on privately owned property will not be open to the general public. The County and other agencies with needed access will be granted access to these private roadways.

152. Level of service standards and the County's reserve capacity standards will be met with the addition of Project-related traffic during construction and operation.

153. The construction access roads and pipelines will not be located within local wellfields.

G. Land Use/Comprehensive Plan

154. Land uses adjacent to the site and associated non-linear facilities comprise undeveloped land; electrical generating Units 1, 2, 3, 4, and 5; and transmission infrastructure. The industrial wastewater facility is located to the west and south of the Units 6 and 7 site. Canals that return cooling water to Units 1 through 4 surround that site. The BNP, Biscayne Bay Aquatic Preserve, and the FPL Everglades Wetland Mitigation Bank are adjacent to the larger Turkey Point plant property. The Homestead Air Reserve Base and the Homestead-Miami Speedway are northwest of the site. Most of the existing land uses in the vicinity of the larger FPL Turkey Point plant property are vacant land.

155. The Project site and associated non-linear facilities are compatible with the existing proximate land uses.

156. Existing land uses within and in the vicinity of the proposed corridors for the temporary construction access roads and the potable water pipeline are comprised of vacant land, agriculture, residential, electric power facilities, the Homestead Air Reserve Base, and the Homestead International Speedway. Most of the existing land uses in the immediate vicinity of the southern portion of the temporary construction access roads are vacant land.

157. Land uses within the proposed corridor for the reclaimed water pipeline comprise a water treatment facility, a landfill, agricultural land, and transmission infrastructure. The BNP and Biscayne Bay Aquatic Preserve are located to the east of the proposed reclaimed pipeline corridor. The Homestead Air Reserve Base and the Homestead International Speedway are located approximately five miles northwest of the corridor. Most of the existing land uses in the immediate vicinity of the proposed corridor are vacant land.

158. The proposed temporary construction access roads, the potable water pipeline, and the reclaimed water pipeline are compatible with the existing land uses within those proposed corridors.

159. FPL will grant the MDWSD an unobstructed utility easement along Southwest 360th Street from Southwest 177th Avenue to the plant property as required by Condition 2 of County Resolution Z-1-13.

160. FPL will also grant the County an easement along section line road ROW on the Southwest 344th Street alignment east of Levee L-31 in accordance with Condition 13 of County Resolution Z-1-13.

161. FPL will design the construction access roads to avoid impacts to County-designated Environmentally Endangered Lands.

162. The plant and non-transmission line portion of the Project will be consistent with local land development regulations (LDRs), including zoning ordinances.

163. FPL intends to comply with all of the conditions of County Resolutions Z-56-07 and Z-1-13 and with all of the criteria of the CDMP amendment for the construction access roadways.

164. The plant and non-transmission line portion of the Project will be consistent with the CDMP and the City of Homestead's comprehensive plan; consistent with the Strategic Regional Policy Plan of the SFRPC; and consistent with the State Comprehensive Plan.

H. Wetlands and Wetlands Mitigation

165. Construction of the Plant and non-linear associated facilities would permanently impact approximately 398 acres of wetlands. Approximately 250.2 acres are associated with construction on the site and are contained within the industrial wastewater treatment facility. The remaining permanent wetland impacts are associated with construction of the associated non-transmission line facilities. There will also be approximately 43.6 acres of temporary impacts associated with construction of the reclaimed water pipeline.

166. Wetland impacts associated with the construction of the radial collector well system are limited to approximately

three acres of temporary wetland impacts during installation of the radial collector well delivery pipeline. The construction and operation of the radial collector wells will not impact wetland vegetation upon sovereign submerged lands.

167. There will be no wetland impacts associated with construction of the equipment barge unloading area.

168. FPL has made efforts to reduce and eliminate impacts to wetlands through a variety of engineering, design, and other measures, including for example, locating the site within the existing, previously impacted, permitted industrial wastewater facility; relocating the parking and laydown areas to locations within the existing Turkey Point plant property; reconfiguring the RWTF to reduce the footprint and relocating the RWTF; and restoration of roadways within the construction access improvements corridors.

169. FPL conducted its wetlands assessment in accordance with the Department's Uniform Mitigation Assessment Method (UMAM). A total of 262 UMAM credits of functional loss are associated with construction of the plant and non-transmission line portion of the Project. This includes permanent, temporary, and secondary wetland impacts.

170. FPL has proposed a wetland mitigation plan for the entire Project. FPL proposes to mitigate for wetland impacts associated with the plant and non-transmission line portion of

the Project through a combination of regional wetland restoration, enhancement, and preservation initiatives furthering regional restoration goals, as well as the use of credits obtained from the Everglades Mitigation Bank and restoration of temporary wetland impacts associated with pipeline installation. The mitigation plan includes over 800 acres of wetland restoration, enhancement, and preservation. Additional mitigation activities are proposed within the Model Lands Basin to the west and south of the Turkey Point plant, including creation of a crocodile nesting sanctuary and restoration of wetlands associated with the temporary construction access roadways. FPL's proposed wetland mitigation plan is appropriate to offset the expected wetland impacts.

171. FPL's proposed wetland mitigation plan for the plant and non-transmission line portion of the Project will fully offset impacts to the functions of wetlands and other surface waters within the same drainage basins as the impacts and will avoid unacceptable cumulative impacts to wetlands or surface waters.

172. FPL's proposed wetland mitigation plan for the plant and non-transmission line impacts of the Project will fully offset the effects, including functional wetland loss, caused by the construction, operation, and maintenance of the Project.

173. FPL is capable of successfully implementing the proposed mitigation plan.

174. FPL's proposed wetland mitigation plan complies with Conditions 1 and 9 of County Resolution Z-56-07 and Condition 15 of County Resolution Z-1-13.

175. The plant and non-transmission line portion of the Project is not contrary to the public interest.

176. The plant and non-transmission line portion of the Project is consistent with relevant requirements of the SFWMD.

I. Wildlife/Threatened and Endangered Species

177. FPL has submitted to all reviewing agencies a comprehensive threatened and endangered species management plan for all listed species for the Project. FPL has preserved, to the maximum extent practicable, all habitat that supports or is critical to listed species. The threatened and endangered species management plan addresses short-term measures to be taken during construction and permanent measures necessary to protect critical habitat. No nests of listed species will be destroyed without prior approval and relocation, if required. The plan includes permanent measures to prevent direct and indirect impacts to critical habitat sufficient to prevent disruption of sensitive behaviors such as breeding, nesting, and foraging within critical habitat.

178. FPL's threatened and endangered species management plan complies with Conditions 2 and 11 of County Resolution Z-56-07 and Condition 18 of County Resolution Z-1-13.

179. The threatened and endangered species management plan includes a comprehensive inventory of all threatened or endangered flora and fauna and identifies all habitat that supports these species.

180. FPL has avoided and minimized impacts to wildlife, including listed species, by locating the site and associated non-transmission line facilities within previously disturbed areas to the greatest extent practicable, avoidance of nesting habitat, commitment to conduct pre-clearing surveys, incorporation of wildlife protection features in the design of construction access roadway improvements, and requiring wildlife training of all construction employees.

181. FPL's proposed wildlife protection features associated with the construction access roads include installing crocodile and wildlife underpasses on Southwest 359th Street east of the L-31E Canal; installing fencing (including fine mesh material along the base of the fencing) along Southwest 359th Street from the L-31E Canal to Southwest 137th Avenue and along portions of both Southwest 117th Avenue and Southwest 137th Avenue between Southwest 344th Street and Southwest 359th Street; providing a six-foot box culvert wildlife underpass

along Southwest 359th Street between Southwest 117th Avenue and Southwest 137th Avenue; providing a second wildlife underpass associated with the bridge on the west side of the L-31E along Southwest 359th Street; and installing enlarged arch culverts along Southwest 359th Street from the L-31E Canal Westward to Southwest 137th Avenue to replace existing culverts.

182. FPL's proposed conservation and monitoring plans will protect listed species from adverse effects from construction and operation of the plant and non-transmission line portions of the Project. FPL's proposed mitigation plan offsets any potential impacts to listed species.

183. The plant and non-transmission line portion of the Project is not anticipated to cause adverse impacts to the abundance and diversity of fish, wildlife, or listed species.

184. Construction, operation, and maintenance of the plant and non-transmission line portion of the Project will not adversely affect the conservation of fish, wildlife, listed species, or their habitat; will not cause adverse secondary impacts to water resources, or aquatic or wetland-dependent fish or wildlife; and will not adversely impact the value of functions provided to fish and wildlife and listed species by wetlands and other surface waters.

185. In accordance with Condition 3 of County Resolution Z-56-07, prior to construction, FPL will obtain all permits and

assessments required by United States Fish and Wildlife Service (USFWS) for the preservation and management of habitat for listed species in accordance with applicable state and federal law.

J. Florida Panther

186. The Florida panther is classified as an endangered species. The USFWS has not designated critical habitat for the Florida panther. USFWS has, however, designated a Panther Focus Area (PFA).

187. Approximately 5.75 miles of the construction access roadway corridors are within the PFA. Where the potable water pipeline is co-located with the construction access roadway corridor, it is also within the PFA. The remainder of the plant and non-transmission line portion of the Project is outside of the PFA. The roads and pipeline corridors within the PFA will result in an impact to approximately 69 acres on the fringe of the PFA. The 69 acres have a panther habitat value of 297 panther habitat units (PHUs).

188. There is a very low likelihood that Florida panthers would occur in the area of the Turkey Point plant and the non-transmission line portion of the Project.

189. Construction, operation, and maintenance of the plant and non-transmission line portion of the Project will not

destroy, degrade, or result in a reduction of habitat that is critical to Florida panthers.

190. Panthers do not use the area of the construction access roadway corridors, including for denning or as a travel corridor.

191. FPL's proposed wildlife protection measures are appropriate and sufficient to prevent adverse impacts to Florida panthers from any traffic mortalities associated with the access roads, and are appropriate mechanisms to enhance protection for wildlife in the area.

192. Construction, operation, and maintenance of the plant and non-transmission line portion of the Project will not impact the values of wetland or other surface water functions so as to cause adverse impacts to the habitat of the Florida panther.

193. The construction, operation, and maintenance of the plant and non-transmission line portion of the Project will not have an actual or potential negative impact on Florida panther habitat; will not have adverse impacts on Florida panthers, their habitat, or affect the conservation of the Florida panther and its habitat; will not have adverse secondary impacts on Florida panthers or their habitat; will not result in a reduction in the number of Florida panthers; will not destroy, degrade, or result in a reduction of habitat that is critical to Florida panthers; will comply with all applicable federal,

state, and local laws and regulations for protection of Florida panthers, including FWC requirements, County code and zoning requirements, CDMP provisions, and City of Homestead requirements; is in compliance with all applicable agency non-procedural requirements related to Florida panthers; and will minimize adverse effects on Florida panthers.

K. American Crocodiles

194. The American crocodile is listed as a threatened species by USFWS and endangered by FWC. The American crocodile was first designated as endangered by the USFWS in 1975, and reclassified (downlisted) as threatened in 2007.

195. In the 1980s, FPL developed a comprehensive crocodile management program for the crocodiles that are found in the existing cooling canal system at Turkey Point. These activities instituted at Turkey Point have largely been responsible for the increase in American crocodile population in South Florida over the last 25 years.

196. USFWS has designated critical habitat for the American crocodile. The site, the radial collector well system area and delivery pipeline area, nuclear administration building, a small portion of the training building, a portion of the parking area, a portion of the potable water pipeline corridor, and a portion of the construction access roadways are within designated critical crocodile habitat. Historical

monitoring of the crocodile population indicates occasional observations of basking crocodiles on the Units 6 and 7 site. There has been no habitual utilization of any of those areas of the Site for foraging or nesting by crocodiles due to the lack of suitable nesting substrate, altered and highly variable hydrology, and limited food supply.

197. The proposed facility locations outside of the designated critical habitat likewise do not provide significant basking, nesting, or foraging habitat for American crocodiles.

198. American crocodiles do not use any of the Units 6 and 7 plant and non-transmission line facility proposed locations for nesting.

199. The areas proposed for spoil disposal are not suitable for crocodile nesting. Placement of the spoil will not affect crocodile movement into and out of the cooling canal system or result in any adverse impacts to American crocodiles.

200. The plant and non-transmission line portion of the Project will not adversely impact American crocodile travel corridors.

201. FPL will enhance and create crocodile habitat within and adjacent to the cooling canal system, including creation of additional juvenile low salinity refugia upon selected berms, vegetative restoration, substrate enhancement to create suitable nesting habitat upon selected berms that have not historically

supported crocodile nests, and construction of an additional American crocodile nesting and foraging sanctuary (the Sea Dade Canal Sanctuary) south of the cooling canal system within the Everglades Mitigation Bank.

202. FPL's proposed constraints on traffic, maintenance, and construction within the cooling canal system and proposed wildlife protection measures, including crocodile underpasses, are appropriate and sufficient to enhance protection of American crocodiles.

203. The measures proposed and agreed to by FPL are adequate to avoid adverse impacts to the size and health of the American crocodile population from construction and operation of the Project.

204. The habitat that is being impacted by the plant and non-transmission line portion of the Project is not critical to American crocodile viability or survival, is not suitable for American crocodile nesting or foraging, and is only occasionally used for basking. The habitat that is being created far outweighs the value of any habitat being impacted.

205. The plant and non-transmission line portion of the Project will not compromise the viability or survival of the American crocodile or result in a net reduction in the number of American crocodiles.

206. Construction, operation, and maintenance of the plant and non-transmission line portion of the Project will not impact the values of wetland or other surface water functions so as to cause adverse impacts to the abundance of the American crocodile; will not adversely affect the conservation of American crocodile habitat; will not have any adverse impacts, including secondary or cumulative impacts, on American crocodiles, their habitat, or affect the conservation of the American crocodile and its habitat; will not adversely impact nesting locations of American crocodiles; will not cause adverse impacts to the abundance and diversity of American crocodiles; will comply with all applicable federal, state, and local laws and regulations for protection of American crocodiles, including FWC requirements, County code and zoning requirements, CDMP provisions, and City of Homestead requirements; complies with all applicable agency non-procedural requirements related to American crocodiles; and will minimize adverse effects on American crocodiles.

L. Eastern Indigo Snakes

207. Eastern indigo snakes are classified as threatened by USFWS and FWC. No critical habitat has been designated for Eastern indigo snakes.

208. Eastern indigo snakes have not been observed in the proposed locations for the Project Site or the construction

access roadways. The areas impacted by the plant and non-transmission line portion of the Project will not compromise the viability or survival of Eastern indigo snakes or result in a reduction in the number of Eastern indigo snakes.

209. FPL's proposed pre-clearing surveys and wildlife protection measures along the construction access roadways are appropriate and sufficient to enhance protection of Eastern indigo snakes.

210. Construction, operation, and maintenance of the plant and non-transmission line portion of the Project will not impact the values of wetland or other surface water functions so as to cause adverse impacts to the habitat of the Eastern indigo snake; will not have adverse secondary impacts on Eastern indigo snakes; will not have any adverse impacts on Eastern indigo snakes, or affect the conservation of Eastern indigo snakes and their habitat; will not cause adverse impacts to the abundance of Eastern indigo snakes; complies with all applicable federal, state, and local laws and regulations for protection of Eastern indigo snakes, including FWC requirements, County code and zoning requirements, CDMP provisions, and City of Homestead requirements; complies with all applicable agency non-procedural requirements related to Eastern indigo snakes; and will minimize adverse effects on Eastern indigo snakes.

M. Manatees

211. The Florida manatee is classified as endangered. The equipment barge unloading area, radial collector well system area, and the reclaimed water pipeline crossings of canals occur in or near areas that may be used by Florida manatees.

212. The presence of the Florida manatee is known to occur in Biscayne Bay, but not within the site or the industrial wastewater facility, as the closed-loop cooling canals do not connect to the Bay. Manatees occasionally are found in some of the SFWMD canals connecting to Biscayne Bay north of the Turkey Point plant, some of which are contained within the reclaimed water pipeline corridor.

213. Construction of the plant and non-transmission line portion of the Project will involve minimal in-water work and will be limited to the equipment barge unloading area and temporary impacts associated with canal crossings of the reclaimed water pipeline.

214. The equipment barge unloading area will be constructed through excavation of uplands adjacent to the Turkey Point plant turning basin. No dredging within Biscayne Bay will be required.

215. The FWC Standard Manatee Conditions for In-Water Work will be followed for all in-water activity located where waters are accessible to manatees. FPL will comply with the Project's

Manatee Protection Plan to avoid any impacts to the manatees during the equipment barge unloading area expansion. FWC-approved manatee observers will be on-site during all in-water construction activities and will advise personnel to cease operation upon sighting a manatee within 50 feet of any in-water construction activity.

216. The plant and non-transmission line portion of the Project will not adversely impact manatees and is consistent with FWC requirements to conserve and protect manatees and will not have any adverse impacts on the Florida manatee.

N. Avian Species

217. FWC has not designated critical habitat for any of the listed avian species in the regional ecosystem of the plant and non-transmission line portion of the Project. While some habitat used by listed species will be affected by the plant and non-transmission line facilities, the extent of this habitat impact is minimal and will be fully mitigated.

218. No wood stork nesting colonies are located within the vicinity of the Site or associated non-transmission line facilities. The plant and non-transmission line portion of the Project will have minimal impacts to wood storks, due to minimal loss of foraging habitat.

219. Snail kites do not normally occur in the area of the plant and non-transmission line associated facilities.

Construction, operation, and maintenance of the plant and non-transmission line portion of the Project will not adversely impact snail kites.

220. Construction, operation, and maintenance of the plant and non-transmission line portion of the Project will not result in a net loss of shorebirds or their habitat. FPL's proposed mitigation offsets any impacts to shorebird habitat.

221. FPL will employ measures to deter Least Tern nesting on the gravel parking areas.

222. There are no known bald eagle nests in the vicinity of the plant and non-transmission line facilities. FPL's planned activities are unlikely to have any impact on the bald eagle.

223. The plant and non-transmission line portion of the Project will not result in a reduction in the number of listed avian species.

224. Construction, operation, and maintenance of the plant and non-transmission line portion of the Project will not impact the values of wetland or other surface water functions so as to cause adverse impacts to the abundance and diversity of avian species, including listed species; will not adversely impact the conservation of avian species, including threatened and endangered avian species or their habitats; will not cause adverse secondary impacts to avian species; and complies with

all applicable federal, state, and local laws and regulations for protection of avian species, including FWC requirements, County code and zoning requirements, CDMP provisions, and City of Homestead requirements.

225. The plant and non-transmission line portion of the Project complies with all applicable agency non-procedural requirements related to avian species; and will utilize reasonable and available methods to minimize adverse impacts to avian species and their habitat.

O. Plants/Exotics/Landscaping

226. Botanical surveys were conducted within the Site and associated linear facilities, resulting in a total of 33 threatened or endangered plant taxa observed. Many of these listed plant species were observed on side-slopes of existing roadways, transmission structure pads, and pine rockland soils that are subject to routine vegetation management such as mowing. Impacts to listed plant species will be avoided or minimized to the greatest extent practicable through pre-clearing surveys, relocation of individuals, if feasible, and/or modification of facility design, such as modification of access road or pipeline alignments so as to avoid impacting listed plants.

227. FPL has prepared an exotic vegetation management plan. FPL will not plant listed exotic or nuisance species. If

encountered on the locations of the site and associated non-transmission line facilities or mitigation areas, they will be removed prior to construction in that location.

228. FPL will maintain wetland mitigation lands free of exotic vegetation, as required by Condition 10 of County Resolution Z-56-07.

229. FPL's exotic vegetation management plan complies with Condition 12 of County Resolution Z-56-07.

230. FPL will undertake final tree surveys before commencement of construction of the plant and of the construction access roads and water pipelines. FPL will take measures to avoid impacts to protected trees during construction, in accordance with local requirements. FPL will provide mitigation for impacts to trees.

231. All off-site landscaping, including for the construction access roadways, complies with the local non-procedural requirements for landscaping and with Condition 13 of County Resolution Z-56-07 and Condition 14 of County Resolution Z-1-13. Also, FPL will comply with Condition 19 of County Resolution Z-1-13.

P. Comprehensive Everglades Restoration Project (CERP)

232. The CERP was authorized by Congress in 2000 and provides a framework and guide to restore, protect, and preserve the water resources of central and southern Florida, including

the Everglades National Park. The plant and non-transmission line associated facilities are within the boundary of one CERP project; a small portion of the reclaimed water pipeline corridor falls within the Biscayne Bay Coastal Wetlands Project. All plant and non-transmission line associated facilities, including the reclaimed water pipeline and construction and operation of the radial collector wells are not inconsistent with that CERP Project.

233. The plant and non-transmission line portion of the Project is consistent with CERP and its overall objectives.

Q. Archeological and Historic Sites

234. FPL conducted cultural resources assessment surveys for the Site and associated non-linear facilities in compliance with applicable state and federal requirements. No historical or archaeological resources were identified.

235. FPL also conducted a preliminary cultural resource assessment survey for the Project's associated linear facilities. It is typical practice when certifying corridors to conduct a review of known or previously-recorded resources, with the field surveys to be conducted after the final ROW location is finalized. No previously-recorded archaeological sites, archaeological zones, historic structures, historic districts, historic linear resources, historic cemeteries, or historic bridges were identified within or adjacent to the reclaimed

water pipeline corridor, the construction access roadway corridors, or the potable water pipeline corridor.

236. The State Division of Historical Resources (DHR), State Historic Preservation Office (SHPO), reviewed the cultural resources assessment reports and agreed that the site and associated non-linear facilities will not have an effect on historic properties. The SHPO also concurred with the work plans submitted for the site and associated non-linear facilities and the linear facilities.

237. The plant and non-transmission line portion of the Project will comply with the National Historic Preservation Act and applicable SHPO non-procedural requirements; all applicable County code non-procedural requirements related to cultural, archaeological, and historical resources; all CDMP provisions related to archaeological and historical resources; and all applicable non-procedural requirements of the City of Homestead code and comprehensive plan related to cultural, historical, and archaeological resources.

238. The plant and non-transmission line portion of the Project will not have adverse impacts, including secondary impacts, on cultural, historical, or archaeological resources.

R. Solid and Hazardous Waste

239. All solid waste from construction and operation will be stored, recycled, processed, and disposed of in accordance

with the applicable federal, state, and local rules and regulations. All solid waste will be disposed of at a permitted solid waste management facility.

240. Used oil from construction vehicles and equipment will be collected in appropriate containers and transported off-site for recycling or disposal at an approved facility.

241. Hazardous waste materials generated during construction and operation will be managed and disposed of by a licensed hazardous waste contractor in accordance with all applicable federal, state, and local rules and regulations.

S. Noise and Lighting Impacts

242. Noise associated with construction and operation of the plant and non-transmission line portion of the Project will comply with the applicable County and City of Homestead non-procedural requirements. Construction and operation of the plant and non-transmission line portion of the Project will not have any adverse noise-related impacts.

243. Units 6 and 7 will require outdoor lighting for security purposes and worker and plant safety, including lighted walkways, parking areas, and various equipment areas. The plant and non-transmission line portion of the Project will not have adverse lighting-related impacts and will comply with NRC, United States Occupational, Safety, and Health Administration, and County non-procedural requirements.

T. Socioeconomic/Public Impacts and Benefits

244. The Project will have a positive fiscal impact on the County, the County School Board, and the community. The Project is anticipated to result in payment of $1.4 to $2.0 billion in property taxes to the County over the Project's operating life; payment of $52.6 to $74.2 million in state sales taxes during the construction period; payment of $1.1 to $1.7 billion in property taxes to the County School Board over the Project's lifetime; and payment of $138.3 million to $202.9 million to other taxing authorities over the Project's lifetime.

245. From an economic impact perspective, the Project is anticipated to result in creation of 806 permanent, onsite jobs for plant operations; creation of approximately 3,950 direct onsite jobs and 3,689 indirect jobs (annual average) at peak during the construction period; $28.3 billion in total economic output over the operating period; and $8.2 to $11.2 billion in total economic output during the construction period.

246. Project construction will take approximately 123 months. Construction and operation of the plant and non-transmission line portion of the Project will not have an adverse population impact to the County. There will be adequate housing and school capacity in the County to accommodate the construction and operation workforce and their families. Police, fire, emergency management, and medical facilities in

the region will be sufficient to accommodate construction and operation of the plant and non-transmission line portion of the Project.

247. Construction and operation of the plant and non-transmission line portion of the Project will not have an adverse impact on regional scenic, cultural, or natural landmarks or on residential, commercial, or recreational facilities and uses. Construction, operation, and maintenance of the plant and non-transmission line portion of the Project likewise will not adversely affect fishing or recreational values or marine productivity.

248. The Project meets an identified need for electrical power and has substantial economic and fiscal benefits. The Project will ensure electrical reliability for FPL's customers. The Project will also have environmental benefits. The environmental benefits include use of reclaimed water as the primary source of cooling water. The encouragement and promotion of water conservation and use of reclaimed water are State objectives and considered to be in the public interest. FPL's use of reclaimed water is also consistent with the County's efforts to meet the requirements of Florida's 2008 ocean outfall legislation. As described earlier, the use of nuclear power will also avoid substantial emissions of greenhouse gases. The evidence also shows that the Project will

fully offset all impacts to wetlands and includes additional mitigation activities conducted without credit for the generation of functional lift. The Project is clearly in the public interest and will serve the broad interests of the public.

249. The PSC has determined that there is a need for the Project, and it reaffirmed that need through annual review. The Project will not result in any unmitigated adverse impacts to air and water quality, fish and wildlife, water resources, or other natural resources of the state. The Project effects a reasonable balance between the need for the facility and the impacts upon air and water quality, fish and wildlife, water resources, and other natural resources of the state resulting from the construction and operation of the Project.

U. Road Right-of-Way Dedications

250. The County has proposed conditions of certification to require FPL to dedicate to the County approximately 131 parcels of land at locations identified by the County in Attachment 3 to its Plant Agency Report.

251. The County's zoning code is found in chapter 33, MDC. Section 33-133 establishes "minimum right-of-way widths for streets, roads and public ways for the unincorporated area of the County . . . ." Section 33-46 provides that "[n]o permit shall be issued for a building or use on a lot, plot, tract, or

parcel in any district until that portion of the applicant's lot, plot, tract, or parcel lying within the required official zoned right-of-way has been dedicated to the public for road purposes . . . ." Dedications are only required where the applicant owns the land in fee.

252. The list of 131 locations was identified by the County Public Works Department and Environmental Resources Department. The County has existing roads at some of these locations, but it does not have the full dedicated road ROW at other locations. The County does not currently have plans to construct roads at other locations identified for dedication. The County is aware that FPL does not own the land in fee at some of the identified locations but did not identify if FPL owned the land at the listed locations. The County witnesses were not aware of prior permitting by the County Works Department or Environmental Resources Department, including permitting of transmission lines, requiring dedication of road ROW.

253. At some locations, the County is seeking dedications in areas identified for restoration of the Everglades or Biscayne Bay under CERP; however, the County might make the dedicated road ROW available for CERP features and not use them for public roads. The County also seeks dedications to obtain County access to environmentally endangered lands managed by the

County. Instead of dedications for public roads at several locations, the County would require FPL to close roads and convey the land to the County. If the County later decides to not build a road, the landowner can file a petition to request that the County Commission abandon the road ROW dedication through a public hearing.

254. Many of these 131 parcels are along or across the corridors for the electrical transmission lines, the reclaimed and potable water pipelines, and the construction access roads. The County did not identify where these parcels are located within established ROWs. Several parcels identified by the County for dedications are not located in areas proposed for Project-related facilities

III. Transmission Facilities

A. Overview

1. Transmission Facilities

255. As noted above, the transmission facilities associated with the Project proposed by FPL include the on-site Clear Sky electrical substation, expansion of the existing Levee electrical substation, two access-only transmission line corridors, and two transmission line corridors containing a total of five transmission lines.

256. "Transmission facilities" refers to the proposed transmission lines in the application, as defined in sections

403.503(14) and 403.522(22), including the Clear Sky-Turkey Point 230-kV transmission line and the Clear Sky-Davis and Davis-Miami 230-kV transmission line (the eastern transmission lines); Clear Sky-Levee No. 1 and No. 2 500-kV transmission lines and Clear Sky-Pennsuco 230-kV transmission line (the western transmission lines); and the Clear Sky substation and Levee substation expansion.

257. FPL originally proposed to locate the transmission lines in approximately 88.7 miles of transmission line corridors: 52 miles in the FPL West Preferred Corridor and 36.7 miles in the FPL East Preferred Corridor. For its western transmission lines, FPL is now seeking certification of the West Consensus Corridor/MDLPA No. 2 -- a combination of an alternate corridor proposed by MDLPA and FPL West Preferred Corridor -— as its favored western corridor. The West Consensus Corridor/MDLPA No. 2 and the FPL West Preferred Corridor are both approximately 52 miles in length. FPL is concurrently seeking certification of its original FPL West Preferred Corridor as a back-up, to be used only in the event a ROW for the western transmission lines in the West Consensus Corridor/MDLPA No. 2 cannot be secured in a timely fashion and at a reasonable cost.

258. The proposed transmission lines are necessary to safely and reliably connect the new power generation from the Project to FPL's existing electrical transmission network.

Certification of the eastern and western transmission lines, as conditioned, serves the broad interests of the public by ensuring reliable electric service at a reasonable cost.

259. An electrical transmission line is a high voltage system that is used to transfer power, typically from power plants or other generation facilities, to one or more substations that may be connected by the transmission line.

260. A substation is a facility where the voltage of electricity carried on a transmission line can be increased or reduced by the use of transformers and other related electrical equipment for safe and practical transmission to other substations or distribution directly to customers.

261. The general components of a transmission line are structures (single or multiple poles), insulators, conductors (wires that carry the electricity) and overhead ground wires (OHGW) that protect the conductors from lightning strikes and also provide for relay protection and telecommunications, other communications wires, various hardware, and access roads. In wet areas, a transmission line may also include structure pads.

262. An access road is an integral part of a transmission line. It allows access to each structure location for construction purposes and also provides ongoing access for routine and emergency maintenance. The transmission line access

roads and structure pads required for the lines, if not already existing, will be unpaved.

263. A structure pad is an unpaved area of compacted and stabilized fill that is of sufficient size to accommodate necessary access for construction and for subsequent maintenance, restoration, and emergency operation activities.

264. Transmission line siting involves identifying a route for the transmission lines, selecting a corridor that encompasses that route, and ultimately acquiring the ROW within the corridor in which the transmission lines will be built, operated, and maintained.

265. The route or route alignment is the line between the endpoints for the transmission lines.

266. The corridor is the area within which the transmission ROW will be located. At a minimum, it must be wide enough to accommodate a ROW that in turn is wide enough for the planned transmission facilities; the corridor can be up to a mile wide. Once the ROW is acquired, the corridor boundaries narrow to include only the ROW.

267. The ROW for the transmission line is established through the acquisition of property rights or through use of existing property rights.

268. Including the alternate transmission line corridors proposed by other parties, there are a total of two corridors

proper for certification in the east study area and five corridors proper for certification in the west study area.

2. FPL's Siting and Corridor Selection Process

269. FPL utilized a multidisciplinary transmission line siting team consisting of experts in land use, engineering, the environment, and public outreach to select its preferred corridors for both the eastern and western transmission lines. For the following reasons, the corridor selection process used by FPL is found to be reasonable, is consistent with the methodology, guidelines, and criteria used in prior corridor projects throughout the State, and therefore is appropriate for use in this proceeding. The fact that population data and/or density information, house-by-house or parcel-by-parcel, were not specifically used by FPL, does not detract from the validity of the selection process.

270. The objective of FPL's corridor selection study was to select a certifiable corridor that balances land use, environmental, engineering, and cost considerations. Corridor selection methods were designed to be integrative of multidisciplinary siting criteria; rational and objective in decision-making; sensitive to social and environmental conditions; responsive to regulatory requirements; reflective of community concerns and issues; and capable of accurate documentation and verification.

271. The process sought to maximize collocation opportunities and minimize intrusion into siting constraints to the extent practicable. Collocation is the ability to follow (within or adjacent to) an existing linear feature, easement, or ROW, providing the opportunity to reduce the amount of new access road construction, impacts to wildlife habitat, and other impacts. It may include siting a utility within or adjacent to an existing vacant but established ROW. Collocation provides a way to minimize impacts in several ways. With an existing structure, the vegetation, wildlife habitat, and surrounding land uses have already been affected by the existing facility. Adding a new transmission line in such areas will add very little, if any, additional impact. In addition, positioning a corridor along existing roads where feasible to provide access often offers an opportunity to reduce wetland impacts. FPL uses existing access roads where available to minimize wetland impacts. Also, the transmission lines can be designed to avoid clusters of roadside canopy trees.

272. The corridor selection process consisted of multiple steps, including project and study area definition, public outreach, resource mapping and alternative route delineation, quantitative and qualitative evaluation of alternate routes, and selection of a preferred corridor.

273. First, for both the eastern and western transmission lines, FPL defined the project and study area by specifying the voltages and typical ROW widths of the transmission lines to be built, the substation endpoints for the route to connect, the types of typical structures, and existing transmission line ROWs in the area.

274. For the eastern transmission lines, FPL specified transmission structures for a single circuit, 230-kV transmission line to connect the proposed Clear Sky substation to the Turkey Point substation, and a single circuit, 230-kV transmission line to connect the Clear Sky, Davis, and Miami substations. The study area was developed to include those four substations and FPL's existing transmission line ROWs connecting them.

275. The west study area included the Clear Sky, Levee, and Pennsuco substations and existing FPL transmission ROWs and other linear features that occur between these substations.

276. For the western transmission lines, FPL specified two 500-kV lines extending from the on-site Clear Sky substation, extending west and then north to the existing Levee substation. From the proposed Clear Sky substation, FPL also specified a 230-kV transmission line from the on-site Clear Sky substation to the existing Pennsuco substation.

277. For the next corridor selection step, FPL evaluated collocation opportunities and siting constraints within the study areas in a regional screening mapping exercise. Public outreach was initiated to solicit information for the regional screening exercise. Resource mapping information was obtained from available information sources, including local, regional, state, and federal agency geographic information systems data. FPL used a technique of overlay mapping software programs to allow flexibility in adding new information as it became available and modifying layers to analyze certain constraints or opportunities.

278. For all transmission line routes, the types of resources mapped included base map information, including: highways, roads, and streets; county and city boundaries; railroads, airports, and heliports; existing and proposed FPL substations; existing FPL transmission lines; existing FPL properties, ROWs, and easements; water bodies, rivers, streams, and canals; land use information (existing and proposed development for which local approvals are pending); planned unit developments and developments of regional impact; property boundaries; existing schools and County School Board lands; cemeteries and historical structures and districts; national parks, wildlife refuges, estuarine sanctuaries, landmarks, or historical sites; state parks, preserves, proposed and existing

Florida Forever lands, Areas of Critical State Concern, Save Our Rivers lands, and aquatic preserves; SFWMD-owned lands; County lands, parks, recreation areas, and mitigation lands; Native American lands; privately-designated wetland mitigation areas; privately-owned environmental preserves/sanctuaries; military properties; and environmental information, i.e., listed federal and state-protected species and unique habitats; USFWS-designated critical habitats; and wetlands as delineated on USFWS National Wetlands Inventory maps.

279. Once those resources were mapped, the team used the study area regional screening maps as a visual tool, along with aerial photography, ground reconnaissance, and helicopter fly-overs, to develop alternative routes. The team identified routes designed to best avoid or minimize siting constraints and maximize use of collocation opportunities with existing linear features/ROWs. Using route selection guidelines developed by the multidisciplinary team and based on similar guidelines used in previous projects in Florida, several alternative route segments were developed that, when combined, could connect the Project substations. The route selection guidelines used were designed to:

> 1. Maximize collocation with certain linear features (existing FPL transmission lines, easements, or ROW; roads; canals; etc.).

2. Follow parcel or section lines where practicable and when other linear collocation opportunities do not exist.

3. Minimize crossing of constraints identified as a result of regional screening (e.g., environmentally sensitive lands, existing development, and proposed development for which local approvals are pending).

4. Avoid known airports and private airstrips consistent with FAA and other applicable regulations.

5. Follow disturbed alignments (ditches, roads) through wetlands, where practicable.

6. Minimize crossing of existing transmission lines.

280. Applying the route selection guidelines to the study area regional screening maps, FPL's multidisciplinary team identified 35 route segments that combined to form 134 eastern alternative routes and 34 route segments that combined to form 99 western alternative routes.

281. Once alternative routes were identified, evaluation of these alternative routes involved a systematic, quantitative and qualitative evaluation of each route using environmental, land use, cost, and engineering criteria, integrating information received from the public and other stakeholders through FPL's outreach program.

282. For all transmission line routes, the quantitative criteria used were: number of non-FPL parcels/lots crossed;

length of route not following FPL-owned ROW or other transmission line easements; length of route not following other linear features; length of route through existing parks/ recreation areas/designated conservation lands; length of forested wetlands crossed; length of non-forested wetlands crossed; number of eagle nests/wading bird colonies within one-half mile; and engineering/construction cost estimates. These criteria are based on the application of accepted transmission line siting factors used on previous projects across Florida.

283. In addition, the quantitative route evaluation criteria included the number of buildings and schools/school properties within 200 feet of eastern route centerlines and within 500 feet of western route centerlines. The use of these measures of separation was not unreasonable. The proximity distance for this relative comparison among eastern routes was shorter than for the western routes due to the much higher density of development within the east study area.

284. Data for quantitative route evaluation criteria came from the regional screening map data, recent digital aerial photography for the study area, input from agencies and local governments, ground and aerial surveys of routes, and input from the community outreach program. Each segment was analyzed for each quantitative criterion, and the value for each criterion was recorded by segment. The relative weight (importance) of

each criterion to be used in the alternative route evaluation was then established by the siting team. These criteria and weights were validated through input from the community obtained as part of the community outreach program. The weighting of criteria in this manner was not shown to be unreasonable.

285. The next step of the integrated alternative route evaluation process involved performing a qualitative assessment of more localized conditions. This evaluation included analyses of siting issues and opportunities; siting constraints; additional ground and aerial surveys; and feedback, additional public input, and comments received at agency workshops and meetings, nine community open houses, and numerous individual and small group meetings with area residents, property owners, and local governments.

286. Qualitative criteria evaluated for all transmission line routes included: available space within existing FPL ROW, easements, or fee-owned property; available ROW along roads, transmission lines, and railroads; road plans; proposed development plans; proximity of existing development; types of development in proximity; proximity and orientation of public airports and private airstrips; ingress/egress at substations; bridge crossings; constructability; acquisition status of existing and proposed conservation lands and/or greenways; ability to avoid or minimize wetland impacts; ability to avoid

or minimize impacts to parks, recreation, and conservation lands; proximity to historical districts, roads, and/or structures; review of potential underground scenarios where an overhead transmission line design is not feasible; potential listed species presence; crossing of Native American lands; potential use of local access roads/trails; proximity to known archaeological locations; and vegetative landscapes along streets (tall trees).

287. Qualitative criteria for western transmission line routes also included the significance of the Everglades National Park and the ability to utilize or cross government-owned parcels. Environmental considerations and land ownership were key considerations in the west.

288. FPL's corridor selection process took into account proposed development in the corridor areas, while avoiding environmentally sensitive areas to the extent practicable. It reflected a reasoned balancing of the need for the transmission lines against the potential impact on both the public and the environment.

289. After quantitative and qualitative evaluation of all identified route alignments and consideration of public input throughout the corridor selection process, FPL selected preferred corridors and delineated corridor boundaries.

290. The PPSA requires a balancing analysis of "whether, and the extent to which" a number of considerations are satisfied. § 403.509(3), Fla. Stat.; In re: Gainesville Renewable Energy Center, LLC, Case No. 09-6641EPP, 2010 Fla. ENV LEXIS 174 (Fla. DOAH Nov. 1, 2010), 2010 Fla. ENV LEXIS 173 at *11 (Fla. Siting Bd. Dec. 15, 2010)(PPSA statutory scheme is one of balancing and reasonableness). Although the route selection criteria and process employed by FPL's team are not expressly enumerated in the PPSA, the criteria were used to quantitatively and qualitatively assess the balance of statutory factors that the various routes would achieve. Similar criteria were used to evaluate multiple proposed routes in numerous other successful transmission line certification proceedings for projects throughout Florida. In those proceedings, the criteria were vetted by agency review, local government review, and public input.

3. Post-Certification Planning and Design, All Corridors Proper for Certification

a. ROW Selection and Delineation

291. Once a corridor has been selected for a transmission line and certified, FPL establishes a ROW through multiple means, including (1) purchasing easement rights over the affected parcels; (2) purchasing the property in fee simple if necessary; and/or (3) acquiring longitudinal use permits and

licenses for public lands, where transmission lines cross or are longitudinally located within public properties or public rights-of-way. A combination of these three methods can take place over the length of a transmission line in order to establish a ROW for that line.

292. FPL cannot construct transmission lines on ROWs for which it has not acquired the necessary property rights.

293. Unless the transmission line is located on available public ROW, based on a review of recently completed projects, it costs FPL approximately four times the market value of land to actually acquire and assemble a ROW within a certified corridor. This is called the "acquisition factor."

294. After certification, FPL will be required to submit its proposed transmission line ROW alignments to the Department, with copies to DOT, SFWMD, SFRPC, the County, and the affected municipalities delineating the proposed ROW for the areas within each agency's jurisdiction. Each agency will then have the opportunity to notify the Department of any apparent conflicts with the requirements of the Conditions of Certification.

295. The final transmission line alignment will take into account approved development to be constructed in the area. For example, upon FPL's request, the County will identify the location of approved but not yet constructed development within the County's jurisdiction so FPL can plan to avoid or minimize

conflicts with any such development. Further, to address any concerns by local governments regarding future development, FPL is willing to comply with a condition of certification to accommodate approved but not yet constructed development in the design of the transmission line.

296. Selection of a ROW within a corridor and optimal placement of structures within the ROW can also avoid potential obstructions and minimize wetland impacts. For example, the ROW can be positioned along existing roads to provide access, which can reduce wetland impacts.

b. Transmission Line Design Standards

297. FPL's transmission lines are designed to conform to applicable codes, guidelines, and industry standards, including: National Electrical Safety Code (NESC) standards, such as those for clearances, loading, strength, and extreme wind event design; Department standards for electromagnetic fields (EMF); DOT Utility Accommodation Manual specifications; American Society of Civil Engineers (ASCE) standards; Institute of Electrical and Electronic Engineers standards; American Society of Testing Material (ASTM) standards; American Concrete Institute (ACI) standards for the design of concrete transmission poles; United States Occupational Safety and Health Administration requirements for safe minimum approach distances;

applicable noise ordinances of local governments, and FPL's own design and hardening standards for transmission lines.

298. The NESC is the standard adopted by the PSC with which FPL's transmission lines must comply to protect public safety. The NESC, rather than local building codes, is the national industry standard for construction and public safety that is most applicable for transmission lines.

299. FPL presented evidence demonstrating that many of its internal design standards exceed those of the national standards. These internal design standards may require minimization of impacts even beyond regulatory requirements, where practical. For example, FPL may reverse phase on double circuit lines to minimize the magnetic field or may vary the span between structures to avoid significant environmental, historical, or archaeological resources or conflicts with existing land uses like driveways.

300. Overhead design for its transmission lines constitutes FPL's current standard and customary practice where there is no engineering constraint requiring an underground installation. About 98 percent of FPL's transmission system is overhead in design.

301. Undergrounding of FPL's proposed transmission lines is not justified by any asserted concern about their structural integrity. The concrete monopole structures are specifically

engineered to withstand extreme wind events, which meet or exceed NESC requirements.

302. Extreme weather can affect both underground and overhead transmission lines. In some cases, restoration of an underground circuit can take significantly longer than for an overhead circuit. The Coral Gables/Pinecrest transmission line expert agreed that undergrounding transmission lines can involve reliability problems, and it could take weeks or months to repair a fault on an underground transmission line.

303. FPL's overhead transmission lines such as those proposed for this Project have performed very well in extreme weather events over their operating history.

304. The PSC, not local governments, has regulatory authority over undergrounding of electric utility lines. The incremental costs of undergrounding transmission lines, where overhead transmission lines are feasible, but undergrounding is requested for aesthetic reasons, are typically paid by the requesting entity. This cost allocation principle has been recognized by the PSC, the Florida Legislature, and the Florida Supreme Court to ensure that entities that benefit from extraordinary costs will bear those costs when other means are technically feasible. See § 366.03, Fla. Stat. ("No public utility shall make or give any undue or unreasonable preference or advantage to any person or locality, or subject the same to

any undue or unreasonable prejudice or disadvantage in any respect."); Fla. Power Corp. v. Seminole Cnty., 579 So. 2d 105, 108 (Fla. 1991)("Permitting cities or counties to unilaterally mandate the conversion of overhead lines to underground would clearly run contrary to the legislative intent that the [PSC] have regulatory authority over this subject.").

c. Transmission Line Construction and Maintenance Process

305. The first step in transmission line construction is to survey the land to locate property lines, property corners, section corners, and road ROW lines to prepare the easement descriptions for ROW acquisition or to establish the boundaries of an existing transmission ROW. After any necessary acquisition, additional surveying is undertaken to stake out ROW lines and stake locations for poles, anchors, structure pads, and access roads for ROW preparation.

306. The second step in transmission line construction is ROW preparation. ROW preparation requires trimming or removal of vegetation in conflict with safe construction and operation of the transmission line. Where clearing is required in uplands or wetlands, trees and shrubs whose mature height could exceed 14 feet and which are very close to the transmission line will be evaluated for pruning or clearing to ground consistent with American National Standards Institute (ANSI) standards. Stumps may be removed or grubbed and treated with approved herbicides.

FPL will implement tree protection, replacement, and relocation measures in compliance with applicable non-procedural requirements of the local government within which the work is being conducted. In wetland areas, selective clearing of vegetation by hand may be required. Additionally, in wetlands and sensitive pine rockland communities such as County-designated Natural Forest Communities (NRCs), trees and shrubs whose mature height could exceed 14 feet which are very close to the transmission line will be pruned or cleared using only restrictive cutting techniques.

307. Where there is an existing cluster of canopy trees, FPL can design the transmission lines to avoid removing the trees with higher structures or shorter or longer spans.

308. FPL will implement tree protection and replacement measures in compliance with the applicable non-procedural requirements of the local government where the clearing is being conducted. Alternately, a contribution to a local government's tree fund may be made, where allowed.

309. ROW preparation also includes construction of access roads and structure pads where required. FPL will evaluate existing access roads, both public and private, for possible use. If necessary, in some instances these existing access roads may need to be improved to accommodate the construction and maintenance equipment needed for the transmission lines.

310. Where new access roads and pads are necessary, they will be constructed with hauled in clean fill material. Culverts will be included in the design of the roads and pads as necessary to maintain existing surface water flow conditions.

311. The next steps in transmission line construction are material hauling and spotting and structure erection. The transmission line poles are trucked to each pole location and can be laid out along the patrol or access road or can be installed as soon as they are delivered to the site. A hole will be augured at each pole location. For the concrete single-pole, this hole will typically be 18 to 25 feet deep and approximately 72 inches in diameter on average. The material excavated from the holes will be spread evenly onto adjacent uplands, either onto existing or recently constructed access roads or pads where appropriate, or be removed from the site. The pole will then be set by the use of cranes and backfilled with crushed rock. The framing process, or installation of hardware and insulators on the poles, may be done with the poles laid on the ground or once erected. Some of the transmission line structures, including most of the structures for the western transmission lines and some of the heavy angle structures for the eastern transmission lines, will also require the installation of anchors and guy wires.

312. Anchors will be either multi-helix screw-in-type anchors or pile-type anchors. Pile-type anchors provide strength applications by embedding a short reinforced concrete pole section to a required depth with backfill. Multi-helix anchors are installed using truck-mounted equipment to screw the anchor into the ground to the required length or torque to meet design requirements. Guy wires will be attached to hardware connected to the anchor extending above the ground and to the transmission line structure.

313. Span lengths can be varied for several reasons. Sometimes a pole location or height is adjusted to avoid a wetland, cluster of canopy trees, or other environmentally sensitive feature, or to coincide with property lines or the location of existing distribution poles that will be displaced. Span length can also be adjusted to accommodate the location or crossing of other electric utility lines or poles, or over highways, canals, or other linear features.

314. Once the poles are in place and the insulator assemblies and hardware are installed, conductors and OHGW will be installed. A rope will be used as a pilot line to pull the conductors and OHGW through the stringing blocks. Conductor pulls will be up to two miles apart, or about 10,000 feet or shorter between dead-end or heavy angle structures. A conductor or OHGW stringing operation typically has a puller at one end of

the installation and the conductor reels with the tensioner at the opposite end of the installation. The pilot lines will be pulled in one direction, and the conductors will be pulled in the opposite direction. After pulling, the conductors and OHGW will be spliced together and ultimately sagged (tensioned) to ensure that the conductor is installed with the proper clearance. The conductor will then be attached to the insulator assemblies, and the transmission line will be energized.

315. FPL will minimize the potential for impacts to wetlands during construction through the use of sedimentation control devices to control erosion and turbidity, along with regrading and seeding/mulching of side slopes if needed after construction.

316. The final step in constructing a transmission line is ROW restoration, which is the final clean-up of the ROW after construction is complete. Where necessary, this involves restoring areas that might have been disturbed during construction due to use of heavy vehicles. Restoration may also include stabilizing any potentially erodible areas or replacement of vegetation impacted during construction.

317. FPL will conduct routine maintenance on the ROWs following construction. As is typical and customary for FPL transmission line construction, the transmission lines will require minimal maintenance. Vegetation on and adjacent to the

ROWs will be maintained to ensure the safe, reliable operation of the lines. In areas that are not in active agricultural or nursery use, FPL will manage vegetation on the ROW by a variety of methods, including trimming, mowing, and the use of approved growth regulators and herbicides, targeting species that are incompatible with the safe access and operation and maintenance of the transmission system. Where the transmission lines are located along a roadside, very little maintenance of the ROW will need to take place. FPL's management techniques will encourage a broad diversity of vegetation growth to remain on the ROW. FPL will control exotic vegetation within the ROWs in any certified corridor.

d. Applicable Non-Procedural Requirements

i. Wetland and Ecological Impacts

318. In selecting the preferred transmission line corridors, and in comparing the alternate corridors proposed by other parties with the FPL preferred corridors, FPL analyzed wetland ecology within all proposed transmission line corridors through a combination of formal wetland delineation in the field, field reconnaissance, review of aerial photography, and review of SFWMD land use/land cover data. FPL conducted a wetlands assessment of the transmission line corridors in accordance with the UMAM. FPL evaluated the amount of mitigation required using the acreage of wetland impact based on

a conceptual transmission line design and the average quality of affected wetlands.

319. In addition to reducing impacts to wetlands through collocation with existing linear facilities and reducing the construction footprint of the transmission lines, FPL has submitted a wetland mitigation plan for the entire Project to all reviewing agencies. FPL proposes to mitigate wetland impacts associated with the transmission line portion of the Project through purchase of credits from the agency-approved Hole-in-the-Donut Mitigation Bank and the Everglades Mitigation Bank. The service territory for the Hole-in-the-Donut Mitigation Bank and Everglades Mitigation Bank covers the entirety of the Project area.

320. FPL's proposed wetland mitigation plan for the transmission line impacts will offset the adverse effects, including functional loss, caused by the location, construction, operation, and maintenance of the transmission lines in the certified corridors, and the transmission lines will not cause unmitigated secondary or cumulative impacts to wetlands or surface waters.

321. FPL will use best management practices in constructing the proposed transmission lines to prevent, to the extent practicable, spills, erosion, dust generation, off-site

sedimentation, and pollution of waterways and storm drainage systems.

322. No wastes will be discharged during location, construction, operation, and maintenance of the proposed transmission lines without being given the degree of treatment necessary to protect the beneficial uses of the waters of the state. FPL will not discharge any wastewater, stormwater, or groundwater from a transmission line excavation into a storm sewer.

323. In light of the measures proposed in the conditions of certification, construction of the proposed transmission lines will not adversely affect navigation or the flow of water or cause harmful erosion or shoaling.

324. FPL's location, construction, operation, and maintenance of the proposed transmission lines will not result in the discharge of any stormwater, surface water, groundwater, roof runoff, or subsurface drainage to the public sewer system.

325. After construction, during the period that any planted vegetation is being established and afterward during maintenance of its ROW, FPL will comply with all applicable non-procedural requirements for water conservation and environmental resource protection.

326. Location, construction, operation, and maintenance of the proposed transmission lines in the proposed transmission

line corridors will not have a significant adverse effect on wildlife habitat or the abundance and diversity of wildlife within that corridor, including listed plant and animal species; will not adversely affect the conservation of fish and wildlife populations, including endangered or threatened species, or their habitats; will not adversely affect the fishing or recreational values or marine productivity in the vicinity; will not adversely impact the functions of wetlands or other surface waters from a wildlife perspective; will not adversely impact the ecological value of uplands to avian or non-avian aquatic or wetland-dependent listed animal species for nesting and denning; and will not be inconsistent with CERP Projects or the overall CERP objectives.

ii. Wildlife and Threatened and Endangered Species

327. As noted above, FPL has submitted to all reviewing agencies a comprehensive threatened and endangered species management plan for all listed species for the Project. This plan includes sufficient protection measures for the Florida panther, the American crocodile, and avian species, among other species, regarding the proposed transmission lines.

328. There is little likelihood that panthers are present in the transmission line corridors. In general, Florida panthers are not adversely affected by the presence of transmission lines, structures, fill pads, and access roads

within their home ranges. These features actually have the potential to benefit panther conservation by providing new movement corridors; by providing elevated habitat features likely to provide refuges during periods of high water; and by enhancing white-tailed deer populations, the principal prey species of panthers, in the herbaceous wetland habitats adjacent to the transmission line access roads. Location, construction, operation, and maintenance of the proposed transmission lines in any of the corridors proper for certification will not adversely impact the conservation and preservation of Florida panthers or their habitats; will not adversely impact the abundance of Florida panthers; will not adversely impact panther denning; will not impact travel corridors used by Florida panthers; and will not pose an actual or potential threat of adverse impacts to Florida panthers or their habitat, including secondary or cumulative impacts.

329. In the small geographic portion of the proposed corridors where the transmission lines intersect the designated American crocodile critical habitat, FPL has proposed conservation measures to prevent adverse impacts to American crocodiles. FWC has also proposed, and FPL has agreed to, conditions of certification to minimize impacts to American crocodiles. FPL's proposed mitigation measures will far outweigh any impacts to American crocodile habitat. The

wildlife protection measures proposed by FPL and the agreed upon conditions of certification, in Attachment 1, Section C.III, are sufficient to prevent adverse impacts to the American crocodile from the location, construction, operation, and maintenance of the transmission lines in any of the corridors proper for certification.

330. The location, construction, operation, and maintenance of the proposed transmission lines in any of the corridors proper for certification will not adversely impact the conservation or preservation of American crocodiles or their habitat; will not adversely impact American crocodile nesting; will not impact travel corridors used by American crocodiles; will not impact the abundance of American crocodiles; and will not have any potential or actual adverse impacts on American crocodiles, including secondary or cumulative impacts.

331. FPL has proposed conservation measures to prevent adverse impacts to Eastern indigo snakes. FWC has also proposed, and FPL has agreed to, conditions of certification to minimize impacts to Eastern indigo snakes. FPL's proposed mitigation measures will far outweigh any impacts to Eastern indigo snake habitat. The wildlife protection measures proposed by FPL and the agreed upon conditions of certification are sufficient to prevent adverse impacts to the Eastern indigo snake from the location, construction, and operation and

maintenance of the transmission lines in any of the corridors proper for certification.

332. The location, construction, operation, and maintenance of the proposed transmission lines in any of the corridors proper for certification will not adversely impact the conservation or preservation of Eastern indigo snakes or their habitat; will not impact the abundance of Eastern indigo snakes; and will not have any potential or actual adverse impacts on Eastern indigo snakes, including secondary or cumulative impacts.

333. FPL has proposed conservation measures, including an Avian Protection Plan (APP) to prevent adverse impacts to avian species, including the wood stork, Everglade snail kite, and least tern. FWC has also proposed, and FPL has agreed to, conditions of certification to minimize impacts to avian species. The wildlife protection measures proposed by FPL and the agreed upon conditions of certification are sufficient to prevent adverse impacts to avian species from the location, construction, operation, and maintenance of the transmission lines in any of the corridors proper for certification.

334. Location, construction, operation, and maintenance of the proposed transmission lines in any of the corridors proper for certification will not adversely impact any listed avian species; will not impact the values of wetland or other surface

water functions so as to cause adverse impacts to avian species; will not have an actual or potential negative impact on avian species; will not adversely (including cumulatively) impact avian species or avian species conservation, including listed species, or their habitat; will not adversely impact nest locations or nesting behavior of avian species; will not cause adverse impacts to the ecological value of uplands to aquatic or wetland-dependent listed avian species, including nesting locations or nesting behavior; and will not cause adverse impacts to the abundance and diversity of avian species.

335. The location, construction, operation, and maintenance of the transmission lines in accordance with the conditions of certification and the mitigation and species protection plans will not result in the intentional death or injury of migratory birds in violation of the Migratory Bird Treaty Act of 1918, as amended.

336. The location, construction, operation, and maintenance of the transmission lines in any of the corridors proper for certification will not have any adverse impacts to the abundance and diversity of fish or to fish habitat.

337. FWC, SFWMD, and the County have proposed, and FPL has agreed to, conditions of certification to minimize impacts to species, including listed plant and wildlife species. Location, construction, operation, and maintenance of the transmission

lines in any of the corridors proper for certification will not significantly adversely affect wildlife populations, including endangered or threatened species, or their habitats, and will not adversely impact the ecological value of uplands to aquatic or wetland-dependent listed animal species for nesting or denning.

iii. Public Health and Welfare

338. FPL's proposed transmission lines will comply with applicable non-procedural pre-construction and construction requirements.

339. The proposed transmission lines will comply with good engineering practices and safety standards for the design of such facilities.

340. The design, location, construction, operation, and maintenance of the proposed transmission lines will ensure electric system reliability and integrity for the electric customers served by the transmission lines. Reliable, safe, cost-effective electrical service is in the public interest and supports the general welfare of the community.

341. FPL will dispose of transmission line construction debris in compliance with all applicable non-procedural state, county, and local requirements.

342. The design, location, construction, operation, and maintenance of the proposed transmission lines will comply with

all applicable design codes, standards, and industry guidelines, as well as FPL's customary internal design practices, and will have sufficient safety standards to protect the public. This includes compliance with local government public works requirements.

343. Location, construction, operation, and maintenance of the transmission lines will comply with all applicable non-procedural public ROW requirements.

344. FPL will comply with all applicable limitations on parking of large trucks in areas zoned residential during construction of the proposed transmission lines.

345. FPL will maintain traffic during construction of the proposed transmission lines using a certified maintenance of traffic plan that complies with the DOT's Roadway and Traffic Design Standards, the Manual of Uniform Traffic Control Devices for streets and highways, or other applicable non-procedural requirements relating to traffic of the local jurisdiction within which the traffic is being maintained.

346. During construction of the proposed transmission lines, FPL will not locate any temporary office, trailer, portable toilets, equipment, or storage materials and supplies within any temporarily obstructed public roads or ROWs.

347. Waste created by location, construction, operation, or maintenance of the proposed transmission lines will not be

allowed to accumulate on the ROW. All waste will be collected on a daily basis during construction and disposed of in accordance with applicable state, county, and local non-procedural requirements.

348. The location, construction, operation, and maintenance of the proposed transmission lines will comply with all applicable noise regulations; will not have an adverse impact on air quality; will not result in harmful quantities of contaminants being released to any existing or potential drinking water resource; and will not result in the creation of depressions in which water can accumulate in a manner that would encourage the propagation of mosquitoes.

349. The proposed transmission lines will comply fully with the applicable Department standards for EMF from transmission lines. See Fla. Admin. Code Ch. 62-814. There is nothing unusual about the levels of EMF from the proposed transmission lines. The EMF levels are within the range to which people are exposed from many sources in everyday environments at home, work, and in public locations. The EMF levels are also many times lower than the international standards for public exposures to EMF and do not pose a health risk to people living or working near the proposed transmission lines. The large body of scientific research on EMF does not provide a reliable scientific basis to conclude that exposure to

EMF causes any adverse health effects, including the development or promotion of cancer or neurodegenerative illness in children or adults. The testimony presented by several members of the public claiming cancer or other risks was either unsupported by actual scientific evidence or was based on epidemiological studies whose results were inconsistent and did not establish a causal relationship between EMF and any adverse health effects.

350. Dr. Barredo and Dr. Bailey presented the only credible expert testimony on EMF and health. Based on their detailed expert evaluations of the body of relevant scientific research, the EMF will not have an adverse health effect on the populations living and working near the lines.

351. The proposed transmission lines will not result in any new public access points to public lands.

352. FPL's ROW maintenance will comply with applicable non-procedural requirements related to vegetation in proximity to electric facilities.

353. The location, construction, operation, and maintenance of the transmission lines in compliance with the conditions of certification will not cause harmful interference with microwave communications in South Florida.

iv. Archaeological/Historical Considerations

354. In 2009, FPL conducted a preliminary cultural resources survey of the linear facilities associated with the

Project, including the associated transmission line corridors. The assessment included a desktop analysis as well as a visual survey. In the context of evaluating the alternate corridors proposed by other parties, FPL updated the preliminary assessment and also evaluated the alternate corridors. The assessment was consistent with the typical practice in the cultural resources profession when evaluating corridors for linear facilities and did not include field surveys. Field surveys will be conducted after the final ROW locations are finalized.

355. The Area of Potential Effect (APE) is the geographic area within which the Project may directly or indirectly cause changes to the character or use of historic properties listed or eligible for listing in the National Register of Historic Places. FPL considered an APE of 100 feet from each side of the proposed transmission line corridors for direct effects to cultural resources and 500 feet from each side of the proposed transmission line corridors for indirect effects to historic resources. The DHR agreed with the APE FPL used in its assessment. The APE for the cultural resources survey to be conducted post-certification will be established in consultation with that agency and will vary depending upon the character of the surrounding built and natural environments and final design and locations of the transmission line structures. The survey

of the transmission line ROWs will identify, document, and evaluate any resources that are 50 years or older, both previously recorded and unrecorded, and will include coordination with local governments. Any historical resources that may have been discovered or listed in the National Register of Historic Places or DHR's Florida Master Site File in the intervening time between preparation of the preliminary cultural resources assessment and the full survey will be identified during the post-certification survey.

356. FPL's proposed transmission lines will comply with all applicable federal, state, and local requirements relating to the protection of archaeological and historic resources. FPL will avoid and minimize adverse impacts to historical and archaeological resources in all areas.

357. The City of Miami expressed concerns regarding the proximity of the eastern corridors to historic resources within its boundaries, potential adverse effects on those resources, and the adequacy of FPL's assessment of those resources. The greater weight of the evidence does not support these concerns. Rather, the evidence shows that FPL's assessment was conducted in accordance with typical practice in the cultural resources profession, and that FPL will avoid and minimize adverse impacts to historical resources in all areas. Notably, the DHR concurs with FPL's recommendations.

v. Applicability of Local Government Comprehensive Plans, Zoning Codes, and/or Land Development Regulations

358. Throughout this proceeding, the local governments have argued that FPL should be required to design its transmission lines to comply with local comprehensive plans and LDRs, such as height restrictions and locational constraints. At hearing, Department witnesses testified that the Department interprets the PPSA, and in particular section 403.509, to mean that there are no "applicable" local government comprehensive plans or LDRs for the proposed transmission lines and pipelines in this case. This interpretation of the PPSA is consistent with the plain language of sections 163.3164 and 380.04, is a logical and reasonable interpretation of the law, and should be accorded substantial deference. Moreover, the Department's interpretation of the PPSA was not shown to be contrary to the plain language in the statute or clearly erroneous.

359. If local governments were permitted to regulate the design, height, size, or placement of transmission pole structures, FPL could be unable to implement transmission line designs that comply with necessary industry standards and safety codes, such as the NESC, with which transmission lines must comply; unable to provide service to a designated area or substation; or unable to acquire the necessary uninterrupted contiguous ROW needed between substations and designated service

areas. To validate these concerns, it was not necessary, as Coral Gables asserts, for FPL to analyze every zoning and comprehensive plan requirement that might apply, speculate on whether or how it would be applied by the local government, and then predict with specificity how the regulation would impact FPL's ability to build the transmission lines.

360. For these reasons, transmission lines should not be subject to local comprehensive plans or LDRs, such as zoning codes. The Legislature has recognized this imperative by statutorily providing that transmission lines are not considered "development" for the purposes of local government comprehensive plans, LDRs, and zoning ordinances. See §§ 163.3164(14) and 403.50665, Fla. Stat.

361. Local development or zoning regulations and comprehensive plan requirements that might impose constraints on the location, height, or type of transmission lines constructed do not apply to the proposed transmission lines.

vi. Economic Impact

362. FPL conducted an analysis of the potential economic impacts of the proposed transmission lines on the municipalities located within the transmission line project areas. The location, construction, operation, and maintenance of the proposed transmission lines are anticipated to have little, if any, effect on the economy of the area or negative fiscal impact

on the municipalities located within the transmission line project areas.

363. The transmission lines will serve and protect the broad interests of the public by providing for a safe and reliable electrical system at a cost-effective price.

B. Eastern Transmission Lines

1. Typical Structures and Substation Proposed

364. The following constitutes FPL's proposed eastern transmission lines:

> a. Clear Sky-Turkey Point transmission line: a 230-kV line from the proposed Clear Sky substation to the existing Turkey Point substation on the Turkey Point plant property (Clear Sky-Turkey Point);
>
> b. Clear Sky-Davis-Miami transmission line: a 230-kV line running from the proposed Clear Sky substation to the existing Davis substation in southeast Miami-Dade County (Clear Sky-Davis), and another 230-kV line running from the Davis substation east and then north, predominately along U.S. Highway 1, to the existing Miami substation in downtown City of Miami just north of Miami River (Davis-Miami);
>
> c. FPL proposes to locate these transmission lines in the approximately 36.7 miles of the FPL East Preferred Corridor.

365. The entire construction process for the eastern transmission lines will take between 24 and 36 months.

366. As part of this Project, FPL is proposing a new electrical substation, Clear Sky, on the Turkey Point Site in

southeastern Dade County. The Clear Sky substation will be connected to, and receive electricity from, proposed Units 6 and 7. That substation will occupy approximately 11.6 acres and will be the starting point for the two proposed 500-kV lines and the three proposed 230-kV lines associated with the Project. The substation site will be fenced and surrounded by a stormwater management area.

367. The proposed Clear Sky substation, existing Turkey Point substation, existing Davis substation, and existing Miami substation are part of the proposed eastern transmission lines, although only the work at the Clear Sky substation is being certified in this proceeding. Work at the other three substations will be permitted separately, if needed.

368. Zoning approval from the County for the construction of the Clear Sky substation as an "unusual use" has already been obtained.

369. For a portion of the Davis-Miami transmission line, FPL proposes to replace an existing, concrete monopole 138-kV line with a double-circuit unguyed 230-kV line on a new concrete monopole designed to accommodate the two circuits, each with separate insulators. This practice is proposed for the approximately two-mile stretch of the FPL East Preferred Corridor along Ponce De Leon Boulevard in Coral Gables.

370. FPL constructs concrete monopole transmission structures throughout its service area in urban, suburban, and rural settings similar to the structures proposed for the FPL East Preferred Corridor. Monopole construction of the type proposed within the FPL East Preferred Corridor, whether guyed or unguyed, follows its usual and customary practice for such lines.

371. Wooden transmission structures are not FPL's customary design for new transmission lines. Where poles are being replaced in urban areas in the east study area, old wooden structures have often been replaced by concrete monopoles as the need arises.

372. The typical height of the proposed 230-kV monopole structures in the FPL East Preferred Corridor is between 80 to 105 feet. (By stipulation, FPL has agreed that within Coral Gables, the poles will not exceed 98 feet in height or 4.1 feet in width.) This is similar to the height of other monopoles FPL has installed in its service area, including several in other parts of the County.

373. While urban density is a factor in corridor selection, it is not determinative as to the siting of a transmission line corridor.

374. FPL provided evidence of numerous 230-kV transmission lines of similar design to the transmission lines proposed for

the FPL East Preferred Corridor. These transmission lines are in similar urban areas of FPL's service territory, including areas of Miami-Dade, Broward, and Palm Beach Counties.

375. While sharply conflicting testimony on the issue was presented, the more persuasive evidence established that the transmission lines will be just one of many necessary urban features visible to the eye in the current urban landscape, such as street and traffic lights. Measures can be employed to minimize aesthetic impacts of the lines, such as landscaping to direct the eye away from the structures and adding new vertical elements to blend in with the pole. Numerous similar visible linear features exist in the U.S. Highway 1 multi-modal transportation corridor.

376. The only location where the overhead installation of the proposed eastern transmission lines is not feasible is at the point where the Davis-Miami transmission line crosses the Miami River. An underground crossing of the Miami River is proposed for the Davis-Miami Segment.

2. Corridor Selection Process for East Preferred Corridor

a. FPL East Preferred Corridor

377. In the corridor selection process for the eastern transmission lines, FPL's multidisciplinary team used the same process described in Findings of Fact 269 through 290.

378. The east study area included the Clear Sky, Turkey Point, Davis, and Miami substations and existing FPL transmission ROWs and other linear features that occur between these substations. Between the Turkey Point plant property and the Davis substation area, the study area focused on FPL's existing 330-foot-wide ROW that contains multiple existing 230-kV lines and has space available to accommodate the new Clear Sky-Davis transmission line. From there, the study area was expanded to include numerous available transmission lines, roadways, railways, and other linear features that could provide collocation opportunities to follow to the Miami substation. Much of the east study area is dominated by dense urban and suburban development. It contains several historical districts and sites and a major multi-modal transportation corridor.

379. In addition to the qualitative criteria evaluated for all corridor segments, qualitative criteria for eastern transmission line routes included assessment of crossings for the Miami River, historical districts, the availability and use of Miami-Dade Metrorail and/or Miami-Dade Transit Busway (Busway) ROW, and landscaping.

380. Land uses and constructability constraints were key considerations in the east.

381. FPL's corridor selection process attempted to reflect a reasoned balancing of the need for the transmission lines

against the potential impact on both the public and the environment.

382. After evaluation of all identified route alignments and significant consideration of public input throughout the community outreach program, FPL selected the East Preferred Route and delineated corridor boundaries for the route.

b. Filing of Alternate Corridors

383. During this process, one alternate corridor was proposed jointly by Coral Gables and Pinecrest, referred to as the Pinecrest/Coral Gables Alternate Corridor (PAC), for the portion of the FPL East Preferred Corridor from the area east of the Davis substation to the Miami substation. The PAC is described in more detail below.

c. Eastern Transmission Line Corridors Proper for Certification

384. FPL and the Department filed notices of acceptance of the PAC. The Department determined that both the FPL East Preferred Corridor and PAC met the criteria for certification.

385. While both the FPL East Preferred Corridor and PAC are proper for certification, the multidisciplinary team recommended, and FPL is seeking certification of, the East Preferred Corridor and opposes certification of the PAC.

3. FPL East Preferred Corridor

a. General/Constructability

386. Through the corridor selection process described above, FPL selected the East Preferred Corridor and delineated corridor boundaries. The FPL East Preferred Corridor is of variable width. This flexibility allows FPL to accommodate localized conditions, respond to future development between the times of corridor selection and construction, take advantage of certain collocation opportunities, and avoid siting constraints or utilize existing or relocated FPL ROWs.

387. For the east 230-kV transmission lines, the typical span length in the FPL East Preferred Corridor will range from approximately 200 to about 700 feet, depending on location-specific factors, ROW widths, and other design considerations. No new access roads or structure pads are anticipated to be needed in the FPL East Preferred Corridor.

388. The FPL East Preferred Corridor exits the Turkey Point plant property to the north and continues in a general north-south orientation following an existing FPL transmission line ROW. It follows this ROW west towards the Florida Turnpike, then northwestward to U.S. Highway 1, and then extends generally north to the Davis substation. The FPL East Preferred Corridor then continues generally east to the U.S. 1 corridor, then generally north following the U.S. Highway 1 corridor with

expansions around the downtown Kendall area and certain Metrorail stations, and terminating at the Miami substation immediately north of the Miami River in downtown City of Miami. In the FPL East Preferred Corridor, there is also a short proposed 230-kV transmission line between the proposed Clear Sky substation and the existing Turkey Point substation, both within the Turkey Point plant property.

389. The Clear Sky-Turkey Point portion of the Corridor is approximately 0.4 miles long; the Clear Sky-Davis portion is approximately 19 miles long; and the Davis-Miami portion is approximately 17.7 miles long.

390. Location, construction, operation, and maintenance of the Davis-Miami transmission line in proximity to the Metrorail facility in compliance with the conditions of certification will not interfere with operation of the Metrorail.

391. Location, construction, operation, and maintenance of the Davis-Miami transmission line in proximity to the Metrorail facility in compliance with the conditions of certification will not exceed safety or industry limits applicable to the Metrorail facilities.

392. Location, construction, operation, and maintenance of the Davis-Miami transmission line will not interfere with the use of U.S. Highway 1 as a multi-modal transportation corridor.

393. Location, construction, operation, and maintenance of the Davis-Miami transmission line will not interfere with the possible future southward extension of the Metrorail within the 100-foot Busway ROW.

394. Location, construction, operation, and maintenance of the eastern transmission lines in either of the eastern corridors will not cause obstructions to visibility.

b. FPL East Preferred Corridor: Land Use

395. The FPL East Preferred Corridor leaves the proposed Clear Sky substation and passes through Homestead Bayfront Park, heading north and west. It then passes through a largely agricultural area with existing transmission lines. Shortly before reaching the Davis substation, it crosses into low density residential land use.

396. From the Davis substation, the East Preferred Corridor proceeds east along an existing FPL transmission line ROW until its intersection with U.S. Highway 1, then northeast along U.S. Highway 1 and the Busway before reaching the Kendall Urban Center or Dadeland area. U.S. Highway 1 is a principal arterial roadway with six traffic lanes. For most of this segment along the U.S. Highway 1/Busway ROW, the Corridor is approximately 200 feet wide, ranging in width from approximately 200 feet to 350 feet. The FPL East Preferred Corridor in this area is co-located with a wide multimodal transportation

corridor. In this segment, the northern tip of the Village of Palmetto Bay and the western edge of Pinecrest are on the eastern edge of the Corridor, with the remainder of the Corridor being in unincorporated Miami-Dade County. The land uses within this segment are primarily commercial, with two parks on the east side of the Corridor, and industrial, commercial, and single-family residential uses on the west side. There are a limited number of cross streets compared to the east side of the Corridor.

397. In the area of the County-designated Kendall Urban Center, the FPL East Preferred Corridor widens to allow greater flexibility. In this segment, the Corridor is bounded by commercial and multi-family residential development. The Corridor here also includes ROWs for several existing linear features such as State Road 826 and the SFWMD's ROW along Snapper Creek.

398. The next segment of the FPL East Preferred Corridor narrows to follow the U.S. Highway 1/Metrorail ROW and stretches northeast through South Miami and Coral Gables, and into the City of Miami. For this segment, the Corridor ranges between 150 feet to 300 feet in width. Within South Miami, there is fairly continuous commercial development along the east side of U.S. Highway 1, including the Shops at Sunset and other highway strip commercial use. Uses along the west side of the Corridor

in South Miami include some single-family residential, South Miami Hospital, City Hall, South Miami Metrorail Station, and industrial uses. This segment then crosses Southwest 57th Avenue (Red Road), entering Coral Gables. Within Coral Gables, in addition to the Metrorail guideway, the M-Path, and U.S. Highway 1, the Corridor expands to include the Ponce de Leon Boulevard ROW and an existing 138-kV transmission line. This area has, from west to east, the University of Miami (with a large campus extending to the west), some commercial, multi-family, and single-family development on the west side of Ponce de Leon Boulevard, and the Metrorail guideway between Ponce de Leon Boulevard and U.S. Highway 1, and commercial development east of U.S. Highway 1. Farther north within Coral Gables, adjacent to the Corridor is multi-family residential and commercial development, including the Village of Merrick Park (a shopping mall), and an industrial area. In the portion of the Corridor along U.S. Highway 1, which contains limited single-family development, those homes are generally oriented away from U.S. Highway 1. Upon entering the City of Miami, the Corridor widens to include the Coconut Grove substation at Douglas Road (Southwest 37th Avenue) and Bird Road (Southwest 40th Street). Commercial development exists on either side of Bird Road in this portion of the segment. The Corridor returns to the U.S. Highway 1/Metrorail ROW, with single-family residential land use

on the northwest offset by a frontage road, and commercial land uses bordering the southeast side, with residential farther beyond. The Corridor then widens again around the Coconut Grove and Vizcaya Metrorail stations.

399. In the next segment, the Corridor enters downtown City of Miami before the subaqueous crossing of the Miami River. Land uses in this area include single family, multi-family residential, Simpson Park, and commercial. It also crosses the City of Miami-designated Coral Way scenic transportation corridor in the vicinity of Interstate Highway 95 (I-95). Industrial and commercial uses are also adjacent to the Miami River in this area.

400. The eastern transmission lines in either of the eastern corridors will be generally compatible with the communities' priorities and preferences as reflected in their comprehensive plans and LDRs.

c. FPL East Preferred Corridor: Environment

401. Most of the FPL East Preferred Corridor has been altered from its natural state. Surface waters are limited to canals, ditches, channelized waterways, and reservoirs. Closer to the Turkey Point Plant site, a variety of wetland communities of varying quality and types exist, including forested and herbaceous wetlands. Beyond this area of wetlands, wildlife habitats within the Corridor are generally lacking or absent in

the agricultural and urbanized uplands. Construction of the proposed transmission lines in this area would use existing transmission line and other ROWs, and existing access roads and structure pads where they are needed, limiting wetland and surface water impacts to less than one-half acre, requiring less than one-half credit of mitigation.

402. None of the lands within the Corridor contain native terrestrial ecological attributes in significant amounts. However, there is a small area of the Corridor that includes upland forest classified as NFC by the County within Simpson Park. There are also some NFCs adjacent to but not within the Corridor near the Davis substation. There is very little wildlife habitat value found north of Davis substation. South of the Davis substation, the native upland and wetland communities are limited and generally small. The presence of the existing transmission lines, adjacent agricultural operations, and other development means that existing wildlife communities have already adapted to these man-induced habitats in that area.

403. FPL will avoid and minimize impacts within the Simpson Park NFC and, to the extent practicable, will avoid placing any of the transmission lines within the NFC. FPL will only conduct minimum tree trimming, pruning, or topping of trees in the NFC to meet ANSI standards. High visibility markers will

be installed to protect trees in the NFC during construction. Exotic vegetation within the ROW in the NFC shall be controlled to the extent practicable. Impacts to this NFC or other NFCs due to placement of the proposed transmission lines in the Corridor are anticipated to be insignificant.

404. A portion of the Corridor, no more than 0.2 miles long immediately north of the Units 6 and 7 site, is within designated critical habitat for the American crocodile. The area of overlap is largely occupied by other proposed facilities, including the nuclear administration building, the construction and contractor parking area, and the training building. This area is largely void of vegetation and is primarily rock fill. As the Corridor progresses north beyond the area of designated critical habitat, it enters a highly urbanized area. No part of the Corridor is suitable for crocodile basking, nesting, or foraging.

405. American crocodiles are not commonly observed in the area of the FPL East Preferred Corridor.

406. Eastern indigo snakes, classified as threatened by USFWS and FWC, are not commonly found in southern Florida and are not commonly observed in the FPL East Preferred Corridor. Two recorded observations of Eastern indigo snakes occurred in the southern end of the Corridor in 2011. There is a moderate

likelihood of Eastern indigo snake occurrence within the Corridor south of the Davis substation.

407. The FPL East Preferred Corridor is entirely outside of the PFA and would not affect Florida panthers or their habitats.

408. The eastern transmission lines if constructed in either of the eastern corridors will not cause a flood hazard.

d. FPL East Preferred Corridor: Traffic

409. There will be some temporary, short-term impacts to traffic during construction of the proposed transmission lines within the FPL East Preferred Corridor, but no permanent or long-term impacts to traffic or traffic flow patterns will occur. Transmission line construction may require closure of one or more traffic lane segments among the six or four lanes within the Corridor, particularly in the area of U.S. Highway 1. To avoid closure of a high-volume traffic lane, construction in most segments of the Corridor would occur at night.

410. The Corridor is compatible with DOT and Miami-Dade Transit long-range plans.

4. The PAC

a. General/Constructability

411. The PAC begins east of the Davis substation, where the FPL East Preferred Corridor along Southwest 131st Street intersects with the existing ROW for the North-South segment of

the FPL Turkey Point-Flagami transmission lines in the Kendall area. From there, the PAC continues north along the existing transmission line ROW for approximately 10.15 miles to FPL's - Flagami substation. From the Flagami substation, the PAC continues east for approximately 11.2 miles to FPL's Miami substation. The total length of the PAC where it diverges from the FPL East Preferred Corridor is approximately 21.35 miles.

412. The Flagami-Miami (i.e., east-west) portion of the PAC mostly follows very narrow residential streets with typically only 50-foot wide ROWs. Except for a few areas with a ROW of 50 to 80 feet, however, the FPL East Preferred Corridor does not have this narrow configuration.

413. While there are several other utility lines in the PAC, those lines are not in FPL-controlled or owned ROWs. The public ROWs are typically only 50 feet wide along narrow residential streets. To add another transmission line to those pole locations would require reconstruction of the poles to allow for a double-circuit configuration. As noted above, where double circuits are installed on a pole, two sets of insulators are also required to be installed, one set for each circuit. This configuration in ROWs along narrow residential streets would require acquisition of private strip easements along the frontage of hundreds of residential and commercial lots, with sets of conductors overhanging front yards, or removal of on-

street parking, swales, or vegetation to place the poles in those spaces. In some cases, there are buildings with no setbacks, precluding placement of a double-circuit pole.

b. The PAC: Land Use

414. As the PAC diverges from the FPL East Preferred Corridor, the first segment stretches northward through unincorporated Miami-Dade County along the existing ROW for the North-South segment of the FPL Turkey Point-Flagami Kendall transmission lines in the Kendall area toward the Flagler Street area. Land uses vary from residential to commercial and also include some municipal and multi-family residential areas.

415. The second segment of the PAC extends from west to east between Southwest 92nd Avenue and Southwest 61st Avenue. Originating in unincorporated Miami-Dade County, the existing public road ROWs in this area are generally 50 feet wide. The PAC also encompasses an existing 138-kV transmission line in this area. This segment begins with a mix of residential areas, including townhomes and estate-zoned areas, and transitions toward more intense residential uses. Progressing into the City of Miami, the PAC enters dense, older neighborhoods. The residential home setbacks are shallower and the ROWs include sidewalks, parking spaces, and driveway access areas, which limit room for additional facilities. In addition, underground utilities likely exist within the ROWs. Depending on the

alignment of the Davis-Miami transmission line within the PAC, construction may require demolition of a residence. While most ROW in this City of Miami area is approximately 60 feet wide, Flagler Street along the northern edge of the PAC has a 100-foot ROW and an existing 138-kV transmission line. Throughout this segment, the residential uses face onto the proposed corridor.

416. Farther east into the City of Miami, the third segment of the PAC extends from west to east between Northwest 61st Avenue and Northwest 26th Avenue. This segment begins with largely single-family residential areas and transitions to multi-family residential, with as many as 65 dwelling units per acre in certain areas. It also includes elementary and middle schools. ROWs are approximately 50 and 60 feet in width.

417. The next segment of the PAC extends from west to east from Northwest 26th Avenue to Southwest 7th Avenue and also contains areas of 65 dwelling units per acre. Depending on the alignment, two aerial crossings of State Road 836 (an elevated roadway) may be required, which could require taller poles. Farther east, there are no existing transmission lines available for collocation. The higher-density residential neighborhoods have limited setbacks and contain primarily 50-foot road ROWs, occupied with sidewalks, parking, and driveway access, and homes facing the roadway. ROWs are as narrow as 30 or 45 feet in certain areas. For Americans with Disabilities Act compliance,

transmission line structures may have to be placed in what are currently parking areas. In addition, buildings with zero-foot setbacks in certain areas present design constraints.

418. Southwest 7th Avenue and Southwest 2nd Avenue bound the final segment of the PAC. In this area, the PAC approaches José Martí Park. It then encompasses the Miami River and I-95 before ultimately connecting to FPL's existing Miami substation.

c. The PAC: Environmental

419. From the proposed Clear Sky substation to the Davis substation area, the PAC coincides with the FPL East Preferred Corridor. As such, the land uses and vegetation within the PAC in this area are identical to those described for the first segment of the FPL East Preferred Corridor. Similarly, wetland and surface water impacts throughout the PAC will be limited to less than one-half acre and would require mitigation of less than one-half credit. None of the lands within the PAC contain native wetland ecological attributes in significant amounts.

420. Wetlands and surface waters within the PAC are limited primarily to low quality, man-made ditches and canals that can be spanned. The construction of the proposed transmission lines would use existing transmission line ROW, existing access roads, and existing structure pads. Wetland and surface water impacts will be limited to less than one-half acre

and would require mitigation of less than one-half credit of mitigation.

421. Where the PAC diverges from the FPL East Preferred Corridor, it traverses an existing transmission line ROW south of the Flagami substation and highly developed residential and commercial areas east of the Flagami substation that do not provide quality wildlife habitat. One federally-designated threatened plant species (Garber's Spurge) is recorded within the PAC.

422. There is no difference between the FPL East Preferred Corridor and the PAC with regard to the presence of or impacts to American crocodiles, Eastern indigo snake, Florida panther, avian species, or fish species or habitat.

d. The PAC: Traffic

423. There will be some temporary, short-term impacts to traffic during construction of the proposed transmission lines within the PAC, but no permanent impacts to traffic or traffic flow patterns will occur. Because the PAC largely consists of two-lane roadways with narrow ROWs, lane closure for construction would require flag personnel to direct one lane of traffic in two directions.

424. Because traffic volume in that area is not significant, construction within the PAC can be conducted during the day, though construction in certain road segments should be

conducted during night hours to avoid significant traffic disruptions.

e. Hardening or Improving Existing Transmission Lines Within the PAC

425. Coral Gables and Pinecrest argue that FPL should abandon its FPL East Preferred Corridor in favor of the PAC, which already contains existing 138-kV transmission lines. Their witnesses assert that co-locating the proposed Davis-Miami transmission line with existing 138-kV transmission lines in the PAC between the Flagami and Miami substations would provide an opportunity to harden or improve existing substandard or wooden poles by relocating existing transmission lines onto new, double-circuit concrete poles constructed for the 230-kV transmission line, thereby increasing reliability.

426. No credible evidence was presented that certification of the PAC would necessarily result in the hardening or improvement of existing lines there, once FPL considered all relevant factors for final design of the new Davis-Miami transmission line, beyond FPL's routine hardening or improvement of its transmission lines. Moreover, there is no credible evidence to rebut the testimony of FPL's transmission line engineer regarding the proposed design. In any event, a double-circuit configuration with one circuit on each side of the pole,

a configuration suggested by Coral Gables and Pinecrest, cannot be accommodated along many locations within the PAC.

427. While the Davis-Flagami segment of the PAC contains sufficient room to co-locate with existing FPL transmission lines, it contains significant barriers to placing the new transmission line on new poles together with the existing FPL transmission lines. In this segment, the road ROWs do not have sufficient width to accommodate the new, larger poles proposed for the Davis-Miami transmission line. This segment primarily contains narrow, two-lane residential streets with limited space, where sidewalks, road-side parking areas, and improvements on private, residential lots present a conflict for these larger poles.

428. Co-locating an existing transmission line with the new transmission line on a single, double-circuit pole is not technically feasible in many areas of the PAC due to space constraints. For example, where a single-circuit transmission line pole is currently located adjacent to buildings that are built to the edge of the street, replacement of that pole with a larger double-circuited pole may not be technically feasible. The new transmission line structure may need to be installed across the street, resulting in transmission lines along both sides of the street, or moved to another street entirely.

429. In addition, FPL routinely engages in hardening or improvement of its existing transmission lines as a standard and customary business practice, including replacing existing wooden structures with concrete monopoles as the need arises. Such hardening and improvement along the PAC will occur through FPL's normal course of hardening as pole replacement is needed.

5. Eastern Transmission Line Construction and Design Standards

a. Undergrounding

430. City of Miami, Coral Gables, South Miami, and Pinecrest have urged the Siting Board to require undergrounding of the transmission line in their own jurisdictions and rely upon their local comprehensive plans and local regulations in support of their position. Although the County originally proposed undergrounding of the eastern transmission lines, the County and FPL have reached agreement on conditions for placement of the eastern transmission lines overhead in either of the eastern corridors.

431. Credible preliminary estimates indicate that undergrounding the Davis-Miami transmission line within the FPL East Preferred Corridor would cost approximately $13.3 to $18.5 million per mile. These numbers compare to a cost range of $1.5 to $2.5 million per mile for overhead facilities, with a cost differential of $10.8 to $17 million per mile. Thus,

underground construction in this area would be roughly nine times more expensive than overhead construction.

432. Extreme weather events do not require undergrounding transmission lines in the FPL East Preferred Corridor.

433. FPL generally uses underground design where overhead construction is not feasible or the requesting entity pays the incremental cost of underground construction. With the exception of the Miami River Crossing, no engineering constraints require the use of undergrounding.

b. Miami River Crossing

434. Construction of the Davis-Miami 230-kV transmission line in any corridor proposed for the Davis-Miami transmission line will require an underground crossing of the Miami River.

435. In the area where the Davis-Miami transmission line crosses the Miami River, the Miami substation is bounded by the I-95 bridge west of Second Avenue and the Metrorail bridge to the east. These fixed bridges and their vertical clearances required for navigation prohibit the use of an overhead transmission line design into the Miami substation. Due to this engineering constraint, placement of the transmission line underground is the only technically feasible alternative. Accordingly, FPL proposes undergrounding the eastern transmission line at the Miami River Crossing.

436. A transition or termination structure will be required where the underground portion of the transmission line transitions to overhead. North of the Miami River, the termination structure will be within the Miami substation fence. South of the Miami River, the location of the transition structure has not been finally determined, but preliminarily its location has been identified as somewhere along Third Avenue on a private easement.

437. The proposed Miami River crossing is located within the Biscayne Bay Aquatic Preserve. This crossing requires an easement over sovereign submerged lands from the Board of Trustees, which was requested by FPL through this proceeding. FPL has existing underground transmission lines that cross the Miami River to the south of the Miami substation, with associated sovereign submerged lands easements.

438. The Miami River crossing can be constructed using horizontal directional drill technology. Construction of the Miami River crossing is a water-dependent activity.

439. The transmission line crossing of the Miami River is a "structure required for the installation or expansion of public utilities," constitutes "[r]easonable improvement for . . . public utility expansion," and is specifically allowed by the statute that created the Biscayne Bay Aquatic Preserve. § 258.397, Fla. Stat.; Fla. Admin. Code R. 18-18.006(3)(b)(iv)7.

440. Placement of the transmission line in the sovereign submerged lands easement will not disturb submerged land resources or result in unmitigated adverse impacts to sovereign lands.

441. The underground transmission line will be constructed and operated in compliance with all applicable codes, standards, and industry guidelines. FPL will use best management practices in constructing the underground transmission line beneath the Miami River.

442. The design, location, construction, operation, and maintenance of the proposed transmission line beneath the Miami River will ensure electric system reliability and integrity for electric customers served by the transmission line.

443. FPL owns the existing Miami substation, but must acquire any necessary private property interests for the transmission line easements north and south of the sovereign submerged lands at the Miami River. The Miami River crossing will be designed and constructed to avoid restriction or infringement on riparian rights of adjacent upland owners.

444. No wetland vegetation will have to be removed, cut, or destroyed to place the transmission line in the sovereign submerged easement for crossing the Miami River. There will not be any impacts to the shoreline from placement of the transmission line in the sovereign submerged lands easement for

crossing the Miami River. In this area, the Miami River is within bulkheads and seawalls.

445. Though temporary construction impacts will occur, the area affected by the underground installation will be restored soon after construction and there will not be any permanent impacts to property owners along the Miami River as a result of the transmission line crossing.

446. Construction of the underground portion of the transmission line beneath the Miami River will not affect navigation or the flow of water or cause harmful erosion or shoaling.

447. During location, construction, operation, and maintenance of the underground portion of the transmission line, no wastes will be discharged without being given the degree of treatment necessary to protect the beneficial uses of the waters of the state. Likewise, harmful quantities of contaminants will not be released to any existing or potential drinking water source.

448. The location, construction, operation, and maintenance of the underground portion of the transmission line will not have an adverse impact on air quality and will not result in any new public access points to public lands.

449. Placement of the underground transmission line in the sovereign submerged lands easement will not detract from or

interfere with propagation of fish and wildlife, or traditional recreational uses. Rather, it will minimize adverse impacts on fish and wildlife habitat and other natural and cultural resources.

450. Placement of the transmission line beneath the Miami River in the sovereign submerged lands easement is consistent with the Biscayne Bay Aquatic Management Plan.

451. Placement of the transmission line beneath the Miami River in the sovereign submerged easement is clearly in the public interest.

c. Maintenance of Hydrology/CERP Consistency

452. FPL has submitted flowage easements to the County that provide for maintenance of existing flow across transmission corridors within the Biscayne Bay Coastal Wetlands CERP Project study boundaries and allowing improvements to sheet flow consistent with planned restoration projects in the area. These easements satisfy the requirements of Condition 17 of County Resolution Z-56-07.

453. The eastern transmission lines in either of the eastern corridors are not inconsistent with CERP Projects or the overall objectives of CERP.

d. Economic Impacts

454. 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 non-residential 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.

455. The analysis regarding the transmission line's impact on property values within and adjacent to the FPL East Preferred Corridor and the PAC presented by Dr. Frishberg, a Coral Gables expert, was imprecise, methodologically flawed, and irrelevant to the extent it did not appropriately address the substantial amount of non-residential properties in both corridors. The analysis of Dr. Weisskoff, a public witness, was also flawed in several respects. For example, his analysis is based on a misrepresentation of the published literature, contained a substantial calculation error, and failed to take into account several important variables affecting property value impacts. Therefore, these witnesses' testimonies are not credited.

e. Clear Sky Substation

456. Construction of the Clear Sky substation expansion will require clearing and grubbing the expansion area. Turbidity screens and other erosion control devices and techniques will be used to minimize construction impacts to nearby wetlands and water bodies. The expanded substation yard area will be excavated, filled with clean fill that is trucked to the site, graded, and rolled to provide the necessary elevation. A new grounding grid will be constructed and a new security fence around the expansion area will be installed.

f. Compliance with Design Standards

457. All of the transmission lines, including the Clear Sky substation, will be constructed and operated in compliance with all applicable design codes, standards, and industry guidelines, including NESC, the Department's EMF standards, and the industry standards adopted by ASCE, ASTM, ANSI, ACI, and the Institute of Electronic and Electrical Engineers.

6. Applicable Non-Procedural Requirements for Eastern Transmission Facilities

a. Zoning Regulations and Comprehensive Plans

458. As noted above, local zoning regulations and comprehensive plan requirements are not applicable non-procedural requirements for transmission facilities. To the extent local ordinances have been incorporated into the

conditions of certification, FPL has committed to comply with them. Otherwise, the often competing zoning regulations of local jurisdiction are not applicable.

b. Work in SFWMD Rights-of-Way

459. FPL's Davis-Miami transmission line will cross several SFWMD canals and may use a portion of SFWMD ROW along the Snapper Creek Canal. There are no levees within the vicinity of the FPL East Preferred Corridor. Location, construction, operation, and maintenance of the Davis-Miami transmission line will comply with the requirements for SFWMD ROW Occupancy Permits and, as such, will not interfere with the SFWMD's access, operations, or maintenance of the works of the district.

460. Location, construction, operation, and maintenance of the eastern transmission lines in compliance with the conditions of certification will not interfere with the present or future construction, alteration, operation, or maintenance of the works or lands of the SFWMD that are crossed. This applies only to proposed future construction, alteration, operation, or maintenance known at the time of FPL's project design.

461. Location, construction, operation, and maintenance of the proposed eastern transmission lines will comply with applicable SFWMD non-procedural requirements, including

requirements of the Criteria Manual for Use of Works of the District.

c. Other Non-Procedural Requirements

462. The location, construction, operation, and maintenance of the proposed transmission lines will comply with applicable Department non-procedural environmental resource permitting criteria and other regulations.

463. The location, construction, operation, and maintenance of the transmission lines in either of the eastern transmission line corridors will comply with the tree ordinances of the local governments in which the facilities will be located.

464. The City of Miami raised concerns over impacts to tree canopy and the replacement of trees that must be removed within the final ROW within the City. A City witness testified that it was her preference that FPL do more than comply with the City of Miami's tree ordinance in siting and constructing the transmission line within the City. To this end, FPL will comply with the City's tree ordinance, and it will confer with local officials to identify areas of tree canopy that can be spanned or addressed by other engineering solutions, to relocate or replace trees that must be removed, or mitigate for impacts by paying into a tree fund. Within the City of Miami, the amount of tree removal in either of the eastern corridors will be

similar. The City also desires a condition of certification requiring FPL to not only comply with the City's tree ordinance, but also to submit a tree survey, a tree disposition plan, and a landscape plan to replace any trees prior to doing any work within the City of Miami, and to install transmission poles to avoid large, existing trees to the extent practicable. FPL has committed to a condition of certification to address each of the items.

465. If constructed within either the East Preferred Corridor or the PAC, the proposed Davis-Miami transmission line will comply with the applicable non-procedural requirements of the local governments in which it will be located. These applicable non-procedural requirements include the requirements within the City of Miami, Coral Gables, South Miami, and the County that (1) FPL construct and maintain transmission lines in accordance with its customary practice; (2) FPL transmission lines not unreasonably interfere with traffic on public ROW or reasonable egress from and ingress to abutting property; (3) FPL transmission lines be located as close to the outer boundary of public ROW as practicable, or as agreed with the local government; and (4) FPL repair or restore any damage to public ROW caused by construction or maintenance of transmission lines.

466. During construction of the proposed Davis-Miami transmission line within the City of Miami, FPL will not

excavate, dig up, or obstruct any public street or sidewalk in a manner that creates an obstruction for more than two adjacent blocks at a time. If any such obstruction is required, FPL will complete the work on one block before proceeding to work in the second block.

467. If any sidewalk must be reconstructed following construction of the Davis-Miami transmission line within the City of Miami, FPL will use only natural, uncolored Portland cement concrete for that sidewalk reconstruction.

468. If any road pavement must be repaired following installation of the proposed transmission line within the City of Miami, FPL will use paving of a long-life, hard-surfaced type with sufficient base to ensure lasting service and a minimum expense for maintenance, as chosen in consultation with the City's Public Works Department.

7. Eastern Corridors Comparison: Least Adverse Impacts, Including Cost

a. Comparison of Land Use Considerations

469. While the final ROW for the Davis-Miami transmission line will be identified post-certification during final design, preliminary alignments within the PAC and the FPL East Preferred Corridor were identified to facilitate comparisons between the two corridors where they diverge. FPL analyzed three routes to compare the proposed eastern corridors: (1) a route within its

East Preferred Corridor (the EPC Alignment); (2) the alignment identified by Pinecrest and Coral Gables within the PAC (the PAC Alignment); and (3) an alignment identified by FPL's engineers that they believe constitutes a more technically feasible alignment within PAC than the PAC Alignment (the 2013 Alignment).

470. The PAC Alignment has 2,829 buildings within 200 feet of the alignment; the 2013 Alignment has 2,746. These figures reflect the density within the PAC. In contrast, the EPC Alignment has only 762 buildings within 200 feet of the alignment. The transmission line, if built within either of the PAC Alignments, would be in proximity to three times more buildings than the EPC Alignment.

471. The PAC Alignment would cross or abut 1,217 separate parcels; the 2013 Alignment would cross or abut 1,164. In contrast, the EPC Alignment would cross or abut only 363 separate parcels. The transmission line, if built within either of the PAC Alignments, would cross or abut three times more parcels than the EPC Alignment.

472. There are 15 schools within 200 feet of the PAC Alignment and 14 schools within 200 feet of the 2013 Alignment; there are eight schools within 200 feet of the EPC Alignment, including the University of Miami.

473. There are more residential uses and smaller lots along the PAC. In contrast, more commercial parcels of larger size are along the FPL East Preferred Corridor.

474. Along the PAC Alignment, the available road ROW space is generally only 50 feet in width, rendering it generally too narrow for the construction of the necessary double-circuit transmission line structures suggested by Pinecrest and Coral Gables without acquiring additional ROW space on adjacent private property, much of which is dense residential development on shallow, narrow lots. However, along the EPC Alignment, the available road/Metrorail ROW is generally 200 feet wide or wider, making it less likely that FPL will need additional ROW space on adjacent private property.

b. Comparison of Engineering/Constructability Considerations

475. Where the FPL East Preferred Corridor and PAC diverge, both contain collocation opportunities. While the total length of existing FPL transmission lines for collocation along the PAC Alignments may be greater than the total length along the EPC Alignment, the Flagami-Miami segment of the PAC has significant barriers to implementing collocation with those existing FPL lines.

476. Besides the narrow ROWs along the PAC Alignments, there are many obstructions such as sidewalks, fences, porches,

and other improvements which constrain construction of the Davis-Miami transmission line as proposed by Pinecrest and Coral Gables. In contrast, along most of the EPC Alignment, the ROW has a larger amount of available open space with few obstructions.

477. There is greater potential conflict with underground utilities along the PAC than the FPL East Preferred Corridor. This is due to the greater likelihood of underground utilities parallel to streets, perpendicular lateral lines to service the homes in the PAC, and limited flexibility to adjust pole locations to avoid such constraints.

478. Proximity of the PAC to the Miami International Airport will require notification to the FAA and possibly the Miami-Dade Aviation Department for crane operations during construction. There are no airports near the FPL East Preferred Corridor for the Davis-Miami transmission line.

479. The cost of constructing the Davis-Miami transmission line within the PAC Alignment, including the cost of acquiring the necessary ROWs, ranges from $83.1 million to $107.7 million; the cost of construction within the 2013 Alignment within the PAC ranges from $77.8 million to $100.6 million. In contrast, the cost of construction of the Davis-Miami transmission line within the EPC Alignment ranges from $50.7 million to $68.6 million.

c. Comparison of Environmental Considerations

480. There are no material differences in environmental considerations between the PAC and the FPL East Preferred Corridor.

481. There is no material difference between the FPL East Proposed Corridor and the PAC from a wetlands impacts or wetlands mitigation perspective. Construction of a transmission line within either of the two corridors would not impact any significant amount of wetlands or surface waters.

482. The FPL East Preferred Corridor and the PAC are similar with respect to the likely magnitude of effects on the abundance and diversity of wildlife resulting from construction of a transmission line. From the point the FPL East Preferred Corridor and PAC diverge, approximately two miles east of the Davis substation, they largely traverse similar areas of dense urban development to reach the Miami substation. Neither corridor traverses high quality wildlife habitat or has the potential to impact listed species. Therefore, no adverse effects upon wildlife abundance and diversity would be anticipated.

483. FPL will minimize impacts to NFCs in the FPL East Preferred Corridor, avoiding impacts to the extent practicable, consistent with the NFC standards and requirements contained in chapter 24, MDC. The PAC does not cross a NFC.

484. There is no difference between the FPL East Preferred Corridor and the PAC with regard to impacts to American crocodiles; both must cross the same 0.2-mile area.

485. There is no difference between the FPL East Preferred and the PAC with regard to impacts to Eastern indigo snakes.

486. Avian issues are minimal with both of the proposed corridors, and there is no significant difference between the two corridors.

487. From the standpoint of impacts to Florida panthers and their habitat, there is no difference between the FPL East Preferred Corridor and the PAC because both corridors traverse urbanized, developed areas of the County outside of the PFA, and panthers are not likely to occur in those areas.

d. Comparison of Traffic Impacts

488. No material difference exists between the traffic impacts anticipated in the FPL East Preferred Corridor and the PAC. Both the PAC and the FPL East Preferred Corridor will involve moderate to significant disruption of traffic during the temporary construction activities. Construction in the FPL East Preferred Corridor requires lane closure in a higher-volume roadway (U.S. Highway 1) and would be limited during peak traffic hours. Construction in the PAC would impact lower-volume roadways and would not be limited to nighttime hours, but

would require flag personnel to direct one lane of traffic in two directions.

e. Archaeological and Historic Sites

489. There is no material difference between the FPL East Preferred Corridor and the PAC in terms of impacts to archaeological or historic resources. Location, construction, operation, and maintenance of the proposed transmission lines in accordance with the conditions of certification in either of the eastern transmission line corridors will not adversely impact archaeological or historic structures, sites, or resources, given the level of disturbance and alteration in both corridors.

f. Summary

490. Because of significant constructability issues and land use constraints within the PAC and in light of the relative costs for placement of the Davis-Miami transmission line within the two eastern corridors proper for certification, the FPL East Preferred Corridor represents the corridor which, on balance, has the least adverse impacts, including costs, considering the criteria in section 403.509(3).

C. Western Transmission Lines

1. Typical Structures and Substation Proposed

491. The following constitute FPL's proposed western transmission lines associated with the Project:

(a) From the proposed on-Site Clear Sky substation, FPL is proposing two 500-kV lines extending west and then north to the existing Levee substation. The total length of this alignment of the West Consensus Corridor/MDLPA No. 2 and FPL West Preferred Corridor is approximately 43.6 miles.

(b) From the proposed Clear Sky substation, FPL is also proposing to extend a 230-kV transmission line to the west and then north to the existing Pennsuco substation. This line is proposed to be constructed in the same ROW as the previously described 500-kV lines, but will bypass the Levee substation and continue to the Pennsuco substation. From the Levee substation area to the Pennsuco substation, FPL has an existing multi-circuit transmission line ROW. The section of the proposed Clear Sky-Pennsuco 230-kV transmission line between Levee and Pennsuco will be placed within this existing ROW. This 230-kV-only portion of the West Consensus Corridor/MDLPA No. 2 and FPL West Preferred Corridor is approximately 8.4 miles long.

(c) Also as part of the western corridors, there are three access-only corridor laterals to be used only for vehicular access to the certified transmission lines. If the West Consensus Corridor/MDLPA No. 2 is certified and used for the placement of the western transmission lines, one of the access-only corridor laterals extends from the northwest corner of Government Lot 4 to Northwest 137th Avenue. It is 200 feet wide with 100 feet extending on each side of the north section line of government Lots 3 and 4. The second access-only corridor lateral for the West Consensus Corridor/MDLPA No. 2 extends south from the northwest corner of government Lot 4 to the north bank of the C-4 Canal. It is 200 feet wide with 100 feet extending on each side of the west section line of Government Lot 4. From that point, it narrows to 100 feet in width and extends

to the west to include the bridge over the C-4 Canal at the entrance to the Trail Glades Sport Shooting Range. The third access-only corridor lateral extends from Krome Avenue to the L-31N ROW along the theoretical extension of Kendall Drive and is 200 feet in width. In addition, FPL will use the existing SFWMD access roadways on the L-31N levee and east of the L-31N canal within the SFWMD ROW, other public roadways, and newly constructed access roads within the corridor boundaries for access to transmission structures within the West Consensus Corridor/MDLPA No. 2 south of Tamiami Trail. If the FPL West Preferred Corridor is certified and used for placement of the western transmission lines, two access-only corridor laterals are also proposed. The Tamiami Trail Access Corridor is just north of Tamiami Trail where the FPL West Preferred Corridor crosses the road. This access corridor is a rectangle that adjoins the FPL West Preferred Corridor, is approximately 0.25 mile long and 370 feet wide, and includes the existing SFWMD levee access roadway and bridge associated with the L-29 canal. The Krome Avenue Access Corridor is proposed along the L-30 canal ROW and includes Krome Avenue from the point where the FPL West Preferred Corridor exits Water Conservation Area 3-B and turns east towards the Levee substation. This access corridor extends approximately five miles due north along SFWMD ROW, is approximately 600 feet wide, and includes the existing levee access roadway and bridge associated with the L-30 canal, as well as Krome Avenue.

(d) The total length of the western transmission lines is approximately 52 miles.

492. Construction of the proposed on-site Clear Sky substation is addressed above. The existing Levee substation is

a transmission substation with multiple existing 500- and 230-kV transmission lines connected to it. The substation property encompasses approximately 65 acres. The property currently includes the fenced area of substation equipment, stormwater retention areas, wetland mitigation areas, compacted access/ patrol roads, and undeveloped areas. The fenced area of the existing Levee substation must be expanded approximately 130 feet to the north along the entire length of the fence (approximately 800 feet) to accommodate installation of transformers, breakers, and switchgear, and the connection of the two proposed 500-kV transmission lines being extended from the proposed Clear Sky substation at the Turkey Point site. The proposed expansion of the fenced area of the substation is approximately 2.3 acres. The expansion area is within the geographic boundaries of the County's "unusual use" approval for the existing substation. Zoning approval from the County for the expansion of the Levee substation as an unusual use has already been obtained.

493. All transmission facilities, including the Clear Sky substation and Levee substation expansion, will comply with applicable design standards.

2. Corridor Selection: FPL West Preferred Corridor and West Consensus Corridor/MDLPA No. 2

a. FPL's Existing Transmission Line ROW, Turkey Point to Levee Substation

494. In the 1960s and early 1970s, FPL acquired a ROW between the Turkey Point plant property and the Levee substation for placement of transmission lines. The existing ROW is wide enough to accommodate the proposed new transmission lines; it already contains an existing transmission line along most of its length south of the Everglades National Park.

495. Approximately 7.4 miles of this ROW was encompassed by the addition of the Everglades National Park Expansion Area (Expansion Area) to the Everglades National Park in 1989. Subsequent to the expansion, the National Park Service (NPS) and several other land-owning agencies in the area negotiated with FPL to exchange FPL's currently owned transmission line ROW in the Expansion Area for a combination of easements and property that would provide a continuous transmission ROW between the Turkey Point plant property and the Levee substation, and provided for a slight adjustment of the eastern boundary of the Everglades National Park so the relocated ROW would be entirely outside the Everglades National Park. Collectively, these efforts are referred to as the "Land Exchange." The NPCA is actively opposing the Land Exchange.

496. If the Land Exchange is consummated, a total of approximately 12 miles of FPL's existing ROW is proposed for relocation. The Land Exchange has been authorized by federal legislation and is undergoing final environmental review by the NPS. In 2011, the NPS began developing an Environmental Impact Statement (EIS) to review the impact of the proposed Land Exchange, which is a required review for such a federal action. The current schedule estimates the Draft EIS should be available in late 2013 with the Final EIS due to occur in the fall of 2014, although those dates could change. Thirty days after issuance of the Final EIS, the Record of Decision should be available.

497. Once finalized, the relocated ROW that will result from the Land Exchange will be within the FPL West Preferred Corridor and portions of it will be within the West Consensus Corridor/MDLPA No. 2. The existing transmission line ROW that FPL has owned since the 1960s and early 1970s in the area of the Land Exchange is identified in its application as the FPL West Secondary Corridor. However, the FPL West Secondary Corridor has been withdrawn from consideration by FPL.

498. FPL desires to execute the Land Exchange and utilize a portion of those land rights for siting either the West Consensus Corridor/MDLPA No. 2 or the FPL West Preferred Corridor.

b. West Preferred Corridor Selection

499. In the corridor selection process for the western transmission lines, the multidisciplinary team used the same process described in Findings of Fact 269 through 290 to evaluate potential corridors for the western transmission

500. The west study area included the Clear Sky, Levee, and Pennsuco substations and existing FPL transmission ROWs and other linear features that occur between these substations.

501. Much of the west study area is dominated by low-density residential development, agricultural and nursery operations, conservation lands, and mining activities. There are relatively few existing linear features that provide collocation opportunities.

502. Each of the routes identified by the multidisciplinary team during the corridor selection process was evaluated in detail according to the quantitative and qualitative process described above.

503. FPL's corridor selection process took into account planned development in the corridor areas, while avoiding environmentally sensitive areas to the extent practicable and reflected a balancing of engineering, environmental, and land use considerations against the need for the Project.

504. After evaluation of all identified route alignments and consideration of public and agency input throughout the

community outreach program, FPL selected the West Preferred Route and delineated corridor boundaries for the route. The FPL West Preferred Corridor is of variable width, being wider in certain areas to give FPL flexibility in delineating the ROW within the corridor so as to accommodate localized conditions or take advantage of certain opportunities like following a property boundary, and narrower in other areas to avoid siting constraints, such as development or an environmentally sensitive area, or to utilize existing or relocated FPL ROWs, while maintaining a continuous route.

c. Filing of Alternate Corridors

505. During the certification process, four alternate western transmission line corridors were proposed for consideration in addition to the western corridors included by FPL in its application. MDLPA presented three alternate corridors and NPCA presented one, each to replace all or a portion of the West Preferred Corridor between approximately Southwest 120th Street and the Levee substation.

506. MDLPA No. 2 is encompassed within the West Consensus Corridor/MDLPA No. 2 and is discussed in detail below, together with the FPL West Preferred Corridor. MDLPA No. 2 was developed after further discussions with the Everglades National Park and representatives of SFWMD and NPCA about the goal of reducing the potential impact on the Everglades National Park. The West

Consensus Corridor/MDLPA No. 2 achieves the combined goal of lessening potential impacts on the Pennsuco Wetlands and the Everglades National Park, while avoiding more urban uses to the east. It includes a segment of the FPL West Preferred Corridor, but also includes enough real estate east of the L-31N canal to potentially accommodate the full ROW where that proves to be a practical option for FPL and the rock mining companies.

507. The Pennsuco Wetlands, designated by the County as environmental protection lands, are a two-mile wide, approximately nine-mile long wetland between the Water Conservation Area 3B/Krome Avenue and rock mining lands known as the Lake Belt mining area. The Pennsuco Wetlands have long been a target of acquisition and restoration by various government agencies. Rock miners are still funding the ongoing acquisition and restoration of the wetlands as part of their wetland mitigation for mining wetlands within the Lake Belt mining area. About 80 percent of the Pennsuco Wetlands area has been acquired, and most of it has been restored.

508. MDLPA No. 1 was the first alternate corridor for the western transmission lines proposed by MDLPA and constitutes only a modest adjustment to the FPL West Preferred Corridor. MDLPA proposed its alternate corridor to avoid the FPL West Preferred Corridor's central crossing of the Pennsuco Wetlands. MDLPA No. 1 stays as close to the FPL West Preferred Corridor as

possible but crosses the Pennsuco Wetlands two miles farther south and eliminates much of the construction in Water Conservation Area 3B.

509. MDLPA No. 3 was developed after discussion between the MDLPA and other interested parties, including NPCA. The goal was to develop a corridor with less impact west of the L-31N canal. However, the mining companies were not willing to propose a corridor with impacts on private property south of the parcel owned by CEMEX. Instead, MDLPA proposed a deviation from the FPL West Preferred Corridor which would move the corridor to the east to Krome Avenue on property owned by CEMEX and Kendall Krome Properties and Investments.

510. NPCA filed one alternate corridor to be considered for portions of FPL's West Preferred Corridor, with a primary goal to eliminate potential impacts to conservation lands (primarily the Everglades National Park) and to wetlands. NPCA's corridor selection involved no analysis within the Everglades National Park itself. Potential impacts to future urban development in the Urban Expansion Area (UEA) of the County or encumbrances that might hinder use of NPCA's corridor were not considered in the selection process. NPCA's route selection team did not include a land use planner or a transmission line engineer. NPCA did not hold any publicly noticed open houses or workshops to solicit input from residents

and other stakeholders in the area before selecting its proposed corridor. Similarly, the number of government-owned parcels with encumbrances crossed by the proposed corridor was not considered. NPCA assumed parcels would likely be made available, despite a lack of confirmation through any final action or documentation. The County supports this corridor.

d. Western Transmission Line Corridors Proper for Certification

511. FPL and the Department filed notices of acceptance of the alternate corridors proposed by MDLPA and NPCA as proper for certification. The Department determined that all of the western alternate corridors met the criteria for certification. Consistent with its practice, the Department did not do a comparison of impacts among the different western alternate corridors.

512. Each of the alternate corridors was evaluated by FPL's multidisciplinary team using the same quantitative and qualitative factors used to select the FPL West Preferred Corridor.

513. Due to the withdrawal of the FPL West Secondary Corridor, only five western transmission line corridors are proper for certification as that term is used in sections 403.503(11) and 403.522(10).

514. FPL is seeking certification of the West Consensus Corridor/MDLPA No. 2 and the FPL West Preferred Corridor, with the FPL West Preferred Corridor to be utilized only if an appropriate ROW within the West Consensus Corridor/MDLPA No. 2 cannot be secured in a timely manner and at a reasonable cost. Both corridors are approximately 52 miles in length.

3. Corridor Descriptions

515. The western transmission line corridors can be divided into four separate geographic sections. Moving from south to north, these are referred to as the Turkey Point-U.S. Highway 1 Section, the U.S. Highway 1-Southwest 120th Section, the Southwest 120th-Levee Section (also known as the West Divergence Area), and the Levee-Pennsuco Section. The western transmission line corridors are co-existent in the Turkey Point-U.S. Highway 1, U.S. Highway 1-Southwest 120th, and Levee-Pennsuco Sections. They diverge only in the West Divergence Area.

a. Sections Common to All Western Corridors

516. The Turkey Point-U.S. Highway 1 Section, common to all of the corridors, begins at the proposed Clear Sky substation on Turkey Point plant property and continues west for approximately ten miles, co-located with an existing transmission ROW, to approximately U.S. Highway 1. The next section common to all western corridors, U.S. Highway 1-

Southwest 120th Section, heads west and then north from U.S. Highway 1 to approximately Southwest 120th Street, just south of the Everglades National Park. The final section common to all western corridors is the section where the western corridors reconverge in the Pennsuco Wetlands north of Tamiami Trail and just west of the Levee substation, to the Pennsuco substation, the Levee-Pennsuco Section.

i. Turkey Point-U.S. Highway 1

517. This Section of the western corridors coincides with FPL ROW containing existing transmission lines and access roads. Land uses are predominantly wetlands. Adjacent land uses already exist along this Section in a compatible manner with transmission line facilities. The proposed western transmission lines would be compatible with the land uses in this area.

518. The Turkey Point-U.S. Highway 1 Section consists of a variety of wetland habitats, including areas of mangrove wetlands in the vicinity of the L-31E canal, freshwater marshes dominated by sawgrass, occasional tree islands, as well as some areas dominated by nuisance and exotic species. Construction of the western transmission lines within this Section would result in no more than 59 acres of wetland impact, and likely less than that, based on the measures FPL has agreed to take to eliminate and reduce wetland impacts. The majority of wetlands within the

transmission line ROW would remain undisturbed, and the loss of wetland functions would be fully mitigated.

519. Plants and wildlife found in the Turkey Point-U.S. Highway 1 Section common to all western corridors are those adapted to wetland cover types such as wading birds, raptors, amphibians, and reptiles, as well as small mammals and occasional deer. Very few upland habitats exist, and the Section comprises an existing FPL transmission line easement, including an access road, structures, and structure pads.

ii. U.S. Highway 1-Southwest 120th Street

520. This Section of the western corridors coincides with FPL ROW containing existing transmission lines and access roads. Adjacent land uses have therefore adapted to the presence of transmission lines and have remained stable over time. Land uses are predominantly agricultural with some residential, and the northern end of this Section transitions to open lands. The western transmission lines would be compatible with the land uses in this area.

521. The Section is primarily upland in nature and dominated by agricultural land uses, primarily tree nurseries. Other agricultural uses in this area include row crops and citrus. This Section traverses portions of two areas designated by the County as NFCs, the Sunny Palms Pineland and Kings Highway Pineland. These NFCs could also be home to various

species of state-listed plants. Wildlife found in this Section includes common reptiles, amphibians, birds, and mammals that are habituated to human-induced habitats. Wetland resources within this area of the corridors are limited to small areas of freshwater marsh, ditches, and canals. Construction of the transmission lines within this area will incur minimal wetland impacts, estimated to be less than one acre of relatively low-quality wetlands.

iii. Levee-Pennsuco

522. North of the West Divergence Area, in the Levee-Pennsuco Section, all of the western corridors travel along an existing multi-circuit transmission line ROW through unincorporated Miami-Dade County, Doral, and Medley, passing alongside agricultural, industrial, and multi-family residential uses.

523. The Section comprises active rock mining facilities and contains very little undisturbed wildlife habitat. Rock quarries may contain some habitat for aquatic species, but very little native upland habitat exists. Wildlife usage is limited to common amphibians, reptiles, birds, and mammals found in the County. From the Florida Turnpike to the Pennsuco substation, the corridors are dominated by FPL's existing transmission lines with scattered uplands and herbaceous wetlands on the existing transmission line ROW. Adjacent land uses include residential,

commercial, and industrial uses in Doral. No unique wildlife usage is expected in any of this Section due to the fact the existing right-of-way has been in place and maintained for many years. Wildlife species have become accustomed to those habitats.

524. Construction of the transmission line between the Levee and Pennsuco substations will use the existing transmission line roads and structure pads to the greatest extent practicable, limiting estimated wetland impacts to approximately one acre.

525. Land uses for the western alternate corridors are identical to the land uses in the FPL West Preferred Corridor and West Consensus Corridor/MDLPA No. 2 in the Turkey Point-U.S. Highway 1, U.S. Highway 1-Southwest 120th, and the Levee-Pennsuco Sections, as these Sections are common to all the corridors.

b. <u>West Divergence Area: FPL West Preferred and West Consensus Corridor/MDLPA No. 2</u>

526. The West Divergence Area extends from the southernmost point where the first alternate corridor diverges from the FPL West Preferred Corridor to the Levee substation. This Section generally encompasses an area that will be entirely east of the Everglades National Park following the Land Exchange and includes the L-31N and L-30 levees/canals and eastward to

encompass the Krome Avenue area and Bird Drive Basin. It then runs northward to a point just west of the Levee substation where all the western corridors reconverge.

527. In the West Divergence Area, the FPL West Preferred Corridor turns due east at Southwest 120th Street towards the L-31N levee. Moving north from approximately Southwest 120th Street to Tamiami Trail, the FPL West Preferred Corridor straddles the L-31N canal and runs adjacent to the Krome Detention Center. After crossing Tamiami Trail, the FPL West Preferred Corridor then proceeds along the L-30 levee, passing the Miccosukee Casino property, and eventually parallels Krome Avenue to the north to a point just west of the Levee substation. The FPL West Preferred Corridor then proceeds due east across the Pennsuco Wetlands into the Levee substation.

528. Within the West Divergence Area, the ecological conditions differ among the various corridors. In this portion of the Corridor, freshwater marshes (sawgrass) dominate. These freshwater marshes provide suitable foraging habitat for a variety of wading birds, and support a variety of fish, amphibians, reptiles, and small mammals. Some tree islands also occur within the Southwest 120th-Levee Section of the Corridor and may provide suitable nesting habitats for wading birds, some of which are listed. No wading bird colonies exist within the Corridor, but there are two colonies within 0.5 mile of its

boundaries. These colonies have historically contained wood storks and listed wading birds during some nesting seasons. Additionally, the FPL West Preferred Corridor includes some historical nesting sites and marginally suitable foraging habitat for the endangered Everglade snail kite, particularly in the area north of Tamiami Trail. In any of the western corridors proper for certification, throughout the West Divergence Area, the potential for adverse impacts to any wildlife species is low.

529. In the West Divergence Area, the wetland quality in the Corridor tends to average between 0.70 and 0.80 using UMAM. Placing the ROW in the FPL West Preferred Corridor would impact no more than 137 wetland acres, given FPL's flexibility to site the ROW within the Corridor and position the transmission line structures to avoid or minimize wetland impacts to the extent practicable.

530. In the northern portion of the West Divergence Area, the wildlife habitats within the Corridor consist primarily of sawgrass marsh with scattered tree islands on the west side of the L-31N levee and Bird Drive Basin to the east, with scattered herbaceous marsh and tree islands. The Corridor itself is primarily co-located along disturbed areas including an existing levee and canal heading to the Levee substation.

531. Through much of the West Divergence Area, both the FPL West Preferred Corridor and the West Consensus Corridor/ MDLPA No. 2 straddle the L-31N levee, which represents a seam between the Everglades National Park to the west, and residential and agricultural uses to the east. Some of the lands are in transition and include agricultural lands, a few large single family estates (one unit per five acres), and open lands, with more urban development to the east. Farther north along L-31N levee, the land uses to the east of the FPL West Preferred Corridor and the West Consensus Corridor/MDLPA No. 2 are previously-disturbed uses, rail, and predominantly rock mining. Farther north, but south of Tamiami Trail, the FPL West Preferred Corridor continues to run along a seam between conservation uses to the west and more developed uses, including the Krome Detention Center, to the east. North of Tamiami Trail, the FPL West Preferred Corridor straddles the L-30 levee and runs between the conservation lands in Water Conservation Area 3B and the Miccosukee Casino property and then Krome Avenue further north. The Corridor then turns east on existing ROW through the environmental protection lands of the Pennsuco Wetlands, and then through rock mining land uses to the Levee substation.

532. Existing tall structures in the vicinity of the FPL West Preferred Corridor include the Miccosukee Casino and the

Krome Detention Center water tower, as well as power poles and radio towers.

iii. West Consensus Corridor/MDLPA No. 2

533. In the West Divergence Area, the West Consensus Corridor/MDLPA No. 2 begins approximately one mile south of a hypothetical extension of Kendall Drive and extends to the Levee substation. Where it overlaps the FPL West Preferred Corridor along the L-31N levee, the Corridor widens eastward of the L-31N levee to encompass rock mining lands. It then diverges from the FPL West Preferred Corridor for approximately 13 miles, turning east at a point north of a hypothetical extension of 18th Street running just south of the Krome Detention Center. It then turns north at a point east of Krome Avenue, crossing Tamiami Trail and continuing north along the Dade-Broward Levee until it reaches the FPL West Preferred Corridor alignment; the West Consensus Corridor/MDLPA No. 2 then continues east until it reaches the Levee substation.

534. For most of the distance along the L-31N levee, the West Consensus Corridor/MDLPA No. 2 includes, but is wider than, the FPL West Preferred Corridor. This configuration provides enough room on both sides of the canal for placement of the proposed western transmission lines, with some flexibility to potentially locate all or part of the transmission lines on the rock-mining lands and other private and public property to the

east. The Corridor includes sufficient real property east of the L-31N Canal to accommodate the full transmission line ROW in some areas, if that proves to be a practical option for FPL and the rock mining companies.

535. Where the West Consensus Corridor/MDLPA No. 2 overlaps the FPL West Preferred Corridor in the West Divergence Area, such as along the L-31N Canal, the ecological conditions are the same, with conservation uses (the Everglades National Park) to the west and predominantly mining and rail uses to the east. However, the widened area of the West Consensus Corridor/MDLPA No. 2 immediately to the east of the FPL West Preferred Corridor includes primarily previously-disturbed rail and mining operations, as well as shrub and brushland, and remnant upland and wetland habitats.

536. The West Consensus Corridor/MDLPA No. 2 diverges from the FPL West Preferred Corridor by turning eastward along a hypothetical extension of Southwest 18th Street, at the northern boundary of the rock mining overlay west of Krome Avenue. In this area, the West Consensus Corridor/MDLPA No. 2 passes south of the Krome Detention Center, then runs eastward through the Bird Drive Basin overlay, consisting of open lands, wetlands, and conservation lands. The adjacent land uses in that area are open lands, wetlands, and conservation lands. In the Bird Drive Basin the land use is mixed ownership of governmental and

private parcels. The width of the corridor in this location provides flexibility to minimize crossings of private property in the Bird Drive Basin.

537. Where the West Consensus Corridor/MDLPA No. 2 crosses wetlands within the Bird Drive Basin and, north of Tamiami Trail, the eastern edge of the Pennsuco Wetlands, the wildlife habitats generally consist of herbaceous marsh (sawgrass), wet prairie, shrub/brushland, and tree islands (primarily melaleuca). This area is used by wetland-dependent wildlife, such as wading birds, reptiles, amphibians, small mammal, and deer. The West Consensus Corridor/MDLPA No. 2 is, however, located farther than the FPL West Preferred Corridor from known locations of wood stork colonies located along and north of Tamiami Trail. At the point where it turns north and for the remainder of its length until it reaches the Levee substation, the West Consensus Corridor/MDLPA No. 2 is very wide. This allows maximum flexibility in aligning the corridor so as to avoid obstacles and minimize impacts.

538. The Bird Drive Basin is a County regulatory zoning overlay that consists primarily of wetlands, although in many cases they are low-quality herbaceous wetlands with scattered tree islands (primarily melaleuca). It is located east of the rock mining zoning overlay and Krome Avenue from approximately Southwest 88th Street to Southwest 8th Street (Tamiami Trail).

539. Wetlands in the Bird Drive Basin and the east side of the Pennsuco Wetlands are generally lower in quality compared to wetlands located further to the west, due to increased proliferation of nuisance and exotic species of vegetation.

540. Wetland quality within the West Consensus Corridor/MDLPA No. 2 tends to average between 0.70 and 0.80, and siting the ROW within the West Consensus Corridor/MDLPA No. 2 would impact no more than 122 wetland acres.

541. The Urban Development Boundary (UDB) is an area designated by the County in the CDMP for existing urban uses, while the UEA, adjacent to the UDB, is designated by the County for anticipated future urban development after 2015, if there is a need based on population growth. Corridors farthest from these areas are more desirable from the standpoint of potential conflict with residential and urban land uses, although all would be compatible from a land use perspective.

542. Both the West Consensus Corridor/MDLPA No. 2 and the FPL West Preferred Corridor are entirely west of the area designated by the County as the UEA and even farther west of the area designated as the UDB. There is no urban development near the West Consensus Corridor/MDLPA No. 2 or the FPL West Preferred Corridor.

543. The western transmission lines in any of these corridors would be compatible and consistent with the adjacent

land uses, including the Everglades National Park, and would serve the broad interests of the public.

c. West Divergence Area: Other Western Alternate Corridors

544. Vegetation/wildlife habitats within the West Divergence Area of MDLPA No. 1, MDLPA No. 3, and the NPCA Corridor have a mixture of agricultural areas, uplands, and wetlands. Land is more disturbed and wetlands more degraded the farther east one heads, as compared to the areas closer to the Everglades National Park. Wildlife usage is more limited to the east than to the west as a result of the land disturbances. Wetland quality in MDLPA No. 1 tends to average between 0.70 and 0.80 using UMAM; MDLPA No. 3 wetlands were of somewhat lower quality in spots, averaging between 0.60 and 0.80. The NPCA Corridor, located farthest east, had the lowest quality wetlands, averaging between 0.60 and 0.70.

545. In the West Divergence Area, the acres of wetlands potentially impacted by each alternate corridor, and therefore the amount of mitigation required to offset the impacts, also tends to decrease to the east and increase to the west. MDLPA No. 1 would impact no more than 199 acres of wetlands. In contrast, MDLPA No. 3 and the NPCA Corridor, located the farthest east, would impact 165 and 152 acres of wetlands, respectively.

546. Wildlife species usage in the West Divergence Area of the alternate corridors consists of common amphibians, reptiles, birds, and mammals of the region. Some listed wading birds would be expected to forage in certain portions of the alternate corridors.

547. Within the West Divergence Area, the alternate corridors cross agricultural lands, open lands, rock mining, residential parcels, and wetlands.

i. MDLPA No. 1

548. In the north portion of the West Divergence Area, MDLPA No. 1 deviates from the FPL West Preferred Corridor for approximately four miles between Tamiami Trail and the Levee substation, turning east north of Tamiami Trail. It crosses the Pennsuco Wetlands approximately two miles farther south than the FPL West Preferred Corridor and is coexistent with the FPL West Preferred Corridor for its remainder, generally following the L-31N levee and canal. Except in the area north of Tamiami Trail to the Levee substation, MDLPA No. 1 is identical to the FPL West Preferred Corridor.

549. The ecological conditions in the south and center portions of the West Divergence Area of MDLPA No. 1 are the same as the West Consensus Corridor/MDLPA No. 2. Like the FPL West Preferred Corridor and West Consensus Corridor/MDLPA No. 2, it

travels along the same seam between land uses along the L-31N levee and canal and adjacent to/within active rock mining areas.

550. Within MDLPA No. 1, uplands in the north portion of the West Divergence Area consist primarily of roads and levees. The wetlands are primarily sawgrass marsh with melaleuca-dominated tree islands. Wildlife species usage consists of common amphibians, reptiles, birds, and mammals of the region. No known listed species occurrences were identified, but it is expected that wading birds would use the area for foraging. The northern part of MDLPA No. 1 in the West Divergence Area is within 1,500 feet of one wading bird colony containing wood storks along Tamiami Trail.

ii. MDLPA No. 3

551. MDLPA No. 3 follows a more easterly pattern in the West Divergence Area than the West Consensus Corridor/MDLPA No. 2 or the FPL West Preferred Corridor. It deviates from the FPL West Preferred Corridor and West Consensus Corridor/MDLPA No. 2 for approximately 13 miles between Southwest 120th Street and the Levee substation. It turns east approximately one-half mile south of the theoretical extension of Kendall Drive, then north along Krome Avenue, then through the Bird Drive Basin and eastern Pennsuco Wetlands to the Levee substation.

552. In the south portion of the West Divergence Area, MDLPA No. 3 follows the West Consensus/MDLPA No. 2 and FPL West

Preferred Corridors until it turns east along Southwest 100th Street, through residential, agricultural, and open/mining land uses.

553. In the south portion of the West Divergence Area, MDLPA No. 3 includes agricultural and rock mining areas as well as sawgrass marsh, native wetland hardwoods, and exotic wetland hardwoods. Wildlife habitat in this area is very limited.

554. The wildlife habitats within the central portion of MDLPA No. 3 in the West Divergence Area consist of agricultural areas adjacent to Krome Avenue and lower quality wetlands east of Krome Avenue. These areas include wetlands consisting primarily of freshwater marsh, wet prairie, and tree islands (many of which contain melaleuca).

555. The north portion of MDLPA No. 3 in the West Divergence Area crosses wetland habitat within the Bird Drive Basin and Pennsuco Wetlands. Some listed wading birds would be expected to forage in this area although no breeding colonies are known in this area. In the Bird Drive Basin, there is a mixture of some low-quality exotic wetland hardwoods, sawgrass marsh, and wet prairie wetlands; the corridors cross Tamiami Trail, and then enter the Pennsuco Wetlands in an area where there is a mixture of exotic wetland hardwoods, sawgrass marsh, and wet prairie. All of the corridors converge just to the west of the Levee substation.

556. The center and north portions of MDLPA No. 3 and NPCA Corridor in the West Divergence Area are generally overlapping. From the intersection of Southwest 100th Street and Southwest 177th Avenue/Krome Avenue, MDLPA No. 3 and NPCA Corridor move north following Krome Avenue/Southwest 177th Avenue and angle northeastward near Southwest 72nd Street to run through environmental preservation/wetlands, open lands, and rock mining lands, and near to residential lands. They are both located within the Bird Drive Basin in this area. From the Bird Drive Basin area, the corridors travel northward generally along the Dade-Broward Levee alignment to the Levee substation. A portion of MDLPA No. 3 is located within the County-designated North Trail Basin. The two corridors are both wide at this location, angling to the east through Bird Drive Basin wetlands to the Dade-Broward Levee alignment. In this area, they also generally overlap the West Consensus Corridor/MDLPA No. 2, which is the widest choice of corridors in this area.

557. The two corridors both cross the UEA and are the closest corridors to the UDB. They also cross the property owned by Limonar, which has yet-to-be finalized plans for future residential and mixed-use development of its 485-acre tract.

iii. NPCA Corridor

558. The NPCA Corridor deviates from the FPL West Preferred Corridor near Southwest 120th Street to the Levee

substation for approximately 15 miles. It turns eastward in the Southwest 120th Street area to Krome Avenue, where it turns northward along Krome Avenue, generally following MDLPA No. 3 to a point just west of the Levee substation, where the alternate corridors all converge.

559. The south boundary of the West Divergence Area is defined by the southern boundary of the NPCA Corridor. It turns eastward and encompasses an area on the south side of Southwest 120th Street, including land outside the Everglades National Park and south of the FPL West Preferred Corridor. Between Southwest 194th Avenue and Southwest 197th Avenue, the NPCA Corridor jogs northward to be within the FPL West Preferred Corridor. It then turns north to run for a short distance along the L-31N levee, and then eastward again along Southwest 112th Street, where it turns northward again at Southwest 177th Avenue/Krome Avenue. Like MDLPA No. 1 and MDLPA No. 3, the NPCA Corridor runs through predominantly agricultural areas/rock mining areas along Krome Avenue as well as the Bird Drive Basin overlay and the North Trail Basin overlay.

560. As noted above, in the central portion, the NPCA Corridor overlaps MDLPA No. 3 and thus has the same adjacent land uses. It also crosses the UEA as well as the property owned by Limonar, which has plans, although not yet final, for future residential and mixed-use development of this property.

561. The NPCA Corridor has similar ecology as MDLPA No. 3 in the southernmost part of the West Divergence Area but traverses more agricultural areas.

562. The center portion of the NPCA Corridor in the West Divergence Area, like MDLPA No. 3, consists of agricultural areas and wetlands, providing suitable habitat for a variety of common wading birds, mammals, fish, reptiles, and amphibians.

563. From an ecological perspective, the northern part of the NPCA Corridor within the West Divergence Area is also the same as MDLPA No. 3. Both traverse wetland habitat within the Bird Drive Basin, the North Trail Basin, and the Pennsuco Wetlands. Some listed wading birds would be expected to forage in this area although no breeding colonies are known for this area. In the Bird Drive Basin, there is a mixture of some low-quality exotic wetland hardwoods, sawgrass marsh, and wet prairie wetlands. The corridors cross Tamiami Trail, and then enter the Pennsuco Wetlands in an area where there is a mixture of exotic wetland hardwoods, sawgrass marsh, and wet prairie. All of the corridors converge just to the west of the Levee substation.

564. Wetlands to the east of the L-31N levee within the Bird Drive Basin and the Pennsuco Wetlands, in which MDLPA No. 3 and the NPCA Corridor traverse, are somewhat lower in quality

compared to wetlands located west of the L-31N canal, in which MDLPA No. 1 traverses.

565. In the north portion of the West Divergence Area, the West Consensus/MDLPA No. 2, MDLPA No. 1, and MDLPA No. 3 narrow as they approach the Levee substation, limiting the crossing of the Pennsuco Wetlands and adjacent land uses, while the NPCA Corridor remains wide from north of the North Trail Basin to the Levee substation.

4. Western Transmission Line Construction and Design Standards

566. The location, construction, operation, and maintenance of the western transmission lines will comply with all applicable design standards. They will be located, constructed, operated, and maintained in a manner consistent with all applicable non-procedural regulatory standards; these standards are reflected in the Conditions of Certification, and FPL has committed to implementing those conditions. The entire construction process for the western transmission lines will take between four to five years.

567. Existing transmission lines and access roads in the certified corridor will first be assessed to determine whether they are suitable for construction and ongoing operation and maintenance activities for the proposed western transmission lines. If determined to be suitable, these features will be

used, which will minimize the need for new road construction in the area that could potentially impact wetlands or surface hydrology.

568. In the past, FPL has used the SFWMD's existing levees for access onto other projects and may seek to use these levees as access roads for this Project, which could further minimize the need for new access roads.

569. Where new access roads and structure pads are necessary, they will be constructed with clean fill material and unpaved. Access road and pad elevations will be established after a review of available drainage basin data, seasonal water elevations, and flow patterns. The final grade elevation of any necessary access roads and structure pads will be sufficient to ensure emergency access to provide at least 12 inches of clearance over seasonal or mean high-water levels or over controlled water levels in areas where water levels are regulated. The roads and pads will have two-to-one side slopes, which allows for a stable side slope. An 18-foot top width of the road is proposed to allow for large vehicular use during construction and maintenance. A variation on this width will occur in the southern portion of the corridor that is common to all of the western corridors proper for certification where the main plant construction temporary access road will be built over the location of the future permanent transmission line access

road. This wider plant access will also be used temporarily for transmission access. Once the plant construction is complete, the temporary additional width will be removed.

570. Where practicable, access roads and structure pads will be constructed outside of wetlands. Culverts will be installed under the access roads and structure pads as needed to maintain pre-construction flows. Culverts will be covered with at least two feet of clean fill to prevent them from being crushed by vehicles.

571. FPL will use sedimentation control devices to control erosion and turbidity, and will utilize stable, compacted fill material, along with seeding and mulching of side slopes, to minimize the potential for impacts to wetlands.

572. Transmission line construction includes material hauling, spotting, and structure erection. If multiple-piece structures are used for the western transmission lines (tubular steel poles installed on concrete caisson foundations), the augured holes will be approximately nine feet in diameter to accommodate the installation of concrete caisson foundations.

573. For the western 500-kV transmission lines, the typical span length will be approximately 1,000 feet between structures. For the west 230-kV transmission line, the typical span length from Clear Sky to the Levee substation area will be approximately 500 feet, and from the Levee substation area to

the Pennsuco substation, the typical span length will range from approximately 250 to 750 feet, following the alignment of the existing 230-kV transmission lines in that ROW.

574. Span lengths vary for several reasons. Sometimes a pole location is adjusted to avoid a tree canopy, wetland, or archaeological or historical site, or to coincide with property lines or the location of existing distribution poles that will be replaced. They can also be adjusted to accommodate the crossing of highways, water bodies, or other linear features.

575. The typical ROW width identified in the application to accommodate the three western transmission lines between the Clear Sky and Levee substations is approximately 330 feet, which for a majority of the length of the corridor comprises FPL's existing transmission line ROW. Between the Levee and Pennsuco substations the ROW will be approximately 170 feet, and the 230-kV transmission line will be mostly constructed within existing FPL transmission line ROWs, with the exception of the upland easement requested in a mining area.

576. FPL establishes a transmission line ROW through multiple means, such as the purchase of easement rights over affected parcels, property in fee simple, and for public ROW, the acquisition of longitudinal use permits and licenses for crossing permits.

577. Where FPL is not constrained to a 330-foot ROW, it may use its traditional 500-kV H-frame unguyed structures using a horizontal configuration. Use of such structures would allow greater span lengths between structures, potentially minimizing wetland impacts.

578. All of the western alternate corridors, including the West Consensus Corridor/MDLPA No. 2, cross property owned by state and federal agencies in the West Divergence Area east of the FPL West Preferred Corridor. FPL may not have the eminent domain authority to condemn all of the necessary rights in those government parcels.

579. No party presented evidence suggesting that undergrounding for any portion of the western transmission lines was appropriate for the proposed western transmission lines or that undergrounding was feasible for the western 500-kV transmission lines.

580. Construction of the Levee substation expansion will require clearing and grubbing the expansion area. Turbidity screens and other erosion control devices and techniques will be used to minimize construction impacts to nearby wetlands and water bodies. The expanded substation yard area will be excavated, filled with clean fill, graded, and rolled to match the existing substation yard elevation. The existing grounding

grid will be expanded and a new security fence around the expansion area will be installed.

581. After the substation expansion area is prepared, concrete caisson foundations will be installed for the new equipment using drilling rigs and large cranes. Once the foundations are complete, the new bus system, circuit breakers, switches, and other associated equipment will be installed.

5. Applicable Non-Procedural Requirements

a. Wetlands

582. The corridor selection process appropriately eliminated and reduced impacts to wetlands and waters of the state to the extent practicable, as required by applicable rules. First, FPL has eliminated consideration of the FPL West Secondary Corridor for this Project completely, despite having owned the ROW within this corridor for over 40 years. Second, assuming the West Consensus Corridor/MDLPA No. 2 can be feasibly and timely obtained, FPL's preference for the West Consensus Corridor/MDLPA No. 2 over the FPL West Preferred Corridor constitutes a substantial additional wetland impact elimination measure by moving a significant length of the lines in the West Divergence Area to the east side of the L-30 and L-31N levees and avoiding a central crossing of the Pennsuco Wetlands. Third, the FPL West Preferred Corridor and West Consensus Corridor/MDLPA No. 2 are co-located with existing disturbed

ROWs, with existing linear facilities and using existing access roads and infrastructure where available. The need for new access roads will be minimized in the West Consensus Corridor/MDLPA No. 2, due to the ability to use existing access.

583. Additional minimization of impacts will be incorporated throughout the entire certified corridor during final transmission line design. Locating the transmission lines within corridors allows flexibility in routing and additional wetland avoidance/minimization opportunities such as adjusting the location of structure pads and access roads, and/or adjusting the span lengths between structures.

584. No significant adverse effect on the abundance and diversity of wildlife is anticipated as a result of construction in any of the corridors proper for certification. Pre-clearing listed species surveys will be conducted. Most herbaceous and low-growing wetland vegetation will not need to be cleared. Construction practices in wetlands will retain the vegetative root mat in areas not filled, thereby minimizing impacts to wetland vegetation.

585. Impacts will be rectified or mitigated to the extent practicable by restoring wetlands within the ROW that are not directly impacted by structure or pad installation. Also, FPL has committed to controlling exotic vegetation within the entire ROW (both wetlands and uplands). Any remaining unavoidable

impacts will be fully compensated through the Hole-in-the-Donut Mitigation Bank and the Everglades Mitigation Bank.

586. These measures satisfy the state Environmental Resource Permit criteria and the County code criteria relative to wetland impacts.

587. Wetlands to the east of the L-31N levee within the Bird Drive Basin (where the West Consensus Corridor/MDLPA No. 2, MDLPA No. 3, and NPCA Corridor are located) are lower in quality compared to wetlands located west of the L-31N levee (where the FPL West Preferred Corridor and MDLPA No. 1 are located). They also experience more shallow inundation compared to wetlands to the west of L-31N levee, reducing the amount of wetland fill required to elevate proposed roads and transmission structure pads and the amount of mitigation required for the wetland impacts.

588. Construction, operation, location, and maintenance of the western transmission lines in any of the western corridors will not adversely impact the functions of wetlands or other surface waters from a wildlife perspective.

589. Restrictive clearing techniques will be employed in forested wetlands and sensitive pine rockland communities.

590. NPCA offered testimony regarding federal law and international treaties to underscore the importance of the Everglades National Park wetlands, including designation of part

of present-day Everglades National Park as a Wilderness Area (excluding the East Everglades addition) in 1978, designation of Everglades National Park as a world heritage site by the United Nations Educational, Scientific, and Cultural Organization in 1979, and inclusion of Everglades National Park among the Ramsar List of Wetlands of International Importance in 1987. However, all of these designations predated Congressional authorization of the Land Exchange.

591. In addition, the Everglades National Park Protection and Expansion Act of 1989 and the Water Resources Development Act of 2000, cited by NPCA witnesses, predated the negotiations and agreements, subsequently authorized by Congress, for the Land Exchange.

b. Avian Species

592. The western corridors were analyzed for their potential to impact avian species, including wading birds and the endangered wood stork and Everglade snail kite, since they are known to occur in the area.

593. There are no known current nesting sites for listed avian species within any of the western corridors, but there are wading bird colonies in the vicinity of the FPL West Preferred Corridor in the area of Tamiami Trail.

594. The USFWS has recommended primary and secondary protection zones with specific management restrictions in order

to minimize wood stork colony disturbance. Such recommended management restrictions for wood storks and their colonies would not prohibit placement of the proposed transmission lines in the FPL West Preferred Corridor or West Consensus Corridor/MDLPA No. 2.

595. The wood stork is known to nest in four colonies both south and north of Tamiami Trail and west of the FPL West Preferred Corridor. These colonies have been well documented for years and are known as the Tamiami East 1 and 2, Tamiami West, and 3B Mud East colonies. The NPCA Corridor and MDLPA No. 3 are the farthest from these colonies. The FPL West Preferred Corridor and MDLPA No. 1 fall within 1,500 feet of one of these colonies. The West Consensus Corridor/MDLPA No. 2 is located east of all of these colonies, and the closest colony (Tamiami East 1) is approximately one mile away from the closest corridor boundary. The West Consensus Corridor/MDLPA No. 2 falls outside the recommended primary (500 to 1,500 feet) and secondary (2,500 feet) management zones for the wading bird colonies published by the USFWS. No known listed species have been recorded in the West Consensus Corridor/MDLPA No. 2, MDLPA No. 3, or NPCA Corridor, but it could be expected that listed species would utilize portions of those corridors.

596. The primary and secondary management zones for these colonies are flexible and much smaller management zones may be

applied, as was done for the Tamiami Trail Modifications: Next Steps Project near the West Preferred Corridor. Three wood stork nesting colonies are located along Tamiami Trail to the west of the western corridors. One colony (3B-Mud East) is located farther north, to the west of L-30 levee. The FPL West Preferred Corridor crosses only portions of the secondary management zones for the Tamiami East 1 and 3B-Mud East colonies. None of the other western corridors cross either a primary or secondary management zone of a wood stork colony.

597. None of the Everglade snail kite's critical habitat areas, as designated by the USFWS, are crossed by any of the western corridors. The closest critical habitat area is over ten miles to the west, and not "in close proximity," as suggested by NPCA.

598. Although some parties contend otherwise, the record establishes there will be no adverse impacts on avian species, including listed species such as the wood stork and Everglade snail kite. In all of the corridors proper for certification FPL will implement design features to protect avian species. These include: (1) wide spacing of the energized conductors to avoid birds touching two conductors simultaneously, which is the manner in which many avian electrocutions on power lines occur; (2) perch discouragers on every pole; and (3) bird flight

diverters on all of the spans on the overhead or ground wires within one-half mile of any wood stork colonies.

599. FPL has agreed to comply with very specific wood stork and Everglade snail kite conditions of certification proposed by FWC. These are sufficient to protect the species.

600. The location, construction, operation, and maintenance of the proposed transmission lines in the western transmission line corridors will not adversely impact the ecological value of uplands to aquatic or wetland-dependent listed avian species for enabling existing nesting by these species because the upland areas to be affected are of low value to wetland-dependent species.

601. FPL's APP outlines specific design and construction standards for distribution and transmission lines, substations, and other avian mortality reduction methods. These standards are designed to avoid and minimize potential bird impact issues such as electrocutions and collisions, as well as avian enhancement activities that can provide benefits to birds from FPL structures and activities. These steps should resolve the concerns expressed by NPCA at hearing.

602. The APP also provides FPL managers and field personnel with a single, accessible information resource describing avian protection background issues, relevant bird species, potential impact issues, applicable federal, state, and

local regulatory context, key resources and contacts for bird issue responses, and FPL responsibilities.

603. The APP also outlines specific training, response, reporting, and quality control protocols to ensure that FPL personnel are adequately prepared for responding to potential bird impact issues, focusing on bird mortality, injury, or nesting incidents, and on key potentially affected listed bird species, as well as personnel safety procedures to be implemented during responses to bird impact situations.

604. In light of these measures to be implemented, FPL has provided reasonable assurances that avian species in the region are unlikely to suffer electrocution from or collision with the transmission lines.

605. The location, construction, operation, and maintenance of the proposed transmission lines in any of the western corridors will not adversely impact wood storks. There will be no loss of nesting habitat as a result of the proposed transmission lines, any loss of wood stork foraging habitat will be fully mitigated, and there will be minimal to negligible exposure of wood storks to risk of electrocution as a result of the western transmission line corridors. There will be only a small risk of a wood stork collision with the transmission lines because their large wings enable them to fly slowly with higher maneuverability. Any risk will be further minimized by use of

flight diverters. While it is assumed juvenile wood storks are poorer flyers than adults and may be more susceptible to collisions, there has never been a documented case of a juvenile wood stork colliding with a transmission line. The period of exposure of young wood storks to hazards around the colony is very short, as they leave the colony within about 48 hours after fledging.

606. The location, construction, operation, and maintenance of the proposed transmission lines in the western transmission line corridors will not adversely impact Everglade snail kites. While the Everglade snail kite is known to occasionally forage within parts of some of the western transmission line corridors, the area currently lacks apple snails, which are the Everglade snail kite's primary food source. If apple snails were to return, however, Everglade snail kites could also return. Everglade snail kite foraging and nesting behavior is compatible with transmission facilities and habitats under transmission lines, so no impacts to Everglade snail kites are expected. By virtue of their flight morphology and behavior, Everglade snail kites are not likely to be exposed to any risk of electrocution or collision mortality from the transmission lines.

607. With respect to all other listed avian species, habitat loss will be minimal to negligible because they will be

restricted to a minor loss of foraging habitat for some wetland-dependent species with no significant adverse effect on the population, and this habitat loss will be fully mitigated. There is no risk of electrocution from the proposed transmission lines, as the separation of energized parts exceeds the maximum wingspan or bill tip to foot length of all listed bird species potentially occurring within the area. While some listed species will be exposed to risk of collision with the lines, this risk will be relatively small and is not likely to affect any populations.

608. In light of the APP and other protection measures described above, the location, construction, operation, and maintenance of the proposed transmission lines in any of the western transmission corridors proper for certification will be consistent and in compliance with FWC regulations related to the protection of threatened and endangered avian species, as well as the Migratory Bird Treaty Act of 1918, as amended. More strict measures than those imposed by the FWC, or described in the APP, are not necessary.

609. The location, construction, operation, and maintenance of the proposed transmission lines in the western transmission line corridors will not impact the values of wetland or other surface water functions so as to cause adverse impacts to the abundance and diversity of any listed avian

species because all wetland impacts will be mitigated consistent with applicable regulations and the approved mitigation plan.

610. No adverse impact to the conservation of birds or their habitats, including endangered and threatened species, is expected. Impacts on birds, including listed species and their habitats, have been avoided and minimized through the siting of the corridors and design of the transmission lines. The risks to avian species are small and all impacts will be fully mitigated.

611. The location, construction, operation, and maintenance of the proposed transmission lines in the western transmission line corridors will not cause adverse secondary impacts to avian species.

612. The location, construction, operation, and maintenance of the proposed transmission lines in the western transmission line corridors will not adversely impact the population of any threatened or endangered avian species.

613. The location, construction, operation, and maintenance of the proposed transmission lines in any of the western corridors proper for certification will not prevent the preservation of avian species.

614. Through the use of reasonable and available methods, the location, construction, operation, and maintenance of the proposed transmission lines in any of the western corridors

proper for certification will minimize any adverse effects on avian species and their habitats. FPL has committed to taking a variety of steps to minimize any potential adverse impacts on avian species and their habitats including the siting of corridors, avian-protection design features and construction standards, and mitigation.

615. From an avian perspective, FPL's mitigation will fully compensate for any functions that may be lost on environmentally sensitive lands as a result of the location, construction, operation, and maintenance of the proposed transmission lines.

616. The location, construction, operation, and maintenance of the transmission lines will comply with all applicable non-procedural requirements related to protection of avian species, including listed avian species and their habitat.

c. Non-Avian Wildlife Species

617. Impacts of location, construction, operation, and maintenance of the transmission lines on non-avian wildlife were also evaluated and specifically included evaluations of potential impacts to the Florida panther, Eastern indigo snake, and the American crocodile, since they are listed species known to occur in the area.

618. In all of the corridors within the west study area, the potential for adverse impacts to any wildlife species,

including listed species, is low. Care was taken in the corridor routing to avoid and minimize proximity to known listed species locations. Listed species pre-clearing and construction surveys will be conducted. Prior to conducting surveys, FPL will coordinate with the FWC and USFWS to obtain and follow the current survey protocols, as memorialized in the FWC-recommended conditions of certification to which FPL has agreed to comply in any of the western corridors.

619. The ecological value of the uplands to wetland-dependent listed species for nesting and denning will not be adversely affected by location, construction, operation, and maintenance of the western transmission lines in any of the western corridors.

620. The location, construction, operation, and maintenance of the proposed transmission lines in any of the western transmission line corridors will not have an adverse effect on the abundance and diversity of wildlife, including listed species, because all corridors offer flexibility in locating the ROW to avoid site-specific listed species locations, all corridors will be required to comply with conditions of certification requiring pre-clearing and construction surveys, and all wetland impacts will be mitigated.

621. Construction of the proposed transmission lines in any of the western corridors proper for certification, or any

portion thereof, will not have a significant adverse effect on fish habitat or the abundance or diversity of fish.

622. The location, construction, operation, and maintenance of the proposed transmission lines in any of the western corridors will not adversely affect the conservation of fish and wildlife populations, including endangered and threatened species, or their habitats; will not adversely affect the fishing or recreational values or marine productivity in the vicinity; will not adversely impact the functions of wetlands or other surface waters from a wildlife perspective; and will not adversely impact the ecological value of uplands to non-avian aquatic or wetland dependent listed animal species for nesting and denning. Construction, operation, location, and maintenance will comply with all of the conditions proposed by FWC and all agency substantive requirements.

623. In light of the proposed protective measures and the proposed mitigation, the location, construction, operation, and maintenance of the proposed transmission lines in any of the western corridors will not cause adverse secondary impacts to fish and wildlife; will not adversely affect the fishing or recreational values or marine productivity in the vicinity; and will not adversely impact the functions of wetlands or other surface waters from a wildlife perspective.

i. Panthers

624. The proposed western transmission line corridors are within the extreme southeastern area of the range of the Florida panther in south Florida. All western corridors fall partially within the panther primary zone and partially within the panther secondary zone.

625. Florida panthers have been recorded in the area of the proposed western transmission line corridors. There is, however, a very low likelihood that panthers would actually occur in the area during construction.

626. There are positive benefits that accrue to Florida panthers and their habitat and prey associated with the placement of transmission lines within panther habitats. Therefore, the transmission lines will not result in the loss of panther habitat or adverse impacts to the panther.

627. FPL has proposed protection measures for Florida panthers in the unlikely event they would occur in the transmission line ROWs, including training of construction personnel and unannounced inspections. FPL has also agreed to FWC-proposed protection measures for Florida panthers. Those protection measures are sufficient to prevent adverse impacts to Florida panthers from the location, construction, operation, and maintenance activities associated with the proposed western transmission lines.

628. The location, construction, operation, and maintenance of the transmission lines will comply with all applicable non-procedural requirements related to protection of Florida panthers.

ii. Eastern Indigo Snakes

629. Eastern indigo snakes have not been observed in the western corridors. The location, construction, operation, and maintenance of the transmission lines will comply with all applicable non-procedural requirements related to protection of Eastern indigo snakes.

d. Hydrologic Considerations

630. New access roads, structure pads, and stormwater discharges during construction in any of the western corridors proper for certification have the potential to impact surficial hydrology. NPCA contends that FPL's current proposal to construct culverts in its preferred corridors will stop sheet flow, the proposed roads and structure pads will disrupt water flow, and this will adversely affect the hydrological resources of the Everglades National Park. For the following reasons, these concerns are not well-founded.

631. Where new access roads are needed or upgrades are required to accommodate construction vehicles, those access roads will be unpaved and constructed using clean fill. Culverts will be included in wetland areas to maintain channel

flow and overland flow. Culverts are also expected to be used under structure pads where required to maintain existing surface flows. These culverts would help to equalize water volume and maintain pool equilibrium.

632. The spacing, diameter, and length of the culverts for access roads and structure pads will be based on hydrological studies that will be conducted post-certification, where final project elements are reasonably expected to impact surface or groundwater. Any culverts will comply with applicable conditions of certification. A combination of different culvert sizes is expected to be used. The design will be dictated depending on where the corridor is located and the amount of water that will need to be managed, among many different criteria. Typically, culverts installed in wetlands are designed so the bottom of the culvert will match the wetland floor elevation.

633. The proposed western transmission lines will comply with applicable agency non-procedural requirements, including requirements of the County, SFWMD, and Department, as well as SFWMD ROW Occupancy Permit Criteria. In particular, the conceptual design specified by FPL in its application will maintain surface water flows and will not result in ponding or flooding.

634. The location, construction, operation, and maintenance of the proposed western transmission lines will comply with applicable Department non-procedural environmental resource permitting criteria and other non-procedural requirements.

635. Based upon the conceptual design specified by FPL in its application, the design of the roads and structure pads will incorporate drainage features such as culverts to allow the free flow of water. The function of culverts is to allow water to flow freely without impeding natural systems. The design used for the western transmission lines will ensure that culverts maintain equilibrium of water on both sides of roads and structure pads.

636. FPL will also implement and maintain erosion and sediment control devices and best management practices such as silt fences, hay bales, erosion control blankets, and turbidity screens.

637. FPL proposes to conduct hydrologic studies if the final project elements are reasonably expected to impact surface or ground water to ensure that any impacts associated with hydrology, water quality, and water supply will be avoided and minimized.

638. FPL has committed to a flowage easement that would maintain existing sheet water and allow for future improvement

of surface water flows across the transmission line ROW located within the Biscayne Bay Coastal Wetlands CERP Project study area boundaries, which traverse the Turkey Point-U.S. Highway 1 section of the western transmission corridors.

639. FPL has proposed specific design measures to protect surficial hydrology of the Wink Eye Slough and the Northeast Shark River Slough. These sloughs are unique environmental features. The Wink Eye Slough traverses the west corridors in the Turkey Point-U.S. Highway 1 Section, common to all the west corridors. The eastern edge of the Northeast Shark River Slough is within the FPL West Preferred Corridor and West Consensus Corridor/MDLPA No. 2 in the L-31N levee portion of the West Divergence Area. The predominant hydrologic flow of the Northeast Shark River Slough occurs west of the L-31N levee. FPL will design the transmission line access roads and structure pads to avoid sheet flow impacts to these sloughs, considering design alternatives such as culverts, stabilized at-grade roads, geoswales, or other techniques to maintain the sheet flow in compliance with applicable non-procedural requirements.

e. CERP

640. The location, construction, operation, and maintenance of the proposed western transmission lines in any of the western corridors proper for certification are not

inconsistent with CERP Projects or the overall objectives of CERP.

641. FPL demonstrated that the western transmission line structures and access roads will be designed and constructed in any of the western corridors in such a manner as to maintain surface flows and sheet flow, and no flood hazards will be created as a result of the transmission lines or access roads. Access roads will be properly culverted and appropriately constructed so as to maintain drainage and manage water quality and will not interfere with sheet flow or the higher water levels anticipated as a result of CERP implementation. The transmission line structures and access roads will not negatively impact the quality, quantity, or timing of the distribution of water. Given these considerations, a contention that the West Consensus Corridor/MDLPA No. 2 or back-up West Preferred Corridor will negatively affect the CERP Modified Water Deliveries Project, or specific goals and objectives of the CERP Yellow Book (the blueprint for Everglades restoration), is rejected.

642. FPL has submitted flowage easements to the County for review in accordance with Condition 17 of County Resolution Z-56-07.

f. East Everglades Area of Critical Environmental Concern

643. The County has a zoning overlay district known as the East Everglades Area of Critical Environmental Concern (EEACEC) that comprises approximately 242 square miles, part of which is within the Everglades National Park. See ch. 33B, MDC. A portion of the corridor common to all western corridors crosses the EEACEC south of Southwest 120th Street. In the West Divergence Area, the FPL West Preferred Corridor and portions of the West Consensus Corridor/MDLPA No. 2 and MDLPA No. 1 follow the extreme eastern edge of the EEACEC where they travel along the L-31N levee. The EEACEC's northern boundary is Tamiami Trail. The remaining alternate corridors are not located within the EEACEC in this area.

644. For parcels within the EEACEC zoning overlay district, additional restrictions apply to development to ensure, singly or cumulatively, no adverse effects on the hydrologic or ecologic integrity of the east Everglades. See ch. 33B, MDC. For the reasons set forth in the Conclusions of Law, these EEACEC restrictions do not apply to transmission lines.

645. Notwithstanding the inapplicability of these restrictions, the evidence establishes that the location, construction, operation, and maintenance of the western transmission lines in corridors traversing the EEACEC in

compliance with the agreed-upon conditions of certification will maintain existing flows and water quality and will not have an adverse impact on natural flow of water or cause a change in water quality or quantity in the adjacent Everglades National Park.

646. The location, construction, operation, and maintenance of the western transmission lines in any portion of the EEACEC likewise would not have an adverse impact on wetland flora and fauna within the adjacent Everglades National Park or cause material injury to wetland ecology on adjoining lands or on portions of the ROW not proposed for placement of the transmission lines. For example, FPL has committed to employ best management practices during construction to avoid sedimentation and undertake exotic vegetation control within the ROW.

g. Bird Drive Everglades Wetland Basin and North Trail Basin

647. The County has two environmental districts within portions of the proposed western transmission line corridors, which have been adopted in chapter 24, MDC. The Bird Drive Everglades Wetland Basin (Bird Drive Basin) is located south of Tamiami Trail and east of Krome Avenue. The North Trail Basin is located north of Tamiami Trail and approximately two miles east of Krome Avenue.

648. Sections 24-48.20 and 24-48.21 require that all work within the Bird Drive Basin or the North Trail Basin must be consistent with the Land Management Plan to ensure the maintenance of biological resources in that area. Those provisions call for minimizing impacts to flood drainage; minimizing impacts to water storage capacity and Biscayne Aquifer recharge; and maintaining desirable biological values, or mitigating for loss of such values.

649. A portion of the West Consensus Corridor/MLDPA No. 2, MDLPA No. 3, and the NPCA Corridor traverse the Bird Drive Basin and North Trail Basin. The West Consensus Corridor/MDLPA No. 2 traverses a short distance of the northern portion of the Bird Drive Basin and the westernmost edge of the North Trail Basin. MDLPA No. 3 and the NPCA Corridor traverse a significant portion of the Bird Drive Basin and the western edge of the North Trail Basin. The FPL West Preferred Corridor and MDLPA No. 1 are not located within the Bird Drive or North Trail Basins.

650. The western transmission lines will not cause impacts to flood drainage, will minimize impacts to water storage capacity and Biscayne Aquifer recharge, and will allow the areas to maintain desirable biological values. The location, construction, operation, and maintenance of the western transmission lines in any portion of the Bird Drive Basin or

North Trail Basin will not cause any unmitigated impacts to wetlands.

651. The placement of the western transmission lines in any of the western corridors within the Bird Drive Basin and North Trail Basin will be compatible with the County's land management plans for those areas.

h. Natural Forest Communities

652. Two NFCs are located in the section of the western corridors between U.S. Highway 1 and Southwest 120th Street, a section that is common to all the western corridors. In accordance with Condition 20 of County Resolution Z-56-07, FPL will minimize impacts to NFCs in the western corridors consistent with the NFC standards and requirements of chapter 24, MDC. FPL has agreed to a stipulation and associated conditions with the County to not place any structures within the edge of the Sunny Palms NFC, which is included in the western transmission line corridors. For the Kings Highway Pinelands NFC, FPL already has an existing easement and transmission line crossing in this area. Additional vegetation clearing and construction for the certified facilities will occur only in accordance with the stipulated conditions applicable to NFCs.

i. Use of SFWMD ROW, Crossings, and Levees

653. FPL's proposed western transmission lines will cross several SFWMD canals and may use a portion of SFWMD ROW linearly along the L-31N and L-30 levees. The proposed western transmission lines also involve the crossing of SFWMD bridges. Crossings of SFWMD canals and crossing or use of SFWMD levees and bridges will be required for all western corridors.

654. The FPL West Preferred Corridor traverses or runs longitudinally with the following SFWMD facilities: L-31E canal, C-113 canal, C-103 (Mowry) canal, C-102 (Princeton) canal, L-31N canal, C-1W (Black Creek) canal, C-4 (Tamiami) canal, L-29 Borrow Enlargement, and L-30N canal.

655. The FPL West Preferred Corridor or West Consensus Corridor/MDLPA No. 2 may use SFWMD levees L-31N, L-30, and L-29 for access during construction, operation, and maintenance. MDLPA No. 1, MDLPA No. 3, and the NPCA Corridor may also require the crossing of several SFWMD facilities including canals and levees. The location, construction, operation, and maintenance of the proposed transmission lines will not interfere with the present construction, alteration, operation, or maintenance of the works or lands of the SFWMD that are crossed. While parallel runs have a potential for interfering with the District's operation and maintenance of its system, it is possible to accommodate transmission lines with site-specific

configurations. Transmission lines have been successfully designed and constructed within SFWMD ROW previously.

656. The location, construction, operation, and maintenance of the proposed transmission lines will not interfere with proposed future construction, alteration, operation, or maintenance of the works or lands of the SFWMD that are crossed. This applies only to proposed future construction, alteration, operation, or maintenance known at the time of FPL's project design.

657. The proposed transmission lines within SFWMD lands will not result in damage from soil erosion.

658. Structural integrity of bridges crossed by vehicular traffic will be certified by a professional engineer registered in the State of Florida.

659. Before FPL's use of levees for construction and maintenance access, FPL will coordinate with the SFWMD Right-of-Way Department to develop a plan for compatible use of these facilities.

660. Any improvements within the associated canal ROWs will maintain the structural integrity of the levee(s) at a level as good as or better than the conditions in existence immediately prior to commencement of FPL's work activities.

661. All activity within SFWMD ROWs will be conducted consistent with applicable SFWMD non-procedural requirements and

will be consistent with the development and regulation of dams (or levees) and other works to provide water storage for beneficial purposes.

662. The western transmission lines will not adversely affect the levees or other works crossed or paralleled by the transmission lines; unduly burden SFWMD interests; contribute to damage from floods, soil erosion, or excessive drainage; affect disease-carrying vectors and pests so as to impact public health and welfare; or have adverse effects on human health or waters of the state.

663. SFWMD has stipulated to the use of its ROWs in whichever corridor is ultimately approved for certification, provided the Conditions of Certification in Attachment 1 to this Recommended Order are met.

664. FPL has agreed to accept the conditions of certification offered by SFWMD, and FPL has demonstrated that the conditions offered by SFWMD relating to ROW occupancy permits will be met.

j. Upland Easement

665. The 230-kV segment of the western transmission lines that is common to all western corridors proper for certification includes an approximately four-acre parcel of state-owned uplands. The parcel is adjacent to an existing FPL transmission line ROW through previously mined areas east of Levee substation

and northwest of the intersection of Doral Boulevard and the Homestead Extension of the Florida Turnpike. The area is currently subject to a commercial mining lease and is a limerock mine. FPL has requested that the Siting Board direct the Board of Trustees to issue an upland easement for this approximately four-acre parcel through this proceeding.

666. The upland easement over this narrow strip is required for the Clear Sky-Pennsuco 230-kV transmission line in order to comply with EMF standards and to accommodate conductor swing out in high winds. No construction will occur within the upland easement.

667. The narrow strip of uplands for which FPL is seeking an easement from the state is between two rock mine pits and currently used as a berm access road by mining operations. It has limited value to wildlife. All of the western corridors must use this same segment.

668. FPL will undertake all activities on the upland easement in accordance with best management practices. Placement of the proposed transmission line in the area of the requested upland easement over state lands will not have adverse impacts on conservation, the environment, natural resources, wetlands, or fish and wildlife values.

669. If the easement is not obtained, FPL could still construct the proposed line, but that would involve

reconstructing two of the existing transmission lines to make adequate space within FPL's existing ROW, and it may be very difficult to get the extended transmission line outages that would be required to reconstruct those facilities.

670. Grant of the easement is not contrary to the public interest, as the area is already subject to a commercial mining lease and is a limestone mine. There is a clear public need for the Project, and there are no reasonable alternative locations. The public does not use the area to be covered by the upland easement.

k. General Considerations

671. The evidence establishes that the structural integrity of bridges, dams, or levees will not be affected by construction or operation of the western transmission lines; the lines will not cause damage from soil erosion; they will not cause or contribute to flood damage or excessive drainage; they will not affect disease-carrying vectors and pests so as to impact public health and welfare; and they will not have other adverse effects on human health or water resources.

672. The location, construction, operation, and maintenance of the western transmission lines in accordance with the conditions of certification will comply with applicable noise regulations and will not have an adverse impact on air quality.

673. The western transmission lines will comply fully with the applicable Department standards for EMF from transmission lines.

674. The location, construction, operation, and maintenance of the proposed transmission lines in any of the western transmission line corridors proper for certification will not adversely impact archaeological or historic structures, sites, or resources. There is no material difference between the western transmission line corridors proper for certification in terms of impacts to cultural resources and archaeological and historic sites.

675. All of the western corridors provide sufficient access to the proposed transmission lines, either via existing public roads, existing FPL access roads, or through the use of access corridors to ensure suitable access. All of the alternate corridors east of the L-31N and L-30 levees provide flexibility for access because there will be multiple opportunities for access on public roadways along those routes.

676. There will be no adverse traffic impacts from construction of the proposed transmission lines in any of the western corridors. The western corridors are compatible with DOT and Miami-Dade Transit long-range plans.

677. If constructed within any of the corridors proper for certification, the proposed western transmission lines will

comply with the applicable non-procedural requirements of the local governments in which they will be located. These applicable non-procedural requirements include the requirements of Florida City, Doral, Medley, and the County that FPL: (1) construct and maintain transmission lines in accordance with FPL's customary practice; (2) ensure that its transmission lines do not unreasonably interfere with traffic on public ROW or reasonable egress from and ingress to abutting property; (3) ensure that transmission lines be located as close to the outer boundary of public ROW as practicable, or as agreed with the local government; and (4) repair or restore any damage to public ROW caused by construction or maintenance of transmission lines.

678. Impacts to wildlife habitat and listed species in any of the western corridors will be avoided, minimized, and mitigated. All of the western transmission line corridors proper for certification are appropriate for placement of the proposed western transmission lines from a wildlife perspective.

679. The evidence establishes that all of the five western corridors proper for certification meet the criteria for certification set forth in section 403.509(3).

7. Corridor Comparison: Least Adverse Impacts Including Costs

680. As found above, the multidisciplinary team evaluated the various proposed western transmission line corridors based

on a theoretical centerline of the transmission lines through the middle of each corridor, with the centerline adjusted as needed to avoid certain obstacles. The comparative evaluation also assumed use of a ROW obtained through the implementation of the Land Exchange. For the NPCA Corridor, FPL evaluated both the alignment as proposed by NPCA and an adjusted centerline based on FPL's expertise as more feasible than that proposed by NPCA, to allow for a more equitable comparison.

a. Environmental Comparisons

681. Within the West Divergence Area, the FPL West Preferred Corridor would impact a maximum of 137 wetland acres, although these figures will likely be significantly reduced through FPL's final transmission line design process. The West Consensus Corridor/MDLPA No. 2 would impact no more than 122 wetland acres. The wetland ecology in both corridors is generally similar, as is the estimated acreage of wetland impact. Wetland quality in both corridors ranges between 0.70 and 0.80 as measured by UMAM.

682. Within the West Divergence Area, MDLPA No. 1 and MDLPA No. 3 would impact up to 138 or 104 wetland acres, respectively, and those wetlands range in quality from 0.70-0.80 (MDLPA No. 1) to 0.60-0.80 (MDLPA No. 3).

683. Using either centerline alignment, the NPCA Corridor would impact up to 91 wetland acres, ranging in quality from 0.60 to 0.70.

684. Construction of the proposed transmission lines within the NPCA Corridor would traverse lower quality wetlands and require a smaller amount of mitigation to offset unavoidable wetland impacts, as compared to the other proposed western corridors.

685. In the certification analysis required by section 403.509, wetland impacts are only one factor of a multi-faceted analysis. Determination of the appropriate corridor for certification is a balancing of the criteria, and impacts to wetlands or other natural resources are not the only factors in the analysis. See § 403.509(3), Fla. Stat.

686. From a surficial hydrology perspective, there is no material difference between any of the western corridors proper for certification, because each corridor can be engineered to maintain sheet flow and other surface water flow. However, the amount of engineering that would be required to maintain sheet flow in each area and the level of complexity involved differs between the corridors. The FPL West Preferred Corridor, MDLPA No. 1, and West Consensus/MDLPA No. 2 would require equivalent levels of surficial hydrology engineering. MDLPA No. 3 and the

NPCA Corridor would involve the least surficial hydrology engineering.

687. The potential for adverse unmitigated impacts to listed species is equally low within the FPL West Preferred Corridor and MDLPA No. 1, and lower in the West Consensus Corridor/MDLPA No. 2, MDLPA No. 3, and the NPCA Corridor.

688. From the perspective of PHUs, the NPCA Corridor would require the least panther mitigation credits (7), followed by MDLPA No. 3 (76), West Consensus Corridor/MDLPA No. 2 (207), MDPLA No. 1 (288), and FPL West Preferred Corridor (374). While PHUs are one metric for comparing potential habitat impacts, there is no material difference in any of the western corridors from a Florida panther perspective. Florida panthers are not adversely affected by, and may even benefit from, the presence of transmission lines.

689. There is no material difference among the western corridors with respect to potential impacts to American crocodiles or Eastern indigo snakes or their habitats.

690. The presence of the Everglades National Park 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.

691. From a wildlife habitat standpoint, the FPL West Preferred Corridor and MDLPA No. 1 are about equivalent, with West Consensus Corridor/MDLPA No. 2, MDLPA No. 3, and the NPCA Corridor ranked as somewhat more desirable. However, in all of the western corridors proper for certification, the potential for adverse impacts to any wildlife species, including listed species, is low, given the pre-clearing listed species surveys and construction methods to be employed that serve to avoid and minimize impacts, as discussed above. FPL's wildlife experts do not see a significant difference in impact between the corridors from a wildlife perspective, and FWC recommends the identical wildlife conditions of certification for all western transmission line corridors.

692. In the FPL West Preferred Corridor and MDLPA No. 1, the potential for adverse impacts to any wildlife species is low. In any of the other proposed western alternate transmission line corridors, that potential is lower.

b. Land Use Comparison

693. The proposed western transmission lines in any of the western corridors will be compatible with adjacent land uses and consistent with the communities' priorities and preferences as reflected in the comprehensive plans and land development regulations. However, it is desirable from a land use perspective to be further from residential and urban land uses.

694. 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 Everglades National Park was one factor in the analysis. In contrast, NPCA and the County reviewed and considered primarily environmental impacts in proposing and comparing the various western corridors or assessing corridor impacts.

695. FPL assessed the visibility of the proposed transmission line structures from various vantage points. NPCA did no comparative visual impact analysis, including no assessment of visual impacts to Everglades National Park visitors. The County assessed only whether the proposed lines would be visible from Management Area 1, also known as the 8.5 Square Mile Area.

696. The west transmission line structures placed in any of the western corridors proper for certification would not be visible to visitors at the Everglades National Park 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 Everglades National Park 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 closest corridor proper for certification (the FPL West Preferred Corridor) would be barely visible on the horizon.

697. 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.

698. In the West Divergence Area, the FPL West Preferred Corridor is the farthest away from any urban or residential areas, minimizing potential for conflicts with adjacent land uses. The greater the distance a residence is from a transmission line, the likelihood of the visibility of that transmission line is reduced. Along the L-31N levee/Land Exchange area, there are three buildings within 500 feet of the FPL West Preferred Corridor centerline, one of which is residential. The FPL West Preferred Corridor is predominantly within existing ROWs or runs along existing linear features and would require crossing 49 individual parcels or lots throughout its length.

699. Regarding the number of buildings within 500 feet of the corridor centerline for the various corridor alignments, the

MDLPA No. 1 centerline has three buildings, one of which is residential; the West Consensus Corridor/MDLPA No. 2 centerline and the MDLPA No. 3 centerline each have nine buildings, two and four of which are residential, respectively; the NPCA Corridor recommended centerline has five buildings, all of which are residential; and the NPCA Corridor adjusted centerline has seven buildings, six of which are residential. The two NPCA Corridor centerline route alignments considered by FPL are close to urban areas. MDPLA No. 1 centerline would require FPL to cross 45 separate parcels, while the West Consensus Corridor/MDLPA No. 2 centerline would require crossing of 63 parcels, although some of these private parcels are owned by mining companies who may be amenable to land donations if the West Consensus Corridor/ MDLPA No. 2 is certified. MDLPA No. 3 centerline, the NPCA Corridor recommended centerline, and the NPCA Corridor adjusted centerline would require the crossing of 96, 108, and 104 individual parcels, respectively. The higher the number of parcels to be crossed, the higher the acquisition costs will be.

700. In considering the number of buildings in proximity and the number of parcels crossed, the West Consensus Corridor/MDLPA No. 2, FPL West Preferred Corridor, and MDLPA No. 1 rank equally. MDLPA No. 3 and both of the NPCA Corridor centerline alignments ranked as the least desirable when considering these two land use factors.

701. MDLPA No. 1, like the FPL West Preferred Corridor, follows along existing levees for a good portion of its length (11.1 miles); West Consensus Corridor/MDLPA No. 2 and MDLPA No. 3 follow 8.3 and 4.8 miles of linear features, respectively, while the two NPCA Corridor route alignments would follow 7.1 or 5.9 miles of such features, respectively. The ability to collocate with existing linear features is important from a land planning perspective, as linear features serve as a seam between land uses and avoid or minimize potential conflicts with adjacent land uses, in addition to minimizing impacts to wildlife and wildlife habitat. There is also an efficiency to be gained by collocating in an existing utility ROW in terms of maintenance.

702. Accordingly, MDLPA No. 1 and the FPL West Preferred Corridor rank as the "most desirable" in terms of the ability to co-locate the new transmission lines with existing linear features in the landscape and thereby minimize potential adverse land use impacts. The West Consensus Corridor/MDLPA No. 2 Corridor and the remainder of the proposed western transmission line alternate corridors ranked as less desirable for this aspect, although in no case would the transmission lines change the land uses within the corridor.

703. FPL's multidisciplinary team expressly considered whether and how much of a corridor was located in conservation

lands, and in particular, the Everglades National Park. The FPL West Preferred Corridor does not traverse the wetlands comprising the Bird Drive Basin or the North Trail Basin. In contrast, the other western transmission line alternate corridors impact either Bird Drive Basin or North Trail Basin wetlands, with MDLPA No. 1 impacting 0.11 acres, West Consensus Corridor/MDLPA No. 2 impacting 2.27 acres, and MDLPA No. 3 and the two NPCA Corridor alignments impacting between 4.81 and 5.92 acres of wetlands, respectively, in these basins. The West Consensus Corridor/MDLPA No. 2, MDLPA No. 3, and NPCA Corridor avoid most or all of the Pennsuco Wetlands. None of the corridors traverse the Everglades National Park.

704. The FPL West Preferred Corridor is located primarily along the L-31N levee, which represents a seam between conservation uses of the Everglades National Park and more developed land uses to the east. Around 4.8 miles will be located in conservation lands. MDLPA No. 1 also has 4.8 miles in conservation lands, and MDLPA No. 3 and the NPCA Corridor alignments range between 3.8 and 4.1 miles in such lands. In contrast, the West Consensus Corridor/MDLPA No. 2 has only 2.8 miles of its length in conservation lands.

705. The Land Exchange would give FPL fee simple or easement rights over a contiguous ROW within the West Preferred Corridor as well as portions of MDLPA No. 1 and West Consensus

Corridor/MDLPA No. 2. Those rights are contingent on the Land Exchange occurring. This would leave no ROW to be acquired over government-owned parcels in the FPL West Preferred Corridor. If the Land Exchange occurs, MDLPA No. 1 would cross six government-owned parcels, while the West Consensus Corridor/ MDLPA No. 2 and MDLPA No. 3 cross 27 and 49 government-owned parcels, respectively. The NPCA Corridor proposed alignment would cross 74 governmental parcels; the adjusted centerline alignment drawn by FPL in the NPCA Corridor would only cross 47 such parcels. Thus, the FPL West Preferred Corridor is the most desirable from this standpoint. MDLPA No. 1 is slightly less desirable, and the remaining western transmission line alternate corridors, which require substantially more government land crossings, are the least desirable since it is often significantly more difficult, costly, and time-consuming to acquire ROWs across government-owned parcels, and FPL may not have eminent domain authority to acquire those parcels if the agencies are not willing sellers.

706. Land uses within the FPL West Preferred Corridor and MDLPA No. 1 are canals and embankments and rock mining, the most desirable uses from a land use perspective. Land uses within the West Consensus Corridor/MDLPA No. 2 are rock mining and lands with regulatory overlays, somewhat less desirable due to the regulatory overlays. Lands within MDLPA No. 3 and the NPCA

Corridor are residential, agriculture, wellheads, and lands with regulatory overlays, which are less desirable land uses than those within the other three corridors.

707. The FPL West Preferred Corridor, MDLPA No. 1, and West Consensus Corridor/MDLPA No. 2 do not encroach on the UEA and are furthest from the UDB; thus, they are all equally the least likely of the western corridors to interfere with residential land uses. They run predominantly along seams between less developed, conservation lands to the west and transitional uses and more urban development to the east. They therefore avoid conflicts with more dense urban development.

708. MDLPA No. 3 and both NPCA Corridor alignments encroach on the UEA and are closest to the UDB. MDLPA No. 3 and the NPCA Corridor also cross the property of Limonar, a property owner with plans for future development that is opposed to the placement of transmission lines on its property. Also, placing a corridor over the UEA property would reduce the size of the UEA which has been identified by the CDMP that is available for urban development.

709. The mining companies prefer the West Consensus Corridor/MDLPA No. 2. It has the least interference with their uses and mining. It is on property where there is a lot of industrial activity associated with active rock mining, a heavy industry. In contrast, the mining companies are unsure of the

effect of MDLPA No. 3 on their ability to mine the eastern part of their property. There is a potential with the West Consensus Corridor/MDLPA No. 2 that the mining companies may be willing to donate their property for the transmission line ROW, thus offsetting the added cost of ROW acquisition in this corridor. However, the mining companies are not willing to do so for MDLPA No. 3.

710. The West Consensus Corridor/MDLPA No. 2 is wide enough to provide flexibility in siting the proposed transmission lines so that both the 500-kV and 230-kV lines could potentially be located on mining property land in significant portions of that corridor. However, there are some features such as the rock processing plant and shipping area near the quarry that could limit or preclude siting of the proposed transmission lines, requiring the lines to be placed in other portions of the corridor in this area.

711. MDLPA's goal for MDLPA No. 1 was simply to minimize potential impacts to the Pennsuco Wetlands; for the West Consensus Corridor/MDLPA No. 2 and MDLPA No. 3, the goal was both to minimize impacts on Everglades National Park and on Pennsuco Wetlands. The benefits of the West Consensus Corridor/MDLPA No. 2 include avoiding a central crossing of the Pennsuco Wetlands and completely removing the proposed transmission lines from Water Conservation Area 3B. This

corridor is also further removed from known wood stork colonies along and north of Tamiami Trail, and is farther east of potential Everglade snail kite foraging habitat within the Everglades National Park. Although the western transmission lines would not interfere with surface flows in any of the corridors, MDLPA believes use of the West Consensus Corridor/ MDLPA No. 2 would be less likely to interfere with any attempts to restore flow inside the eastern part of Everglades National Park and also removes any potential future conflict inside Water Conservation Area 3B, if any.

c. Engineering Comparisons

i. Traffic

712. There is no material difference with regard to traffic impacts between any of the western corridors proper for certification.

713. There is minimal to no risk of conflict with traffic or with future roadway expansion or road widening projects in the FPL West Preferred Corridor or MDLPA No. 1. The remaining western corridors present some risk of potential conflict with the proposed expansions of Krome Avenue near Kendall Drive and the State Road 836 Southwest Extension, but it is recognized that conflicts with these projects are highly speculative at this stage.

ii. Construction and Maintenance Access

714. In the West Divergence Area, while all of the western corridors provide reasonable access for construction and maintenance, access along the FPL West Preferred Corridor and West Consensus Corridor/MDLPA No. 2 may be limited to one-way traffic.

iii. ROW Acquisition

715. For the West Preferred Corridor, FPL has executed agreements in place from all of the landowners involved in the Land Exchange area for conveyance of land clear of encumbrances. Already authorized by Congress, significant investment and commitment has been made to this exchange. It would also encompass portions of the West Consensus Corridor/MDPLA No. 2, MDLPA No. 1, MDLPA No. 3, and the NPCA Corridor.

716. From an engineering/constructability standpoint, the difficulty or ease in acquiring the necessary property interest in the land underlying the corridors is a significant consideration. Following implementation of the Land Exchange, the FPL West Preferred Corridor would be highly desirable from a property acquisition standpoint, as FPL would own all of the necessary property interests for placement of the western transmission lines in the FPL West Preferred Corridor. The remaining corridors are less desirable from this perspective, as FPL would need to acquire permanent easements over numerous

government parcels within any of the alternate corridors. Since FPL does not have eminent domain authority over all government lands, its ability to acquire the necessary easements over government parcels is uncertain. Additionally, consistent with past practice, FPL would seek a ROW over lands owned by the SFWMD, which would lessen this concern for the other western transmission line alternate corridors, and in particular, MDLPA No. 1 and the West Consensus Corridor/MDLPA No. 2, both of which also incorporate the L-31N and L-30 levees.

717. If the Land Exchange is timely implemented, no further ROW acquisition will be required for the West Preferred Corridor. A small portion of the West Consensus Corridor/MDLPA No. 2 will also use properties obtained through the Land Exchange. Between the point where the West Consensus Corridor/MDLPA No. 2 turns east from the SFWMD L-31N ROW and the point where it converges with the FPL West Preferred Corridor west of the Levee substation, FPL will need to establish a new ROW for the western transmission lines.

718. Some of the government parcels in the area where the western alternate corridors diverge from the FPL West Preferred Corridor were purchased with federal funds or other grants that limit the uses of the property. These encumbrances may be overcome if FPL purchases substitute land for the encumbered parcels. But removal of the encumbrances held by federal

agencies would require action or review under the National Environmental Policy Act. It is not known how much time or cost would be required to clear these encumbrances. These uncertainties are the reason FPL is seeking certification of the FPL West Preferred Corridor as a back-up to the West Consensus Corridor/MDLPA No. 2.

d. Cost Comparisons

719. The FPL West Preferred Corridor would cost approximately $229.4 million to construct. MDLPA No. 1 would cost approximately $282.5 million, while the West Consensus Corridor/MDLPA No. 2 would cost around $273.2 million. The NPCA Corridor adjusted centerline alignment would cost approximately $262.15 million. MDLPA No. 3 and the NPCA Corridor centerline would cost approximately $298.25 million and $313.7 million, respectively.

720. Conflicting testimony was presented on the cost of the NPCA Corridor ROW. Testimony by NPCA indicated that a transmission line ROW could be acquired within its alternate corridor for approximately $23.3 million. However, the methodology used to prepare this estimate has not been credited. FPL submitted an appraisal consistent with the Uniform Standards of Professional Appraisal Practice that showed the cost for FPL to acquire a transmission line ROW in the NPCA Corridor would be approximately $84 million. This estimate includes the cost of

the property, any damages to remainder parcels (severance damages), title work, survey work, legal fees, and appraisal fees, but does not include the cost to acquire and substitute lands for parcels within the transmission line ROW with federal encumbrances. Determination of the costs associated with exchanging substitute lands to clear encumbrances on government-owned parcels is not possible until a final ROW for the western transmission lines is identified and negotiations completed on the substitute lands to be accepted.

e. Summary: Least Adverse Impacts, Including Cost

721. Given these considerations, the West Consensus Corridor/MDLPA No. 2 has the least adverse impact, including costs, only if a ROW within that corridor can be acquired in a timely manner and at reasonable cost. If a ROW within the West Consensus Corridor/MDLPA No. 2 cannot be secured in a timely manner and at a reasonable cost, then the FPL West Preferred Corridor has the least adverse impact, including costs. While the FPL West Preferred Corridor is the least expensive and preferable from a land use perspective, including being farthest from urban uses that might potentially conflict with the transmission line, the West Consensus Corridor/MDLPA No. 2 is subject to an agreement limiting acquisition costs to no more than ten percent above the total projected costs of the FPL West Preferred Corridor, rendering the West Consensus Corridor/MDLPA

No. 2 the second least expensive. In addition, the West Consensus Corridor/MDLPA No. 2 is sufficiently wide to allow flexibility to site the ROW within the Corridor in a manner to minimize conflicts. Neither the FPL West Preferred Corridor nor West Consensus Corridor/MDLPA No. 2 encroaches on land designated as UEA. The FPL West Preferred Corridor includes a central crossing of the Pennsuco Wetlands, while the West Consensus Corridor/MDLPA No. 2 avoids such a crossing. From a cost and adjacent land use standpoint, the West Preferred Corridor is somewhat preferable to the West Consensus Corridor/MDLPA No. 2 and significantly preferable to the remaining western transmission line alternate corridors. From an environmental standpoint, the West Consensus Corridor/MDLPA No. 2 is somewhat preferable to the FPL West Preferred Corridor and MDLPA No. 1, but less preferable than the NPCA Corridor. The West Consensus Corridor/MDLPA No. 2 is fairly equivalent to MDLPA No. 1 from an adjacent land use standpoint, but has the added advantages of allowing the placement of transmission lines farther from Everglades National Park and is less expensive than MDLPA No. 1. Also, the West Consensus Corridor/MDPLA No. 2 is less expensive than MDLPA No. 3 or the NPCA Corridor, and is significantly preferable in terms of adjacent land uses and ROW acquisition to these western transmission line alternate corridors. The FPL West Preferred Corridor and West Consensus

Corridor/MDLPA No. 2 are roughly equivalent and both represent, on balance, the corridors with the least adverse impacts, considering the factors set forth in section 403.509(3), including costs.

722. Certification of the West Consensus Corridor/MDLPA No. 2 and the FPL West Preferred Corridor, as conditioned, serves the broad interests of the public by ensuring reliable electric service at a reasonable cost.

V. Conditions of Certification

A. Agreed Upon Conditions of Certification

723. In constructing, operating, and maintaining the Project, including the Plant and its associated non-transmission facilities and transmission lines, FPL has agreed to comply with the Conditions of Certification in Attachment 1 to this Recommended Order.

724. FPL has provided reasonable assurances that the Project, including the Plant and its associated non-transmission facilities and transmission lines, can be constructed in compliance with the agreed-upon Conditions of Certification in Attachment 1.

725. The Department has proposed and FPL has agreed that the conditions in Attachment 1 are appropriate or necessary. They are therefore authorized.

726. The only condition relative to the plant and non-transmission line portion of the Project remaining in dispute is addressed in the "Road Right-of-Way Dedications" section above. That condition is not authorized. Other transmission line conditions of certification proposed by local governments remaining in dispute are discussed below.

B. Disputed Conditions of Certification – Transmission Lines

1. Miami-Dade County

727. The County submitted its Agency Report on the proposed transmission lines associated with the Project to the Department's Siting Coordination Office, pursuant to sections 403.5064(4), 403.507(2), and 403.526(2). The Agency Report proposed 73 conditions of certification relating to the FPL transmission line corridors.

728. The County and FPL reached agreement on conditions to resolve the concerns in the Agency Report enumerated in General Conditions 1-5, 7-25, 27-29, and 32; East Conditions 1-17, 19, 20(b), 21, and 22; and West Conditions 1, 2, 3, 4(b), 5(c), 6-8, and 10-18 (with the exception of certain conditions to be applied in the West Corridor Divergence Area). The County and FPL have not reached agreement on proposed General Conditions 6, 26, 30, and 31; East Conditions 18 and 20; West Conditions 4, 5, and 9; the unnumbered conditions on page 59 of the Agency

Report; and the conditions to be applied in the West Corridor Divergence Area (General Conditions 14-23 and West Conditions 6-8, 11-13, and 16-18). Those conditions remain in dispute between the two parties.

729. FPL will comply with the conditions included in Sections C.VII.A through C.VII.5 of Attachment 1, which reflect the conditions stipulated with the County.

730. The Department's PAR for the transmission line portion of the application did not include some of the County's proposed conditions of certification, noting that section 403.507(3)(c) and rule 62-17.133(4) require that agency recommendations for conditions of certification be limited to those within the proposing agency's jurisdiction and authorized by a specific statute, rule, or ordinance. All of the conditions that remain in dispute between FPL and the County were rejected by the Department in Appendix I to the PAR.

731. Proposed General Condition 6 relating to air quality is rejected because it is based on provisions of state regulations, the County's comprehensive plan, which is not applicable to the proposed transmission lines, and section 24-7(6), MDC, establishing that the County Department of Environmental Resources Management has the authority to render assistance to persons operating equipment which may cause air pollution. The state regulations do not provide a proper basis

for a County condition and the comprehensive plan is not applicable to the proposed transmission lines, as discussed in the Conclusions of Law. Further, FPL established that the proposed transmission lines will not cause air pollution if constructed in compliance with the conditions of certification in Attachment 1. Thus, General Condition 6 is rejected.

732. For the reasons cited previously, proposed General Condition 26 (ROW dedication) is rejected.

733. Proposed General Condition 30 seeks to require FPL to compensate the County for its review of the application. The bases for this condition are sections 403.511(4) and 403.531(4), which allow local governments to charge "appropriate fees." These provisions, however, relate to post-certification reviews, and not review of the application. Thus, proposed General Condition 30 is rejected.

734. Proposed General Condition 31 seeks to require FPL to work with the County and the SFRPC to provide electric vehicle charging stations at County parking lots and other locations. However, the County offered no evidence to support this condition. Thus, proposed General Condition 31 is rejected.

735. Proposed East Condition 18 relates to conditions based on the land use designations of certain areas. These conditions are based on comprehensive plan provisions that are

not applicable to the proposed transmission lines, and are hereby rejected.

736. Proposed East Condition 20 relates to impacts within BNP. FPL is in the midst of federal government agency review of the Project, in which the United States Department of the Interior, representing BNP, is participating. Thus, any conditions regarding activities within BNP will be addressed in that federal process. The County cites only comprehensive plan provisions, which are not applicable to the proposed transmission lines, as bases for this condition. Further, it provided no evidence to even suggest that the proposed transmission lines will create negative impacts within BNP. Thus, proposed East Condition 20 is rejected.

737. Proposed West Conditions 4, 5, and 9 propose to restrict transmission lines based on land use designations and are based entirely on the comprehensive plan. Because the comprehensive plan is not applicable to the proposed transmission lines, these three conditions are rejected.

738. On page 59 of the Agency Report are listed five conditions of certification proposing to preclude the location of transmission lines in certain areas, including most of the West Corridor Divergence Area, based on the East Everglades Area Zoning Overlay District found in chapter 33B, MDC. Those zoning provisions are not applicable to the proposed transmission lines

and are not a proper basis for these proposed conditions. Other agencies, including the Department, SFWMD, and FWC, have proposed conditions that will require FPL to avoid and minimize impacts to the environmental resources in that area, and FPL has established that the transmission lines can be constructed, operated, and located to avoid and minimize impacts to the environmental resources in that area. Thus, these proposed conditions are rejected. Further, although the Department did not originally recommend the proposed conditions relating to wetlands protection and wildlife in its PAR, FPL is willing to accept those conditions in the West Corridor Divergence Area. These conditions are found in Attachment 1, §§ C.VII, I, J, and P.

739. The County has also proposed conditions for the West Consensus Corridor/MDLPA No. 2 that are similar to or the same as the conditions in the FPL West Preferred Corridor. Conditions 1 through 6 are based on the County zoning code and comprehensive plan, are not applicable to the proposed transmission lines, and are rejected. Further, FPL has established that the proposed transmission lines in the West Consensus Corridor/MDLPA No. 2 will not adversely impact the environmental resources in the West Corridor Divergence Area. Even so, FPL is willing to accept the County-proposed conditions relating to wetlands protection and wildlife in the West

Divergence Area. Those conditions have been included in Attachment 1.

740. Proposed Condition VII of County Exhibit 11, relating to alternate corridor access roads, tree islands, and Trail Glades Park, has been partially incorporated by the Department into the Conditions of Certification. FPL has agreed to comply with those conditions recognizing that "tree islands" are defined in section 24-5, MDC, as "a vegetative community located within freshwater wetlands whose dominant vegetation components consist of native hardwood trees and shrubs." Although the County proposed expanded versions of those conditions, those expanded versions are rejected because the County failed to present credible evidence to support those requirements.

741. Because PAC, MDLPA No. 1, MDLPA No. 3, and the NPCA Corridor are not recommended for certification, the County-proposed conditions for those corridors are rejected.

2. City of Miami

742. The City of Miami's Agency Report on the proposed transmission lines proposes conditions 5.1 through 5.15 to address its regulatory and other concerns related to the proposed transmission line. It also recommends denial of the proposed transmission line certification.

743. The City of Miami and FPL have reached an agreement on conditions to resolve the City's concerns set forth in

conditions 5.1, 5.3, 5.7, 5.8, 5.9, 5.11, 5.12, 5.13, 5.14, and 5.15 on the FPL Corridors, and conditions 5.1, 5.3, 5.7, 5.8, 5.9, 5.10, 5.12, 5.13, 5.14, and 5.15 on the Alternate Corridors. The stipulation acknowledged that the City of Miami's proposed conditions 5.2 (undergrounding), 5.4 (zoning), 5.5 (landscaping), 5.6 (EMF), and 5.10 (scenic transportation corridor) for the FPL East Preferred Corridor and 5.2, 5.4, 5.5, and 5.6 for the PAC remain in dispute between the two parties. FPL will comply with the conditions included in sections C.X.A. and C.X.C through C.X.G. of Attachment 1, which reflect the conditions stipulated with the City of Miami.

744. The Department's PAR for the transmission line portion of the application did not include some of the City of Miami's proposed conditions because section 403.507(3)(c) and rule 62-17.133(4) require that agency recommendations for conditions of certification be limited to those within the proposing agency's jurisdiction and authorized by a specific statute, rule, or ordinance. However, the Department included condition 5.10, as proposed by the City of Miami.

745. FPL will comply with the applicable non-procedural requirements of proposed condition 5.10 regarding the City of Miami's Scenic Transportation Corridor starting at Southwest 13th Street and continuing along Coral Way, as reflected in section C.X.B of Attachment 1. FPL also agrees that the

condition should be imposed on the construction of the transmission line within the East Preferred Corridor. This scenic transportation corridor is not located within the PAC, and is not relevant for that corridor.

746. FPL will comply with the applicable non-procedural requirements of the City of Miami's ordinances to protect and minimize impacts to trees in the construction and placement of the transmission line, and to replace or mitigate for any damage to, or removal of trees in, the construction and placement of the transmission line. To address the City of Miami's concerns regarding trees in proposed condition 5.5, FPL agrees that the condition in section II.A of Attachment 2 should be imposed on the construction of the transmission line within either of the east corridors proper for certification.

747. The City of Miami contends that FPL should exceed the applicable requirements of its ordinances to protect against tree impacts and/or replace trees damaged or removed as a result of the transmission line. However, such requirements are undefined, exceed the scope of the ordinances, and are rejected. See § 403.507(3)(c), Fla. Stat.

748. The City of Miami also proposed conditions 5.2 and 5.4 requiring underground construction of the transmission line in either of the east corridors. Those conditions are rejected

for the reasons previously discussed and in the Conclusions of Law.

749. The City of Miami proposed condition 5.6 regarding EMFs in both east corridors. However, it failed to offer into evidence this section of its two Agency Reports. The City's proposed condition is rejected because that topic is exclusively regulated by the Department; FPL has demonstrated that it will comply with the relevant, applicable Department standards; and the City of Miami presented no credible evidence to rebut that showing.

750. The City of Miami proposed condition 5.9 regarding historic resource preservation in both east corridors. On this issue, FPL established that it will comply with the applicable City of Miami non-procedural requirements through the conditions proposed in Attachment 2, section II.B. No credible evidence to the contrary was presented. Accordingly, condition 5.9 is rejected, and the condition proposed in Attachment 2, section II.B. is accepted.

3. City of Coral Gables

751. Coral Gables' Agency Report on the proposed transmission lines proposed conditions A-Q relating to the FPL East Preferred Corridor.

752. Coral Gables and FPL have reached an agreement on conditions to resolve Coral Gables' concerns set forth in

conditions A.5, C.1, D, E.1, E.2, E.3, E.4, F, G, H.1, H.2, I., J.1, J.2, K, L, M.1, M.2, M.3, N, O, and P in the Agency Report. However, they have not reached agreement on proposed conditions A.1, A.2, A.3, A.4, A.6, B, C.2, and Q. Those conditions remain in dispute between the two parties.

753. FPL will comply with the conditions included in sections C.VIII.A. through C.VIII.P. of Attachment 1, which reflect the conditions stipulated with Coral Gables.

754. The Department's PAR for the transmission line portion of the application did not include some of Coral Gables' proposed conditions because they fail to meet the requirements of section 403.507(3)(c) and rule 62-17.133(4). All of the conditions that remain in dispute between FPL and Coral Gables were rejected by the Department in Appendix I to the PAR.

755. Proposed conditions A.1, A.2, A.3, and A.4 relate to aesthetic impacts of the proposed transmission line and are based on the zoning code and comprehensive plan. They are not applicable to the East Preferred Corridor and are rejected.

756. Proposed condition A.6 seeks to require FPL to compensate Coral Gables for alleged "economic impacts" of the East Preferred Corridor. As discussed above, the more persuasive evidence establishes that the East Preferred Corridor will not cause negative economic impact to Coral Gables or properties within the City. Further, there is no ordinance

applicable to the proposed transmission lines that provides a basis for this condition. The proposed condition is rejected.

757. Proposed condition B seeks to require FPL to follow state laws regarding eminent domain in the acquisition of property rights for the proposed transmission line. However, FPL is already required to comply with state laws and regulations in the construction, operation, and maintenance of the transmission line, including in the acquisition of property rights. Further, Coral Gables cites no ordinance as a basis for this condition. Condition B is rejected.

758. Proposed condition C.2 seeks to require FPL to build the transmission line underground within the City, at FPL's expense. Coral Gables cites only its zoning code and comprehensive plan in support of the condition, which are not applicable to the proposed transmission line. For the reasons discussed above, this condition is rejected.

759. Finally, proposed condition Q, paragraphs 1 and 2, seek to require FPL to indemnify the City for any work done by FPL within the City. FPL is committed to comply with applicable ordinances requiring such indemnification and to comply with Condition C.VIII.P in Attachment 1 addressing this subject. Thus, no additional condition is required. Proposed condition Q, paragraph 3, seeks to require FPL to comply with all federal, state, and local regulations. FPL has committed to do so.

Thus, this condition is not required. Proposed condition Q, paragraph 4, seeks to require FPL to provide Coral Gables with any terms, benefits, or concessions or agreements provided to any other local government. Coral Gables has provided no applicable ordinance or other authority as a basis for this condition, and it is hereby rejected. Proposed condition Q, paragraph 5, adopts the recommendations and reports of the SFWMD, SFRPC, and the County. The issues of concern to those entities, as they relate to the FPL East Preferred Corridor, have been resolved to the satisfaction of those three agencies. Further, Coral Gables has identified no applicable non-procedural ordinance providing a regulatory basis for this condition. Accordingly, these proposed conditions are rejected.

4. Village of Pinecrest

760. Pinecrest's Agency Report on the proposed transmission lines proposed conditions A.1 through D.8 to address its regulatory and other concerns related to the proposed transmission line. It also recommended denial of the proposed transmission line certification.

761. The Department included proposed conditions C.3 (nuisances) and C.4 (emergency management) in the PAR. FPL will comply with those conditions, now found in section C.XII.A and C.XII.B of Attachment 1.

762. In addition, to address Pinecrest's concerns reflected in conditions A.2 (solid waste), A.3 (noise), B.1 (location of the transmission line within Pinecrest), B.3 (trees), D.2 (obstructions of visibility), D.5 (trees), D.6 (trees), and D.8 (ROW restoration), FPL agrees that the conditions in section III.A. through III.F. of Attachment 2 should be imposed on the construction of the transmission line within the East Preferred Corridor. FPL is willing to comply with these conditions and has demonstrated its ability to do so.

763. Proposed condition B.2 seeks to require that FPL coordinate with appropriate authorities to accommodate expansion plans for the Busway and Metrorail along U.S. Highway 1. FPL has coordinated with DOT, MDX, and Miami Dade Transit and reached agreement with those agencies on conditions of certification addressing future facilities. Thus, FPL has satisfied this requirement and there is no need for inclusion of the proposed condition in this Recommended Order.

764. For reasons previously stated, proposed condition C.1, which seeks to require FPL to construct the transmission line underground, is rejected.

765. Proposed conditions C.2 (pole placement information), D.1 (historical resources), D.3 (appearance of structures), D.4 (compliance with comprehensive plan), and D.7 (signs) seek to require FPL to comply with chapter 30 of Pinecrest's LDRs and

its comprehensive plan. These conditions are rejected for the reasons previously found.

5. Cities of Doral and South Miami

766. Doral and South Miami also proposed conditions of certification beyond those included by the Department in Attachment 1. However, these cities provided no evidence or legal argument to support these conditions, and they are rejected.

VI. Public Testimony and Comments

767. Six sessions on four separate days were held to allow members of the public to testify or offer comments on the Project. In addition, a number of written comments or letters were submitted by mail. Members of the public testified both in favor of and in opposition to the Project.

768. Members of the public who testified in favor of the Project commented on the economic benefits of the Project and specifically focused on the potential for job creation. Many members of the public also commented that they believe nuclear power is safe and clean and that this Project will allow South Florida to sustainably meet its future energy needs. Several members of the public testified that FPL is a good corporate citizen and environmental steward.

769. The individuals who testified in opposition to the Project raised a wide range of concerns, such as economic

impacts, property values, health-related and aesthetic impacts of the proposed transmission lines, as well as safety and environmental impacts of various features of the Project.

770. Some members of the public expressed concerns that the Project is not needed and should be deferred in favor of other energy alternatives. Several individuals testified that they believe the PSC's determination of need is out of date and should be reconsidered. A few members of the public testified that they are concerned that the power to be generated by the new nuclear units is actually intended for other areas of Florida. As to these concerns, the PSC has made its determination that the Project is needed to meet the needs of FPL's customers, based in part on the PSC's consideration of renewable and other energy resources. The PSC's need determination remains in legal effect. The PSC annually reviews the Project's costs.

771. Several members of the public expressed concerns related to radiological safety of the nuclear units. However, issues related to radiological safety are exclusively considered by the NRC and are beyond the scope of this proceeding.

772. Some members of the public expressed concerns about the safety of new nuclear units at the Turkey Point location in the event of a natural disaster, questioning sea level rise projections and storm surge and high winds during hurricanes.

Another member of the public testified regarding concerns related to the use of deep well injection. FPL considered reasonable sea level rise and storm surge projections in the design of the proposed nuclear units. Regarding the deep well injection, the evidence reflects that the Boulder Zone, which will receive the injection of Project wastewaters can adequately confine the planned volumes of wastewater. Underground injection has been extensively used in Florida.

773. Some members of the public testified that they are concerned about impacts to the Biscayne Aquifer, specifically expressing concerns about saltwater intrusion and other contaminants entering the water supply. A few members questioned how well isolated the proposed radial collector well laterals below Biscayne Bay will be from the Biscayne Aquifer. Others expressed concerns about conflicting water uses potentially increasing water costs. One individual testified that he believed that the APT was not adequate. FPL conducted an appropriate APT, in accordance with accepted professional procedures, at the site of the proposed radial collector wells as part of the extensive groundwater modeling of those wells. That modeling and other evaluations demonstrated that the operation of the radial collector wells would not cause saltwater intrusion or cause contamination or other adverse impacts to groundwater or drinking water sources. Under the

conditions of certification and an agreement with the County, FPL will use reclaimed water from the County as the primary source of cooling water and will use the radial collector wells only when reclaimed water is not available in sufficient quantity or quality. FPL's use of reclaimed water is a beneficial and cost-effective means of maximizing the use of reclaimed water and helps the County meet its reclaimed water compliance requirements.

774. A few members of the public are concerned about potential negative environmental impacts to Biscayne Bay. The evidence shows that the Project will not have negative effects on Biscayne Bay. Construction in upland areas near the Bay for the radial collector wells and the barge unloading area will utilize measures to prevent adverse impacts from runoff that might reach the Bay. The radial collector well laterals will be drilled beneath the Bay without any dredging in the Bay itself. Operation of the radial collector wells will not adversely affect the water quality including salinity, or the ecological resources including fisheries in the Bay, and the radial collector wells will be closely monitored to ensure there are no adverse impacts.

775. Members of the public testified both in favor of and in opposition to the proposed transmission lines. Several of the individuals who testified in opposition were only opposed to

the FPL East Preferred Corridor and supported the Project if the alternate corridor proposed by Coral Gables and Pinecrest is certified instead. Similarly, several individuals were only opposed to the alternate corridor proposed by Coral Gables and Pinecrest and support the Project with certification of the FPL East Preferred Corridor. The FPL East Preferred Corridor is the corridor with the least adverse impacts, including costs, when considering and balancing the statutory criteria in section 403.509(3).

776. Several individuals testified about negative aesthetic impacts or blight that may be caused by the installation of transmission lines within their communities. Several also stated that they were concerned about negative impacts to quality of life. Specific aesthetic concerns included the height and diameter of the transmission line poles as well as the sway of the transmission lines. A few individuals were concerned about maintaining the historic aesthetic of Coral Gables. The greater weight of the evidence offered with respect to quality of life impacts from the transmission lines did not support these concerns as expressed by the public. Aesthetic and economic impacts have been addressed, and the height and diameter of the transmission line poles was established as customary for FPL. FPL complies with local tree ordinances, including tree replacement planting where

appropriate. Landscaping and trees can help to minimize any aesthetic impacts. The final transmission line alignment will take into account approved and proposed development to be constructed in the area. The testimony established that while transmission lines in urban settings may involve aesthetic impacts, those aesthetic impacts from placing transmission lines such as within any of the eastern corridors would be minimal, and 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. Additionally, FPL is not required to comply with zoning ordinances relating to aesthetics because they are not applicable non-procedural requirements with which FPL is required to demonstrate compliance in the siting of transmission lines.

777. A few members of the public testified that they are concerned that the tree canopy and other landscaping will be negatively affected by the proposed transmission lines. FPL will comply with numerous conditions regarding NFCs and tree pruning/maintenance that will avoid adverse impacts on tree canopy. Additionally, FPL restores the landscaping in the ROW following construction in compliance with applicable regulations.

778. Members of the public expressed concerns about negative economic impacts that may be caused by the installation of transmission lines within their communities, including potential reductions in property values and the potential for a negative impact on the economic development of the areas surrounding the proposed FPL East Preferred Corridor. While the evidence was conflicting on this point, the more persuasive evidence demonstrated that the economic effects on the property values of residential or commercial properties adjacent to the transmission lines would be nominal.

779. Several members of the public expressed concerns that the proposed transmission lines and associated poles are not in compliance with local codes and ordinances. A few members of the public expressed concerns about "humming" noises caused by the transmission lines. The transmission lines meet all applicable non-procedural requirements, including noise standards. Local zoning codes and LDRs are not applicable non-procedural requirements with which a transmission line is required to comply. Nevertheless, FPL has agreed to conditions of certification that incorporate, to the extent practicable, the desires and concerns of the local governments through which the transmission lines pass.

780. Several members of the public expressed concerns that the proposed transmission lines will have negative impacts on

multi-modal transportation uses within FPL's East Preferred Corridor. On this issue, the evidence established that the construction, operation, and maintenance of the transmission lines in proximity to the Metrorail facility or the U.S. Highway 1 multi-modal corridor will not interfere with the operation of the Metrorail. Multi-modal uses will not be affected.

781. A few members of the public expressed concerns about safety and health risks that they believe are associated with high-voltage transmission lines. The evidence established and the parties stipulated that the transmission lines will not have adverse effects on human health. In addition, the design and construction of the transmission line structures conforms to NESC requirements adopted by the PSC to protect public safety. No competent evidence was presented that proximity to transmission lines like the type proposed would cause adverse health effects. Also, there was no competent evidence of adverse health impacts associated with these lines.

782. A few members of the public expressed concerns about interference that could be caused by the transmission lines, specifically referencing EMF and interference with radio communications. The evidence established that there will be no interference with radio or microwave communications.

783. Some members of the public testified that they believe the proposed transmission lines should be or are

required to be placed underground. FPL is proposing underground construction only where an overhead design is not feasible; overhead design is feasible in all locations except when crossing the Miami River.

784. Several members of the public expressed concerns that some existing transmission lines are in poor condition and will never be improved if the FPL East Preferred Corridor is certified. The evidence established that FPL replaces inadequate or outdated transmission lines and poles on an as-needed basis; the certification of the East Preferred Corridor would not change this practice.

785. Several members of the public testified that they are concerned about allowing certification of transmission line corridors prior to the issuance of a license for the nuclear units by the NRC or a commitment to build the nuclear units by FPL. As discussed in the Conclusions of Law, the NRC proceeding need not be completed prior to the issuance of the site certification under the PPSA, including for the transmission lines.

786. Several members of the public expressed concerns about potential negative environmental and aesthetic impacts to Everglades National Park from the transmission lines. Several individuals were concerned about impacts to wading bird colonies. A few individuals expressed a concern about directing

freshwater away from the federal Everglades restoration program. A few other individuals expressed concerns about the proposed Land Exchange. FPL has minimized the impacts to the Everglades National Park by withdrawing its request to certify the West Secondary Corridor, which would have bisected the Everglades National Park. The evidence established that construction, operation, and maintenance of the transmission lines will not be inconsistent with Everglades restoration. Issues related to the Land Exchange involving the western corridors will be addressed by the United States Department of Interior. The evidence established that the transmission lines in the western corridors would not have adverse impacts to wading bird colonies.

787. Finally, one member of the public testified that traffic during construction within FPL's East Preferred Corridor is a concern. The evidence established that traffic impacts between both the East Preferred Corridor and the alternate corridor proposed by Coral Gables and Pinecrest are comparable, and these impacts only occur during the short time frame of construction.

CONCLUSIONS OF LAW

A. General

1. Parties and Standing

788. Although some did not actively participate, the parties to this proceeding are: FPL; Department; Board of

Trustees; DOT; MDX; FWC; SFWMD; SFRPC; the County; Monroe County; Coral Gables; Doral; City of Miami; South Miami; Medley; Pinecrest; Coconut Grove Village Council; Kendale Homeowners' Association; MDLPA; NPCA; Limonar; White Rock Quarries; and Kendall Federation of Homeowners Associations, Inc. The standing of each party is not disputed.

2. Intent

789. This certification proceeding was held pursuant to the PPSA and chapter 62-17, which set out the procedures for power plant siting review. The intent of this licensing process is "to seek courses of action that will fully balance the increasing demands for electrical power plant location and operation with the broad interests of the public." §403.502, Fla. Stat.

3. Procedural Requirements/Statutory Prerequisites

790. The evidence demonstrates compliance with the procedural requirements of the PPSA.

791. The Department and reviewing agencies issued reports in satisfaction of their various statutory duties under the PPSA. All notices required by law were timely published by FPL, the Department, and proponents of alternate corridors in accordance with section 403.5115 and rule 62-17.281. Proofs of publication were timely provided to the Department in accordance with rule 62-17.281(12). All direct written notices required by

law were timely mailed, and lists of landowners and residences notified were timely submitted to the Department in accordance with subsections 403.5115(6) and (7). The Department sent direct mailings for the sovereign submerged lands easements for the radial collector well laterals and the Miami River crossing in accord with section 253.115 and rule 18-21.005(3).

792. At the commencement of the final hearing on July 8, 2013, the City of Miami moved for a continuance of the hearing, alleging that it had inadequate time to prepare for hearing or to conduct discovery; that the proceeding should be postponed until the NRC had completed its proceedings; and that FPL had not made certain showings related to cultural resources and population densities. The motion was denied. The motion was not timely filed under rule 28-106.210, which requires that motions for continuances must be filed no later than five days prior to commencement of a hearing, absent a showing of an emergency. The City of Miami made no showing of an emergency as the basis for its motion. Further, the arguments made in support of a continuance (and at various other times during the proceeding) are not well-founded substantively.

793. The City of Miami failed to demonstrate it was unable to engage in meaningful prehearing discovery. The Initial Order in this proceeding was issued on July 9, 2009, and expressly stated: "Discovery may be undertaken in the manner provided in

the Florida Rules of Civil Procedure and, if desired, should be initiated immediately." The City of Miami has been a party to the proceeding since filing a Notice of Intent to Be a Party on August 20, 2009. The undersigned recognizes, however, that the lengthy agency review process delayed the establishment of final deadlines, including a certification hearing date, for several years. Even so, the final certification hearing date was approved by Order dated August 21, 2012, or almost a year before the hearing began. Further, the City of Miami did not object to procedural and discovery deadlines established by Order dated March 26, 2013. The City of Miami's argument that it was not able to engage in meaningful discovery is not well taken.

794. Contrary to an assertion by some parties, the NRC proceeding need not be completed prior to the issuance of the site certification under the PPSA. The PPSA sets out a specific statutory process and time line for processing site certification applications. The Legislature did not allow or require an alternate time frame when federal approvals are pending. In fact, there is Siting Board precedent for issuance of the site certification while an application is pending at the NRC. See In re: Progress Energy Fla. Levy Nuclear Project Units 1 and 2, 2009 Fla. ENV LEXIS 150 at *23 (certification approved in 2009 even though NRC approval was not expected until late 2011).

795. The PSC's need determination has not expired, and it is not so "stale" as to require a new need determination. As explained in the Findings of Fact, the PSC has issued an affirmative need determination for the Project in accordance with section 403.519. The PSC considers the continued feasibility of the Project annually. Under section 403.519(4), the PSC "shall be the sole forum for the determination of [need] and the issues addressed in the petition, which accordingly shall not be reviewed in any other forum, or in the review of proceedings in such other forum." § 403.519(4), Fla. Stat. (emphasis added). Thus, reconsideration of the need for the Project in this proceeding is improper and contrary to the statute. "The PSC is the sole judge as to the need for the power plant, with the [administrative law judge] and, indeed, the Siting board bound by that determination." Fla. Chapter of the Sierra Club v. Orlando Utils. Comm'n, 436 So. 2d 383, 387 (Fla. 5th DCA 1983) ("The determination of need is solely within the jurisdiction of the PSC, and any reevaluation of need at the certification hearing would be wasteful and improper. The purpose of that hearing is to judge the impact of the plant, after a need for the plant has been determined, on the surrounding environment. This determination does not require a weighing of the need beyond that done by the PSC, and the hearing officer and Board in this case were correct in so

holding."); see also In re: Progress Energy Fla. Levy Nuclear Project Units 1 and 2 , 2009 Fla. ENV LEXIS 151 at *6-7 (issues relating to need and reliability were stricken as those matters were determined by the PSC and were not considered in the certification hearing).

5. Burden of Proof

796. As the applicant for certification, FPL "carries the 'ultimate burden of persuasion' of entitlement through all proceedings, of whatever nature, until such time as final action has been taken by the agency." In re: Progress Energy Fla. Levy Nuclear Project Units 1 and 2, 2009 Fla. ENV LEXIS 151 at *114; Fla. Dep't of Transp. v. J.W.C. Co., Inc., 396 So. 2d 778, 787 (Fla. 1st DCA 1981). The standard for FPL's burden of proof is one of reasonable assurances, not absolute guarantees, that the applicable criteria for the issuance of the certification have been satisfied. In re: Progress Energy Fla. Levy Nuclear Project Units 1 and 2, 2009 Fla. ENV LEXIS 151 at *114-115. "Reasonable assurance" contemplates a "substantial likelihood that the project will be successfully implemented." Metro. Dade Cnty. v. Coscan Fla., Inc., 609 So. 2d 644, 648 (Fla. 3d DCA 1992); Hamilton Cnty. Bd. of Cnty. Comm'rs v. Fla. Dep't of Envtl. Reg., 587 So. 2d 1378, 1387 (Fla. 1st DCA 1991). FPL is "not required to disprove all the 'worst case scenarios' or 'theoretical impacts' raised" by parties or members of the

public in the proceeding. In re: Progress Energy Fla. Levy Nuclear Project Units 1 and 2, 2009 Fla. ENV LEXIS 151 at *115.

797. FPL has met its burden of showing by a preponderance of the evidence its entitlement to site certification under the PPSA for the Project, including the plant and transmission line facilities. The evidence submitted by FPL concerning the Plant and non-transmission portions of the Project has not been rejected or contested by any of the agency parties, which have expertise in the matters involved in this Project and which have reviewed the information submitted by FPL. Although the City of Miami challenged this evidence through cross-examination of FPL and agency witnesses, those efforts are not credited. The evidence offered by FPL regarding the plant and non-transmission portions of the Project is therefore entitled to acceptance as meeting FPL's burden of proof in support of issuance of a site certification for the Project. J.W.C., 396 So. 2d at 787.

798. In addition to FPL's evidence, the other evidence in support of issuance of certification for the Project includes the Department's PARs and testimony of the Department staff. The Department's PARs reflect various agencies' review of the Project. Those reports and the Department's testimony demonstrate the Project's compliance with applicable regulatory requirements, including the criteria for certification under section 403.509(3). These requirements include, but are not

limited to, air quality standards, ground and surface water use standards, state and local water quality standards, environmental resource permitting standards, wetland mitigation requirements, wildlife protection requirements, noise-related standards, traffic standards, EMF standards, tree ordinances, and applicable local comprehensive plans and LDRs, including zoning approvals and conditions contained in those approvals. Cumulatively, this evidence from FPL, the Department, and other agencies comprises the competent, substantial evidence in support of certification of the Project.

799. Once an applicant makes a preliminary showing of its entitlement to certification, as FPL has done here, the burden shifts to those opposing the Project to offer "contrary evidence of equivalent quality" to show why the certification should be denied. J.W.C., 396 So. 2d at 789. In this case, no agency or party offered credible evidence in opposition to that presented by FPL on issues related to the plant and non-transmission facilities, and no agency or party offered evidence of equivalent quality as that presented by FPL on any portion of the Project. The testimony offered and the issues raised by the public at the public testimony sessions regarding the Project are addressed above. None of that testimony and evidence as to the Project was of equivalent quality to that presented by FPL.

B. Plant and Non-Transmission Line

1. Criteria for Non-Transmission Line

800. The following criteria in section 403.509(3) apply to certification of the plant and non-transmission lines:

> (3) In determining whether an application should be approved in whole, approved with modifications or conditions, or denied, the board, or secretary when applicable, shall consider whether, and the extent to which, the location, construction, and operation of the electrical power plant will:
>
> (a) Provide reasonable assurance that operational safeguards are technically sufficient for the public welfare and protection.
>
> (b) Comply with applicable non[-]procedural requirements of agencies.
>
> (c) Be consistent with applicable local government comprehensive plans and land development regulations.
>
> (d) Meet the electrical energy needs of the state in an orderly, reliable, and timely fashion.
>
> (e) Effect a reasonable balance between the need for the facility as established pursuant to s. 403.519 and the impacts upon air and water quality, fish and wildlife, water resources, and other natural resources of the state resulting from the construction and operation of the facility.
>
> (f) Minimize, through the use of reasonable and available methods, the adverse effects on human health, the environment, and the ecology of the land and its wildlife and the ecology of state waters and their aquatic life.

(g) Serve and protect the broad interests of the public.

Based upon the evidence presented at the hearing, FPL has demonstrated that the plant and non-transmission line portion of the Project meets the criteria for certification set forth in section 403.509(3).

a. Operational Safeguards (section 403.509(3)(a))

801. In accordance with section 403.509(3)(a), and as explained above, FPL has provided reasonable assurance that the operational safeguards for the construction, operation, and maintenance of the plant and non-transmission line portion of the Project are technically sufficient for the public welfare and protection. The radial collector wells will use an established design and their use will be limited by conditions of certification in order to protect the resources of Biscayne Bay. The cooling towers will utilize proven technology to limit air emissions to the most stringent levels. Project roadways will be designed to meet local and state standards, and will be removed following construction of the Project. Stormwater associated with the Project will be treated and routed to the onsite wastewater treatment facility or to appropriate treatment basins or facilities, thereby protecting local waters. Use of reclaimed water as the primary source of cooling tower makeup water will meet Department standards to protect the public,

while also avoiding the need to use other, more valuable sources of water for cooling. Project wastewaters will be disposed via underground injection wells similar to ones used elsewhere in Florida or to the existing industrial wastewater treatment system. The Project's sanitary wastewater treatment facility will replace other existing sanitary treatment facilities and eliminate the existing disposal of sanitary wastewaters in the shallow aquifer. FPL's wetland mitigation plan can be implemented, assuring the protection of the public welfare in preserving wetland functions in the state. Wildlife protection measures will be implemented in the design of the Project including Project roadways to minimize impacts to native wildlife species.

802. Issues related to radiological safety are preempted by federal regulation under the Supremacy Clause of the United States Constitution and the Atomic Energy Act, 42 U.S.C § 2011, et seq. The Project must be approved by the NRC which regulates radiological safety of nuclear power plants. The NRC preempts the State on safety issues related to the nuclear power plants. See, e.g., Pacific Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n, 461 U.S. 190, 205 (1983) ("Congress . . . intended that the federal government should regulate the radiological safety aspects involved in the construction and

operation of a nuclear plant . . . ."). Therefore, radiological safety issues were not considered in the certification hearing.

b. Non-procedural Requirements (section 403.509(3))

803. FPL has provided reasonable assurance that the location, construction, operation, and maintenance of the plant and non-transmission line portion of the Project will comply with all applicable non-procedural requirements of the Department, SFWMD, FWC, DOT, DHR, DACS, the County (with the exception of the variance noted below), and the City of Homestead.

804. FPL has provided reasonable assurance that the plant and non-transmission portion of the Project will not be inconsistent with CERP and will be consistent and in compliance with all applicable non-procedural requirements related to: surface and groundwater quality, including applicable surface water and groundwater quality standards; underground injection of wastewater; consumptive use of water; storage and treatment of stormwater; flood protection; wetland protection and mitigation; handling of solid and hazardous wastes; air quality; air space; open burning; noise; lighting; protection of historic and archaeological resources; traffic impacts; protection of wildlife, including threatened and endangered species; protection of native plants (including listed plants and their preservation); and the overall objectives of CERP.

805. FPL has provided reasonable assurance that the location, design, construction, operation, and maintenance of the radial collector wells; the above-ground storage tanks; the construction access roadways; the equipment barge unloading area; the potable water and reclaimed water pipelines; the reclaimed water treatment facility; the stormwater management systems for the plant and non-transmission line associated facilities; and the use of fill material will be consistent and in compliance with all applicable non-procedural requirements of the Department and other agencies.

806. FPL has provided reasonable assurance that the location, design, construction, operation, and maintenance of the sanitary wastewater system, including the on-Site sanitary wastewater treatment plant, will be consistent and in compliance with all applicable non-procedural requirements, with the exception of section 24-43.1(6), MDC, from which FPL has requested a variance.

807. FPL should be granted a variance from section 24-43.1(6) to allow use of the on-site package sanitary treatment plant and other on-site cooling water and wastewater treatment and disposal in lieu of connecting the Project to a public sanitary sewer line for treatment and disposal of these wastewaters by the County. Granting of the variance will not be detrimental to the public health, welfare, and safety; will not

create a nuisance; and will not materially increase the levels of pollution in the County.

808. FPL has provided reasonable assurance that the location, design, construction, operation, and maintenance of the underground injection control system will be consistent and in compliance with all applicable non-procedural requirements, subject to separate permitting requirements under the underground injection control program. FPL has provided reasonable assurance that the disposal of Project wastewaters by underground injection will comply with chapter 62-528, which sets forth the requirements for such disposal to protect the State's underground sources of drinking water.

c. Consistency with Comprehensive Plans and LDRs (section 403.509(3)(c))

809. Pursuant to section 403.509(3)(c), the location, construction, and operation of the Project will be consistent with applicable local comprehensive plans and LDRs, including all conditions of any land use approvals.

810. FPL has provided reasonable assurance that the plant and non-transmission line portion of the Project is consistent with the CDMP, the County's LDRs, and the City of Homestead's comprehensive plan and code.

811. FPL has provided reasonable assurance that the plant and non-transmission line portion of the Project is consistent

with the SFRPC Strategic Regional Policy Plan and the State Comprehensive Plan.

d. Meet the Electrical Energy Needs of the State in an Orderly, Reliable, and Timely Fashion (section 403.509(3)(d))

812. As the PSC has previously found, there is a need for the Project. The evidence presented demonstrates that the Project will meet that need in an orderly, timely, and reliable fashion.

e. Effect a Reasonable Balance Between the Need for the Facility and Environmental Impacts (section 403.509(3)(e))

813. Pursuant to section 403.509(3)(e), the Project will effect a reasonable balance between the need for the facility and the impacts resulting from construction and operation of the facility, including impacts to air and water quality, fish and wildlife, water resources, and other natural resources of the state. The plant and non-transmission line portion of the Project will not cause or contribute to any unmitigated adverse environmental impacts to air, water, and natural resources or local community facilities. The Project will provide extensive public benefits, including significant use of reclaimed water, and substantial economic and fiscal benefits. Certification of the Project represents a reasonable balance between the need for Project and its impacts.

f. Minimize Adverse Effects on Human Health, the Environment, and the Ecology of the Land and its Wildlife and the Ecology of State Waters and Their Aquatic Life (section 403.509(3)(f))

814. Pursuant to section 403.509(3)(f), the plant and non-transmission line portion of the Project will minimize, through the use of reasonable and available methods, the adverse effects on human health, the environment, and the ecology of the land and its wildlife and the ecology of state waters and their aquatic life. The Project will comply with applicable non-procedural requirements related to the protection of air, surface water and groundwater quality, fish and wildlife, and other requirements designed to protect the environment. The Project's use of reclaimed water will minimize impacts to local water resources, without impacting potable wellfields. The design and operation of the backup radial collector well system beneath the surface of Biscayne Bay will minimize impacts to the water quality and ecological resources of the Bay, including its aquatic life. Wastewaters during operation will be injected deep underground and away from underground sources of drinking water, thereby minimizing the Project's impacts to the quality of surface and groundwater resources. The Project and its various facilities, including roadways and pipelines, have been designed and sited to minimize, eliminate, and reduce impacts to

wetlands and wildlife habitat, including areas used by crocodiles, panthers, and manatees. Construction of the Project will involve limited work in open waters frequented by manatees, and will be undertaken using measures to protect manatees. Other wildlife protection measures, including underpasses and fencing, will be incorporated into the design of the Project's temporary roadways to minimize impacts to wildlife. Siting of the new generating units within a disturbed area of the existing wastewater treatment facility will minimize impacts to wetlands and valuable habitat. FPL will mitigate for these and other wetland impacts. Project facilities such as roads and pipelines have been co-located with other existing linear facilities, minimizing the impacts to the public and to natural resources, including wetlands, from construction of those facilities.

g. Serve and Protect the Broad Interests of the Public (section 403.509(3)(g))

815. Pursuant to section 403.509(3)(g), the certification of the Project will serve and protect the broad interests of the public.

816. The evidence demonstrates that the Project fully satisfies all of the criteria for certification under the PPSA.

C. Transmission Lines

1. Statutory Requirements

817. Certification of the transmission lines and associated facilities is also governed by section 403.509. Paragraph (4)(a) provides the following evaluation criteria:

> (4)(a) Any transmission line corridor certified by the board, or secretary if applicable, shall meet the criteria of this section. When more than one transmission line corridor is proper for certification under s. 403.503(11) and meets the criteria of this section, the board, or secretary if applicable, shall certify the transmission line corridor that has the least adverse impact regarding the criteria in subsection (3), including costs.

2. Applicable Non-procedural Requirements/Local Government Comprehensive Plans or LDRs

818. In determining whether a PPSA application should be approved in whole, approved with modifications or conditions, or denied, the Siting Board must consider, among other things, whether, and the extent to which, the location, construction, operation, and maintenance of the electrical power plant will: (1) comply with applicable non-procedural requirements of agencies, and (2) be consistent with applicable local government comprehensive plans and LDRs. See § 403.509(3)(b) and (c), Fla. Stat.

819. The PPSA defines "non[-]procedural requirements of agencies" as "any agency's regulatory requirements established

by statute, rule, ordinance, zoning ordinance, land development code, or comprehensive plan, excluding any provisions prescribing forms, fees, procedures, or time limits for the review or processing of information submitted to demonstrate compliance with such regulatory requirements." § 403.503(21), Fla. Stat.

820. There are no local government comprehensive plans or LDRs that are applicable to the proposed transmission lines and pipelines in this case. See §§ 403.509(3)(b), 403.509(3)(c), Fla. Stat. Florida courts have determined that local government comprehensive plans and LDRs do not apply to regulate the location and siting of linear facilities such as electrical transmission lines and pipelines. Fla. Power Corp. v. Seminole Cnty., 579 So. 2d 105, 107 (Fla. 1991)("if 100 such municipalities each had the right to impose its own requirements with respect to installation of transmission facilities, a hodgepodge of methods of construction could result and costs and resulting capital requirements could mushroom"); Fla. Power Corp. v. Gadsden Cnty., Case No. 05-689-CAA (Fla. 2d Cir. Order and Final Judgment of Dec. 6, 2005). The PSC and Siting Board's authority to regulate FPL's proposed electrical transmission lines and corridors, including the access roads to facilitate construction and maintenance of such lines and the pipelines for reclaimed water and potable water, preempts the authority of the

County and other local governments to regulate them. Moreover, they lack any authority to regulate same under chapter 163 or under their independent home rule authority.

821. With respect to the PSC's preemption, the PSC has "exclusive and superior" jurisdiction to "regulate and supervise each public utility with respect to its rates and service," including electrical transmission lines. § 366.04(1), Fla. Stat. See also § 366.04(5), Fla. Stat. Generally, local ordinances, including comprehensive plans and LDRs, that would encroach upon this "exclusive and superior" jurisdiction of the PSC over electric services are invalid and unenforceable. Seminole County; Gadsden County; In re: Petition by City of Parker, PSC-003-0598-DS-EU (FPSC May 12, 2003).

822. With respect to the Siting Board's preemption, the Legislature enacted the PPSA to empower the Siting Board to decide on a "state position with respect to each proposed [power plant] site and its associated facilities." § 403.502, Fla. Stat. Consequently, the Siting Board's authority to regulate and certify "electrical power plant sites and electrical power plants" as defined in the PPSA preempts local government authority to regulate the same. § 403.510(2), Fla. Stat. ("[t]he state hereby preempts the regulation and certification of electrical power plant sites and electrical power plants"); see also §§ 403.511(1) and (3), Fla. Stat. (reserving to the

state the authority to certify and approve the location of such facilities and their associated infrastructure). While the Siting Board must consider whether and the extent to which a power plant and its associated facilities are consistent with applicable local land use and zoning requirements, it is not bound by local requirements. See §§ 403.50665, 403.508(1), 403.509(3), Fla. Stat.

823. Here, the County and municipalities lack the authority to regulate FPL's transmission lines and corridors because their authority to do so has been preempted by the PSC and the Siting Board under these statutes. Accordingly, the County and municipalities may not impose the plan consistency requirement of section 163.3194 or any LDRs to these facilities.

824. The County and municipalities lack any authority to regulate the Project and its associated transmission lines under chapter 163, or under their independent home rule authority. See Seminole County.

825. The definition of "development" under section 380.04 excludes "[w]ork by any utility and other persons engaged in the . . . transmission of . . . electricity . . . for the purpose of inspecting, repairing, renewing, or constructing on established rights-of-way any . . . pipes, . . . power lines, towers, poles, . . . or the like." § 380.04(3)(b), Fla. Stat. The "creation

or termination of rights of access" is also expressly excluded. § 380.04(3)(h), Fla. Stat.

826. This definition and the exclusions from it apply to the authority that a local government exercises under chapter 163 when adopting and enforcing a comprehensive plan or LDR. See § 163.3164(14), Fla. Stat. (incorporating section 380.04 into chapter 163 for purposes of local comprehensive plans and LDRs). Therefore, local governments are prohibited from exercising any authority to regulate the use and development of land through a comprehensive plan or LDR when it comes to matters encompassed by the exclusions in section 380.04(3).

827. The Florida Supreme Court, three District Courts of Appeal, and the Florida Department of Community Affairs have all confirmed this construction of the statute. See, e.g., Rinker Materials Corp. v. Town of Lake Park, 494 So. 2d 1123, 1126 (Fla. 1986) (relying upon the definition of "development" to preclude application of comprehensive planning requirements); St. Johns Cnty. v. Dep't of Cmty. Affrs., 836 So. 2d 1034 (Fla. 5th DCA 2002) (same); Love PGI Partners, LP v. Schultz, 706 So. 2d 887 (Fla. 5th DCA 1998), approved by Schultz v. Love PGI Partners, LP, 731 So. 2d 1270 (Fla. 1999) (same); Robbins v. City of Miami Bch., 664 So. 2d 1150 (Fla. 3d DCA 1995) (same); Bd. of Cnty. Comm'rs of Monroe Cnty. v. Dep't of Cmty. Affrs., 560 So. 2d 240 (3d DCA 1990) (same); Leon Cnty. Bd. of Cnty.

Comm'rs v. Karimipour, 4 So. 3d 777 (Fla. 1st DCA 2009), affirming Karimipour v. Leon Cnty., Case No. 07-CA-3437 (Fla. 2d Cir. Final Summary Judgment June 3, 2008); In re: Petition for Declaratory Stmt. filed by Hughes and Knowles, Case No. DCA-03-DEC-295, 2004 Fla. ENV LEXIS 166 at *6-7 (Fla. DCA Apr. 9, 2004) (proposed powerline on newly established right-of-way not "development" under section 380.04).

828. The County and the municipalities also cannot rely upon home rule authority as an independent, alternative source of authority to regulate these facilities. According to the Florida Constitution, under their home rule authority, charter counties and municipalities may only enact ordinances not inconsistent with general law. See Art. VIII, §§ 1(g) and 2(b) Fla. Const. An ordinance is "inconsistent" with general law if (1) the Legislature has preempted a particular subject area, or (2) the local enactment conflicts with a state statute. Sarasota Alliance for Fair Elections, Inc. v. Browning, 28 So. 3d 880, 885-886 (Fla. 2010) (citations omitted).

829. For the reasons given above, the Legislature has preempted this subject area and therefore any County or municipal ordinances seeking to regulate FPL's transmission lines and corridors, access roads, and water pipelines would be inconsistent with general law and thus invalid. See also City of Hollywood v. Mulligan, 934 So. 2d 1238, 1247 (Fla. 2006)

(finding that a local government "cannot forbid what the legislature has expressly licensed, authorized or required, nor may it authorize what the legislature has expressly forbidden"); Dade Cnty. v. Acme Specialty Corp., 292 So. 2d 378 at n.2 (Fla. 3d DCA 1974) (finding that county ordinances under home rule charter treated the same as municipal ordinances).

830. Even if the County and the municipalities' home rule powers were to somehow free them from the statutory requirements of chapter 163, their comprehensive plan and LDRs would be nevertheless invalid as to FPL's transmission lines and corridors, access roads, and water pipelines because they seek to apply their plans and regulations in a manner that is directly at odds with the dictates of the Legislature.

831. County or municipal ordinances seeking to regulate FPL's transmission lines and corridors, access roads, and water pipelines would conflict with several statutes: chapter 366 to the extent that they purport to regulate FPL facilities that are part of the "coordinated electric power grid throughout Florida" for which the PSC has "exclusive and superior jurisdiction"; chapter 163 and section 380.04(3) to the extent those plans or regulations purport to regulate FPL in the "creation . . . of rights of access . . . or other rights in land," or in its "[w]ork . . . for the purpose of inspecting, repairing, renewing, or constructing on established rights-of-way"; and

chapter 361 to the extent that they purport to regulate FPL in the exercise of its broad eminent domain powers conferred by general law. See §§ 366.04(1), (5), 380.04(3)(b), (h), 361.01, Fla. Stat.

832. Local government comprehensive plans, zoning regulations, and LDRs are not "applicable" to the proposed electrical transmission lines under section 403.509(3)(b) and/or section 403.509(3)(c). This is consistent with the PPSA and is how the Department interprets the PPSA. This interpretation of the statute is reasonable, is not clearly erroneous, and should be accorded deference.

833. The County has a zoning overlay district known as the EEACEC that is approximately 242 square miles and contiguous with the Everglades National Park. The EEACEC is not a non-procedural requirement applicable to transmission lines within the meaning of chapter 403 for the reasons given above.

834. Because there are no "applicable" local government comprehensive plans or LDRs for the proposed transmission lines in this case, the EEACEC cannot be used to regulate them.

835. FPL nonetheless demonstrated that, notwithstanding their inapplicability, the location, construction, operation, and maintenance of the western transmission lines would not conflict with the County's zoning regulations governing the EEACEC. FPL also established that the proposed transmission

lines would not conflict with the County Aesthetics Master Plan and would not cause visual clutter or blight. Further, FPL has voluntarily stipulated to comply with certain local requirements as conditions of certification. These voluntary stipulations do not obviate the foregoing conclusions.

836. There are no local government comprehensive plans or LDRs that apply to the location, construction, operation, and maintenance of the transmission lines. FPL nonetheless has voluntarily agreed to comply with certain stipulated conditions of certification proposed by the local governments who are parties to these proceedings, which conditions may or may not have had as their genesis local comprehensive plans or LDRs. Those conditions are set forth in Attachment 1 to this Recommended Order. FPL's agreement does not change the conclusion of law that there are no local government comprehensive plans, zoning regulations, or LDRs, including zoning regulations, applicable to transmission lines.

3. Criteria for Certification: Transmission Lines

a. General Considerations

837. In determining whether an application for certification pursuant to chapter 403 should be approved in whole, approved with modifications or conditions, or denied, the Siting Board shall consider whether, and the extent to which, the location, construction, operation, and maintenance of the

electrical power plant will: (a) provide reasonable assurance that operational safeguards are technically sufficient for the public welfare and protection; (b) comply with applicable non-procedural requirements of agencies; (c) be consistent with applicable local government comprehensive plans and LDRs; (d) meet the electrical energy needs of the state in an orderly, reliable, and timely fashion; (e) effect a reasonable balance between the need for the facility and the impacts upon air and water quality, fish and wildlife, water resources, and other natural resources of the state; (f) minimize, through the use of reasonable and available methods, the adverse effects on human health, the environment, and the ecology of the land and its wildlife and the ecology of state waters and their aquatic life; and (g) serve and protect the broad interests of the public. See § 403.509(3), Fla. Stat.

838. To the extent more than one transmission line corridor is proper for certification under section 403.503(11) and meets the certification criteria, the Siting Board is to certify the transmission line corridor that has the least adverse impacts regarding the criteria in subsection (3), including costs. § 403.509(4)(a), Fla. Stat. If the Siting Board finds that two or more of the corridors that comply with subsection (3) have the least adverse impacts regarding the criteria in section 403.509(3), including costs, and that the

corridors are substantially equal in adverse impacts regarding the criteria in section 403.509(3), including costs, the Siting Board shall certify the corridor preferred by the applicant if the corridor is one proper for certification under section 403.503(11). See § 403.509(4)(c), Fla. Stat.

839. The PPSA requires the reasonable balancing of the statutory criteria to assess the extent to which the criteria have been met. In re: Gainesville Renewable Energy Center, LLC.

840. Section 403.503(11) defines the word "corridor" to mean:

> the proposed area within which an associated linear facility right-of-way is to be located. The width of the corridor proposed for certification as an associated facility, at the option of the applicant, may be the width of the right-of-way or a wider boundary, not to exceed a width of one mile. The area within the corridor in which a right-of-way may be located may be further restricted by a condition of certification. After all property interests required for the right-of-way have been acquired by the licensee, the boundaries of the area certified shall narrow to only that land within the boundaries of the right-of-way. The corridors proper for certification shall be those addressed in the application, in amendments to the application filed under s. 403.5064, and in notices of acceptance of proposed alternate corridors filed by an applicant and the department pursuant to s. 403.5271 as incorporated by reference in s. 403.5064(1)(b) for which the required information for the preparation of agency supplemental reports was filed.

i. Eastern Transmission Lines

841. The FPL East Preferred Corridor and PAC are corridors proper for certification under section 403.503(11).

842. Based upon the accepted evidence presented at the hearing, the proposed eastern transmission lines in the FPL East Preferred Corridor or the PAC meet the criteria for certification set forth in section 403.509(3).

843. Having determined that both the FPL East Preferred Corridor and the PAC are proper for certification under section 403.503(11), and meet the criteria for certification under section 403.509(3), the corridor with the "least adverse impact" considering the criteria in section 403.509(3), including costs, should be certified. § 403.509(4), Fla. Stat. Of the two eastern corridors proper for certification, it is concluded that the FPL East Preferred Corridor has the least adverse impact considering the criteria of section 403.509(3), including costs.

ii. Western Transmission Lines

844. For the western transmission line corridors, the FPL West Preferred, West Consensus Corridor, MDLPA No. 1, MDLPA No. 2, MDLPA No. 3, and NPCA Corridor are corridors proper for certification under section 403.503(11).

845. Based upon the accepted evidence presented at the hearing, the proposed western transmission lines in the FPL West Preferred Corridor, the West Consensus Corridor/MDLPA No. 2,

MDLPA No. 1, MDLPA No. 3, or NPCA Corridor meet the criteria for certification set forth in section 403.509(3).

846. Having determined that all of the western corridors are proper for certification under section 403.503(11) and meet the criteria for certification under section 403.509(3), the corridor with the "least adverse impact," considering the criteria in section 403.509(3), including costs, should be certified. § 403.504(4), Fla. Stat.

847. Of the five western corridors proper for certification, it is concluded that the West Consensus Corridor/MDLPA No. 2 has the least adverse impact considering the criteria in section 403.509(3), including costs, only if a ROW within that corridor can be acquired in a timely manner and at reasonable cost. If a ROW within the West Consensus Corridor/MDLPA No. 2 cannot be secured in a timely manner and at a reasonable cost, then the FPL West Preferred Corridor has the least adverse impact considering the criteria in section 403.509(3), including costs.

b. Undergrounding (Eastern Transmission Line)

848. As discussed above, the municipalities cannot require FPL to underground the proposed Davis-Miami 230-kV transmission line based upon application of their local comprehensive plans or LDRs or their independent home rule authority. The Legislature has explicitly preempted these local governments'

regulatory authority over the transmission line pursuant to chapter 163 and their independent home rule authority in favor of the PSC and the Siting Board. Permitting the County and municipalities to require FPL to underground its proposed transmission line at the cost of FPL and its customers would violate the Florida Supreme Court's long-standing prohibition on such actions. See Seminole County, 579 So. 2d at 107-08 (rejecting a charter county and municipality's attempts to require undergrounding at the utility's cost, reasoning that if the utility "has to expend large sums of money in converting its overhead power lines to underground, these expenditures [would] necessarily be reflected in the rates of its customers" and thus would "clearly run contrary to the legislative intent that the [PSC] have regulatory authority over this subject").

849. The PSC has consistently relied upon the Florida Supreme Court guidance on this point. See, e.g., In re: Petition by City of Parker, in which the PSC declared that its jurisdiction preempted a municipality's local land use regulations, and recognized the principle enunciated in Seminole County that "the city and county are the cost causers in this case, and their position contravenes our policy that cost causers pay the direct costs of undergrounding."

850. Undergrounding of the Davis-Miami 230 kV transmission line would impose far greater costs on FPL and its ratepayers

throughout Florida than the planned overhead construction of the line. Therefore, consistent with the PSC's policy, the cost causers in this case – the County and municipalities – should be responsible for any costs associated with undergrounding the transmission line, not FPL and its ratepayers. Only the PSC can decide this issue. See Seminole County, 579 So. 2d at 107-108.

851. Finally, the incremental costs of undergrounding transmission lines, where overhead transmission lines are feasible but undergrounding has been requested for aesthetic reasons, is typically absorbed by the requesting entity. See § 366.03 Fla. Stat. ("No public utility shall make or give any undue or unreasonable preference or advantage to any person or locality, or subject the same to any undue or unreasonable prejudice or disadvantage in any respect."); Seminole County, 579 So. 2d at 108 ("Permitting cities or counties to unilaterally mandate the conversion of overhead lines to underground would clearly run contrary to the legislative intent that the [PSC] have regulatory authority over this subject."). No local government in this proceeding has agreed to undertake this financial responsibility.

c. Wetlands Impacts (Western Transmission Lines)

852. The County and municipalities cannot require FPL to avoid all siting of a corridor based solely on wetland impacts

or proximity of the Everglades National Park for at least two reasons.

853. First, as already discussed above, the County and municipalities cannot require FPL to avoid the Everglades National Park based upon application of their local comprehensive plans or local zoning regulations or their independent home rule authority. The Legislature has explicitly preempted these local governments' regulatory authority over the transmission lines pursuant to chapter 163 and their independent home rule authority in favor of the PSC and the Siting Board.

854. Second, the existence of federal or international laws governing the Everglades National Park or funding restoration plans to improve it does not outweigh other factors identified in section 403.509(3). As the record shows, the express language of section 403.509(3) requires a reasonable and balanced weighing of all the statutory factors when determining which corridor has the least adverse impacts, including costs.

855. The fact that one corridor may require more wetland impacts than another corridor is not dispositive. Other factors, such as land use considerations, including proximity to residences and other structures, engineering constraints, and costs must also be balanced.

856. Ultimately, where several alternate corridors all represent the least adverse impacts, including costs, the

statute requires certification of the corridor preferred by the applicant.

857. In this case, the evidence demonstrated that, on balance, including costs, the FPL West Preferred and West Consensus Corridor/MDLPA No. 2 represent the corridors with the least adverse impacts, including costs. FPL has recommended certification of both corridors, first utilizing the West Consensus Corridor/MDLPA No. 2 if an adequate ROW can be secured in a timely manner and at reasonable cost and, if not, utilizing the FPL West Preferred Corridor. Since the impacts of these two corridors are equivalent and, on balance, less than the impacts associated with the other corridors, both of these corridors should be certified.

4. Sufficient Safeguards to Protect the Public Welfare (section 403.509(3)(a))

858. In accordance with section 403.509(3)(a), FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the proposed transmission lines in any of the corridors proper for certification will comply with agreed-upon conditions of certification and will have sufficient safeguards to protect the public welfare.

5. Compliance with Applicable Non-Procedural Requirements (section 403.509(3)(b))

859. In accordance with section 403.509(3)(b), FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the proposed transmission lines in any of the corridors proper for certification will comply with all applicable Department, SFWMD, FWC, DOT, DHR, DACS, County, Doral, Florida City, City of Miami, Coral Gables, South Miami, Pinecrest, Palmetto Bay, and Medley non-procedural requirements.

860. FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the transmission lines in any of the corridors proper for certification, in compliance with the attached conditions of certification, is not inconsistent with the CERP and will be consistent and in compliance with all applicable non-procedural requirements related to surface and groundwater quality, including applicable surface water and groundwater quality standards; storage and treatment of stormwater; flood protection; water conservation; wetland protection and mitigation; disposal of construction debris; air quality; air space; EMF; open burning; noise; lighting; protection of historic and archaeological resources; traffic impacts; protection of fish and wildlife, including avian and threatened and endangered species; protection of native trees and plants

(including listed plants and their preservation); maintenance of vegetation in proximity to electric facilities; protection of natural forest communities; and the objectives of CERP.

861. FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the transmission lines in any of the corridors proper for certification, in compliance with the attached conditions of certification, will be consistent and in compliance with all applicable non-procedural pre-construction, construction, operation, and maintenance requirements of the Department, SFWMD, and other agencies, including the use and occupancy of public ROW requirements.

862. The Project has been determined by the PSC to be required for the protection of the health and safety of the public, when the PSC issued its need determination for the Project. The need determination also found that the Project was the most cost-effective alternative for providing needed electric generating capacity to FPL's customers. Thus, the Project is in the public interest, and there is a "public necessity" for the Project as that term is defined in rule 18-18.004(22), and the Project benefits the public within the meaning of applicable Board of Trustee rules.

863. FPL has also provided reasonable assurance that the location, construction, operation, and maintenance of culverts

needed for access roads, structure pads, or other infrastructure associated with any of the transmission lines will not impede the flow of surface water or sheet flow in wetlands and will not cause any adverse flooding, erosion, scouring, or sedimentation.

864. Some parties have argued that the proposed Davis-Miami 230-kV transmission line violates local government requirements because it uses higher or wider poles than currently exist in those local governments today. However, the evidence establishes that the proposed transmission line pole heights and widths are in accordance with FPL's customary practice for transmission lines within its service territory, including the County, and will be consistent with transmission lines currently in existence in other parts of its service area.

865. If constructed within the East Preferred Corridor or the PAC, the proposed transmission lines will comply with the applicable non-procedural requirements of the local governments in which they will be located. FPL's customary practice with respect to transmission line pole heights and designs are not frozen at the time of adoption of these local government requirements, but rather allow the adaptation and use of new and improved technologies as appropriate to fulfill the public utility's purpose of supplying electrical service through safe, reliable facilities. See Fla. Power Corp. v. Silver Lake Homeowners Ass'n, 727 So. 2d 1149, 1150-51 (Fla. 5th DCA 1999)

(agreement with utility for transmission line construction included modern inventions and improvements); Nerbonne, N.V. v. Fla. Power Corp., 692 So. 2d 928, 929 (Fla. 5th DCA 1997) (agreement with utility for public road purposes was not limited to particular methods of construction, but allows new and improved methods, whether or not those new and improved methods were contemplated by both parties when the agreement was finalized); Brevard Cnty. v. Fla. Power & Light Co., 693 So. 2d 77, 80 (Fla. 5th DCA 1997) (it was an impairment of FPL's contract rights in the franchise agreement for Brevard County to enact an ordinance that restricts transmission line construction for any reason other than interference with traffic, including on aesthetic or property devaluation grounds; the County's police powers did not give the County the right to impair FPL's contract rights, because the purposes of the County ordinance -- to prevent aesthetic blight and property devaluation caused by construction of overhead transmission lines as proposed -- did not justify the impairment, in light of the existing agreement between the parties).

6. Consistency with Applicable Local Government Comprehensive Plans and LDRs (section 403.509(3)(c))

i. Transmission Lines

866. For the reasons set forth above, there are no local government comprehensive plans and LDRs applicable to the

transmission lines, other than those with which FPL may have agreed to comply in the Conditions of Certification.

ii. Levee and Clear Sky Substations

867. Zoning "unusual use" approvals have already been obtained from the County for the construction of the Clear Sky substation (as part of the current zoning approval for the Site) and expansion of the Levee substation.

7. Meet Energy Needs in Orderly, Reliable, and Timely Fashion (section 403.509(3)(d))

868. Pursuant to section 403.509(3)(d), and as determined by the PSC, FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the transmission lines in any of the corridors proper for certification will help the Project meet the electrical needs of the state in an orderly, reliable, and timely fashion.

i. Eastern Transmission Line

869. As previously found, FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the Davis-Miami 230 kV line in the FPL East Preferred Corridor will better meet the electrical needs of the state by allowing for more orderly and less expensive construction of the transmission line with few constructability issues.

ii. Western Transmission Lines

870. As previously found, FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the western transmission lines in the West Consensus Corridor/MDLPA No. 2, if a ROW can be obtained in a timely manner at a reasonable cost, or the FPL West Preferred Corridor, if a ROW within the West Consensus Corridor/MDLPA No. 2 cannot be so obtained, will better meet the electrical needs of the state by allowing for more orderly, timely, and less expensive construction of the transmission line, as compared to the other western alternate corridors.

8. Effect a Reasonable Balance Between Need and Ecological Impacts (section 403.509(3)(e))

871. Pursuant to section 403.509(3)(e), FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the transmission lines as proposed in any of the corridors proper for certification effects a reasonable balance between the need for the facilities as established pursuant to section 403.519, and the impacts upon air and water quality, fish and wildlife, water resources, and other natural resources of the state resulting from construction and operation of the facility.

i. Eastern Transmission Lines

872. Based on the evidence, FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the transmission lines in the FPL East Preferred Corridor effects a more reasonable balance between the need for the facilities as established pursuant to section 403.519, and the impacts upon air and water quality, fish and wildlife, water resources, and other natural resources of the state resulting from such location, construction, operation, and maintenance of the facilities than the PAC. While the environmental impacts of the corridors are virtually identical, the engineering constraints and costs associated with the PAC make location, construction, operation, and maintenance in the FPL East Preferred Corridor a more reasonable accommodation of the need for the facilities than the PAC.

ii. Western Transmission Lines

873. Based on the evidence, FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the western transmission lines in the West Consensus Corridor/MDLPA No. 2, if a ROW can be secured in a timely manner at a reasonable cost, or the FPL West Preferred Corridor, if a ROW within the West Consensus Corridor/MDLPA No. 2 cannot be so obtained, has the fewest adverse impacts relative to air and water quality, fish and wildlife, water resources,

and other natural resources of the state, and both represent a reasonable balance between the need for the facilities as established pursuant to section 403.519 and the impacts upon air and water quality, fish and wildlife, water resources, and other natural resources of the state resulting from construction and operation of the facility. Provided a ROW within the West Consensus Corridor/MDLPA No. 2 can be timely obtained at a reasonable cost, it would have slightly fewer impacts to natural resources than would construction in the FPL West Preferred Corridor, given its substantial lesser proximity to wetlands west of the L-31N levee and greater minimization of impacts to the Pennsuco Wetlands. Both the West Consensus Corridor/MDLPA No. 2 and FPL West Preferred Corridor lie predominantly on a seam between land uses. The West Consensus Corridor/MDLPA No. 2 is wide enough to allow FPL to further minimize potential impacts by the potential placement of facilities on lands owned by limerock mining interests.

9. Minimize Adverse Effects on Human Health, the Environment, and Ecology (section 403.509(3)(f))

874. Pursuant to section 403.509(3)(f), FPL has provided reasonable assurances that the proposed transmission lines can be constructed, operated, and maintained in any of the corridors proper for certification so as to minimize, through the use of reasonable and available methods, the adverse effects on human

health, the environment, and the ecology of the land and its wildlife and the ecology of state waters and their aquatic life. There is no credible evidence of risk to public health from transmission lines.

875. Collocation of the transmission line corridors within or adjacent to existing linear features provides the opportunity to reduce the amount of new access road construction, impacts to wildlife habitat and existing and future development patterns, and other impacts. See, e.g., In Re: Tampa Electric Willow Oak-Wheeler-Davis Transmission Line Siting Application No. TA07-15, Case No. 07-4745TL, 2008 Fla. ENV LEXIS 115 (Fla. DOAH May 13, 2008), 2008 Fla. ENV LEXIS 114 at *6-7 (Fla. Siting Bd. Aug. 1, 2008). Also, collocation of transmission lines enables construction of lines in a more timely and efficient manner, minimizes the need for new access roads, structure pads, and new clearing, and minimizes intrusions into surrounding areas. See, e.g., In re: Progress Energy Fla. Levy Nuclear Project Units 1 and 2, 2009 Fla. ENV LEXIS 151 at *96-97.

10. Serve and Protect the Broad Interests of the Public (section 403.509(3)(g))

876. Pursuant to section 403.509(3)(g), FPL has provided reasonable assurances that the proposed transmission lines can be constructed, operated, located, and maintained in any of the

corridors proper for certification, and will serve and protect the broad interests of the public.

i. Eastern Transmission Lines

877. FPL has provided reasonable assurances that construction of the Davis-Miami 230-kV line in the FPL East Preferred Corridor will better serve and protect the broad interests of the public than construction in the PAC, given the fewer residences, schools, and other buildings in close proximity to the transmission line in the FPL East Preferred Corridor, the difficulty of constructing the line in the narrow ROWs along the residential roads of the PAC, and the cost of construction in the PAC compared to the FPL East Preferred Corridor.

ii. Western Transmission Lines

878. FPL has provided reasonable assurances that construction of the western transmission lines in either the West Consensus/MDLPA No. 2 or the FPL West Preferred Corridor will better serve and protect the broad interests of the public than construction in the MDLPA No. 1, MDLPA No. 3, or the NPCA Corridor. The location, construction, operation, and maintenance of the western transmission lines in the West Consensus Corridor/MDLPA No. 2, if a ROW can be secured in a timely manner at a reasonable cost, or the FPL West Preferred Corridor, if a ROW within the West Consensus Corridor/MDLPA No.

2 cannot be obtained, effects a more reasonable balance between the need for the Project, impacts on natural resources, impacts on more developed urban areas, and costs, compared to the other western alternate corridors.

11. Corridor with Least Adverse Impacts, Including Costs (section 403.509(4))

i. Eastern Transmission Lines

879. For the reasons set forth above, FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the eastern transmission lines within the FPL East Preferred Corridor constitutes the eastern corridor with the least adverse impacts, including costs, considering the factors set forth in section 403.509(3)(e).

ii. Western Transmission Lines

880. FPL has provided reasonable assurances that the West Consensus Corridor/MDLPA No. 2 constitutes the western corridor with the least adverse impacts, including costs, considering the factors set forth in section 403.509(e) if it can be timely obtained at a reasonable cost. If the West Consensus Corridor/MDLPA No. 2 cannot be so obtained, FPL has provided reasonable assurances that the location, construction, operation, and maintenance of the western transmission lines within the FPL West Preferred Corridor constitutes the western corridor with the least adverse impacts, including costs,

considering the factors set forth in section 403.509(3). In light of the directives of section 403.509(4), given FPL's preferences, both the West Consensus Corridor/MDLPA No. 2 and the FPL West Preferred Corridor should be certified, with the West Consensus Corridor/MDLPA No. 2 to be utilized if it can be timely secured for a reasonable cost, and the FPL West Preferred Corridor to be certified as a back-up corridor to be utilized if the West Consensus Corridor/MDLPA No. 2 cannot be so obtained.

12. Disputed Conditions of Certification -- Transmission Lines

881. The County has not shown that requested General Conditions 6, 26, 30, and 31, East Condition 20, West Conditions 4, 5, and 9, and the unnumbered conditions on page 59 of its Exhibit 9 are supported by the County's applicable non-procedural requirements. Therefore, these proposed conditions are rejected.

882. The City of Miami has not shown that Conditions 5.2, 5.4, 5.5, 5.6, and 5.10 for the FPL East Preferred Corridor and Conditions 5.2, 5.4, 5.5, and 5.6 for the PAC are supported by the City's applicable non-procedural requirements. Therefore, these conditions are rejected.

883. The City of Coral Gables has not shown that Conditions A.1, A.2, A.3, A.4, A.6, B, C.2, and Q are supported

by its applicable non-procedural requirements. Therefore, these proposed conditions are rejected.

884. The Village of Pinecrest has not shown that Conditions B.2, C.1, C.2, D.1, D.3, D.4, and D.7 are supported by its applicable non-procedural requirements. Therefore, the proposed conditions are rejected.

885. The Cities of Doral and South Miami have not shown that their requested conditions, other than those included in Attachment 1, are supported by their respective applicable non-procedural requirements. Therefore, these proposed conditions are rejected.

D. Entire Project: Easement Over State-Owned Lands and Road Right-of-Way Dedications

886. The requested easement for the radial collector well laterals over sovereignty submerged lands within Biscayne Bay and the Biscayne Bay Aquatic Preserve meets all applicable Board of Trustee requirements reflected in section 258.397 and chapters 18-18 and 18-21.

887. The requested easement for the transmission line crossing of the Miami River within the boundaries of the Biscayne Bay Aquatic Preserve meets all applicable Board of Trustees requirements reflected in section 258.397 and chapters 18-18 and 18-21.

888. The requested upland easement in the western corridors meets all applicable Board of Trustees requirements reflected in subsections 253.02(2)(b) and (c) and chapter 18-2.

889. FPL has demonstrated entitlement to the three requested easements across state-owned lands. These include the requested easements over submerged lands beneath Biscayne Bay for the radial collector well system, over submerged lands for the transmission line crossing of the Miami River, and over state-owned uplands for the transmission line crossing. For purposes of the requested easements within the Biscayne Bay Aquatic Preserve for the radial collector wells and the crossing of the Miami River, "extreme hardship," as used and defined in section 258.397 and rules 18-18.004(11) and 18-18.006(3)(b), and is inherent in the Project because it is a "public project" and also a "public necessity." The Project is a "public project" because it is being undertaken by FPL, a public utility. The Project has been determined by the PSC to be required for the protection of the health and safety of the public, when the PSC issued its need determination for the Project. The need determination also found that the Project was the most cost-effective alternative for providing needed electrical generating capacity to serve FPL's customers, who are citizens of Florida. Thus, the Project is in the public interest, and there is a "public necessity" for the Project as that term is defined in

rule 18-18.004(22). The Miami River crossing and proposed radial collector wells are "structures required for the installation or expansion of public utilities" and "reasonable improvement[s] for public utility expansion," and are therefore specifically allowed by the Act that created the Biscayne Bay Aquatic Preserve. See § 258.397, Fla. Stat.

890. The potential environmental costs of the Project are only potential, de minimis, or hypothetical costs, as opposed to demonstrable costs, as contemplated by rules 18-21.003(51), 18-2.017(49), and 18-18.004(20), or will be fully mitigated. The environmental benefits, on the other hand, are demonstrable and significant. For these reasons, the demonstrable environmental benefits of the Project outweigh the demonstrable environmental costs.

891. Development of the Project has multiple social benefits and no demonstrable social costs. The demonstrable social benefits of the Project outweigh its demonstrable social costs.

892. Development of the Project has economic benefits accruing to the public at large, and no demonstrable economic costs accruing to the public at large.

893. The environmental, social, and economic benefits accruing to the public at large from the development of the Project outweigh the environmental, social, and economic costs

of developing the Project. The Project is, therefore, in the public interest, as defined in rules 21.003(51) and 18-18.004(20), and qualifies for the issuance of a public easement for the laterals associated with the proposed radial collector wells and the crossing of the Miami River, pursuant to rule 18-18.006(3)(b)(ii).

894. Neither the development of the Project nor any of the three requested easements will have any unacceptable adverse cumulative impact on the Biscayne Bay Aquatic Preserve or on state-owned uplands.

895. The County has not shown that either the requested conditions of certification for road ROW dedications or the list of 131 specific locations for such dedications are supported by applicable non-procedural requirements. Section 33-46, MDC, only requires FPL to dedicate land owned by FPL for public road ROWs. The County has not identified where FPL owns land in fee that would be subject to this requirement, and it acknowledges that FPL does not own the land at some of these locations. The County also seeks some dedications for purposes other than for use as public roads, such as environmental restoration and other reasons which are beyond the purposes of sections 33-46 and 33-133. Therefore the County's list of 131 locations for dedications is not appropriate for inclusion in any final condition of certification.

896. Further, under section 380.04(3)(b), electrical transmission lines and pipelines constructed by electric utilities within established ROWs are excluded from the definition of "development" that is subject to local comprehensive plans and LDRs, including zoning regulations. The only regulatory bases the County cites to support the dedications of road ROWs are found in its zoning code and its adopted comprehensive plan. As discussed above, zoning code requirements and CDMP policies do not apply to the creation of electrical transmission lines or activities within "established rights of way." Where the County's requested dedications of public road ROWs are within an established ROW to be used or created for the electrical transmission lines or for the water pipelines, the County's dedication requirements do not apply to those facilities within established ROW. However, the County also did not identify where such locations for dedications are outside of an established ROW that is subject to section 380.04(3)(b). Thus, many of these 131 locations may occur in areas where the zoning code, including section 33-46, and the CDMP are not applicable to the Project's linear facilities. Given the inapplicability of the County's dedication ordinance and the uncertainty of the purposes and uses of some of the County's requested dedications, there is no legal basis to impose the County's condition on ROW dedications or to include a

list of locations for such road dedications. For these reasons, the County's proposed conditions of certification regarding road ROW dedications should not be imposed in this proceeding.

E. Other Contentions of the Parties

897. All other arguments not specifically addressed by this Recommended Order have been considered and found to be without merit.

RECOMMENDATION

Based upon the foregoing Findings of Fact and Conclusions of Law, it is

RECOMMENDED that the Siting Board grant final certification to Florida Power & Light Company under chapter 403 for the location, construction, and operation of the Turkey Point Units 6 and 7 Project, representing a 2,200 MW nuclear generating facility, and including associated electrical transmission lines and other associated linear facilities, as described in the Site Certification Application and in the evidence presented at the certification hearing, and subject to the Conditions of Certification appended hereto. It is further

RECOMMENDED that the Siting Board certify one of the corridors proper for certification for the eastern transmission lines and the western transmission lines. It is further

RECOMMENDED that the Siting Board certify the following transmission line corridors pursuant to section 403.509:

East Preferred Corridor;

West Consensus Corridor/MDLPA No. 2; and

West Preferred Corridor as a back-up if an adequate right-of-way within the West Consensus Corridor/MDLPA No. 2 cannot be secured in a timely manner and at a reasonable cost. It is further

RECOMMENDED that the Siting Board grant Florida Power & Light Company a variance from section 24-43.1(6), MDC, to allow use of the on-site package sanitary treatment plant and other on-site cooling water and wastewater treatment and disposal in lieu of connecting the Project to a public sanitary sewer line for treatment and disposal of these waters by the County. It is further

RECOMMENDED that the Siting Board direct the Board of Trustees to grant to Florida Power & Light Company three separate easements over state-owned lands, including: (1) submerged lands owned by the State of Florida located within Biscayne Bay for the installation of the laterals associated with a radial collector well system to supply back-up cooling water; (2) submerged lands owned by the State of Florida located within the Miami River for the installation of a subaqueous 230-kV electrical transmission line; and (3) an approximate four-acre parcel of state-owned uplands along the western certified

corridor to allow the construction of a 230-kV electrical transmission line.

DONE AND ENTERED this 5th day of December, 2013, in Tallahassee, Leon County, Florida.

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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days of the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will render a final order in this matter.

STATE OF FLORIDA

DEPARTMENT

OF

ENVIRONMENTAL PROTECTION

Proposed

Conditions of Certification

Florida Power & Light Company

Turkey Point Plant Units 6 & 7

PA 03-45A3

November 4, 2013

Table of Contents

SECTION A: GENERAL CONDITIONS 1

I. SCOPE 1

II. APPLICABLE DEPARTMENT RULES 3

III. REVISIONS TO DEPARTMENT STATUTES AND RULES 4

IV. DEFINITIONS 5

V. DEPARTMENT PERMITS UNDER FEDERAL PROGRAMS 7

A. Air 7

B. Water 7

1. NPDES Industrial Wastewater Discharge 7

2. Underground Injection Control 7

3. NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP) 7

4. NPDES Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity. 8

5. NPDES Generic Permit for Discharge of Produced Ground Water From any Non-Contaminated Site Activity 8

6. NPDES Generic Permit for Discharges from Concrete Batch Plants 8

VI. DESIGN AND PERFORMANCE CRITERIA 8

VII. NOTIFICATION 9

VIII. CONSTRUCTION PRACTICES 9

A. Local Building Codes 9

B. Open Burning 9

C. Vegetation 10

D. Existing Underground Utilities 10

E. Electric and Magnetic Fields (EMF) 10

F. Existing Wells 10

G. Abandonment of Existing Septic Tanks 10

IX. RIGHT OF ENTRY 10

X. DISPUTE RESOLUTION 11

XI. SEVERABILITY 11

XII. ENFORCEMENT 12

XIII. REVOCATION OR SUSPENSION 12
XIV. REGULATORY COMPLIANCE 12
XV. CIVIL AND CRIMINAL LIABILITY 13
XVI. USE OF STATE LANDS 13
XVII. PROCEDURAL RIGHTS 14
XVIII. AGENCY ADDRESSES FOR POST-CERTIFICATION SUBMITTALS AND NOTICES 15
XIX. PROCEDURES FOR POST-CERTIFICATION SUBMITTALS 17
A. Purpose of Submittals 17
B. Filings 17
C. Completeness 17
D. Interagency Meetings 18
E. Determination of Compliance 18
F. Commencement of Construction 18
G. Revisions to Design Previously Reviewed for Compliance 18
H. Variation to Submittal Requirements 18
XX. POST CERTIFICATION SUBMITTAL REQUIREMENTS SUMMARY 19
XXI. POST CERTIFICATION AMENDMENTS 19
XXII. MODIFICATION OF CERTIFICATION 20
XXIII COASTAL ZONE CONSISTENCY 20
XXIV TRANSFER OF CERTIFICATION 20
XXV. LABORATORIES AND QUALITY ASSURANCE 21
XXVI. ENVIRONMENTAL RESOURCES 21
A. General 21
1. Submittals for Construction Activities 21
B. Surface Water Management Systems (SWMS) 22
C. Wetland and Other Surface Water Impacts 24
XXVII. THIRD PARTY IMPACTS 24
XXVIII. FACILITY OPERATION 24
XXIX. RECORDS MAINTAINED AT THE FACILITY 25
XXX. WATER DISCHARGES 25
A. Discharges 25

B. Wastewater Incident Reporting 26
XXXI. SOLID AND HAZARDOUS WASTE 27
A. Solid Waste 27
B. Hazardous Waste and Used Oil 27
C. Hazardous Substance Release Notification 27
D. Petroleum Contact Water 28
E. Contaminated Site Cleanup 28
XXXII. STORAGE TANK SYSTEMS 28
A. Incident Notification Requirements. 28
B. Discharge Reporting Requirements 28
C. Discharge Cleanup 28
D. Out of Service and Closure Requirements 29

SECTION B: SPECIFIC CONDITIONS – Unit 6 & 7 Nuclear Power Plant and associated facilities (EXCLUDING Transmission lines) 30
I. RADIAL COLLECTOR WELL SYSTEM MONITORING 30
A. Department of Environmental Protection 30
B. Florida Fish and Wildlife Conservation Commission (FWC) 31
C. South Florida Water Management District (SFWMD) 33
II. DEPARTMENT OF ENVIRONMENTAL PROTECTION 34
A. Environmental Resource Permitting 34
B. Radial Collector Well System 35
C. Radiological 36
D. Domestic Wastewater Treatment Facility 37
III. DEPARTMENT OF TRANSPORTATION 37
A. Access Management to the State Highway System: 37
B. Overweight or Overdimensional Loads: 37
C. Use of State of Florida Right of Way or Transportation Facilities: 38
D. Standards: 38
E. Drainage: 38
F. Use of Air Space: 38
G. Traffic Control Plan: 39
H. Best Management Practices 39

IV. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION 39
A. Listed Species Conditions 39
B. General Listed Species Survey 40
C. Specific Listed Species Surveys 41
D. Listed Species Locations 42
E. Bald Eagle 42
F. Shorebirds 43
G. Everglades Mink 45
H. Florida Manatee 45
I. Florida Panther 46
J. Rivulus 47
V. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES 48
VI. SOUTH FLORIDA WATER MANAGEMENT DISTRICT 48
A. General 48
B. Excavation, Deposition and Dewatering 56
1. Storage of Spoils 56
2. Dewatering 56
C. Water Supply 57
1. Primary Source (Reclaimed Water) 57
2. Secondary Source (Radial Collector Wells) 58
3. General Conditions for Secondary Cooling Water Supply Sources 60
D. Linear Facilities on SFWMD Real Property Interests 64
E. Additional Conditions Applicable to Water Pipelines on SFWMD Real Property Interests 74
F Roadway Improvements 75
VII. MIAMI-DADE COUNTY 75
A. General Conditions 75
B. Plant Access Roads 77
C. Earthwork And Materials Disposal 78
E. Wastewaters/Sanitary Wastes 80
F. Exotic Vegetation 81

G. Aviation Requirements **81**
H. Rare, Threatened and Endangered Species **82**
I. Reclaimed Water Pipeline **83**
J. Reclaimed Water Treatment Facility **84**
K. Real Property Interests **84**
L. Equipment Barge Unloading Area **85**
M. Water **85**
N. Open Burning **86**
O. Wetland Impacts and Mitigation **87**
P. Radial Collector Well System Monitoring **89**
2. Radial Collector Well System Monitoring Plan (RCWSMP) *89*
3. Radial Collector Well System Monitoring & Reporting *90*
3. Radial Collector Well System Biological Monitoring *90*
4. Radial Collector Well System Monitoring Plan (RCWSMP) *92*
5. RCW Testing *93*
6. Monitoring and Reporting *95*
7. General Conditions for Secondary Cooling Water Supply Sources. *96*
Q. Stormwater Management and Water Quality **97**
R. Environmentally Endangered Lands Adjacent to Non-Transmission Facilities **98**
VIII. BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA **99**
A. Submerged Land Easement for Radial Collector Well Laterals **99**
IX. CITY OF HOMESTEAD **99**
A. Right – of – Way (ROW) – Potable Water Pipeline and Temporary Construction Access Roads **99**
B. ROW Use **99**

SECTION C: SPECIFIC CONDITIONS – TRANSMISSION LINES **100**
I. DEPARTMENT OF ENVIRONMENTAL PROTECTION **100**
A. Process for Review of ROW Location **100**
B. Miami River Crossing **101**
C. Replacement for Restoration of System Integrity **101**

II. DEPARTMENT OF TRANSPORTATION 101
A. Access Management to the State Highway System: 101
B. Overweight or Overdimensional Loads: 102
C. Use of State of Florida Right of Way or Transportation Facilities: . 102
D. Standards: 102
E. Drainage: 102
F. Use of Air Space: 102
G. Specific 103
III. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION ... 105
A. Listed-Species Conditions 105
B. General Listed Species Survey 106
C. Specific Listed Species Surveys 107
D. Listed Species Locations 108
E. Gopher Tortoise 108
F. Wood Stork Wading Bird Colonies 109
G. Everglades Snail Kite 111
H. Bald Eagle 112
I. Southeastern American Kestrels 113
J. Florida Panther 113
K. Florida Black Bear 113
L. Everglades Mink 114
M. Florida Manatee 115
N Avian Protection Plan 115
IV. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES 116
V. DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES ... 116
VI. SOUTH FLORIDA WATER MANAGEMENT DISTRICT 116
A. General 116
B. Central and Southern Florida Project 124
C. Operations & Maintenance / Right-of-Way 127
1. General Conditions 128

2. Standard Limiting Conditions *132*
3. Special Conditions *133*
D. Land Management / Ecosystem Restoration **136**
E. Water Use **137**
F. Corridor-Specific Conditions **138**
VII. MIAMI DADE COUNTY (MDC) **147**
A. General Conditions **147**
B. Noise **147**
C. Environmentally Endangered Lands (EEL) **147**
D. Fill within the Transmission Rights of Way **148**
E. Cultural and Archeological Resources **148**
F. Kings Highway Natural Forest Community (Parcel Folio Number 30-7810-000-0140) **149**
G. Flowage Easement **150**
H. Placement of Transmission Facilities within Transit Right-of-Way **150**
I. Mitigation for Mangrove, Wetland and Upland Tree Impacts **152**
J. Exotic Vegetation **153**
K. Prescribed Burns **153**
L. Within the Proposed Transmission Line ROW in Simpson Park **154**
M. Homestead Bayfront Park **155**
N. Rare, Threatened, and Endangered Species **155**
O. East Corridor **156**
P. West Corridor and East Corridor **158**
Q. Aviation **160**
R. Trail Glades Park Specific Conditions **161**
S. Wellfields: **161**
T. Access Controls: **161**
U. Public Uses of Transmission Line Rights-of-Way: **162**
F. Water and Sewer **162**
W. Earthwork and Material Handling and Disposal **162**
X. Access to Transmission ROW **163**
Y. Wetland Mitigation Protection Requirements: **163**
VIII. CITY OF CORAL GABLES (CCG) **163**

A. Transmission Line Project. 163
B. Transmission Line Design. 163
C. Tree Replacement and Vegetation Management 164
D. Restoration and Use of City ROW Following Construction 165
E. Drainage 165
F. Solid Waste 165
G. Historic Preservation: 165
H. Construction and Traffic Management 165
I. Noise of Transmission Line Construction: 166
J. Noise of Transmission Line Operation 166
K. Maintenance of Pedestrian and Bicycle Traffic 166
L. Emergency Management 167
M. Communications Systems 167
N. Detailed Construction Schedule 169
O. Monitoring 169
P. Indemnification 169
IX. CITY OF DORAL (COD) 170
A. Noise 170
B. Open Burning 170
X. CITY OF MIAMI (COM) 170
A. Archaeological Resource Preservation 170
B. Scenic Transportation Corridor 170
C. Maintenance of Pedestrian and Bicycle Traffic 171
D. Informational Submittal of Final Design Plan 171
E. Emergency Management 171
F. Communication Systems 172
G. Restoration of Conditions in City ROW 172
XI. CITY OF SOUTH MIAMI (CSM) 172
A. ROW Location Conditions: 172
B. Solid Waste 173
C. Emergency Management 173
D. Noise and Demolition 173
XII. VILLAGE OF PINECREST (VOP) 173

A. Nuisances 173
B. Emergency Management 175
XIII. VILLAGE OF PALMETTO BAY (VPB) 175
A. Informational Submittal of Final Design Plan 175
B. Drainage: 175
C. Use of Village Rights of Way: 176
D. Stormwater: 176
E. Construction Activities within the Village: 176
F. Maintenance of Pedestrian and Bicycle Traffic: 176
G. Emergency Management: 176
H. Noise 176
I. Vegetation Tree Trimming: 176
J. Restoration of Conditions: 176
XIV. BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA 177
A. Submerged Land Easement for Transmission Line Crossing of the Miami River 177
B. Upland Easement 177
XV. MIAMI-DADE EXPRESSWAY AUTHORITY (MDX) 177
A. Occupancy License 177
B. Impacts to MDX Right-of-Way 177
C. Property Interest 178

ATTACHMENTS & APPENDICES

Attachment A ..... Maps

Map 1 Site Delineation
Map 2 Delineation of the Certified Area
Map 3 Delineation of Off-Site Non-Linear Facilities
Map 4 Delineation of Off-Site Linear Facilities

Attachment B ..... Surface Water Management System Plans

Attachment C ..... Wetland Mitigation Plan (Rev.2, July 2011)

Attachment D ..... Radial Collector Well System Monitoring Plan

Attachment E ..... FWC BMPs for Operating Vehicles on the Beach

Attachment F.....FWC Standard Manatee & Marine Turtle Construction Conditions for In-Water Work (revised March 2012)

Attachment G .....FWC Panther Focus Area Map

Attachment H .....Sovereign Submerged Land (SSL) Easements

H-a Radial Collector Well Laterals

H-b Miami River Crossing

H-c Upland

Attachment I.....SFWMD Existing and Planned Projects (Plant and Associated Facilities)

I-a Table of SFWMD Existing and Planned Projects

I-b Map of SFWMD Existing and Planned Projects and FPL Proposed Linear Facilities Corridors

I-c Definition of Codes for Consistency with SFWMD Projects

I-d TP6&7 Project Features-Intersecting C&SF System and Works of the District

Attachment J ..... MDC Flowage Easement (May/2013)

Attachment K ..... MDC Controlled Species of Exotic Vegetation

Attachment L..... MDC Prohibited Species of Exotic Vegetation

Attachment M.....FPL Exotic Vegetation Management Plan (May 3, 13)

Attachment N ..FPL Area B Conceptual System Spoils Management Area

Attachment O. MDC Environmentally Endangered Lands (EEL) Parcels Map

Attachment P...Figure 2 from FPL Completeness Response No. MD(3)-04

Attachment Q ..... MDC Height Zoning District for HARB

Attachment R SFWMD Existing and Planned Projects (Transmission Lines)

R-a Table of SFWMD Existing and Planned Projects

R-b Map of SFWMD Existing and Planned Projects and FPL Proposed Linear Facilities Corridors

R-c Definition of Codes for Consistency with SFWMD Projects – Transmission Facilities

R-d TP6&7 Project Features-Intersecting C&SF System and Works of the District

Attachment S.... FPL Conceptual Earthwork and Materials Disposal Plan (June 3, 2011)

Attachment T..... Certificate of FPL Self-Insurance

Attachment U.....Kendall Area Potential Exclusion Zone

Attachment V.....Confidentiality Agreement

Attachment W.....Alternate Corridor Conditions Exhibit

Appendix I ..... NPDES Permit No. FL0001562

Appendix II.....UIC Permits

List of Tables

Table 1. State and Federally Listed Species for Florida 39
Table 2. State and Federally Listed Species in Florida..... 105
Table 3. Exotic Vegetation to be Removed by Licensee. 123

SECTION A: GENERAL CONDITIONS

I. SCOPE

A. Pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Sections 403.501-518, Florida Statutes (F.S.), this certification is issued to Florida Power & Light Company (FPL) as owner/operator of Turkey Point Power Plant Units 6 & 7 and Licensee. Subject to the requirements contained in these Conditions of Certification (COC), FPL may construct, operate and maintain two 1,100 MW (net) nuclear electrical generating units (Units 6 & 7) with supporting buildings, facilities and equipment. FPL may construct, operate and maintain an expansion of the Levee substation, the Clear Sky substation, and Certified Transmission Lines within certified corridors as part of the electrical power plant.

Units 6 & 7 are planned to be located on approximately 218 acres of the existing approximately 9,400 acres. This facility is located at 9.5 miles east of Florida City on SW 344 Street, Florida City, Dade County; UTM Coordinates: Zone 17, 567.2 km East and 2813.2 km North; Latitude: 25°26' 09" North and Longitude: 80° 19' 52" West.

B. The certified facility includes the following major non-transmission line associated facilities;

1. a laydown area;
2. a nuclear administration building;
3. a training building;
4. a parking area;
5. a FPL reclaimed water treatment facility;
6. reclaimed water pipelines;
7. radial collector wells and associated pipelines;
8. an equipment barge unloading area;
9. access roads and bridges; and,
10. potable water pipelines

Associated transmission lines:

1. Clear Sky-Turkey Point transmission line: a 230 kilovolt (kV) line from the existing Turkey Point substation on the Turkey Point Plant property to the proposed Clear Sky substation;

2. Clear Sky-Davis and Davis-Miami transmission lines: a 230-kV line from the proposed Clear Sky substation to the existing Davis substation in southeast Miami-Dade County, and another 230-kV line from the Davis substation to the existing Miami substation in downtown Miami just north of the Miami River;

3. Clear Sky-Levee #1 and #2 transmission lines: two 500-kV lines from the proposed Clear Sky substation to the Levee substation in west Miami-Dade County; and

4. Clear Sky-Pennsuco transmission line: a 230-kV line from the proposed Clear Sky substation to the existing Pennsuco substation in northwest Miami-Dade County.

The Turkey Point 6 & 7 electrical generating units and all on-Site and off-Site linear and non-linear facilities are located in Miami-Dade County, Florida.

C. These COC, unless specifically amended or modified, are binding upon the Licensee and shall apply to the construction, operation and maintenance of the Certified Facilities. If a conflict should occur between the design criteria of the Certified Facilities described in the Application and these COC, the COC shall prevail unless amended or modified. In any conflict between any of these COC, the more specific condition governs. The Department does not intend, solely by the incorporation of these General Conditions, to require the retrofitting of existing Certified Facilities.

D. Within 120 days after completion of the electrical power plant as defined by 403.503(14), F.S., excluding off-Site linear and non-linear associated facilities, Licensee shall provide to the Department in .pdf format: a survey map signed by a professional land surveyor, or acceptable equivalent documentation such as an official legal description, delineating the boundaries of the Site as defined by Section 403.503(28), F.S., and an aerial photograph delineating the boundaries of the Site. The survey map and aerial photograph shall be identified as Site Delineation and attached hereto as part of Attachment A.

The Licensee shall notify the Department of any change to the Site boundary depicted in the Site Delineation in Attachment A. The notification shall be accompanied by an updated land survey map (or legal description) and aerial photograph delineating the new boundaries of the Site for review by the Department.

Absent the above description/delineation of the Site, the Department will consider the perimeter fence line of the property on which the electrical generating facilities are located to be the boundaries of the Site.

E. If both certified and uncertified facilities lie within the boundaries of the Site, the Licensee shall also comply with the requirements of this paragraph. Within 120 days after completion of construction of the electrical power plant and on-Site associated facilities, but excluding off-Site linear and non-linear associated facilities, Licensee shall provide to the Department in .pdf format: documentation delineating the boundaries of the Certified Areas within the Site; such as an aerial photograph or other acceptable documentation delineating the boundaries of the Certified Areas within the Site. The boundaries of the Certified Areas of the Site shall include both the certified "electrical power plant generating facilities" as defined in Section 403.503(28), F.S. and its on-Site "associated facilities" (including on-Site linear facilities) as defined by Section 403.503(7), F.S. This documentation shall be known as Delineation of the Certified Area of the Site and attached hereto as part of Attachment A.

F. Within 120 days after completion of construction of the off-Site associated non-linear facilities, Licensee shall provide to the Department in .pdf format: a survey map signed by a professional land surveyor, or acceptable equivalent documentation such as an official legal description, delineating the boundaries of the Certified Areas for each off-Site non-linear Certified Facility; and an aerial photograph delineating the boundaries of the Certified Areas for each off-Site non-linear Certified Facility. The surveys and aerial photographs shall be known as Delineation of the Certified Areas of the Off-Site Non-Linear Facilities and attached hereto as part of Attachment A.

G. Within 180 days after completion of construction of associated off-Site linear facilities, as defined by Section 403.503(7), F.S., the Licensee shall provide: an aerial photograph(s)/map(s) at a scale of at least 1:400, or acceptable equivalent documentation such as an official legal description or survey map(s) signed by a professional land surveyor, delineating

the boundaries of the Certified Areas, following acquisition of all necessary property interests and the corridor narrowing as described in Section 403.503(11), F.S., which shall be known as Delineation of Off-Site Linear Facilities and attached as part of Attachment A.

Following any post-certification approvals that require a change to the boundaries of the Certified Area(s) depicted in Delineation of Off-Site Linear Facilities in Attachment A, the Licensee shall submit an updated aerial photograph/map, survey map or legal description.

[Section 403.511, F.S.]

II. APPLICABLE DEPARTMENT RULES

The construction, operation, and maintenance of the Certified Facilities shall be in accordance with all applicable non-procedural provisions of Florida Statutes and Florida Administrative Code (F.A.C.), including, but not limited to, the applicable non-procedural portions of the following rules, except to the extent a variance, exception, exemption or other relief is granted in the final order of certification, in a subsequent modification to the COC, or as otherwise provided under the PPSA:

Florida Administrative Codes:
18-2 (Management of Uplands Vested in the Board of Trustees)
18-14 (Administrative Fines for Damaging State Lands)
18-18 (Aquatic Preserves)
18-21 (Sovereign Submerged Lands Management)
62-4 (Permits)
62-17 (Electrical Power Plant Siting)
62-25 (Regulations of Stormwater Discharge)
62-40 (Water Resource Implementation Rule)
62-150 (Hazardous Substance Release Notification)
62-160 (Quality Assurance)
62-204 (Air Pollution Control-General Provisions)
62-210 (Stationary Sources-General Requirements)
62-212 (Stationary Sources-Preconstruction Review)
62-213 (Operation Permits for Major Sources of Air Pollution)
62-214 (Requirements for Sources Subject to the Federal Acid Rain Program)
62-256 (Open Burning)
62-296 (Stationary Sources-Emission Standards)
62-297 (Stationary Sources-Emission Monitoring)
62-301 (Surface Waters of the State)
62-302 (Surface Water Quality Standards)
62-304 (Total Maximum Daily Loads)
62-312 (Dredge and Fill Activities)
62-330 (Environmental Resource Permitting)
62-340 (Delineation of the Landward Extent of Wetlands and Surface Waters)
62-343 (Environmental Resource Permit Procedures)
62-345 (Uniform Mitigation Assessment Method)
62-520 (Groundwater Classes, Standards and Exemptions)
62-522 (Groundwater Permitting and Monitoring Requirements)

62-528 (Underground Injection Control)
62-531 (Water Well Contractor Licensing Requirements)
62-532 (Water Well Permitting and Construction Requirements)
62-550 (Drinking Water Standards, Monitoring and Reporting)
62-555 (Permitting, Construction, Operation, and Maintenance of Public Water Systems)
62-560 (Requirements for Public Water Systems That Are Out of Compliance)
62-600 (Domestic Wastewater Facilities)
62-601 (Domestic Wastewater Treatment Plant Monitoring)
62-604 (Collection Systems and Transmission Facilities)
62-610 (Reuse of Reclaimed Water and Land Application)
62-620 (Wastewater Facility and Activities Permitting)
62-621 (Generic Permits)
62-650 (Water Quality Based Effluent Limitations)
62-660 (Industrial Wastewater Facilities)
62-699 (Treatment Plant Classification and Staffing)
62-701 (Solid Waste Management Facilities)
62-710 (Used Oil Management)
62-730 (Hazardous Waste)
62-740 (Petroleum Contact Water)
62-761 (Underground Storage Tank Systems)
62-762 (Aboveground Storage Tank Systems)
62-769 (Florida Petroleum Liability and Restoration Insurance Program)
62-770 (Petroleum Contamination Site Clean-Up Criteria)
62-780 (Contaminated Site Clean-Up Criteria)
62-814 (Electric and Magnetic Fields)
64E-6 (Standards for Onsite Sewage Treatment and Disposal Systems)

For Facilities in the South Florida Water Management District:
40E-2 (Consumptive Use)
40E-3 (Water Wells)
40E-6 (Works or Lands of the District)
40E-8 (Minimum Flows and Levels)
40E-9 (Real Property Acquisition and Disposal)
40E-21 (Water Shortage Plan)

III. REVISIONS TO DEPARTMENT STATUTES AND RULES

A. The Licensee shall comply with rules adopted by the Department subsequent to the issuance of the certification under the PPSA which prescribe new or stricter criteria, to the extent that the rules are applicable to electrical power plants, after a reasonable time for compliance. Except when express variances, exceptions, exemptions, or other relief have been granted, subsequently adopted Department rules which prescribe new or stricter criteria shall operate as automatic modifications to the certification.

B. Upon written notification to the Department, the Licensee may choose to operate the certified electrical power plant in compliance with any rule subsequently adopted by

the Department which prescribes criteria more lenient than the criteria required by the terms and conditions in the certification which are not site-specific.

[Section 403.511(5)(b), F.S.; subsection 62-4.160(10), F.A.C.]

IV. DEFINITIONS

Unless otherwise indicated herein, the meaning of terms used herein shall be governed by the applicable definitions contained in Chapters 373 and 403, F.S., and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these COC which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning. As used herein, the following shall apply:

A. "Application" as defined in Section 403.503(6), F.S. For purposes of this certification, "Application" shall also include materials submitted for petitions for modification to the COC.

B. "Associated Facilities" as defined in Section 403.503(7), F.S.

C. "Certified Area" or "Certified Areas" means the area within the Site in which the Certified Facilities are located. For off-Site non-linear associated facilities, this shall mean the areas within which the certified off-Site associated facilities are located. For associated linear facilities this term shall mean the area encompassed by the boundaries of the certified corridors, until such time as all property interests required for ROWs have been acquired, after which time the term will include only the area within the final ROWs in accordance with Section 403.503(11), F.S.

D. "Certified Facility" or "Certified Facilities" means the certified electrical power generation facilities and all on- or off-Site associated structures and facilities identified/described in the Application or in the final order of certification.

E. "Certified Transmission Line" or "Certified Transmission Lines" shall mean one or more of the transmission lines, as defined in Section 403.522(22), F.S. that is certified by the Siting Board.

F. "Complete," as that term is used in relation to post-certification filings, shall mean the post-certification filing provides the data required by the relevant COC.

G. "DEO" means the Florida Department of Economic Opportunity.

H. "DEM" shall mean the Florida Division of Emergency Management.

I. "DEP" or "Department" means the Florida Department of Environmental Protection.

J. "DHR" means the Florida Department of State, Division of Historical Resources.

K. "District-owned lands" shall mean lands owned by the South Florida Water Management District at the time of certification.

L. "DOH" means the Florida Department of Health.

M. "DOT" means the Florida Department of Transportation.

N. "Emergency conditions" means urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity.

O. "Practicable" means reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.

P. "FWC" means the Florida Fish and Wildlife Conservation Commission.

R. "Licensee" means Florida Power & Light Company which has obtained a certification order for the Certified Facilities.

S. "Listed species" shall mean a species listed as endangered, threatened, or a species of special concern by FWC, the Florida Department of Agriculture and Consumer Services, or the U.S. Fish and Wildlife Service.

T. "NPDES permit" means a federal National Pollutant Discharge Permit System permit issued by DEP in accordance with the federal Clean Water Act (referred to as State of Florida Industrial Wastewater (IWW) Facility Permit FL0001562, as well as subsequent modifications, amendments and/or renewals).

U. "NRC" shall mean the United States Nuclear Regulatory Commission.

V. "FPL" shall mean Florida Power & Light Company, the Licensee.

W. "Post-certification submittal" shall mean a submittal made by the Licensee pursuant to a COC.

X. "PSD permit" means a federal Prevention of Significant Deterioration air emissions permit issued by DEP in accordance with the federal Clean Air Act.

Y. "ROW" means the right-of-way to be selected by the Licensee within a certified corridor in accordance with the COC and as defined in Section 403.503(27), F.S.

Z. "SFRPC" means the South Florida Regional Planning Council.

AA. "SCO" shall mean the DEP Siting Coordination Office.

BB. "SED" shall mean the DEP Southeast District Office.

CC. "Site" as defined in Section 403.503(28), F.S. For Turkey Point Units 6 & 7 this includes the property on which the following will be located: two 1,100 MW (net) nuclear electrical generating units with supporting buildings, facilities and equipment; a laydown area; a nuclear administration building; a training building; parking area; an FPL reclaimed water treatment facility; radial collector wells and associated pipelines; an equipment barge unloading area; and those portions of all linear associated facilities located on Turkey Point Plant property east of SW 117th Avenue and south of Palm Drive.

DD. "Surface Water Management System" or "System" means a stormwater management system as defined in Section 373.403. (10), F.S., dam, impoundment, reservoir, appurtenant work, or works, or any combination thereof. The terms "surface water management system" or "system" include areas of dredging or fill.

EE. "SFWMD" means the South Florida Water Management District.

FF. "State water quality standards" shall mean the numerical and narrative criteria applied to specific water uses or classifications set forth in Chapter 62-302, F.A.C.

GG. "Title V permit" means a federal permit issued by DEP in accordance with Title V provisions of the federal Clean Air Act.

HH. "Wetlands" shall mean those areas meeting the definition set forth in Section 373.019(27), F.S., as delineated pursuant to Chapter 62-340, F.A.C.

V. DEPARTMENT PERMITS UNDER FEDERAL PROGRAMS

This certification is not a waiver of any other Department approval that may be required under federally delegated or approved programs. The Department may consider a violation of any of these permits as a violation of this certification.

A. Air

All Air Construction Permits and Title V Air Operation Permits in force for the certified facilities are incorporated by reference herein as part of these Conditions. The Air Construction Permits and Title V Air Operation Permits can be found at this web link using facility ID number 0250003: http://appprod.dep.state.fl.us/air/emission/apds/default.asp.

[Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297, F.A.C.]

B. Water

1. NPDES Industrial Wastewater Discharge

Licensee shall comply with all applicable provisions of IWW Permit No. FL0001562 (attached as Appendix I) as well as any subsequent modifications, amendments and/or renewals.

[Chapter 62-621, F.A.C.]

2. Underground Injection Control

Any construction or operation of injection wells shall be in accordance with all applicable provisions of UIC Permit No. 293962-002-UC (attached as Appendix II) as well as any subsequent modifications, amendments and/or renewals.

[Chapter 62-528, F.A.C.]

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.

[Section 403.0885, F.S.; Rule 62-621.300, F.A.C.]

4. NPDES Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity.

Any storm water discharges associated with industrial activity in a Certified Area shall be in accordance with all applicable provisions of Chapter 62-621, F.A.C.

[Section 403.0885, F.S.; Rule 62-621.300, F.A.C.]

5. NPDES Generic Permit for Discharge of Produced Ground Water From any Non-Contaminated Site Activity

Prior to discharge of produced ground water from any non-contaminated Certified Area activity which discharges by a point source to surface waters of the State, as defined in Chapter 62-620, F.A.C., the Licensee must first obtain coverage under the Generic Permit for Discharge of Produced Ground Water From any Non-Contaminated Site Activity. Similarly, if the activity involves a point source discharge of ground water from petroleum contaminated site, the Licensee must obtain coverage under the Generic Permit for discharge from petroleum contaminated sites. Before discharge of ground water can occur from such sites, analytical tests on samples of the proposed untreated discharge water shall be performed as required by Rule 62-621.300, F.A.C., to determine if the activity can be covered by either permit.

If the activity cannot be covered by either generic permit, the Licensee shall apply for an individual wastewater permit at least ninety (90) days prior to the date discharge to surface waters of the State is expected. No discharge to surface water is permissible without an effective permit.

[Section 403.0885, F.S.; Rule 62-621.300, 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.

[Section 403.0885, F.S.; Rule 62-621.300, F.A.C.]

VI. DESIGN AND PERFORMANCE CRITERIA

Certification, including these COC, is predicated upon preliminary designs, concepts, and performance criteria described in the Application or in testimony and exhibits in support of certification. Final engineering design will be consistent and in substantial compliance with the preliminary information described in the Application or as explained at the certification hearing. Conformance to those criteria, unless specifically modified in accordance with Section 403.516,

F.S., and Rule 62-17.211, F.A.C., is binding upon the Licensee in the design, construction, operation and maintenance of the Certified Facility.

[Section 403.516, F.S.; Rule 62-17.211, F.A.C.]

VII. NOTIFICATION

A. If, for any reason, the Licensee does not comply with or will be unable to comply with any condition or limitation specified in this certification, the Licensee shall immediately provide the SED with the following information:

1. A description of and cause of noncompliance; and

2. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The Licensee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this certification.

All notifications which are made in writing shall additionally be immediately provided to the Siting Office via email to SCO@dep.state.fl.us.

[Subsection 62-4.160(8), F.A.C.]

B. The Licensee shall promptly notify the SCO in writing of any previously submitted information concerning a Certified Facility that is later discovered to be inaccurate.

[Subsection 62-4.160(15), F.A.C.]

VIII. CONSTRUCTION PRACTICES

A. Local Building Codes

This license shall not affect in any way the right of any local government to charge appropriate fees or require that construction be in compliance with applicable building construction codes. Subject to the conditions set forth herein, this certification shall constitute the sole license of the state and any agency as to the approval of the location of the site and any associated facility and the construction and operation of the proposed electrical power plant.

[Section 403.511, F.S.]

B. Open Burning

Any open burning in connection with initial land clearing shall be in accordance with the applicable non-procedural requirements of Chapters 62-256 and 5I-2, F.A.C. Prior to any burning of construction-generated material, after initial land clearing that is allowed to be burned in accordance with Chapter 62-256, F.A.C., the Licensee shall seek approval from the SED, whose approval may be granted in conjunction with the approval of the Division of Forestry. Burning shall not occur if not approved by the SED or if the Division of Forestry has issued a ban on burning due to fire safety conditions or due to air pollution conditions.

[Chapters 5I-2 and 62-256, F.A.C.]

C. Vegetation

For Certified Facilities located in any Florida Department of Transportation (DOT) ROW, Section 4.6 of the Florida DOT *Utility Accommodation Manual* (2010) available on the DOT website (located at this web address http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/710020001/710020001.pdf) shall serve as guidelines for best management practices.

D. Existing Underground Utilities

Licensee must follow all applicable portions of the Underground Facility Damage Prevention and Safety Act, Chapter 556, F.S. Ticket numbers shall be available for request until underground work is completed for the affected area.

[Chapter 556, F.S.]

E. Electric and Magnetic Fields (EMF)

Any certified electrical transmission lines that are associated facilities and electrical substations shall comply with the applicable requirements of Chapter 62-814, F.A.C. The EMF associated with any configuration developed during the final design of a Certified Facility not shown in the Application shall be provided to DEP on DEP Form 62-814.900, F.A.C., at least 90 days prior to the start of construction or such shorter time period to which the DEP Siting Office agrees, as required by Rule 62-814.520(3).

[Chapter 62-814, F.A.C.]

F. Existing Wells

Any existing wells to be impacted in the path of construction that will no longer be used shall be abandoned by a licensed well contractor. All abandoned wells shall be filled and sealed in accordance with subsection 62-532.500(4), F.A.C., or with the rules of the authorizing agency, or consistent with these COC.

[Rule 62-532.500(4), F.A.C.]

G. Abandonment of Existing Septic Tanks

Any existing septic tanks to be impacted by construction and that will no longer be used shall be abandoned in accordance with Rule 64E-6.011, F.A.C., unless these COC provide otherwise.

[Chapter 64E-6, F.A.C.]

IX. RIGHT OF ENTRY

A. Upon presentation of credentials or other documents as may be required by law, the Licensee shall allow authorized representatives of the Department or other agencies with jurisdiction over a portion of a Certified Facility:

1. At reasonable times, recognizing the security that must be maintained at the nuclear facility, depending upon the nature of the concern being investigated, to enter upon a Certified Facility in order to monitor activities within their respective jurisdictions for purposes of assessing compliance with this certification; or

2. During business hours, to enter the Licensee's premises in which records are required to be kept under this certification; and to have access to and copy any records required to be kept under this certification.

B. When requested by the Department, on its own behalf or on behalf of another agency with regulatory jurisdiction, the Licensee shall within 15-working days, or such longer period as may be mutually agreed upon by the Department and the Licensee, furnish any information required by law, which is needed to determine compliance with the certification. *[Paragraph 62-4.160(7)(a) and subsection 62-4.160(15), F.A.C.]*

X. DISPUTE RESOLUTION

A. General

If a situation arises in which mutual agreement between either, the Department and the Licensee or the Department and an agency with substantive regulatory jurisdiction over a matter cannot be reached, the Department shall act as a facilitator for an informal meeting in an attempt to resolve the issue. If the dispute is not resolved in this initial informal meeting, Licensee may request a second informal meeting in which both Licensee and the agency with substantive regulatory jurisdiction over the matter at issue can participate in an attempt to resolve the issue. If, after such meetings, a mutual agreement cannot be reached between the parties, then the matter shall be immediately referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, F.S. The Licensee or the Department may request DOAH to establish an expedited schedule for the processing of such a dispute.

B. Post-Certification Submittals

If it is determined, after assessment of a post-certification submittal, that compliance with the Conditions will not be achieved for a particular portion of a submittal, the Department shall make a separate determination of other portions of the submittal, unless those portions of the submittal are substantially related to or necessary to implement that portion for which it has been determined that compliance with the Conditions will not be achieved.

C. Modifications

If written objections are filed regarding a modification, and the objections address only a portion of a requested modification, then the department shall issue a Final Order approving the portion of the modification to which no objections were filed, unless that portion of the requested modification is substantially related to or necessary to implement the portion to which written objections are filed.

[Section 120.57.403.504(8), F.S and Rule 62-17.211, F.A.C.]

XI. SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification or the application of any provision of this certification to any circumstance is held invalid, the remainder of the certification or the application of such provision to other circumstances shall not be affected thereby.

XII. ENFORCEMENT

A. The terms, conditions, requirements, limitations and restrictions set forth in these COC are binding and enforceable pursuant to Sections 403.141, 403.161, 403.514, 403.727, and 403.859 through 403.861, F.S., as applicable. Any noncompliance by the Licensee with these COC constitutes a violation of Chapter 403, F.S., and is grounds for enforcement action, license termination, license revocation, or license revision. The Licensee is placed on notice that the Department may review this certification periodically and may initiate enforcement action for any violation of these COC.

B. All records, notes, monitoring data and other information relating to the construction or operation of a Certified Facility which are submitted to the Department may be used by the Department as evidence in any enforcement case involving a Certified Facility and arising under the Florida Statutes or Department rules, subject to the restrictions in Sections 403.111 and 403.73, F.S. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

[Sections 403.061(8), 403.121, 403.131, 403.141, 403.151, 403.161, 403.511, 403.514, F.S.; subsections 62-4.160(1) and 62-4.160(9), F.A.C.]

XIII. REVOCATION OR SUSPENSION

The certification shall be final unless revised, revoked or suspended pursuant to law. This certification may be suspended or revoked pursuant to Section 403.512, F.S. This certification is valid only for the specific processes and operations identified in the Application or approved in the final order of certification and indicated in the testimony and exhibits in support of certification. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this approval may constitute grounds for revocation and enforcement action by the Department. Any enforcement action, including suspension and revocation, shall only affect the portion(s) of the Certified Facilities that are the cause of such action, and other portions of the Certified Facilities shall remain unaffected by such action.

[Sections 403.512, 403.532, and 403.9425, F.S.; subsection 62-4.160(2), F.A.C.]

XIV. REGULATORY COMPLIANCE

As provided in Sections 403.087(7) and 403.722(5), F.S., except as specifically provided in the final order of certification or these COC, the issuance of this certification does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This certification is not a waiver of or approval of any other Department license/permit that may be required for the Certified Facilities which are not addressed in this certification. This certification does not relieve the Licensee from liability for harm or injury to human health or welfare, animal, or plant life, or public or private property caused by the construction or operation of the Certified Facilities, or from penalties therefore.

[Subsections 62-4.160(3) and 62-4.160(5), F.A.C.]

XV. CIVIL AND CRIMINAL LIABILITY

Except to the extent a variance, exception, exemption or other relief is granted in the final order of certification, in a subsequent modification to these Conditions, or as otherwise provided under Chapter 403, F.S, this certification does not relieve the Licensee from civil or criminal penalties for noncompliance with any COC, applicable rules or regulations of the Department, or any other state statutes or regulations which may apply.

[Sections 403.141, 403.161, 403.511, F.S.]

XVI. USE OF STATE LANDS

A. Except as specifically provided in the final order of certification, or these conditions, the issuance of this certification conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

B. Except for the three easements which the Siting Board has directed the Board of Trustees (BOT) of the Internal Improvement Trust Fund of the State of Florida to issue and execute for the construction and operation of facilities associated with the Turkey Point Units 6 & 7 Project, including but not limited to the Radial Collector Well System Laterals under Biscayne Bay and the transmission line crossing of the Miami River and the state-owned uplands located in Section 23, Township 53 South, Range 39 East, if f any portion of a Certified Facility is located on sovereign submerged lands, state-owned uplands, or within an aquatic preserve, then the Licensee must comply with the applicable portions of Chapters 18-2, 18-18, 18-20 and 18-21, F.A.C., and Chapters 253 and 258, F.S. Except as specifically provided under Chapter 403, the final order of certification, or these COC, if any portion of a Certified Facility is located on sovereign submerged lands, the Licensee must submit section G of the Joint Application for Environmental Resource Permits to the Department prior to construction.

Except for the three easements which the Siting Board has directed the Board of Trustees (BOT) of the Internal Improvement Trust Fund of the State of Florida to issue and execute for the construction and operation of facilities associated with the Turkey Point Units 6 & 7 Project, including but not limited to the Radial Collector Well System Laterals under Biscayne Bay and the transmission line crossing of the Miami River and the state-owned uplands located in Section 23, Township 53 South, Range 39 East, if any portion of a Certified Facility is located on state-owned uplands, the Licensee must submit an Upland Easement Application to the Department prior to construction.

C. Except for the three easements which the Siting Board has directed the Board of Trustees (BOT) of the Internal Improvement Trust Fund of the State of Florida to issue and execute for the construction and operation of facilities associated with the Turkey Point Units 6 & 7 Project, including but not limited to the Radial Collector Well System Laterals under Biscayne Bay and the transmission line crossing of the Miami River and the state-owned uplands located in Section 23, Township 53 South, Range 39 East, if f a portion of a Certified Facility is located on sovereign submerged lands or state-owned uplands owned by the Board of Trustees of the Internal Improvement Trust Fund, pursuant to Article X, Section 11 of the Florida Constitution, then the proposed activity on such lands requires a proprietary authorization.

Under such circumstances, the proposed activity is not exempt from the need to obtain a proprietary authorization. Unless otherwise provided in the final order of certification or these COC, the Department has the responsibility to review and take action on requests for proprietary authorization in accordance with Rules 18-2.018 or 18-21.0051, F.A.C.

D. The Licensee is hereby advised that Florida law states: "No person shall commence any excavation, construction, or other activity involving the use of sovereign or other state lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund or the Department of Environmental Protection under Chapter 253, F.S., until such person has received from the Board of Trustees of the Internal Improvement Trust Fund the required lease, license, easement, or other form of consent authorizing the proposed use." Pursuant to Chapter 18-14, F.A.C., if such work is done without consent, or if a person otherwise damages state land or products of state land, the Board of Trustees may levy administrative fines of up to $10,000 per offense.

E. The terms, conditions, and provisions of any required lease or easement issued by the State shall be met. Any construction activity associated with a Certified Facility shall not commence on sovereign submerged lands or state owned uplands, title to which is held by the Board of Trustees of the Internal Improvement Trust Fund, until all required lease or easement documents have been executed.

F. The Licensee shall abide by the terms and conditions of any easements which the Siting Board directs the Board of Trustees (BOT) of the Internal Improvement Trust Fund of the State of Florida, to issue and execute for the construction and operation of facilities associated with the Turkey Point Unit 6 & 7 Project including but not limited to the Radial Collector Well System laterals under Biscayne Bay and the transmission line crossings of the Miami River and the state-owned uplands located in Section 23, Township 53S, Range 39E. Such easements, once issued, are incorporated by reference herein as part of this Certification and attached as Attachment H, and their provisions shall be Conditions of this Certification. The Licensee shall comply with the substantive provisions and limitations set forth in such Easements as part of these Conditions of Certification, and as those provisions may be modified, amended, or renewed in the future by the BOT or Department. Such provisions shall be fully enforceable as Conditions of this Certification. Any violation of such provisions shall be a violation of these Conditions of Certification.

[Chapters 253 and 258, and Section 403.511, F.S.; Chapter 3.1.1. of the B.O.R.; Chapters 18-2, 18-14, 18-21, 62-340, and subsections 62-343.900(1) and 62-4.160(4), F.A.C.; Upland Easement Application and Section G of the Environmental Resource Permit Application Form. See also Sections B(VIII) and C(XIV) below.]

XVII. PROCEDURAL RIGHTS

Except as specified in Chapter 403, F.S., or Chapter 62-17, F.A.C., no term or COC shall be interpreted to preclude the post-certification exercise by any party of whatever procedural rights it may have under Chapter 120, F.S., including those related to rule-making proceedings.

[Section 403.511(5)(c), F.S.]

XVIII. AGENCY ADDRESSES FOR POST-CERTIFICATION SUBMITTALS AND NOTICES

Where a condition requires post-certification submittals and/or notices to be sent to a specific agency, the following agency addresses shall be used unless the COC specify otherwise or unless the Licensee and the Department are notified in writing of an agency's change in address for such submittals and notices:

Florida Department of Environmental Protection
Siting Coordination Office, MS 5500
2600 Blair Stone Rd.
Tallahassee, FL 32399-3000

Florida Department of Environmental Protection
Southeast District Office
400 North Congress Avenue, Suite 200
West Palm Beach, FL 33401

Florida Department of Economic Opportunity
Office of the Secretary
107 East Madison Street
Tallahassee, FL 32399-2100

Florida Fish & Wildlife Conservation Commission
Office of Policy and Stakeholder Coordination
620 South Meridian Street
Tallahassee, FL 32399-1600

South Region Shorebird Contact
Florida Fish & Wildlife Conservation Commission
8535 Northlake Boulevard
West Palm Beach, FL 33412
(561) 625-5122

Florida Department of Transportation
District Administration
605 Suwannee Street
Tallahassee, FL 32399-0450

Florida Department of Agriculture and Consumer Services
Division of Forestry
3125 Conner Boulevard
Tallahassee, FL 32399-1650

South Florida Regional Planning Council
Office of the Executive Director
3440 Hollywood Boulevard, Suite 140

Hollywood, FL 33021

South Florida Water Management District
Office of General Counsel
3301 Gun Club Road
West Palm Beach, FL 33406

Florida Department of State
Division of Historical Resources
500 S. Bronough Street
Tallahassee, FL 32399-0250

MDC
Office of General Counsel
111 N.W. First Street, Suite 2810
Miami, FL 33128

City of Coral Gables
Office of City Attorney
405 Biltmore Way
Coral Gables, FL 33134

City of Doral
Office of City Attorney
150 West Flagler Street, Suite 2200
Miami, FL 33130

City of Florida City
Office of City Attorney
12550 Biscayne Blvd., Suite 800
North Miami Beach, FL 33181

City of Homestead
Office of City Attorney
2525 Ponce de Leon Boulevard, Suite 700
Coral Gables, FL. 33134

Town of Medley
Office of Town Attorney
7777 N.W. 72 Avenue
Medley, FL 33166

City of Miami
Office of City Attorney
444 S.W. 2nd Avenue, Suite 945
Miami, FL 33130

Village of Palmetto Bay
Office of Village Attorney
18001 Old Cutler Road, Suite 533
Palmetto Bay, FL 33157

Village of Pinecrest
Office of Village Attorney
7700 N. Kendall Drive, Suite 703
Miami, FL 33156

City of South Miami
Office of City Attorney
1450 Madruga Avenue, Suite 202,
Coral Gables, FL 33146

[Section 403.511, F.S.]

XIX. PROCEDURES FOR POST-CERTIFICATION SUBMITTALS

A. Purpose of Submittals

COC which provide for the post-certification submittal of site specific technical data by the Licensee to DEP or other agencies are for the purpose of determining the Licensee's compliance with the COC. COC which require the Licensee to conduct monitoring of the environmental effects arising from the construction, operation and maintenance of a Certified Facility are for assurances of continued compliance with these COC, without further agency action. Any submittal of information or determination of compliance pursuant to post-certification review does not provide a point of entry for a third party.

[Subparagraph 62-17.191(1) and (2), F.A.C.]

B. Filings

All post-certification submittals of information by Licensee are to be filed with the SCO, the DEP District Office(s), and any other agency that is entitled to receive a submittal pursuant to these COC. All filings with the SCO shall be submitted in electronic .pdf format only, unless otherwise requested by SCO. Each submittal shall clearly identify the Certified Facility name, PA#, and the condition number/s (e.g., Section X, Condition XX.y.(z)) requiring the submittal, as identified in these COC. As required by Section 403.5113(2), F.S., each post-certification submittal will be reviewed by each agency with regulatory authority over the matters addressed in the submittal on an expedited and priority basis.

C. Completeness

DEP shall review each post-certification submittal for completeness on an expedited and priority basis. This review may include consultation with the other agency/ies receiving the post-certification submittal with regulatory jurisdiction over the matter addressed in the submittal. DEP's finding of completeness shall specify the area of a Certified Facility affected, and shall not delay further processing of the post-certification submittal for non-

affected areas. The Licensee may request that the SCO hold a meeting within 15 days after a post-certification submittal to discuss any completeness issues.

If any portion of a post-certification submittal is found to be incomplete, the Licensee shall be so notified. Failure to issue such a notice within 30 days after filing of the post-certification submittal shall constitute a finding of completeness. Subsequent findings of incompleteness, if any, shall address only the newly filed information.

[Subparagraph 62-17.191(1)(c) 2, F.A.C.]

D. Interagency Meetings

DEP may conduct an interagency meeting with other agencies that received a post-certification submittal. The purpose of such an interagency meeting shall be for the agencies with regulatory jurisdiction over the matters addressed in the post-certification submittal to discuss whether compliance with these COC has been provided. Failure of DEP to conduct an interagency meeting or failure of any agency to attend an interagency meeting shall not be grounds for DEP to withhold a determination of compliance with these COC nor to delay the timeframes for review established by these COC. At DEP's request, a field inspection shall be conducted with the Licensee and the agency representative in conjunction with the interagency meeting.

E. Determination of Compliance

DEP shall give written notification within 90 days to the Licensee and the other agency/ies to which the post-certification information was submitted of DEP's determination whether there is demonstration of compliance with these COC. If it is determined that compliance with these COC has not been provided, the Licensee shall be notified with particularity of the deficiencies and possible corrective measures suggested. Failure to notify Licensee in writing within 90 days of receipt of a complete post-certification submittal shall constitute a determination of compliance.

F. Commencement of Construction

If DEP does not object within the time period specified in paragraph E. above, Licensee may begin construction pursuant to the terms of these COC and the subsequently submitted construction details.

G. Revisions to Design Previously Reviewed for Compliance

If revisions to site-specific designs occur after submittal, the Licensee shall submit revised plans prior to construction for review in accordance with the post-certification process specified in this Condition.

H. Variation to Submittal Requirements

DEP, in consultation with the appropriate agencies that have regulatory authority over a matter to be addressed in a post-certification submittal, and Licensee may jointly agree to vary any of the requirements for a post-certification submittal provided the information submitted is sufficient to provide reasonable assurances of compliance with these COC.

[Section 403.511, F.S.; Rule 62-17.191, F.A.C.]

XX. POST CERTIFICATION SUBMITTAL REQUIREMENTS SUMMARY

Within 90 days after certification and within 90 days after any subsequent modification or certification the Licensee shall provide the Department a complete summary of those post-certification submittals that are identified in these COC where due-dates for the information required of the Licensee is identified. A summary shall be provided as a separate document for each Certified Transmission Line Corridor or segment thereof. Such submittals shall include, but are not limited to, monitoring reports, management plans, wildlife surveys, etc. The summary shall be provided to the SCO and any affected agency or agency subunit to which the submittal is required to be provided, in a sortable spreadsheet, via CD and hard copy, in the format identified below or equivalent. For subsequent modifications and certifications, a Post-Certification Submittal Requirements Summary shall be required for only those resulting in new or altered post-certification requirements.

Condition Number	Requirement and Timeframe	Due Date	Name of Agency or Agency Subunit to whom the submittal is required to be provided

[Section 403.5113, F.S., subsection 62-17.191(3), F.A.C.]

XXI. POST CERTIFICATION AMENDMENTS

If, subsequent to certification, the Licensee proposes any material change to the Application and revisions or amendments thereto, as certified, the Licensee shall submit a written request for amendment and a description of the proposed change to the Application to the Department. Within 30 days after the receipt of a complete request for an amendment, the Department shall determine whether the proposed change to the application requires a modification to the COC.

A. If the Department concludes that the change would not require a modification to the COC, the Department shall provide written notification of the approval of the proposed amendment to the Licensee, all agencies, and all other parties to the certification.

B. If the Department concludes that the change would require a modification to the COC, the Department shall provide written notification to the Licensee that the proposed change to the Application requires a request for modification pursuant to Section 403.516, F.S.

[Section 403.5113, F.S]

XXII. MODIFICATION OF CERTIFICATION

A. Pursuant to Sections 403.516(1)(a), F.S., and Rule 62-17.211, F.A.C., the Siting Board hereby delegates the authority to the Department to modify any Condition.

B. In addition, the Department is delegated the authority to modify conditions as follows:

1. The Department may modify any COC herein in accordance with Section 403.516, F.S.

2. The certification shall be modified to conform to subsequent DEP-issued permits, permit amendments, permit modifications, or permit renewals of any separately issued permits under a federally delegated or federally approved permit program. Such modification may be made without further notice if the matter has been previously noticed under the requirements for any federally delegated or approved permit program. In the event of a conflict, the more stringent of the conditions of such permits or of these COC shall be controlling.

3. The Department may modify specific conditions of a certification which are inconsistent with the terms of any federally delegated or approved permit for the certified electrical power plant. Such modification may be made without further notice if the matter has been previously noticed under the requirements for any federally delegated or approved permit program.

C. Any anticipated facility expansions, production increases, or process modifications which may result in new, different or increased discharge or emission of pollutants, change in fuel, or expansion in generating capacity must be reported by submission of an appropriate request for an amendment, modification, or certification.

D. Any anticipated facility change that results in a change to the Site Delineation or the Delineation of the Certified Area, attached hereto as part of Attachment A, must be accompanied by a map or aerial photo showing the proposed new boundaries of the Site and/or Certified Area. Within 120 days after completion of construction of the approved facility change, the Licensee shall provide the information required by Section A. General Conditions, Condition I. Scope, paragraphs D, E, F, or G, as appropriate.

E. The Licensee may file a petition for modification with the Department, or the Department may initiate the modification upon its own initiative.

[Section403.516, F.S.; Rule 62-17.211, F.A.C.]

XXIII COASTAL ZONE CONSISTENCY

Pursuant to Sections 373.428 and 403.511, F.S., certification of the Certified Facilities constitutes the State's concurrence that the licensed activity or use is consistent with the federally approved program under the Florida Coastal Management Act.

[Sections 373.428, 380.23 and 403.511(7), F.S.]

XXIV TRANSFER OF CERTIFICATION

A. This certification is transferable in whole or in part, upon Department approval, to an entity determined to be able to comply with these COC. A transfer of certification of all or

part of the Certified Facilities may be initiated by the Licensee's filing of a Notice of Intent to Transfer Certification with the Department. The notice of intent shall identify the intended new certification holder or Licensee and the identity of the entity responsible for compliance with the certification. Upon the filing with the Department of a written agreement from the intended Licensee/Transferee to abide by all the applicable COC and applicable laws and regulations, the transfer shall be approved unless the Department objects to the transfer on the grounds of the inability of the new Licensee to comply with the COC, specifies in writing its reasons therefore, and gives notice and opportunity to petition for a Section 120.57, F.S., administrative hearing. Upon approval, the Department will initiate a modification to the COC to reflect the change in Licensee in accordance with Rule 62-17.211, F.A.C.

B. In the event of the dissolution of the Licensee, the Department may transfer certification to successor entities which are determined to be competent to construct, operate, and maintain the Certified Facilities in accordance with the COC and which are proper applicants as defined by the PPSA. Upon determination that such a successor entity complies with the above, the Department will initiate a modification to the COC to reflect the change in Licensee in accordance with Rule 62-17.211, F.A.C.

[Rule 62-17.211, F.A.C]

XXV. LABORATORIES AND QUALITY ASSURANCE

Chemical, physical, biological, microbiological and toxicological data collected as a requirement of these COC must be reliable, and collected and analyzed by scientifically sound procedures. Unless otherwise specified in these COC, the Licensee shall adhere to the minimum field and laboratory quality assurance, methodological and reporting requirements of the Department as set forth in Chapter 62-160, F.A.C. Standard Operating Procedures can be downloaded from the following website: http://www.dep.state.fl.us/water/sas/sop/sops.htm.

[Rule 62-160, F.A.C.]

XXVI. ENVIRONMENTAL RESOURCES

A. General

1. Submittals for Construction Activities

a. Prior to the commencement of construction of new facilities and/or associated facilities the Licensee shall provide to the SED Environmental Resource Permitting Section for review, all information necessary for a complete *Joint Application for Individual and Conceptual Environmental Resource Permit/Authorization to Use* (ERP), DEP Form 62-330.060(1). Information may be submitted by discrete portions of the Certified Facilities for a determination of compliance with these COC.

This form may: a) have been submitted concurrently with a SCA; b) be submitted as part of an amendment request or a petition for modification; or c) be submitted as a post-certification submittal following approval of a project through certification, a petition for modification, or an amendment. Such ERP submittals, once received, shall be reviewed in accordance with the non-procedural standards and criteria for issuance of an ERP, including all the provisions related to reduction and elimination of impacts, conditions for

issuance, additional conditions for issuance, and mitigation contained in Chapters 62-330, F.A.C., as applicable, unless otherwise stated in these Conditions.

Those forms submitted as part of a site certification, an amendment, or a modification, shall be processed concurrently with, and under the respective certification, amendment, or modification procedures. Those forms submitted as a post-certification submittal (after certification, or amendment or modification and prior to construction) shall be processed in accordance with Section A. General Conditions, Condition XIX., Procedures for Post-Certification Submittals.

No construction shall commence on a Project feature, or in a particular segment for a linear facility, until the Department has determined that there is a demonstration of compliance with these COC. For post-certification submittal reviews, the Department's determination is governed by Section A. General Conditions, Condition XIX. Procedures for Post-Certification Submittals.

b. Concurrent with submittal of the DEP form required in Subparagraph A. 1. a., above the Licensee shall submit, as applicable, a survey of wetland and surface water areas as delineated in accordance with Chapter 62-340, F.A.C., and verified by appropriate agency staff for Department compliance review. Available DEP-approved wetland and surface water delineations within the boundaries of a Certified Facility or a portion thereof may be used and reproduced for this delineation submittal and verification.

2. Any delineation of the extent of a wetland or other surface water submitted as part of the DEP ERP Application Form required by Subparagraph A.1.a. above, including plans or other supporting documentation, shall not be considered binding on the Department unless a specific condition of this Certification or a formal wetlands jurisdictional determination under Section 373.421(2), F.S., provides otherwise.

[Section 373.416, 373.421, and 403.504, F.S.; Chapters 62-330, 62-340, F.A.C.]

B. Surface Water Management Systems (SWMS)

1. Information regarding surface water management systems (SWMS) will be reviewed for consistency with the applicable 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 SWMS(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 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 *the State of Florida Erosion and Sediment Control Designer and Reviewer Manual* (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 *the State of Florida Erosion and Sediment Control Designer and Reviewer Manual.* 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 facilities prior to use of the portion of a Certified Facility being 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 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.

[Section 373.414, F.S., Chapters 62-302, 62-330 and Rule 62-4.242, F.A.C.]

C. Wetland and Other Surface Water Impacts

1. All Certified Facilities shall be constructed in a manner which will eliminate or reduce adverse impacts to on-site and/or adjacent wetlands or other surface waters to the extent practicable or otherwise comply with substantive criteria for elimination or reduction. When impacts to wetlands will occur as a result of a future amendment, modification, or certification and cannot be practicably eliminated or reduced, the Licensee may propose and the Board or the Department shall consider mitigation to offset otherwise unpermittable activities under the Environmental Resource Permit review process pursuant to Condition A.1, above.

2. Proposed mitigation plans submitted with the DEP ERP Application forms required in Condition A.1.a. above, or submitted and approved as part of an amendment, modification, or certification, and that are deemed acceptable by DEP, shall include applicable construction conditions, success criteria, and monitoring plans and shall be incorporated into these COC and attached as Attachment C (Mitigation Plans).

[Sections 373.413, 373.414, 373.4145, and 403.511, F.S.; Chapters 62-330, and 62-345, F.A.C.]

XXVII. THIRD PARTY IMPACTS

The Licensee is responsible for maintaining compliance with these COC even when third party activities authorized by the Licensee or on the Licensee's behalf occur in or on the Certified Area.

[Section 403.506(1), F.S.]

XXVIII. FACILITY OPERATION

The Licensee shall properly operate and maintain the Certified Facilities and systems of treatment and control (and related appurtenances) that are installed and used by the Licensee

to achieve compliance with these COC. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance.

[Subsection 62-4.160(6), F.A.C.]

XXIX. RECORDS MAINTAINED AT THE FACILITY

A. These COC or a copy thereof shall be kept at the Site.

B. The Licensee shall hold at the Site or FPL's corporate headquarters records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation required by these COC, copies of all reports required by these COC, and the Application for this approval. These materials shall be retained at least three (3) years from the date of the sample, measurement, report, or Application unless otherwise specified by Department rule.

C. Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the date's analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used; and
6. the results of such analyses.

[Subsection 62-4.160(12) and paragraph 62-4.160(14)(b), F.A.C.]

XXX. WATER DISCHARGES

A. Discharges

1. Except as otherwise authorized by a permit issued by the Department under a federally delegated or approved program or to the extent a variance, exception, exemption or other relief is granted, Licensee shall not discharge to ground or surface waters of the State wastes in concentrations which, alone or in combination with other substances, or components of discharges (whether thermal or non-thermal) are carcinogenic, mutagenic, teratogenic, or toxic to human beings (unless specific criteria are established for such components in Rule 62-520.420, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.

2. Except as otherwise authorized by a permit issued by the Department under a federally delegated or approved program or to the extent a variance, exception, exemption or other relief is granted, all discharges and activities must be conducted so as to not cause a violation of the water quality standards set forth in Chapters 62-4, 62-302, 62-520, and 62-550, F.A.C., including the provisions of Rules 62-4.243, 62-4.244, and 62-4.246, F.A.C., the antidegradation provisions of paragraphs 62-4.242(1)(a) and (b), F.A.C., subsections 62-4.242(2) and (3), F.A.C., and Rule 62-302.300, F.A.C., and any special standards for Outstanding Florida Waters and Outstanding National Resource Waters set forth in subsections 62-4.242(2) and (3), F.A.C.;

3. All dewatering discharges must be in compliance with Rule 62-621.300, F.A.C.

[Chapters 62-4, 62-302, 62-520, and 62-550, F.A.C., and Rule 62-621.300, F.A.C.]

B. Wastewater Incident Reporting

1. The Licensee shall report to the SED any noncompliance with industrial wastewater requirements which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Licensee becomes aware of the circumstances.

The Licensee shall provide the following information, to the extent known, to the SED in the 24-hr oral report:

a. Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,

b. Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,

c. Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and

d. Any unauthorized discharge to surface or ground waters.

A written submission shall also be provided to the SED within five days of the time the Licensee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

2. For unauthorized releases or spills of treated or untreated wastewater reported that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the Department by calling the STATE WARNING POINT NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the Licensee becomes aware of the discharge. The Licensee, to the extent known, shall provide the following information to the State Warning Point:

a. Name, address, and telephone number of person reporting;

b. Name, address, and telephone number of the Licensee or responsible person for the discharge;

c. Date and time of the discharge and status of discharge (ongoing or ceased);

d. Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);

e. Estimated amount of the discharge;

f. Location or address of the discharge;

g. Source and cause of the discharge;

h. Whether the discharge was contained on-site, and cleanup actions taken to date;

i. Description of area affected by the discharge, including name of water body affected, if any; and

j. Other persons or agencies contacted.

3. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department shall waive the written report.

[Chapter 376, F.S.; subsection 62-620.610(20), F.A.C.]

XXXI. SOLID AND HAZARDOUS WASTE

A. Solid Waste

The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-701, F.A.C., for any solid waste generated within a Certified Facility during construction, operation, and maintenance.

[Chapters 62-701, F.A.C.]

B. Hazardous Waste and Used Oil

The Licensee shall comply with all applicable non-procedural provisions of DEP Chapter 62-730, F.A.C., for any hazardous waste generated within a Certified Facility. This facility operates under EPA hazardous waste identification number FLD000733683.

The Licensee shall comply with all applicable non-procedural provisions of DEP Chapter 62-710, F.A.C., for any used oil and used oil filters generated within the certified facility.

The Licensee shall comply with all applicable non-procedural provisions of DEP Chapter 62-737, F.A.C., for any spent mercury-containing lamps and devices generated within the certified facility.

[Chapters 62-710, 62-730, and 62-737, F.A.C.]

C. Hazardous Substance Release Notification

1. Any owner or operator of a facility who has knowledge of any release of a hazardous substance from a Certified Facility in a quantity equal to or exceeding the reportable quantity in any 24-hour period shall notify the Department by calling the STATE WARNING POINT NUMBER, (800) 320-0519, within one working day of discovery of the release.

2. Releases of mixtures and solutions are subject to these notification requirements only where a component hazardous substance of the mixture or solution is released in a quantity equal to or greater than its reportable quantity.

3. Notification of the release of a reportable quantity of solid particles of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver,

thallium, or zinc is not required if the mean diameter of the particles released is larger than 100 micrometers (0.004 inches).

[Chapter 62-150, F.A.C.]

D. Petroleum Contact Water

The Licensee shall comply with all applicable provisions of Chapter 62-740, F.A.C., for any petroleum contact water generated within the Certified Facility during construction and operation.

[Chapter 62-740, F.A.C.]

E. Contaminated Site Cleanup

The Licensee shall comply with all applicable non-procedural provisions of DEP Chapter 62-780, F.A.C., and relevant provisions of Chapter 376 or 403, F.S., that result in legal responsibility for site rehabilitation pursuant to those chapters. This responsibility for site rehabilitation does not affect any activity or discharge permitted or exempted pursuant to Chapter 376 or 403, F.S., or rules promulgated pursuant to Chapter 376 or 403, F.S.

[Chapter 62-780, F.A.C.]

XXXII. STORAGE TANK SYSTEMS

Registration, construction, installation, operation, maintenance, repair, closure, and disposal of storage tank systems that store regulated substances shall be in accordance with Chapters 62-761 and 62-762, F.A.C., in order to minimize the occurrence and environmental risks of releases and discharges. Mineral acid storage tank systems are subject only to Rule 62-762.891, F.A.C. Copies of all information submitted to FDEP pursuant to this condition shall also be provided to Miami-Dade County.

A. Incident Notification Requirements.

Notification of the discovery of the loss of a regulated substance from a storage tank system exceeding 100 gallons on impervious surfaces, other than secondary containment, such as driveways, airport runways, or other similar asphalt or concrete surfaces, provided that the loss does not come in contact with pervious surfaces; or of the discovery of any other incident listed in subsections 62-761.450(2) or 62-762.451(2), F.A.C., shall be made to MDC (County) on Incident Notification Form 62-761.900(6) within 24 hours or before the close of the County's next business day.

B. Discharge Reporting Requirements

Upon discovery of an unreported discharge, the Licensee shall report to the County on Discharge Report Form 62-761.900(1) within 24 hours or before the close of the County's next business day those items listed in paragraph 62-761.450(3)(a), F.A.C., including a spill or overfill event of a regulated substance to soil or another pervious surface, equal to or exceeding 25 gallons, unless the regulated substance has a more stringent reporting requirement specified in C.F.R. Title 40, Part 302.

C. Discharge Cleanup

If a discharge of a regulated substance occurs at a Certified Facility, actions shall be taken immediately to contain, remove, and abate the discharge under all applicable

Department rules (for example, Chapter 62-770, F.A.C., Petroleum Contamination Site Cleanup Criteria). The Licensee is advised that other federal, state, or local requirements may apply to these activities. If the contamination present is subject to the provisions of Chapter 62-770, F.A.C., corrective action, including free product recovery, shall be performed in accordance with that Chapter.

D. Out of Service and Closure Requirements

Storage tank systems shall be taken out-of-service and/or closed as necessary in accordance with Rules 62-761.800 and 62-762.801, F.A.C., as applicable.

[Chapters 62-761 and 62-762, F.A.C.]

SECTION B: SPECIFIC CONDITIONS – Unit 6 & 7 Nuclear Power Plant and associated facilities (EXCLUDING Transmission lines)

I. RADIAL COLLECTOR WELL SYSTEM MONITORING

The requirements of the Conditions in this Section B, Condition I. are 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 Turkey Point Units 6 & 7 radial collector well system (RCWS). If adverse impacts are identified as a result of such monitoring, additional measures shall be required to evaluate, abate or mitigate such impacts.

A. Department of Environmental Protection

1. 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 and on near-shore salinity and water quality above the RCW laterals. The RCWSMP shall be incorporated as Attachment D to these Conditions.

b. At least 2 years prior to the expected commencement of construction of the first caisson for the RCWS, the Licensee shall submit a RCWSMP to the DEP SCO (with copies provided to FWC and the SFWMD) for review in accordance with Section A, General Conditions, XIX. Procedures for Post-Certification Submittals. Once finalized, any proposed revision to the RCWSMP shall be submitted to the DEP for review prior to implementation.

c. The RCWSMP shall include, at a minimum, all DEP, FWC and SFWMD requirements for the plan included in the Conditions of this Section B, Condition I. The Plan shall be developed to avoid unnecessary duplication of monitoring requirements of the several agencies to ensure that the Plan is efficient and effective in achieving its purpose of monitoring and identifying any adverse impacts to Biscayne Bay and its resources, including shoreline vegetation within the area of influence as a result of construction and operation of the RCWS. Upon review of the operational monitoring data collected as part of the RCWSMP, the Department may require that FPL revise the RCSWMP to adjust the monitoring durations as appropriate.

d. Should the FWC or SFWMD Conditions of Certification in this Section B, I. be modified such that DEP applicable non-procedural requirements are no longer addressed, DEP may modify this Section to include Conditions to satisfy those applicable nonprocedural requirements of the Department no longer being addressed within the FWC or SFWMD Conditions.

2. Radial Collector Well System Monitoring & Reporting

a. All reports and data submitted to satisfy requirements of the final RCWSMP shall be sent to the DEP SCO with copies provided to FWC and the SFWMD.

b. Submittals shall be reviewed by DEP, FWC and the SFWMD for impacts to resources under their respective authority to protect, and for impacts as identified in those agencies' respective Conditions listed in this Section.

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.

[Chapters 18-18, 62-302, 62-330, 62-341, 62-342, 62-343, 62-345, F.A.C., Section 258.397, F.S., and FPL Stipulation – 6/28/13]

B. Florida Fish and Wildlife Conservation Commission (FWC)

1. Radial Collector Well System Biological Monitoring

a. The "Radial Collector Well System Monitoring Plan" (RCWSMP) being required by the Department of Environmental Protection's Siting Certification Office under these conditions shall be submitted to the FWC and shall be consistent with the provisions below for the purposes of determining whether there are impacts to the fish and wildlife resources of Biscayne Bay resulting from construction and operation of the radial collector well system (RCW).

b. In order to accurately assess potential impacts to listed species dependent on resources within Biscayne Bay, monitoring of seagrass cover and benthic fauna for potential impacts to state listed species in the vicinity of the proposed construction and operation of the RCW shall be conducted by the Licensee prior to RCW construction, during RCW construction and post-RCW construction as follows:

i. Pre-construction (baseline) monitoring shall be conducted for a period of two years prior to the onset of RCW system construction.

ii. Construction monitoring shall be conducted from the onset of RCW construction through completion of RCW construction.

iii. Post-construction monitoring shall be conducted for two years after Turkey Point Units 6 & 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 monitoring period, one year of quarterly monitoring shall be conducted following the first two RCW operational events.

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 for a total of seven sampling locations per transect. At each sampling station, a 0.25-m^2 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 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.

[Article IV, Sec. 9, Fla. Const.; Section 403.507, F.S., Rule 62-17.660, F.A.C.; Sections 379.2291 and 379.2431, F.S.; Chapter 68A-27, F.A.C., and FPL Stipulation – 6/7/13]

C. South Florida Water Management District (SFWMD)

Licensee shall implement a Radial Collector Well System Monitoring Plan (RCWSMP) to confirm that no adverse impacts occur to ecological and water resources of Biscayne Bay and adjacent 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 and macroalgae communities and on near-shore salinity and water quality above the RCW laterals.

1. Plan Scope. The RCWSMP shall address, at a minimum: the initial and periodic monitoring associated with secondary water supply operation of the RCW system; appropriate biological and water quality parameters (specific conductance, chlorides and temperature); necessary monitoring equipment; locations, maps, figures, capability of site access for monitoring locations; frequencies of sampling; and reference monitoring locations and reporting intervals. The RCWSMP shall include a work schedule, if necessary, to ensure the plan is ready to be implemented.

2. Plan Content. The RCWSMP shall include, monitoring of surface water quality for salinity, temperature and conductivity and of seagrass and macroalgae distribution and abundance by species in the vicinity of the proposed RCW system. Locations for pre-construction monitoring shall be congruent with known placement of RCW system laterals.

3. Quality Assurance. The RCWSMP shall include a quality assurance/quality control plan. The quality assurance plan shall include a protocol for maintaining in-situ monitoring devices to ensure accuracy of results. Field observers using the Braun-Blanquet method shall be cross-trained with an established monitoring program for the BBCW Project. Observations shall be calibrated so that results are consistent with BBCW Project.

4. Plan Development. Licensee shall coordinate with SFWMD and other affected agencies to complete development of the RCWSMP. The RCWSMP shall be coordinated with any other similar monitoring plan for the certified project and shall not duplicate any monitoring required by other agencies or conditions of certification. Coordination with SFWMD on the RCWSMP will ensure that data collected in accordance with the RCWSMP will complement contemporaneous data collection associated with the BBCW Phase I project. In designing details of the RCWSMP Licensee may consult the Project Monitoring Plan for the BBCW Phase I project found in Annex E, Part III of the BBCW Phase I PIR. Licensee may, upon review of submitted data from this BBCW monitoring plan and other sources, recommend to SFWMD in writing that the RCWSMP be modified to more appropriately collect necessary data.

5. Plan Review. Licensee shall submit a final RCWSMP to DEP SCO for review in accordance with Section A, General Condition XIX. Procedures for Post-Certification Submittals, prior to implementing the plan. The Plan shall include the location of the monitoring control sites, the seagrass linear transect locations, the benthic and macroalgae and water quality sampling station locations and the quality assurance/quality control plan. SFWMD will have the opportunity to review the final RCWSMP and propose changes if necessary.

6. Plan Duration. Licensee shall implement the RCWSMP before, during and after RCW system construction. Licensee shall conduct quarterly pre-construction (baseline)

monitoring for a period of two years prior to commencing RCW system construction. Licensee shall conduct quarterly monitoring during entire RCW construction period. Licensee shall conduct quarterly monitoring immediately following the Turkey Point Units 6 & 7 commercial operation date for a period of two years including the first two RCW operational events. If two RCW operational events do not occur within the two year post-construction monitoring period, one year of quarterly monitoring shall be conducted following each of the first two RCW operational events. If none of the RCW operational events during the two years following the commercial operation date or later involve operation of the RCW system at full capacity for more than fifteen (15) consecutive days, the Licensee shall conduct quarterly monitoring for one year after the first such event.

7. Significant Adverse Impacts. If statistically significant adverse impacts to the ecological resources of Biscayne Bay are determined to have been caused by the operation of the RCW system, then Licensee shall be required to evaluate or abate such impacts. These measures may include additional monitoring, modeling or mitigation.

8. Plan Modifications. Any proposed modifications to the RCWSMP shall be submitted to DEP SCO for review and concurrence at least thirty (30) days prior to implementation.

[Chapter 373, Part II, F.S.; Rule 40E-2.091, F.A.C.; "Basis of Review for Water Use Permit Applications within the South Florida Water Management District, March 18, 2010", and FPL Stipulation – 5/14/13]

II. DEPARTMENT OF ENVIRONMENTAL PROTECTION

A. Environmental Resource Permitting

1. Wetlands Mitigation Plan

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 accordance with applicable rules and the Mitigation Plan approved by the Department. Any updates to the plan shall be submitted to the Department and reviewed in accordance with Section A, General Conditions, XIX. Procedures for Post-Certification Submittals.

[Chapter 62-345, F.A.C.]

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 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.

[Section 5.0 of the Basis of Review (B.O.R.) and Chapter 62-302, F.A.C.]

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 accordance with Section A, General Conditions, XIX Procedures for Post-Certification Submittals.

B. Radial Collector Well System

1. Testing and Operation Schedules and Limitations

The Department acknowledges that RCWS testing and operation limitations and schedules shall be consistent with the requirements listed in Section B, Condition VI. South Florida Water Management District, C. Water Supply 2. Secondary Source.

2. Construction

a. During construction of the RCWS, delivery pipelines, and associated temporary laydown areas, Licensee shall comply with the applicable requirements listed in Section A, Condition XXVI. Environmental Resources, including but not limited to, implementation and maintenance of erosion and sediment control best management practices, and notification requirements.

Sections 373.413, 373.414, 373.4145, and 403.511, F.S.; Chapters 62-33062-342, and 62-345, F.A.C, and FPL Stipulation – 6/19/13]

b. Licensee shall construct and operate the RCWS such that adverse impacts to the aquatic resources of Biscayne Bay Aquatic Preserve will be minimized.

c. Construction and operation of the RCWS will be as described in the SCA and subsequent completeness submittals. The occurrence of fracturing of the formation around the RCWS and its laterals that may result in adverse impacts to the Bay Aquatic Preserve or its aquatic resources will be minimized. Should fracturing occur, and upon the Department's determination that an adverse impact has resulted from such fracturing of the formation, FPL shall mitigate for adverse impacts to Biscayne Bay Aquatic Preserve and its aquatic resources that have been caused by the fracturing event.

[Chapters 18-18, 62-302, 62-330, 62-341 62-342, 62-343, and 62-345, F.A.C., and FPL Agreement]

3. Radial Collector Well System Monitoring Plan (RCWSMP)

Licensee shall implement a RCWSMP in accordance with the conditions in Section B.I., to confirm that no adverse impacts occur to ecological and water quality resources of Biscayne Bay resulting from the construction and operation of the Turkey Point Units 6 & 7 radial collector well system (RCWS). If adverse impacts are identified as a result of such monitoring, additional measures shall be required to evaluate, abate or mitigate such impacts.

[Chapters 18-18, 62-302, 62-330, 62-341, 62-342, 62-343, and 62-345, F.A.C., Section 258.397, F.S., and FPL Agreement]

C. ***Radiological***

1. NRC Exclusive Authority

The State of Florida recognizes that the US. Nuclear Regulatory Commission (NRC) has exclusive authority in certain areas related to the regulation of the construction and operation of the Turkey Point Units 6 & 7 Nuclear Plant. These conditions of certification do not limit, expand or supersede any federal requirement or restriction under federal law, regulation, or regulatory approval or license nor do these conditions create a basis for the state's regulation in areas reserved to the NRC.

Compliance with the conditions herein does not constitute a waiver of the Licensee's responsibility to comply with all applicable NRC requirements. The State's intent with these conditions of certification is to ensure that the relevant agencies of state government timely receive copies of documents that the Licensee submits to the NRC or other agencies pursuant to the requirements of federal law, that the Licensee work with state agencies in a cooperative manner on matters regulated by the NRC, and to facilitate authorized activities of the Florida Department of Health under Chapter 404, F.S. including agency cooperation, information dissemination and emergency response. Submittal of copies of documents to state agencies will allow the State of Florida to participate in those federal proceedings. The Licensee's acceptance of these conditions of certification does not, in and of itself, constitute a waiver of the Licensee's right to any claim that any such radiological conditions are invalid under the doctrine of federal preemption or otherwise by law.

2. Decommissioning

Upon application to the U.S. Nuclear Regulatory Commission (NRC) for authority to decommission the plant, the Licensee shall provide the Department a copy of the plan submitted to NRC.

3. Emergency Plan

The applicant shall work with the State Division of Emergency Management and the State Department of Health, Bureau of Radiation Control, and applicable local governments to update the emergency procedures and evacuation planning as necessary.

4. Interagency Agreement

The Licensee shall submit a copy of the Florida Department of Health Emergency Response Capability Agreement to the Siting Office.

5. Annual Radiological Environmental Operating Report

Upon submittal to the NRC, a copy of the Annual Radiological Environmental Operating Report for the Turkey Point Plant shall be provided to the Department's Siting Coordination Office.

6. Notification of NRC License

The Licensee shall notify the Department's Siting Coordination Office of any amendments, modification, or renewals of NRC-issued Operating Licenses for the Certified Facility.

[Section 404, F.S. and FPL Agreement]

D. Domestic Wastewater Treatment Facility

At least 90 days prior to construction of the domestic wastewater treatment plant, the Licensee shall submit completed FDEP Form 62-620.910(1), FDEP Form 62-620.910 (2) and a Preliminary Design Report for the domestic wastewater treatment plant. All documentation shall be provided by the Licensee to meet the requirements of Chapter 403, F.S. and Title 62-600 Series of the F.A.C., related to design and operation of domestic wastewater treatment facilities. Such documentation will be processed in accordance with Condition XIX. Procedures for Post-Certification Submittals. Five years from commencement of operation, FPL shall develop and submit a domestic wastewater treatment facility operation and maintenance performance report to the FDEP SED for review pursuant to Section A. Condition XIX. Procedures Post Certification Review Submittals, and every five years thereafter.

[Chapter 62-600 series, F.A.C.]

III. DEPARTMENT OF TRANSPORTATION

A. Access Management to the State Highway System:

All access modifications to State roadway facilities will be subject to the access management standards pursuant to Rule Chapter 14-97, Access Management Classification and Standards, Florida Administrative Code, in accordance with Sections 334.044(2) and 335.182 to 335.188, Florida Statutes.

[Sections 334.044(10)(a), 335.182 - 335.188, F.S.; FPL Stipulation -6/25/13]

B. Overweight or Overdimensional Loads:

Operation of overweight or overdimensional loads by the Licensee on State transportation facilities during construction and operation of the utility facility will be subject to safety and permitting requirements of Chapter 316, F.S., and Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, F.A.C.

[Chapter 316, F.S.; Chapter 14-26, F.A.C.; FPL Stipulation -6/25/13]

C. Use of State of Florida Right of Way or Transportation Facilities:

All usage of State of Florida right of way will be subject to the applicable non-procedural requirements of Chapter 14-46, Utilities Installation or Adjustment, F.A.C.; Florida Department of Transportation's Utility Accommodation Manual (Document 710-020-001);

[Sections 337.403 and 337.404, F.S.; Rules 14-15 and 14-46, F.A.C.; FPL Stipulation -6/25/13]

D. Standards:

The US Federal Highway Administration's Manual on Uniform Traffic Control Devices; Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway System; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; Florida Department of Transportation's Utility Accommodation Manual; Florida Department of Transportation's Plans Preparation Manual; and pertinent sections of the Department of Transportation's Project Development and Environment Manual will be adhered to in all circumstances involving the State Highway System and other State owned transportation facilities.

[Rule 14-15, F.A.C.; FPL Stipulation -6/25/13]

E. Drainage:

Any drainage onto State of Florida right of way and transportation facilities will be subject to the applicable non-procedural requirements of Chapter 14-86, Drainage Connections, F.A.C.

[Chapter 14-86, F.A.C.; FPL Stipulation -6/25/13]

F. Use of Air Space:

Any newly proposed structure or alteration of an existing structure will be subject to the applicable non-procedural requirements of Chapter 333, F.S., and Rule 14- 60.009, Airspace Protection, F.A.C. Additionally, notification to the Federal Aviation Administration (FAA) is required prior to beginning construction, if the structure exceeds notification requirements of 14 CFR Part 77, Objects Affecting Navigable Airspace, Subpart B, Notice of Construction or Alteration. Notification will be provided to FAA Southern Region Headquarters using FAA Form 7460-1, Notice of Proposed Construction or Alteration in accordance with instructions therein. A subsequent Determination by the FAA stating that the structure exceeds any federal obstruction standard of 14 CFR Part 77, Subpart C, for any structure that is located within a 10-nautical-mile radius of the geographical center of a public use airport or military airfield in Florida will be required to submit information for an Airspace Obstruction Permit from the Florida Department of Transportation as a post-certification submittal under Section A. Condition XIX or variance from local government depending on the entity with jurisdictional authority over the site of the proposed structure. The FAA Determination regarding the structure serves only as a review of its impact on federal airspace and is not an authorization to proceed with any construction. However, FAA recommendations for marking and/or lighting of the proposed structure are made mandatory by Florida law. For a site under Florida Department of Transportation jurisdiction, application will be made by submitting Florida Department Transportation Form 725-040-11, Airspace Obstruction Permit Application, in accordance with the instructions therein as a post-certification submittal under Condition of Certification XIX.

[Chapter 333, F.S.; Rule 14-60.009, F.A.C.; FPL Stipulation -6/25/13]

G. Traffic Control Plan:

A temporary traffic control plan for handling construction related traffic is needed subject to the requirements and standards prior to construction affecting state-owned transportation facilities. The plan will be submitted as a post-certification submittal under Condition of Certification XIX and will need to be approved by Florida Department of Transportation prior to construction affecting State-owned transportation facilities.

H. Best Management Practices

Traffic control during facility construction and maintenance State-owned transportation facilities will be subject to the standards contained in the US Federal Highway Administration's Manual on Uniform Traffic Control Devices; Rule Chapter 14-94, Statewide Minimum Level of Service Standards, F.A.C.; Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; and Florida Department of Transportation's Utility Accommodation Manual, whichever is more stringent. It is recommended that the Licensee encourage transportation demand management techniques by doing the following:

- Placing a bulletin board on site for car pooling advertisements.
- Requiring that heavy construction vehicles remain onsite for the duration of construction to the extent practicable.

[Chapter 334, F.S.; Rule 14-96, F.A.C.; FPL Stipulation -6/25/13]

IV. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

A. Listed Species Conditions

The following table (Table 1) contains state and federally listed species that occur in the State of Florida and may occur within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way. The table contains species that are potentially impacted by the activities proposed on the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way. Therefore, these conditions of certification apply to the species listed in this table that are found within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way. Listed Species Occurring or Potentially Occurring in the Turkey Point Units 6 & 7 Site, associated non-linear facilities, and associated linear non-transmission facilities rights of way as of October 2011[1]:

Table 1. State and Federally Listed Species for Florida

Common Name	Scientific Name	Status
American alligator	*Alligator mississippiensis*	FT*
American crocodile	*Crocodylus acutus*	FT
American oystercatcher	*Haematopus palliatus*	SSC
Bald eagle	*Haliaeetus leucocephalus*	**

Black skimmer	*Rhynchops niger*	SSC
Brown pelican	*Pelecanus occidentalis carolinensis*	SSC
Eastern indigo snake	*Drymarchon couperi*	FT
Everglades mink	*Mustela vison evergladensis*	ST
Florida manatee	*Trichechus manatus latirostris*	FE
Florida Panther	*Puma concolor coryi*	FE
Least tern	*Sterna antillarum*	ST
Little blue heron	*Egretta caerulea*	SSC
Limpkin	*Aramus guarauna*	SSC
Piping plover	*Charadrius melodus*	FT
Reddish egret	*Egretta rufescens*	SSC
Rivulus	*Rivulus marmoratus*	SSC
Roseate spoonbill	*Platalea ajaja*	SSC
Snowy egret	*Egretta thula*	SSC
Tricolored heron	*Egretta tricolor*	SSC
White-crowned pigeon	*Patagioenas leucocephala*	ST
White ibis	*Eudocimus albus*	SSC

[1]Species legal statuses are subject to change. Recent changes to 68A-27, Florida Administrative Code (F.A.C.) make it likely that statuses of species listed may change before the Licensee commences work. The licensee shall refer to the law in effect at the time it begins an activity subject to being affected by listed species regulations.

FE = Federally-designated Endangered; FT = Federally-designated Threatened; ST = State-designated Threatened; SSC = State Species of Special Concern

* Due to similarity to another federally threatened species

** While the bald eagle has been both state and federally delisted, it is still governed by the state bald eagle management plan and the federal Bald and Golden Eagle Protection Act.

Note: Florida's Endangered and Threatened species rule changed in November 2010. The list is now comprised of federally designated endangered and threatened species or state designated threatened species. Additionally, the Species of Special Concern (SSC) designation has been retained in the rule until those species designated as SSC are evaluated for listing as state designated threatened species.

[Chapters 68A-27 and 68A-16, Florida Administrative Code (F.A.C.); FPL Stipulation – 6/7/13]

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 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.

[Article IV, Sec. 9, Fla. Const; Section 379.2291, and 403.5113(2), F.S.; and Chapter 68A-27, F.A.C.; FPL Stipulation – 6/7/13]

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 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 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).

[Article IV, Sec. 9, Fla. Const; Section 379.2291, F.S; and Chapters 68A-27, 68A-4, 68A-16, F.A.C.; FPL Stipulation – 6/7/13]

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 & 7 Site, associated non-linear facilities, and 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.

[Article IV, Sec. 9, Fla. Const; Sections 379.2291, 403.507 and 403.5113(2), F.S.; and Chapter 68A-27, F.A.C.; FPL Stipulation – 6/7/13]

E. Bald Eagle

1. The Licensee shall avoid impacts to bald eagle (*Haliaeetus leucocephalus*) nests where possible. If construction activities cannot be avoided within a 660-foot nest buffer zone, construction activities shall be conducted consistent with the FWC Eagle Management Guidelines as outlined in the FWC-approved Bald Eagle Management Plan dated April 9, 2008 (or any subsequent FWC-approved versions). In areas where bald eagle nests are present, all reasonable and practicable efforts shall be made to avoid construction activities during the nesting season (October 1 - May 15, or when eagles are present before October 1 or after May 15).

2. In accordance with the FWC Eagle Management Guidelines, for construction areas that fall within 330 feet of an active or alternate bald eagle nest, as defined in the Bald Eagle Monitoring Guidelines, construction activities shall be conducted only during the non-nesting season (May 16 - September 30). Any construction activities that fall within 660

feet of the nest during the nesting season shall be conducted following USFWS-approved Bald Eagle Monitoring Guidelines, dated 2007, or subsequent USFWS-approved versions.

3. In areas where adverse impacts to nests cannot be avoided, resulting in nest disturbance, the information required for an FWC Eagle Permit shall be obtained from the FWC, as authorized by Rule 68A-16.002, F.A.C., and minimization and conservation measures outlined in the FWC Bald Eagle Management Plan shall be followed, as applicable.

[Article IV, Sec. 9, Fla. Const.; Section 403.507, F.S.; Rule 62-17.191, F.A.C.; Chapter 68A-27, F.A.C., and Rule 68A-16.002, F.A.C.; FPL Stipulation – 6/7/13]

F. Shorebirds

1. Surveys shall be conducted in 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 to identify and document the presence of nesting 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 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 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 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 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.

[Article IV, Sec. 9, Fla. Const.; Section 403.507, F.S.; Rule 62-17.191; Chapter 68A-27, and Rule 68A-16.001, F.A.C.; FPL Stipulation – 6/7/13]

G. Everglades Mink

1. A survey by an experienced biologist (individual or firm with documented experience with Everglades mink or other mustelids) shall be conducted in the reproductive season prior to the initiation of clearing activity in areas where suitable potential habitat exists within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, or associated linear non-transmission facilities rights of way, to determine whether any mink are present, and if any den areas are present. To the extent practicable, the survey shall be conducted during the mink mating season, which extends from September through November. Although chalkdusted trackboards and anal scent attractant has proven effective in detecting the Everglades mink (Humphrey and Zinn 1982), camera traps are another option.

References: Humphrey, S.R. and T.R. Zinno 1982. Seasonal habitat use by river otters and Everglades mink in Florida. Journal of Wildlife Management 46:375- 381.

2. In the event that surveys determine presence of Everglades Mink within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, or associated linear non-transmission facilities, the following measures shall be used to minimize and mitigate for potential impacts.

a. Licensee and FWC will meet to discuss the specific issues and mitigation alternatives.

b. Licensee 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.

c. Licensee will provide a monitoring report after a designated period to document effectiveness of the mitigation plan.

d. Corrective action alternatives will be determined in consultation with FWC and implemented if necessary.

[Article IV, Sec. 9, Fla. Const.; Sections 379.2291, and 403.571, F.S.; Rule 62-17.660 and Chapter 68A-27, F.A.C.; FPL Stipulation – 6/7/13]

H. Florida Manatee

With respect to construction, maintenance and operation within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, or associated linear non-transmission facilities rights of way:

1. The Standard Manatee Conditions for In-Water Work (revision 2012) shall be followed for all in-water activity located where waters are accessible to manatees. These are listed in Attachment F. Blasting as a dredge method shall be prohibited in or adjacent to waters accessible to manatees, unless no other alternative exists, in which case the Licensee may request approval by FWC. An adequate Blast and Protected Species Watch Plan must be

submitted to the Imperiled Species Management Section of the FWC for post-certification review prior to these methodologies being used.

2. At least 60 days prior to the beginning of in-water construction located where waters are accessible to manatees, the Licensee shall contact the FWC to determine whether observers shall be required, how many observers will be needed and who those observers will be. If observers are recommended, manatee observers must be on site during all in-water construction activities and will advise personnel to cease operation upon sighting a manatee within 50 feet of any in-water construction activity. Any in-water work associated with construction or demolition activities shall not be performed after sunset. Movement of a work barge other associated vessels is permitted after sunset. Following project completion, a report summarizing manatee sightings, collisions or injuries shall be prepared by FPL. This report shall be submitted within 30 days following construction completion to the FWC's Imperiled Species Management Section atmailto:imperiledspecies@myfwc.com imperiledspecies@myfwc.com

3. If a cofferdam or sheet piling is used during in-water construction to minimize release of sediment, the area inside (behind) the cofferdam must be checked for the presence of manatees during and after installation of the barrier before further work occurs to determine that manatees have not been entrapped. Manatee observers are required during installation and removal of the barrier but are not required during landward construction.

4. To reduce the risk of a vessel or barge crushing a manatee, any areas within the barge turning basin at Turkey Point where mooring of vessels and barges larger than 100 ft. occurs along any solid face wharf or seawall, including the new equipment barge unloading area, the permittee shall install wharf fenders with appropriate materials to provide sufficient standoff space of at least four feet under maximum designed compression. Fenders or buoys providing a minimum standoff space of at least four feet under maximum designed compression shall also be utilized between two vessels or barges that are moored together.

[Article IV, Sec. 9, Fla. Const.; Sections 379.2291, 379.2431, and 403.507, F.S.; Rule 62-17.660 and Chapter 68A-27, F.A.C.; FPL Stipulation – 6/7/13]

I. Florida Panther

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:

i. 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.

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 roadways in the panther consultation area as defined by the USFWS (Attachment G), including SW 359th Street, SW 137th Avenue, and SW 117th 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 359th 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.

[Article IV, Sec. 9, Fla. Const.; Section 379.2291 and 403.507, F.S.; Rule 62-17.660 and Chapter 68A-27, F.A.C.; FPL Stipulation – 6/7/13]

J. Rivulus

1. Prior to clearing, the Licensee shall conduct surveys for rivulus using modified bottomless lift nets (McIvor and Silverman 2010) or other approved methodology in potentially impacted mangrove habitats within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, or associated linear non-transmission facilities.

[Reference: McIvor, C. C. and N. L. Silverman 2010. Modifications to the bottomless lift net for sampling nekton in tidal mangrove forests. Wetlands Ecology and Management (published on-line)

2. If surveys determine the presence of Rivulus within the Turkey Point Units 6 & 7 Site, associated non-linear facilities, or associated linear non-transmission facilities, the following measures shall be used to minimize and mitigate for potential impacts.

a. Licensee and FWC will meet to discuss the specific issues and mitigation alternatives.

b. Licensee 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.

c. Licensee will provide a monitoring report after a designated period to document effectiveness of the mitigation plan.

d. Corrective action alternatives will be determined in consultation with FWC and implemented if necessary.

[Article IV, Sec. 9, Fla. Const.; Section 379.2291 and 403.507, F.S.; Rule 62-17.660 and Chapter 68A-27, F.A.C.; FPL Stipulation – 6/7/13]

V. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES

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.

[Sections 267.061, 403.531, and 872.02, F.S.; FPL/MDC Stipulation – 6/19/13]

VI. SOUTH FLORIDA WATER MANAGEMENT DISTRICT

A. General

1. For the purposes of these conditions of certification:

a. "SFWMD real property interests" is defined as SFWMD rights-of-way, Works of the District, and any property interest evidenced by being recorded in the public records.

b. "Licensee" as used herein includes Licensee's employees, contractors, subcontractors, invitees, authorized representatives, affiliates, parent, subsidiaries, and/or anyone acting on Licensee's behalf.

2. If this Certification is transferred from the Licensee to another party, the Licensee from whom the Certification is transferred shall remain liable for corrective actions that may be required as a result of any violations that occurred prior to the transfer.

[FPL Stipulation – 5/14/13; Sections 373.044, 373.085, 373.223, 373.342, and 373.413, F.S.; Rules 40E-2.091, 40E-2.301, 40E-2.38l, 40E-3.101(1), and 40E-6.351, F.A.C.]

3. This Certification is based on Licensee's submitted information to SFWMD which reasonably demonstrates that harm to the site water resources will not be caused by the authorized activities. The plans, drawings and design specifications submitted by Licensee shall be considered the minimum standards for compliance.

[FPL Stipulation –5/14/13; Sections 373.219, 373.223, 373.229, 373.308 and 373.315, F.S. and Rules 40E-2.-09(1), 40E-2.301, 40E-2.381 and 40E-3.500-531, F.A.C.]

4. This project must be constructed, operated, and maintained in compliance with and meet all applicable non-procedural requirements and criteria set forth in Chapter 373, F.S., and Chapters 40E-2 (Consumptive Use), 40E-3 (Water Wells), 40E-6 (Works or Lands of the District), 40E-20 (General Water Use Permits), 40E-21 (Water Shortage Plan), F.A.C.]

5. It is the responsibility of the Licensee to avoid or minimize and mitigate any impacts to the water resources during the construction, operation, and maintenance of the project in accordance with these conditions of certification.

[Chapter 373, F.S.; Rules 40E-2.09l, 40E-2.38l, and 40E-6, F.A.C.; FPL Stipulation – 5/14/13]

6. Licensee shall be responsible for the construction, operation, and maintenance of all facilities installed for the proposed project in compliance with these conditions of certification with the exception of: 1) facilities for which a transfer of certification is approved pursuant to Rule 62-17.211(3) F.A.C.; and 2) facilities that are deleted from this certification through a modification of certification pursuant to Section 403.516, F.S. and, if such facilities are located within SFWMD rights-of-way, SFWMD has received a Right-of-Way Occupancy permit application from the party to which the facilities are conveyed.

[FPL Stipulation –5/14/13; Sections 373.309, 373.413, and 373.416, F.S.; Rule 40E-6.381, F.A.C.]

7. Information submitted to SFWMD subsequent to Certification, and prior to the commencement of the subject construction, operation or maintenance activity in compliance with these Conditions of Certification, shall be for the purpose of SFWMD monitoring for Licensee's compliance with the non-procedural criteria contained in Chapter 373, F.S., Section 403.5113, F.S., Chapters 40E-2, 40E-3, 40E-6 including 40E-6.381, 40E-20, 40E-21 and 62-17.191, F.A.C.

8. SFWMD may confer with DEP to request that DEP take any and all lawful actions that are necessary to enforce any condition of this Certification based on the authorizing statutes and rules of SFWMD.

[FPL Stipulation –5/14/13; Sections 373.223, 373.319, and 373.603, F.S.; Rules 40E-2.091, 40E-2.301, 40E-2.381, 40E-6.501, F.A.C.; Section 403.514, F.S.]

9. It is understood that the Licensee and SFWMD shall strive to resolve disputes by mutual agreement. However, SFWMD retains its right to seek any and all available relief under Florida law for the protection of the health, safety, and welfare of persons and property within its jurisdictional boundaries.

[FPL Stipulation –5/14/13; Sections 373.044, 373.085, 373.113, 373.129, 373.413 and 373.429, F.S.; Rules 40E-1.601, 40E-4.331, 40E-6.331, and 40E-6.341, F.A.C.]

10. With concurrence from DEP, SFWMD and Licensee may jointly agree to vary the informational requirements, including deadlines for submittals, without a need for modification of these conditions.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.229, F.S.; Rules 40E-2.101(1) and 40E-6.101(1), F.A.C.]

11. Licensee shall maintain the status, in a confidential manner (exempt from public disclosure) of any documents received from SFWMD, including communications systems and building plans, blueprints, schematic drawings, and diagrams, in preliminary draft and final formats, which depict the internal layout and structural elements of a building or water structure, or other SFWMD facility, owned and operated by SFWMD, which are exempt from the Public Records law, unless required to disclose such documents pursuant to Section 119.071(3)(b)3., F.S., as also agreed to in an executed Confidentiality Agreement, the form of which shall be the same as Appendix D of the SFWMD Impact Assessment Report on Florida Power & Light Company Turkey Point Units 6 & 7 Electric Transmission Line Corridors (PA 03-45A3), dated December 15, 2011. All such documents exempt from public disclosure shall be listed as an exhibit to the Confidentiality Agreement and clearly marked as "EXEMPT" by SFWMD before delivery to Licensee.

12. Indemnification/Insurance

a. To the fullest extent permitted by law, Licensee agrees to defend, indemnify, and hold harmless SFWMD, its Board members, Directors, employees, and agents (collectively, the "Indemnified Parties") from and against any and all claims, suits, loss, including, but not limited to, bodily injury, death, and property damage and all other damage, including reasonable attorneys' fees and costs, sustained by the SFWMD Entities to the extent caused by or arising from Licensee's and its agents' (which includes Licensee's officers, employees, contractors, subcontractors, agents, representatives, and invitees) planning, engineering, design, construction, alteration, operation, maintenance, removal, abandonment of facilities on, activities upon and access over SFWMD real property interests or activities undertaken under this Certification (including post certification reviews, amendments or modifications, collectively the "Certification") unless Licensee can establish that the damages were attributable solely to the negligent or willful actions of one or more Indemnified Parties or third parties other than Licensee and its agents. SFWMD shall have the right to approve, in SFWMD's reasonable discretion, Licensee's legal counsel in connection with this indemnity.

b. Licensee shall obtain and maintain in full force through self-insurance and independent insurance as further set forth herein during the period that the Licensee or its agents access SFWMD real property interests, undertake activities under this Certification, and six months thereafter. Such coverage shall include but not be less than:

i. Licensee shall certify to SFWMD initially, and in subsequent years, in the form of an affidavit or letter that Licensee is self-insured up to $3,000,000 for commercial general liability insurance coverage as set forth in subsection (ii) below, and shall provide an additional $7,000,000 in commercial general liability insurance coverage as set forth in subsection (ii) below by independent insurance for a total of $10,000,000 coverage per occurrence and in the aggregate, and worker's compensation insurance coverage as set forth in subsection (iii) below. Licensee shall submit to SFWMD an audited financial statement to support its affidavit or letter of self-insurance and certificate as evidence of

Licensee's financial ability to comply with the conditions stated herein. In the event that audited financial statement discloses Licensee's financial inability to comply with such conditions, SFWMD may require independent insurance coverage in lieu of the coverage described herein.

ii. Commercial General Liability Insurance against claims for bodily injury, death, or property damage arising out of or in any way related to or resulting from Licensee or its agents (including, but not limited to, its contractors, subcontractors, agents, representatives, and invitees) access over or adjacent to SFWMD right-of-way, Works of the District or real property interests recorded in the public records, interference with SFWMD communication systems, or activities undertaken under this Certification, including planning, engineering, design, construction, operation, and maintenance of facilities, endorsed to include premises-operations, completed operations-products, independent contractors, pollution, explosion, collapse and underground property damage hazards, liability imposed under the terms and conditions of this Certification (including covering Licensee's indemnity obligations), broad form property damage, and fire liability coverage with a combined single limit of $10,000,000 per occurrence and $10,000,000 in the aggregate. Licensee may self-insure the first $3,000,000 of coverage, provided that Licensee assumes the defense obligations of the insurer providing insurance pursuant to this paragraph for all lawsuits or claims against SFWMD. This obligation to defend SFWMD and its agents shall begin immediately upon the filing of any lawsuit or claim that would be defended by the insurance required hereunder and continue until such time as the self-insured retention has been met or the insurance required hereunder provides a defense to SFWMD and its agents.

iii. Workers compensation insurance covering all persons employed by Licensee or its contractors in accordance with statutory benefits. Licensee may self-insure the coverage as it is a qualified self-insurer in the state of Florida in accordance with applicable law.

c. Independent insurance shall be written by companies reasonably acceptable to SFWMD. The Commercial General Liability Policy shall name SFWMD and its agents as additional insureds and shall include a waiver of subrogation in favor of SFWMD and its agents. All insurance, including self-insurance, shall be primary to any liability or property insurance or self-insurance carried by the SFWMD or its agents and shall also provide that any loss otherwise payable shall be payable not withstanding any act or omission of SFWMD or its agents which might, absent such provision, result in a forfeiture of all or a part of such insurance payment. Licensee shall furnish to SFWMD Certificates of Insurance (or certified copies of all insurance coverage, if requested) prior to Licensee entry upon SFWMD real property interests.

d. All insurance coverage required by or provided to Licensee by its agents engaged by Licensee under this Certification shall be extended to the SFWMD and its agents with the same protection and insurance coverages required by and afforded to Licensee. Licensee shall require that its agents include SFWMD and its agents as additional insureds on all such insurance. Licensee shall furnish to SFWMD Certificates of Insurance (or certified copies of all insurance coverage, if requested) of its agents prior to Licensee's agents entry upon SFWMD real property interests.

e. Any insurance provided by Licensee and its agents naming SFWMD and its agents as an additional insured, including self-insurance, shall respond first and defend and indemnify SFWMD and its agents with respect to any and all claims or suits arising out of Licensee's or its agents access over or adjacent to SFWMD rights-of-way, Works of the District or real property interests recorded in the public records, or activities undertaken under

this Certification, including design, construction, operation, and maintenance of facilities. If and only if such insurance does not apply or is otherwise not available with respect to a particular matter, the indemnity provisions in the first paragraph of this section will apply.

f. It is expressly agreed that this Section shall survive the termination or expiration of this Certification.

[FPL Stipulation –5/14/13; Sections 373.016, 373.085 (1) (b), and 373.1391, F.S; Rules 40E-6.051 (3), 40E-6.381 (6), and 40E-6.221 (2)(i), and 62-17.133(3), F.A.C.]

13. Consistency with SFWMD Existing and Planned Projects

a. During the planning and design of the certified plant and non-transmission linear facilities and prior to the final design of the non-transmission linear facilities right-of-way to be located on SFWMD real property interests, Licensee shall coordinate with SFWMD to obtain SFWMD's plans including detailed design plans and specifications for any existing SFWMD project and the latest detailed information available for planned projects, including but not limited to ecosystem restoration projects, and shall coordinate all Licensee's project activities with SFWMD in such a manner as to avoid inconsistencies with SFWMD existing or planned projects. "Planned project" shall mean any project or facility of SFWMD for which SFWMD is authorized to be a non-federal sponsor that is 1) in the construction phase, 2) in the final construction design phase with approved funding for design, or 3) is a CERP project component as defined in Sec. 373.1501(1)(g), F.S., and as listed in Attachment I-a which can be amended by SFWMD, to the extent that any new planned projects meet the definition in this section, upon consultation with Licensee.

No later than thirty (30) days after receipt of Licensee's post-certification submittal of the non-transmission linear facilities right-of-way location as required by DEP Condition XIX, SFWMD will submit to Licensee any SFWMD plans for existing or planned projects.

b. To the extent practicable, Licensee will undertake its preliminary design of the certified plant and non-transmission linear facilities to be located on SFWMD real property interests to accommodate and avoid inconsistencies with SFWMD existing and planned projects.

c. At the time of design of the certified plant and non-transmission linear facilities, Licensee shall submit to SFWMD a preliminary design demonstrating compliance with Section B.VI.A.13.b. above, so that SFWMD can review this information. SFWMD must review Licensee's preliminary design within ninety (90) days following SFWMD receipt of Licensee's preliminary design. If SFWMD does not respond within ninety (90) days, Licensee can proceed with final design consistent with the submitted preliminary design. If SFWMD's review indicates an inconsistency exists, the parties will strive to achieve an agreeable solution in accordance with Section B.VI.A.9. of these conditions of certification. Agreeable solutions may include Licensee's modification of Licensee facilities or if no practicable design alternatives can be identified, SFWMD may agree that its facilities can be modified. If SFWMD modifies its facilities as the agreeable solution, Licensee shall reimburse SFWMD for any and all costs, including direct and indirect (including overhead costs), incurred by SFWMD.

d. At least ninety (90) days prior to construction, Licensee shall submit to SFWMD a final design demonstrating compliance with its preliminary design and any agreeable solutions for design modifications identified pursuant to Section B.VI.A.13.c., so that SFWMD can review this information for consistency with SFWMD identified existing and planned projects. SFWMD must review Licensee's final design within ninety (90) days following SFWMD receipt of Licensee's final design. If SFWMD does not respond within ninety (90) days, Licensee can proceed with construction consistent with the submitted final design. If SFWMD's review indicates an inconsistency exists, the parties will strive to achieve an agreeable solution in accordance with Section B.VI.A.9. of these conditions of certification. Agreeable solutions may include Licensee's modification of Licensee facilities or if no practicable design alternatives can be identified, SFWMD may agree that its facilities can be modified. If SFWMD modifies its facilities as the agreeable solution, Licensee shall reimburse SFWMD for any and all costs, including direct and indirect (including overhead costs), incurred by SFWMD.

e. If two (2) years elapse after Licensee submittal of its final design demonstrating compliance with Section B. VI.A.13.c., without commencement of construction of the approved project facility, Licensee shall request a list of new or updated planned project information. If SFWMD provides a list of new or updated planned project information within thirty (30) days of Licensee's request, Licensee shall incorporate this new or updated information to achieve compliance with Section B. VI.A.13.c. In the event that new or updated information is provided by SFWMD to Licensee, the coordination process as described in Section B.VI.A.13.d. shall be followed.

f. For the purpose of this condition, "inconsistency" shall mean any significant incompatibility, encroachment, or obstruction that hinders, compromises, or detrimentally affects SFWMD projects, scheduling, costs, goals, benefits, functions, operation, maintenance, repair, replacement, rehabilitation, performance, or life expectancy as defined in Attachment I- a (the list of SFWMD existing and planned projects), Attachment I-b (a map showing the SFWMD existing and planned projects in Attachment I-a and the FPL Proposed Linear Facility Corridors) and Attachment I-c (a table explaining the projects listed in Attachment I-a).

[FPL Stipulation –5/14/13; Federal Water Resources Development Acts of 1992, 1996 and 2000; 33 C.F.R. 208 and 385; Sections 373.1501 and 373.085 (1) (b), F.S.; Rules 40E-6.011 (2) and 62-17.133 (3), F.A.C.]

14. Reimbursements and Costs

In addition to any requirements specified elsewhere in these conditions, the Licensee shall also be responsible for the following:

a. Modifications to Licensee Project Facilities

Where the certified plant and non-transmission linear facilities will cross or use lands where SFWMD holds a real property interest, Licensee shall design any future modifications to its plant and non-transmission linear facilities including its structures and access roads, to avoid inconsistency with any SFWMD existing or planned project utilizing the process described in condition VI.A.13. Licensee shall undertake at its own expense any necessary

alterations to Licensee's project as a result of such inconsistencies as defined in Condition VI.A.13.f.

b. Reimbursement for Modifications to SFWMD Facilities

Licensee shall make reimbursements within sixty (60) days following receipt of invoices submitted by SFWMD. Each invoice must be accompanied by an itemization of the time and expenses incurred in accordance with state auditing procedures. In the event a dispute arises as to the appropriateness of the request for reimbursement of one or more cost items, the dispute may be resolved pursuant to the dispute resolution process specified in DEP General Condition X. However, this provision is not intended to be an exclusive remedy and does not preclude the exercise of any other rights and remedies available under law or equity. Reimbursement of a disputed cost shall be held in abeyance until the dispute is resolved.

[FPL Stipulation –5/14/13; Rules 40E-6.381 (3) and (4), and 62-17.133 (3), F.A.C.]

15. Licensee Access to SFWMD Areas of Real Property Interest

a. For informational purposes and to the extent practicable, and subject to any easements or other agreements between Licensee and SFWMD, Licensee shall meet with SFWMD representatives no less than six (6) months prior to construction to identify all of Licensee's major construction activities on SFWMD real property interests. For the purpose of this condition, "major construction activities" shall mean mobilization, earthwork, construction, erection, installation or maintenance involving construction related to Licensee's project. Licensee shall also meet with SFWMD representatives no less than one (1) month prior to commencement of construction to coordinate Licensee's construction schedule and non-major activities on SFWMD real property interests with SFWMD. Licensee is encouraged to discuss coordination of any minor activities that arise unexpectedly with SFWMD.

[FPL Stipulation –5/14/13; Rule 62-17.133 (3), F.A.C.]

b. Licensee shall be responsible for any mitigation or permitting arising from impacts to any state or federally listed threatened or endangered species in areas where SFWMD holds a real property interest occurring from the construction, operation, or maintenance of the plant and non-transmission linear facilities, in accordance with the terms and conditions of any local, state, or federal approvals, and all applicable regulatory laws, including, but not limited to the conditions in this Certification.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Rules 40E-6.221 (2), 40E-6.091 (1) and 62-17.133 (3), F.A.C; SFWMD Volume V Permit Information Manual, Criteria Manual for Use of Works of the District (Basis of Review) Section S.]

c. Licensee, its agents, employees, contractors and subcontractors shall be prohibited from removing any items of historical, architectural, archaeological, or cultural significance on lands where SFWMD holds a real property interest.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Rules 40E-6.311 (3) and 62-17.133 (3), F.A.C.]

d. For purposes of this Certification, "Pollutant" shall mean any hazardous or toxic substance, material, or waste of any kind or any contaminant, pollutant as defined by Rule 62-150 F.A.C., and 42 USC 9601 paragraph 4, in addition to petroleum,

petroleum product, or petroleum by-product. "Release" shall mean the storage, use, handling, (except with written approval from SFWMD in accordance with Section B.VI.D.22) release, discharge or disposal of such Pollutants. Any release of Pollutants that poses a threat to SFWMD real property interests, whether caused by the Licensee or any other third party, shall be reported to the SFWMD within twenty-four (24) hours upon the knowledge thereof by the Licensee. The Licensee shall be solely responsible for the entire cost of cleanup of any release of Pollutants resulting from the activities of the Licensee discovered in or on canals or lands where SFWMD holds a real property interest.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

e. SFWMD does not waive sovereign immunity in any respect.

[Rules 40E-6.091 (1) and 40E-6.381 (7), F.A.C.]

f. No vehicular maintenance or repair activities or substances or parts associated with the repair or maintenance of vehicles or equipment will take place, be used, stored or discarded within lands where SFWMD holds a real property interest nor shall these lands be used for storage or parking of equipment, associated machinery, or construction trailers unless specifically authorized by these Conditions of Certification.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Rules 40E-6.091 (1), 40E-6.381 (8) and 62-17.133 (3), F.A.C.]

g. Licensee shall not stockpile excavated material in the canal or within lands where SFWMD has a real property interest, except as specifically authorized by SFWMD. Licensee shall be responsible for the removal of all construction materials and debris from SFWMD canal and right-of-way.

[FPL Stipulation –5/14/13; 40E-6.091 (1), and 40E-6.381 (8), F.A.C.]

h. During construction, Licensee shall comply with the following concerning the removal of exotic vegetation from lands where Licensee maintains a right-of-way or places above-ground facilities within SFWMD real property interests, specifically, Brazilian Pepper, Melaleuca, Australian Pine, Old World Climbing Fern, Ardesia, and Guava.

i. Licensee shall remove all exotic vegetation throughout the limits of the non-transmission linear facilities from lands where SFWMD holds a real property interest and keep these lands free of said exotic vegetation throughout the life of the project.

ii. Licensee is put on notice that successful removal of the exotic vegetation may require the application of a suitable herbicide on cut stumps, etc. by following manufacturer's label instructions.

iii. Licensee shall take all precautions to not damage or destroy existing native (indigenous) vegetation located within the SFWMD rights-of-way throughout the project limits.

iv. Licensee shall not remove, or treat with herbicide applications any mangrove or other native shoreline vegetation.

v. Licensee shall maintain the project area on a regular cycle basis and keep Licensee's rights-of-way free of excessive weeds and exotic vegetation.

[FPL Stipulation – 5/14/13; Rules 40E-6.091 (1) and 62-17.133 (3), F.A.C.; SFWMD Volume V Permit Information Manual, Criteria Manual for Use of Works of the District (Basis of Review) Section S.]

i. SFWMD Approval Limitations

No right of review, inspection, or approval by SFWMD under this Certification: 1) shall be deemed a waiver of any of SFWMD rights under the Certification or at law or in equity; 2) shall be deemed to be an assumption of such responsibility by SFWMD for any defect, error, omission; or 3) shall relieve Licensee of its responsibility for the performance of its obligations under the Certification and the accuracy, competency, adequacy, fitness, suitability, or coordination of its post-certification responsibilities and deliverables under this Certification. Approval by any governmental or other regulatory agency or other governing body, including DEP SCO, shall not relieve Licensee of responsibility for the strict compliance with conditions under this Certification; Licensee expressly accepts the risk that defects in its performance, if any, may not be discovered until after completion of construction of the plant and non-transmission linear facilities for Turkey Point Units 6 & 7. Licensee's post-certification submittals may be submitted in segments for the non-transmission linear facilities and/or facility-by-facility basis for the plant. SFWMD's failure to timely object to a particular post-certification submittal for any particular segment or facility does not waive SFWMD's right to object to the same information for another post-certification submittal.

[FPL Stipulation – 5/14/13; Rule 40E-6.381, F.A.C.]

16. These conditions of certification shall not operate to revoke any rights, terms or conditions of any permit, license, easement, or other property interest, over SFWMD-owned lands, for the uses identified in those instruments.

B. Excavation, Deposition and Dewatering

1. Storage of Spoils

a. To the extent practicable, Licensee shall avoid using the westernmost 3,500 feet of Licensee-identified storage area on the southern canal berm of the CCS, where the berm is adjacent and parallel to SFWMD Canal C-107, for storage of spoils. This is the least desirable portion of the spoils storage area. Storage areas for spoils in areas that are not near sensitive water resources including Biscayne Bay or wetlands are the more protective option.

b. If Licensee must use the portion of the Licensee-identified storage area described in Section B.VI.B.1.a. above, then Licensee shall implement a protective measure acceptable to SFWMD to limit to the extent practicable, runoff from the spoils entering the C-107 Canal.

[FPL Stipulation – 5/14/13; Sections 373.223 373.309, and 373.413, F.S.; Rules 40E-2.091, 40E-2.381, 40E-3.301(3), 40E-3.301(4), and 40E-6.381, F.A.C.]

2. Dewatering

a. For dewatering of the Units 6 & 7 power block, Licensee shall use the grouting method proposed in the SCA and in subsequent completeness responses (Groundwater Model Development and Analysis: Units 6 & 7: Dewatering and Radial Collector

Well Simulations, Revision 1, Bechtel Power Corporation, February 2011, page 43) to reduce dewatering volumes, unless agreed to in writing by SFWMD.

b. Prior to commencement of construction of those portions of the project that involve dewatering activities, unless the proposed dewatering activity meets the "no notice" criteria of Rule 40E-20.302 (3), F.A.C. and Section 2.5.1 of the Basis of Review for Water Use Permits, Licensee shall submit a detailed plan for the proposed dewatering activities to SFWMD for an assessment of consistency with the non-procedural requirements of Chapters 40E-2, 40E-3 and 40E-20, F.A.C., in effect at the time of certification and impact monitoring if necessary (Rule 62-17.133, F.A.C.). The following information, referenced to North American Vertical Datum of 1988 (NAVD 88) where appropriate, shall be submitted:

i. A detailed site plan that shows the location(s) for each proposed dewatering area

ii. The method(s) used for each dewatering operation

iii. The maximum depth for each dewatering operation

iv. The location and specifications for all proposed wells and/or pumps associated with each dewatering operation

v. The duration of each dewatering operation

vi. The discharge method, route, and location of receiving waters generated by each dewatering operation, including the measures (Best Management Practices) that will be taken to prevent water quality problems in the receiving water(s)

vii. An analysis of the impacts of the proposed dewatering operations on any existing on and/or off-site legal users, wetlands, or existing groundwater contamination plumes

viii. The location of any infiltration trenches and/or recharge barriers

All plans must be signed and sealed by a Professional Engineer or a Professional Geologist registered in the State of Florida.

c. Prior to dewatering, FPL shall submit a monitoring plan which addresses monitoring of groundwater levels and water quality within and adjacent to the dewatering area. The plan shall also include a method for recording daily pumpage from the dewatering area into the CCS. The plan shall include collection of data before commencement of the dewatering operations.

[FPL Stipulation –5/14/13; Sections 373.229 and 373.308, F.S.; Rules 40E-2.091, 40E-2.301 and 40E3.500-531, F.A.C.]

C. Water Supply

1. Primary Source (Reclaimed Water)

a. Primary Source Identification. The primary source of cooling water for Units 6 & 7 is reclaimed water provided by Miami-Dade County Water and Sewer Department (MDWASD), pursuant to a reclaimed water service agreement between Licensee and Miami-Dade County to be used at an expected rate of approximately 59 million gallons per

day (MGD) or approximately 21,500 million gallons (MG) annually. It is expected that the reclaimed water will be a reliable primary source of water for this project.

b. Primary Source Reporting. Licensee shall measure the volume and quality of reclaimed water received from Miami-Dade County. The water quality measurements shall be based on Licensee's requirements for use of reclaimed water for cooling purposes. Licensee shall prepare an annual report describing the reliability of the reclaimed water supply source in terms of both quantity and quality. This report shall contain a description of any temporary interruptions in the use of reclaimed water (including estimated volumes and durations) that may have occurred during the course of the preceding year, the reason(s) if known to Licensee for the interruption, and any solutions implemented by Licensee to prevent recurrence of any such interruptions. The annual report shall be submitted to SFWMD beginning one year after the reclaimed water begins to be used for cooling purposes and yearly thereafter by March 31 of the following calendar year.

2. Secondary Source (Radial Collector Wells)

a. Radial Collector Well System Construction

i. Licensee shall ensure that dewatering effluent generated during construction of the caissons and advancement of the laterals of the RCW system will be routed to the CCS or underground injection. Areas requiring dewatering shall be isolated using sheet pile technology or the equivalent. Drill cuttings shall be used for fill or will be stored in the spoils area within the CCS.

ii. Licensee shall surround the RCW caissons with silt fencing prior to construction to avoid erosion or turbidity impacts to nearby surface waters. Licensee shall use BMPs during construction to isolate construction areas with turbidity curtains, silt screens, sheet-pile barriers, sediment barriers, temporary traps with a controlled storm water release structure, or other erosion or turbidity controls, as appropriate.

iii. The method to be employed by Licensee for drilling the RCW laterals shall be a drilling technique using formation water as the drilling fluid. Drilling shall occur from a position inside the concrete caisson that shall be maintained in a dewatered condition, to the maximum extent possible. The drilling equipment shall be placed below sea level to allow the use of the natural head in the formation (and Bay) to push the drilling water (and cuttings) back toward the caisson. This is a reverse-flow scenario that will maintain control of the drilling water within the drill bore and within the caisson minimizing the potential for frac-outs as the water in formation will be drawn in rather than pushed out by head pressure.

iv. Licensee shall not use trenching for installation of the RCW laterals.

v. Licensee shall submit to SFWMD at least six months prior to commencement of construction of the RCW, plans for RCW construction, contingencies for large storm events, emergency response in the event of an uncontrolled release of excavated material.

vi. Prior to construction of the radial collector wells, the Licensee shall submit drilling plans and other pertinent information to the SFWMD for review as a post-certification submittal subject Section A, General Condition XIX. Procedures for Post-

Certification Submittals. If the final well design or locations are different from those originally proposed in the SCA, Licensee shall also submit to the SFWMD for review an evaluation of the impacts of the proposed pumpage from the alternate well location(s).

b. Radial Collector Well Withdrawals

There may be temporary interruptions in the delivery of reclaimed water to the plant site. Consequently, authorizing a reliable secondary water supply source for the project is in the public interest and is consistent with the criteria set forth in Section 2.2 of the Basis of Review for Water Use Applications within the SFWMD.

i. Secondary Source Identification.

(1) Only in the event that reclaimed water is not available in the quantity or the quality required by Licensee for cooling water purposes shall Licensee be authorized to withdraw cooling water from the RCW system, except as authorized in paragraphs (2) and (4) below.

(2) 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.

(3) Licensee shall be authorized to operate the RCW system up to sixty (60) days and withdraw a maximum volume of 7,465 MG in any consecutive twelve (12) month period [equivalent to sixty (60) days at full capacity of 124.416 MGD].

(4) Licensee shall be authorized to operate the RCW system for periodic testing and system integrated testing purposes.

ii. Secondary Source Reporting

Licensee shall include in the annual report specified in Section B.VI.C.1.b., the volumes and duration of water withdrawn from this secondary source.

iii. RCW Testing

Upon completion of construction of the first radial collector well (RCW), Licensee shall conduct a full-scale radial collector well test (RCWT). The purpose of the RCWT is to confirm aquifer characteristics obtained previously and to confirm values predicted by the modeling conducted in support of the SCA.

(1) Requirements. The RCWT shall include attributes listed below. The RCWT shall be conducted by pumping the caisson and associated laterals at the caisson's design pumping rate. The RCWT shall include measuring pumping rate and flows from individual laterals, seepage (either by meters installed in the bay bottom substrate or an alternative method approved by SFWMD) to determine the hydraulic conditions between the Bay and subsurface conditions in the area and confirm the predicted amounts of water originating from the Bay withdrawn by the RCWs, and observing water levels and water quality (e.g., specific conductance and temperature) 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). The effects of tidal fluctuations, barometric pressure, precipitation, and pumping associated with operation of Units 1 through 4 shall be recorded. Non-RCW pumping influences such as these shall be removed from the pumping and recovery test data prior to the test analysis described below.

(2) 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.

iv. Notification of Operation of RCW System as a Secondary Cooling Water Supply Source

(1) Notice. Licensee shall provide SFWMD forty-eight (48) hour advance notice, when practicable, of Licensee's intent to operate the RCWs as a backup cooling water supply. At a minimum, Licensee shall provide SFWMD twenty-four (24) hour advance notice. Licensee shall also notify SFWMD if withdrawals from the secondary water source will be for more than thirty (30) consecutive days in any twelve (12) month period.

(2) Licensee shall notify SFWMD when withdrawals from the secondary water source have stopped.

v. Monitoring and Reporting

(1) Licensee shall collect and report the monitoring data as described in the Radial Collector Well System Monitoring Plan described in Section B, Condition I. Radial Collector Well System Monitoring, C. Licensee shall submit annual reports that include data collected in accordance with the RCWSMP and statistical analyses of the data.

(2) Licensee shall record withdrawal volumes on a daily, per caisson basis and Licensee shall submit the information to SFWMD on an annual basis. Licensee shall specify the water accounting method used and a description of means of calibration in each report.

[Chapter 373, Part II, F.S.; Rule 40E-2.091, F.A.C.; "Basis of Review for Water Use Permit Applications within the South Florida Water Management District, March 18, 2010", and FPL Stipulation 5/14/13]

3. General Conditions for Secondary Cooling Water Supply Sources

a. Water Shortage Compliance

In the event of a declared water shortage, the Licensee must comply with any secondary source water withdrawal reductions ordered by SFWMD in accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C.

[FPL Stipulation –5/14/13; Section 373.246, F.S.; Rule 40E-2.381, F.A.C.]

b. 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.

c. Interference with Existing Legal Uses

Licensee shall mitigate interference with existing legal uses, in existence at the time of issuance of the Certification Order, caused in whole or in part by Licensee's withdrawals, consistent with an approved mitigation plan. As necessary to offset the interference, mitigation may include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means. Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1 in 10 year drought event that results in the (1) Inability to draw water consistent with the provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; (2) Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent; or (3) Inability of an existing legal user to meet its permitted demands without exceeding the permitted allocation.

[FPL Stipulation –5/14/13; Rule 40E-2.301 (1) (f), F.A.C.]

d. Impacts to Existing Off-Site Land Uses

Licensee shall mitigate harm to existing off-site land uses caused by Licensee's withdrawals, as determined through reference to these Conditions of Certification and Chapter 373, F.S. When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the impacts. Harm, as determined through reference to these Conditions of Certification include: (1) significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other government authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g., fill for construction, mining, drainage canal, etc.); (2) damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; (3) land collapse or subsidence caused by reduction in water levels associated with consumptive use.

[FPL Stipulation –5/14/13; Sections 373.223, F.S.; Rules 40E-2.091, 40E-2.301, and 40E-2.381, F.A.C.]

e. Impacts to Natural Resources

Licensee shall mitigate harm to natural resources caused by Licensee's withdrawals, as determined through reference to these Conditions of Certification and

Chapter 373, Florida Statutes. When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to these Conditions of Certification includes:(1) reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface; (2) reduction in water levels that harm the hydroperiod of wetlands; (3) significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond; (4) harmful movement of contaminants in violation of state water quality standards; or (5) harm to the natural system including damage to habitat for rare or endangered species.

[FPL Stipulation –5/14/13; Sections 373.223, F.S.; Rules 40E-2.091, 40E-2.301, and 40E-2.381, F.A.C.]

f. Water Supply Systems Operation

At any time, if there is an indication that the well casing, pipes, valves, or controls associated with the RCW system leak or have become inoperative, Licensee shall be responsible for making the necessary repairs or replacement to restore the water supply system(s) to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be the cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter 40E-3, F.A.C.

[FPL Stipulation –5/14/13; Sections 373.308 and 373.316, F.S.; Rules 40E-3.041, 40E-3.101, 40E-3.411, and 40E-3.500-531, F.A.C.]

g. Consistency Review of Authorized Withdrawals from the RCW System

Within ten years from the date of issuance of the Certification Order and every ten years thereafter, unless extended by mutual agreement between Licensee and SFWMD, Licensee shall submit to DEP SCO and SFWMD a report on the consistency of the Project's withdrawals from the RCW system as a secondary cooling water source with SFWMD's Specific Water Use Conditions of Certification contained herein. Within 90 days after receipt of the completed report, SFWMD shall evaluate the information contained therein and issue a written notification to the DEP and Licensee as to whether the RCW system withdrawals for consumptive use authorized by this Certification remain in compliance with the provisions of Chapter 373, F.S., and Chapter 40E-2, F.A.C., in effect at the time the certification was issued by the Siting Board. In determining whether Licensee has established that its use of water complies with Chapter 40E-2, F.A.C., and the Basis of Review for Water Use Permit Applications within SFWMD, SFWMD shall evaluate whether Licensee's use of water interferes with a legal use of water that existed at the time the certification was issued by the Siting Board. If the notification indicates that the withdrawals are not in compliance with these provisions, SFWMD shall recommend to Licensee possible alternatives for bringing the withdrawals into compliance with SFWMD's Water Use Conditions of Certification contained herein. In addition, if DEP SCO determines, in consultation with SFWMD, based upon a review of a report submitted pursuant to this condition, that Licensee has failed to establish that the Licensee's use of water from the RCW system meets the consumptive water use requirements described herein, DEP SCO may seek to modify the authorization to use water in the certification or take other appropriate measures to ensure that the consumptive use of water meets the conditions for issuance in Chapter 40E-2, F.A.C., as described herein. Any modification made pursuant to this

Condition shall not be subject to competing applications provided there is no increase in the allocation and no change in source.

[FPL Stipulation –5/14/13; Chapter 40E-2, F.A.C.]

h. Request for Modification of Withdrawals

A modification of the RCW system withdrawals for consumptive use authorized by this Certification may be requested in accordance with the provisions of Section 403.516, F.S. and Rule 62-17.211, F.A.C. Any request for an increase in water withdrawals shall be made pursuant to the provisions of Section 403.516, F.S., and Rule 62-17.211, F.A.C.

i. Calibration and Reporting Requirements

Prior to the use of any proposed withdrawal facility authorized under this Certification, Licensee shall equip each facility with a SFWMD-approved operating water use accounting system and submit a report of calibration to the SFWMD, pursuant to Section 4.1 of the Basis of Review for Water Use Permit Applications. In addition, the Licensee shall submit a report of recalibration for the water use accounting system for each water withdrawal facility (existing and proposed) authorized under this Certification every five years from each previous calibration, continuing at five year increments.

[FPL Stipulation –5/14/13; Section 373.223, F.S.; Rules 40E-2.091, 40E-2.301, and 40E-2.381, F.A.C.]

j. Existing Well Repair, Replacement, Abandonment

If any of the radial collector wells or any required monitoring wells require repair, replacement, or abandonment, Licensee shall submit the information described in Chapter 40E-3, F.A.C., for review by DEP and SFWMD prior to initiating such activities.

[FPL Stipulation –5/14/13; Chapter 40E-3, F.A.C.]

k. Water Conservation Plan

If any changes are proposed to the Project's water use as part of an amendment or modification to this Certification, a revised water conservation plan may be required. If required the revised plan shall, at a minimum, incorporate the following components:

i. An audit of the amount of water needed in the Licensee's operational processes. The following measures shall be implemented within one year of audit completion if found to be cost effective in the audit:

(1) Implementation of a leak detection and repair program;

(2) Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the Licensee's facilities;

(3) Use of processes to decrease water consumption;

(4) Licensee shall develop and implement an employee awareness program concerning water conservation.

[FPL Stipulation –5/14/13; Sections 373.223, F.S.; Rules 40E-2.091, 40E-2.301, and 40E-2.381, F.A.C.]

l. If any non-procedural provision of Chapter 373, F.S., or condition of this Certification is violated, the license shall be subject to review, enforcement action, and possible modification.

[FPL Stipulation –5/14/13; Section 373.129, F.S.]

D. Linear Facilities on SFWMD Real Property Interests

"Linear Facilities" in this section refers to the proposed water pipelines (both reclaimed and potable water) and roadway improvements for this project.

1. Licensee shall be solely responsible for ensuring that all structures on SFWMD works or lands constructed by Licensee and other uses remain in good and safe condition. Licensee is advised that other federal, state, and local safety standards may govern the occupancy and use of SFWMD lands or works. SFWMD assumes no duty with regard to ensuring that such uses are so maintained and assumes no liability with regard to injuries caused to others by any such failure.

[FPL Stipulation –5/14/13; Rule 40E-6.381(1), F.A.C.]

2. If Licensee conveys the water pipelines to Miami-Dade County, Licensee shall notify Miami-Dade County that Miami-Dade County must apply for and receive a SFWMD Right-of-Way Occupancy permit in order to perform its intended operation and maintenance responsibilities for the water pipelines.

[FPL Stipulation –5/14/13; Rules 62-17.133(3) and 40E-6.091, F.A.C.]

3. Licensee solely acknowledges and accepts the duty and all associated responsibilities to incorporate safety features that meet applicable engineering practice and accepted industry standards into the design, construction, operation, and continued maintenance of the authorized facilities/use. This duty shall include, but not be limited to, Licensee's consideration of SFWMD regulation and potential fluctuation, without notice, of water levels in canals and works, if operated in compliance with the USACE Master Water Control Manual for the Central & Southern Florida (C&SF) Project and the Operations and Maintenance (O&M) Manual for the C&SF Project as well as Licensee's consideration of upgrades and modifications to the authorized facilities/use that may be necessary to meet any future changes to applicable engineering practice and accepted industry standards (See Attachment I-d, TP6&7 Project Features–Intersecting C&SF System and Works of the District Project Features). Licensee acknowledges that SFWMD review of this project including, but not limited to, any post-certification reviews and field inspections performed by SFWMD, does not in any way consider or ensure that the authorized use/facilities are planned, designed, engineered, constructed, or will be operated, maintained or modified so as to meet applicable engineering practice and accepted industry standards, or otherwise provide any safety protections. Licensee further acknowledges that any inquiries, discussions, or representations, whether verbal or written, by or with any SFWMD staff or representative during the post-certification review process, including, but not limited to, any field inspections, shall not in any way be relied upon by Licensee as SFWMD assumption of any duty to incorporate safety features, as set forth above, and shall also not be relied upon by Licensee in order to meet Licensee's duty to incorporate safety features, as set forth above.

[FPL Stipulation –5/14/13; Rule 40E-6.381(2), F.A.C.]

4. Licensee shall not engage in any activity regarding the authorized use that interferes with the construction, alteration, maintenance, or operation of the works of the SFWMD, including:

a. discharge of debris or aquatic weeds into the works of the SFWMD;

b. causing erosion or shoaling within the works of the SFWMD;

c. planting trees or shrubs or erecting structures that limit or prohibit access by SFWMD equipment and vehicles, except as may be authorized by this Certification.

d. leaving construction or other debris on SFWMD right-of-way or waterway;

e. damaging SFWMD berms and levees; removal of or damage to SFWMD locks, gates, and fencing; opening of SFWMD rights-of-way to unauthorized vehicular access; or running or allowing livestock on SFWMD rights-of-way.

Licensee shall be responsible for any costs incurred by the SFWMD resulting from any such interference, as set forth in Section B.VI.A.12. a. through B.VI.A.12. e. above.

[FPL Stipulation –5/14/13; Sections 373.085 (1) (b) and 373.086 (1), F.S.; Rules 62-17.133 (3) and 40E-6.381 (1), (2) and (8), 40E6.091 (1) and 40E-6.221 (1), (2) and (10), F.A.C.]

5. Licensee shall dispose of excess spoil material resulting from excavation and backfilling of the pipeline trench within SFWMD rights-of-way in accordance with SFWMD Homestead Field Station Superintendent's determination. Such disposal may require Licensee to haul excess spoil material from SFWMD right-of-way or place it in locations within SFWMD right-of-way specified by SFWMD and in compliance with applicable federal, state and local disposal regulations. Licensee shall not stockpile excavated material in the canal, except as specifically authorized by SFWMD.

[FPL Stipulation –5/14/13; 40E-6.381(8), F.A.C.]

6. Should the authorized activities or placement of the authorized facilities within SFWMD right-of-way or maintenance of same contribute to sloughing, erosion, or wash-outs of SFWMD right-of-way, berm, or side slope of the canal, it is Licensee's sole responsibility and expense to, upon notification from SFWMD, immediately take appropriate steps to restore the right-of-way to pre-existing conditions or better using current SFWMD engineering standards provided by SFWMD as guidance. Site-specific engineering considerations and decisions shall be undertaken by the Professional Engineer in charge (i.e., for backfill material, density/compaction, stabilization, and maintainability). Furthermore, such restoration, when required, shall include grading/re-shaping, seeding, re-sodding with bahia, Argentine, or other species recognized by SFWMD as a drought tolerant species. Licensee is also responsible for removal of all excess project-related material from SFWMD rights-of-way, unless otherwise authorized in these conditions of certification.

[FPL Stipulation –5/14/13; Rules 62-17.133(3) and 40E-6.381(2) and (8), F.A.C.]

7. SFWMD is not responsible for any personal injury or property damage that may directly or indirectly result from the use of water from SFWMD's canal or any activities that may include use or contact with water from the SFWMD canal, since SFWMD periodically sprays its canals for aquatic weed control purposes and uses substances that may be harmful to human health or plant life.

[FPL Stipulation –5/14/13; Rule 40E-6.381(9). F.A.C.]

8. SFWMD has the right to change, regulate, limit, schedule, or suspend discharges into, or withdrawals from, works of the SFWMD in accordance with criteria established by SFWMD or USACE for the works of the SFWMD (See Attachment I-d, TP6&7 Project Features–Intersecting C&SF System and Works of the District Project Features).

[FPL Stipulation -5/14/13; 40E-6.381 (13) and 62-17.133 (3), F.A.C.]

9. Licensee shall be responsible for the repair or replacement of any existing facilities located within SFWMD right-of-way that are damaged as a result of Licensee's installation or maintenance of the authorized facilities.

[FPL Stipulation –5/14/13; Rule 40E-6.381(19). F.A.C.]

10. It is the responsibility of Licensee to make prospective bidders on construction contracts for the certified facilities aware of the pertinent terms and conditions of this Certification.

[FPL Stipulation –5/14/13; Rule 40E-6.381 (21). F.A.C.]

11. At least ninety (90) days prior to the commencement of construction of any portion of the linear facilities over, across, or using any SFWMD canal or levee right-of-way to facilitate the construction or maintenance of the water pipelines, Licensee shall submit complete scaled or fully-dimensioned 11" x 17" drawings to SFWMD showing the proposed facilities for SFWMD review for compliance with the non-procedural requirements of Chapter 40E-6, F.A.C. The drawings shall depict the proposed water pipeline crossings, in both plan and profile views, and shall show, at a minimum, information consistent with Appendix E-3 and E-4 of the Criteria Manual for Use and Occupancy of Works of the District. The time frame specified in this condition shall be considered a maximum allowable time frame, unless adjusted by mutual agreement between SFWMD and Licensee.

[FPL Stipulation –5/14/13; Sections 373.085, 373.086, and 373.413 (2), F.S.]

12. Prior to use of SFWMD right-of-way for construction access, Licensee shall provide a time schedule for use of the right-of-way, including a plan identifying the proposed route ,type, and number of vehicles and the frequency of such use.

[FPL Stipulation 5/14[13; Sections 373.085 and 373.086, F.S.; Rules 40E-6.091(1) and 40E-6.201(1)(j), F.A.C.]

13. Licensee shall only use the access points and gates authorized by SFWMD. Upon payment of applicable key deposit fees and submission of complete key permit applications, SFWMD agrees to issue, as a ministerial act, Licensee the necessary key permits allowing access to SFWMD roads to support the construction, operation, and maintenance needs of Licensee. Licensee shall take all necessary measures practicable to preclude the general

public from accessing those portions of the right-of-way under construction such as posting of designated construction zones.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Rules 40E-6 and 62-17.133 (3), 40E-6.091, F.A.C; SFWMD Volume V Permit Information Manual, Criteria Manual for Use of Works of the District (Basis of Review) Section S]

14. After construction, Licensee shall maintain the area of SFWMD right-of-way utilized for access or occupied by Licensee's above-ground facilities at all times in a condition as good as or better than the condition existing prior to Licensee's use.

*[*FPL Stipulation –5/14/13; *Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]*

15. If deemed necessary to accommodate unimpeded continuous access by SFWMD vehicles and equipment, Licensee shall construct vehicle turn-around/passing areas to meet SFWMD requirements or coordinate with SFWMD when construction activities that may impede access are scheduled to occur, unless otherwise approved by SFWMD.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

16. Subsequent to Certification, any requests for use of SFWMD right-of-way that would otherwise require a waiver to SFWMD Right Of Way Occupancy Permit Criteria, as set forth in Rule 40E-6, F.A.C., if deemed acceptable by SFWMD in writing shall not require an amendment or modification to this Certification.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

17. Licensee is responsible for identifying potential conflicts with existing facilities owned by third parties permitted by SFWMD and for coordinating relocation of previously permitted facilities, as required, including obtaining the necessary right-of-way occupancy permit modifications for those previously permitted facilities. Similarly, if during the course of future permit application reviews, SFWMD notices a proposed facility that potentially interferes with the linear facilities, SFWMD will require the applicant to coordinate with Licensee to resolve potential conflicts.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

18. In granting Licensee use and occupancy of SFWMD rights-of-way, SFWMD does not relinquish any of its rights; particularly its right to use its rights-of-way for access to perform maintenance, inspections, post-storm recovery operations, tree and vegetation management activities, channel and bank stabilization and canal and levee maintenance and improvement activities. Licensee shall only have the right to use SFWMD rights-of-way for those activities, uses, and purposes specifically authorized in this Certification for the purpose of construction, operation, and maintenance of the linear facilities unless otherwise agreed to by SFWMD and Licensee in writing. All other activities, uses, and purposes on SFWMD right-of-way by Licensee not specifically authorized in this Certification are prohibited. Furthermore, Licensee shall not have the right to authorize any other person or entity to utilize SFWMD right-of-way for any activity, use, or purpose without the prior written consent of SFWMD.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

19. SFWMD reserves the right of priority access in order to perform its regional water management missions and Licensee shall not interfere with that access, particularly during emergencies. Uninterrupted SFWMD access shall be maintained at all times.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, and Rule 40E-6.381, F.A.C.]

20. Licensee does not have any authority to incur liens for labor or materials on SFWMD rights-of-way. All persons contracting with Licensee, all materialsmen, contractors, mechanics, and laborers are hereby charged with notice they must look to Licensee, and to Licensee only, to secure the payment of any bill for work done or any materials furnished during the term of this Certification. Pursuant to Sections 713.01(26), F. S., SFWMD right-of-way shall not be subject to liens for improvements and such liability is expressly prohibited. This paragraph shall be included in all contracts with Licensee for materials or services involving SFWMD right-of-way. In the event that Licensee does not, within thirty (30) days following Licensee's notice of the imposition of any such lien, cause the same to be released of record by payment or posting of a bond or other means acceptable to SFWMD, SFWMD shall have, in addition to all other remedies provided herein and by law, the right, but not the obligation, to cause the same to be released by such means as it shall deem proper, including payment of the claim giving rise to such lien. All such sums paid by SFWMD, including, but not limited to reasonable attorney's fees and expenses incurred by it in connection therewith, together with interest at the maximum rate allowed by law, shall be payable to SFWMD by Licensee on demand.

[FPL Stipulation – 5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

21. SFWMD, its Governing Board members, employees, contractors, and subcontractors, are not responsible or liable for any claims by Licensee, or any partner, parent, affiliate, or subsidiary, for damages (including special and consequential), loss, expense, or costs with respect to Licensee's project or other property or improvements arising directly, indirectly, or proximately from water level fluctuations, water flows, or operations of water control structures, if operated in compliance with the USACE Master Water Control Manual for the C&SF Project and the Operations and Maintenance (O&M) Manual for the C&SF Project (See Attachment I-d, TP6&7 Project Features–Intersecting C&SF System and Works of the District Project Features).

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

22. Licensee shall be responsible for incremental costs of SFWMD facility improvement projects within the certified Licensee corridors for linear non-transmission facilities.

a. "Facility improvement project" is a SFWMD project that involves modifications to infrastructure (conveyance canals, water control structures, levees, borrow canals or other SFWMD facilities within the SFWMD right-of-way) as may be necessary in the future to preserve public health, safety and welfare associated with the Central and Southern

Florida Flood Control Project. SFWMD routine maintenance is not considered SFWMD facility improvement projects for purposes of this Certification.

b. "Incremental costs" are costs attributed to a facility improvement project due to the presence of Licensee facilities within the SFWMD right-of-way.

c. Licensee shall not be required to comply with changes made to applicable non-procedural requirements of the SFWMD Criteria Manual after Licensee facilities are designed or incur incremental costs as a result of modifications to Licensee facilities in order to meet the new criteria.

d. SFWMD will notify Licensee when SFWMD initiates a facility improvement project [by conducting a Reconnaissance Study, a Project Implementation Report (PIR) or Feasibility Study, for example] whose construction may incur incremental costs as defined above. SFWMD and Licensee will then initiate the following process if the estimated construction costs include "incremental costs".

e. Design Phase

i. Upon receipt of the Design Documentation Report for Basis of Design, and Opinion of Probable Construction Cost (OPCC) SFWMD will provide copies to Licensee. Licensee shall have the opportunity to review SFWMD's package on the same timetable identified in the schedule.

ii. Licensee shall have the option to develop design alternatives to avoid or minimize incremental costs for SFWMD consideration during the SFWMD Preliminary Design phase.

iii. In addition, at the option of Licensee, Licensee, in consultation with SFWMD, shall identify and retain an independent Consulting Engineer(s) with demonstrated knowledge of and experience with SFWMD and Licensee facilities. Licensee shall be responsible for the payment of fees charged by the Consulting Engineer(s).

iv. The Consulting Engineer shall evaluate SFWMD facility improvement project plans and anticipated incremental costs and will report findings to Licensee and SFWMD for the purpose of confirming or refining incremental costs. At the option of Licensee, the Consulting Engineer will identify design options and construction methods to achieve the planned SFWMD facility improvements, including alterations to SFWMD or Licensee existing facilities.

v. The Consulting Engineer's evaluation shall include a comparison of costs of the various design options and construction methods and shall recommend the design option that represents the option that achieves the objectives of the SFWMD facility improvement project and involves the lowest cost and least impacts to Licensee and SFWMD and their facilities.

vi. Licensee shall submit its Consulting Engineer's evaluation to SFWMD before the preparation of Intermediate Plans and Specifications is complete. SFWMD will consider this evaluation; however, SFWMD is under no obligation to accept or incorporate the recommendations contained in the evaluation.

vii. Licensee and SFWMD will reach written agreement on the maximum incremental costs to be paid by Licensee. In the event agreement on cost cannot be reached, the parties shall pursue dispute resolution pursuant to Condition of Certification X (Section A, General Conditions).

viii. SFWMD will provide Licensee copies of the Final Plans and Specifications for Advertising for Construction, Final Design Documentation Report, Final Construction Schedule and Final Opinion of Probable Construction Cost at least sixty (60) days prior to soliciting bids from contractors.

f. Construction Phase

ix. In accordance with applicable SFWMD procurement policies in effect at the time, SFWMD will select a Contractor as the lowest responsive and responsible bidder to construct the facility improvement project. SFWMD shall provide Licensee copies of the awarded bid, construction schedule and a timetable of estimated incremental costs. [Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.

x. Licensee shall pay SFWMD for incremental costs within sixty (60) days of receipt of written invoice from SFWMD of actual incremental costs of the facility improvement project in accordance with the agreement on maximum incremental costs identified in paragraph vii) above.

[FPL Stipulation – 5/14/13; Sections 373.085(1)(b) and 373.086(1), F.S.; Chapter 40E-6.011(2), 40E-6.381 and 40E-6.221 (1), (2) and (10), F.A.C.]

23. Licensee shall not use SFWMD rights-of-way for the storage of any contaminant, hazardous substance, fuel, or other petroleum products unless agreed to by SFWMD in writing.

[FPL Stipulation – 5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

24. To the extent practicable, Licensee shall expedite the preparation and implementation of any repair, remediation, mitigation, or related plans required to address damages or any other adverse impacts to SFWMD facilities or systems caused by Licensee during the design, construction, operation, and/or maintenance of the certified facilities.

[FPL Stipulation –5/14/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

25. At no time shall Licensee place permanent or semi-permanent above-ground encroachments or facilities within the 40-foot-wide strip of land within SFWMD rights-of-way lying parallel to any SFWMD canal as measured from the top of the existing canal bank landward, unless otherwise authorized in this Certification or agreed to by SFWMD in writing.

[FPL Stipulation –5/14/13; Rule 40E-6.011(4), (5), (6) and (7), F.A.C.]

26. At no time shall Licensee place permanent or semi-permanent above-ground structures within SFWMD one-hundred (100) foot-long equipment staging areas defined as being immediately upstream and downstream of all bridges and pile-supported utility crossings of SFWMD canals, unless otherwise authorized in this Certification, or agreed to by SFWMD in writing. Temporary placement of equipment or materials is allowable as long as the equipment or materials can be removed by Licensee within forty-eight (48) hours of notice given by SFWMD that a tropical storm watch has been declared for Miami-Dade County or at times when post-storm debris removal activities must be undertaken by SFWMD.

[FPL Stipulation –5/14/13; Rules 40E-6.011(9) and 40E-6.091, F.A.C.; "SFWMD Volume V Permit Information Manual, Criteria Manual for Use of Works of the District, September 15, 1999", p. 28.]

27. Within thirty (30) days of completion of the authorized work, Licensee shall contact the SFWMD field representative at the Homestead Field Station to schedule a final inspection for compliance with right-of-way conditions of certification.

[FPL Stipulation –5/14/13;40E-6.381(2), F.A.C.]

28. Licensee shall comply with the following requirements during use of SFWMD right-of-way for construction maintenance, and operation activities:

a. Prior to commencement of construction or use of SFWMD right-of-way, Licensee shall contact the SFWMD field representative at the Homestead Field Station to schedule pre-construction meetings. If these meetings are conducted in accordance with the time and scope requirements of Section B.VI.A.15.a, then the same meeting may meet the requirements of both conditions. Licensee may schedule separate meetings for each feature (potable water pipeline, reclaimed water pipeline, roadway improvements). Licensee shall prepare and present the following at the pre-construction meetings:

i. A list of 24-hour contact personnel. The list shall include the contractor and alternate contact, their titles, and telephone numbers for 24-hour contact.

ii. A written inventory of the type of vehicles, construction equipment, other machinery, and materials that will be located within SFWMD right-of-way.

iii. Written procedures for the clearing of all construction materials, machinery, equipment, and vehicles from the canal and the area immediately adjacent to the canal within 24 hours notice from SFWMD.

iv. A list of the names and contact numbers of the designee and alternate contact responsible for the various operations involved in the clearing procedures.

b. This authorization is for the use of Licensee and Licensee's contractor(s)/sub-contractor(s) only. Upon conveyance of Licensee facilities on SFWMD rights-of-way from Licensee to Miami-Dade County, Licensee shall notify Miami-Dade County of the requirement to obtain Right-of-Way permit from SFWMD.

c. Licensee shall be responsible for locking SFWMD access gates upon entering and leaving SFWMD right-of-way. Licensee shall take all necessary measures to preclude the general public from accessing the right-of-way with motorized vehicles.

d. Licensee is responsible for posting a watchman at any SFWMD vehicular access gates unlocked by Licensee during any working hours that the gate remains unlocked. At no time shall a SFWMD gate unlocked by Licensee be left unlocked and unattended by Licensee.

e. Licensee is responsible for providing and utilizing acceptable dust control measures during the duration of the proposed construction work.

[FPL Stipulation – 5/14/13; Rules 40E-6.011(2) and 62-17.133(3), F.A.C.]

29. Licensee shall comply with the following concerning storm event notifications and requirements during construction activities:

a. If storm, hurricane, or emergency circumstances are developing, SFWMD will attempt to provide a 48-hour notice. Licensee will be contacted by telephone or a visit to the construction site wherein Licensee will be informed of the emergency situation.

Licensee is put on notice that the 48-hour notice is a warning that SFWMD may or may not be able to provide Licensee.

b. If storm, hurricane, or emergency circumstances have developed, SFWMD will contact Licensee by telephone or visit the construction site to place Licensee on 24-hour alert. At this time, Licensee and Licensee's contractor(s) and sub-contractor(s) must begin securing the project site in accordance with Section B.VI.28(a)(iii).

c. Licensee is advised that SFWMD's hurricane, storm event, and/or emergency alert may differ from the National Hurricane Center or the local news and weather. SFWMD takes into consideration the numerous factors concerning construction within the canal rights-of-way. As such, upon SFWMD notification to Licensee of a pending emergency, storm event, or hurricane, Licensee has 24 hours or less to comply with SFWMD orders.

d. Licensee shall remove silt barriers installed by Licensee located within the canal within 48 hours' notice from SFWMD. If in the SFWMD's opinion, storm conditions or emergency circumstances are developing, the removal of the silt barriers by Licensee shall be completed within twelve (12) hours' notice from SFWMD.

[FPL Stipulation –5/14/13; Rules 40E-6.011(2) and 62-17.133(3), F.A.C.]

30. In the event of floods or other natural or civil disaster or emergencies affecting SFWMD or SFWMD right-of-way, Licensee shall cooperate with SFWMD to facilitate mitigation of the impact of such emergencies. Licensee shall immediately notify SFWMD of any emergency situation observed on SFWMD right-of way.

[FPL Stipulation –5/14/13; Rule 40E-6.011(2), and 62-17.133(3),F.A.C.]

31. Licensee shall be responsible for obtaining any and all other necessary federal, state, local, special district, private, and underlying owner authorizations in connection with its activities conducted under these conditions. In the event Licensee does not obtain such authorizations from the underlying owner, Licensee shall acquire or otherwise satisfy any interest or claims made by such underlying owners with respect to these conditions.

[FPL Stipulation –5/14/13; Rules 40E-6.051(2) and 40E-6.381(5) F.A.C.]

32. If required by the Florida Department of Transportation (FDOT) to prepare a Maintenance of Traffic (MOT) Plan that involves SFWMD property, Licensee shall provide SFWMD with a copy of the MOT Plan upon submittal to FDOT. Licensee shall provide SFWMD with a copy of the Final MOT Plan reviewed by the FDOT.

33. Licensee acknowledges its obligation to obtain all necessary approvals from the USACE and that Licensee's proposed activities contemplated under this certification are subject to USACE 33 U.S.C. Section 408/33 C.F.R Section 208 approval requirements and therefore Licensee shall provide promptly to SFWMD all information required by the USACE for 33 U.S.C. Section 408/33 C.F.R. Section 208 review. Licensee further acknowledges and agrees that its proposed activities contemplated under this certification shall be subject to all USACE requirements and conditions, including but not limited to USACE setback requirements and construction standards for federal levees to ensure the integrity of the levee is not compromised. Licensee shall not commence construction of the proposed facilities on SFWMD rights of way contemplated by this certification until the USACE provides all required approvals,

including but not limited to 33 U.S.C. Section 408/33 C.F.R. Section 208 approval. Licensee further acknowledges and agrees, that in the event of future USACE projects or modification of existing USACE projects, it shall be the responsibility of the Licensee to implement any and all necessary modifications to Licensee's facilities including, but not limited to, relocations thereof required by USACE at Licensee's sole cost and expense.

[FPL Stipulation –5/14/13; Federal Water Resources Development Acts of 1992, 1996 and 2000; 33 U.S.C. 408; 33 C.F.R. 385 and 208; Sections 373.1501, 373.103 (2), F.S.; Rule 62-17.133(3), F.A.C.]

34. Licensee shall not block or otherwise restrict or impede canal flows at any time. Licensee is prohibited from placing fill or dams in the canal during any phase of construction or during maintenance unless otherwise authorized by SFWMD.

[FPL Stipulation –5/14/13;]

35. Within sixty (60) days of completion of the installation of each authorized facility within SFWMD lands, works or projects, Licensee shall provide SFWMD with as-built drawings of all Licensee facilities that encroach or cross SFWMD rights-of-way, signed and sealed by a Professional Engineer registered in the State of Florida verifying that the authorized facility was constructed in accordance with these conditions of certification. As-built drawings shall include the canal design section in relation to the burial depth of the subaqueous crossing. Soundings are to be taken at a maximum of ten-foot intervals, from top-of-bank to top-of-bank and tied into the canal right-of-way lines and plotted on standard 10" x 10" cross-section paper or a similar computer-aided design (CAD) drawing. The drawings shall include SFWMD rights-of-way lines and a north arrow and have the design canal section superimposed. NAVD 88 shall be used. English units or a combination of English and metric units of measure shall be used in the drawings. The time frame specified in this condition shall be considered maximum allowable time frame, unless adjusted by mutual agreement between SFWMD and Licensee.

[FPL Stipulation –5/14/13; Sections 373.085(1)(b) and 373.1391, F.S.]

36. Licensee shall not damage existing SFWMD culverts within the L-31E levee. Any alterations to such culverts shall restore the culverts to pre-existing conditions.

[FPL Stipulation –5/14/13; Rule 40E-6.381(19), F.A.C.]

37. Construction shall be performed in accordance with applicable requirements contained in SFWMD Engineering Design Standards for Water Resource Facilities, Section 02220, Excavation and Backfilling and any other applicable engineering standards referenced in this document.

[FPL Stipulation –5/14/13; Sections 373.044, 373.113, 373.085(1), 373.086, 373.103, 373.129, and 373.603, F.S.; Chapter 40E-6, F.A.C.]

38. New access points created by Licensee for non-transmission linear facilities shall be designed to include security patrols, locked gates or other appropriate methods or techniques to prevent illegal access to SFWMD-owned lands including but not limited to lands within Model Lands, Southern Glades, and Biscayne Bay Coastal Wetlands Project footprint. Licensee shall maintain these access points by repairing illegal breaches within thirty (30) days of being notified of or discovering such breaches.

[FPL Stipulation – 5/14/13; Section 373.1391, F.S.]

39. Upon request by Licensee prior to final design of the non-transmission linear facilities, SFWMD shall provide Licensee with a list of SFWMD lands that are subject to planned burns. SFWMD will provide advance notice to FPL of any planned burns in the vicinity of the certified reclaimed water pipeline rights-of-way.

[FPL Stipulation –5/14/13; Section 373.1391, F.S.; and Rule 40E-6.331, F.A.C.]

E. Additional Conditions Applicable to Water Pipelines on SFWMD Real Property Interests.

1. Licensee shall not install water pipelines in SFWMD rights-of-way except for crossings. Conditions a and b below, however, shall also apply in the event that the final certified reclaimed water pipeline corridor includes parallel runs within SFWMD rights-of-way:

a. All work associated with Licensee installation of buried water pipelines that is within and parallel to SFWMD rights-of-way shall be performed within a 25-foot wide work corridor centered on the installation alignment.

b. Licensee shall not utilize SFWMD L-31E right-of-way for placement of parallel runs of the reclaimed water pipeline except for short segments (not to exceed 2,000 feet in length). Short segments shall only be constructed as close to the west SFWMD right-of-way line as possible, but no closer than forty (40) feet landward from the western top-of-bank of the L-31E borrow canal. Such short segments must be specifically agreed to in writing by SFWMD and Licensee post-certification. The foregoing shall not be construed as authorization by SFWMD to impact wetlands, mangroves or other environmentally sensitive lands.

[FPL Stipulation – 5/14/13; Rule 40E-6.091]

2. Subaqueous crossings shall be laid to an elevation, referenced to NGVD 29, which is adequate to provide a minimum of two (2) feet of cover below the existing canal section. If an open-cut method of construction is used then Licensee shall also place a minimum of six (6) inch concrete slab above the pipe to prevent any damage that may be caused by maintenance activities.

[FPL Stipulation – 5/14/13; Rule 40E-6.091]

3. Licensee shall ensure that the portion of the buried facilities crossing the SFWMD right-of-way shall provide a minimum of a two (2)-foot depth of cover below the existing ground elevation. Vaults and manholes, if applicable, shall be installed so the top of the facility is set flush with the existing ground and is constructed in such a manner so as to withstand the FDOT HL 93 loading.

[FPL Stipulation – 05/14/13; Rule 40E-6.091]

4. Licensee shall adequately identify the location of the crossing with a permanent, above-ground marker placed within the SFWMD right-of-way at location(s) specified by the SFWMD field representative.

[FPL Stipulation – 5/14/13; Rule 40E-6.091]

F Roadway Improvements

1. The 359th Street Bridge within the SFWMD L-31E borrow canal right-of-way shall be a free span without pilings in the canal cross-section. Licensee shall install bridge revetment for bank stabilization.

2. The low member elevation of the SW 359th Bridge shall be set at elevation 8.4 feet NGVD 29 or higher.

[FPL Stipulation – 5/14/13; Rule 40E-6.091 F.A.C.]

VII. MIAMI-DADE COUNTY

A. General Conditions

1. The construction, operation and maintenance of the proposed project including all associated non-transmission linear and non-linear ancillary facilities, shall be in compliance with all applicable non-procedural requirements of the Miami-Dade County Code (MDC Code).

[FPL Stipulation – 8/1/13]

2. The construction, operation and maintenance of the proposed project including all associated non-transmission linear and non-linear ancillary facilities, shall be in compliance with all applicable non-procedural requirements of the MDC Public Works Manual.

[FPL Stipulation – 8/1/13]

3. This certification does not authorize unpermitted Adverse Environmental Impacts (AEI) as defined in Section 24-5 of the Code of Miami-Dade County. Any unpermitted AEI that occur as a result of the construction, maintenance, or operation of the Plant and Non Transmission components of the project shall be addressed in accordance with the General Conditions of Certification or such other applicable law.

[FPL Stipulation – 8/1/13]

4. FPL shall provide MDC notice and shall not unreasonably withhold the opportunity for MDC to salvage desirable native vegetation from wetland and tidal waters occurring within the non-transmission areas of the project to be filled or cleared.

[FPL Stipulation – 8/1/13]

5. Mechanical cutting or removal of vegetation associated with the construction or maintenance of the construction access roads for the non-transmission portion of the project shall include removal of such cut vegetation from wetland areas. Cut vegetation shall not be dumped in wetlands. Cut vegetation may be burned in accordance with Section B.VII.S. Open Burning, below. Cut vegetation may be transported to an approved disposal facility.

[FPL Stipulation – 8/1/13; MDC Code Chapter 24 Sections 24-25, 24-27 and 24-48, and Florida Statute 403.413]

6. Unconsolidated shorelines created as a result of the project shall be stabilized with native vegetation, such as but not limited to mangroves. Lime-rock boulder riprap shall be required along any new vertical bulkheads in accordance with applicable County and State requirements, except where the placement of such riprap would constrain or interfere with

the use of the bulkhead by vessels. In such cases the riprap shall be placed at an approved alternate offsite location, or a donation shall be made to the Miami Dade County Biscayne Bay Environmental Enhancement Trust Fund in an amount equivalent to the cost of such offsite placement.

[FPL Stipulation – 8/1/13]

7. Notwithstanding any other conditions of certification or stipulations between FPL and MDC, and pursuant to Section 24-27 of Miami Dade Code, FPL shall not cause, or allow to be caused, any nuisance as defined in 24-5 and/or 24-28 as a result of the construction, operation, or maintenance of the non-transmission features of the project.

[FPL Stipulation – 8/1/13; MDC Code Chapter Section 24-7(1)].

8. All access roadways proposed to be constructed south of SW 344 Street shall minimize impact to wetlands, pursuant to Section 24-48(4) and objectives and policies of the Comprehensive Development Master Plan (CDMP, including but not limited to Objective TC-6 and Policies TC-6C and CON-7 A of the CDMP. Pursuant to Condition 9 of MDC Resolution No. Z- 56-07, sheet flow shall be maintained across nontransmission roadway alignments by elevating portions of the roadway and through installation of culverts in other areas.

[FPL Stipulation – 8/1/13]

9. Non-transmission access roadways approved under MDC Resolution No. Z·56-07 shall be consistent with Conditions 9 and 21 of Z-56-07 and Policy CM-9H of the CDMP.

[FPL Stipulation – 8/1/13]

10. Development shall be substantially in accordance with the adopted zoning hearing plan as referenced in condition No. 1 of MDC Resolution 4-ZAB-559-71, and as modified by Resolutions Z-56-07 and Z-1-13 and with the applicable conditions of these zoning resolutions.

[FPL Stipulation – 8/1/13]

11. All landscape material that will not be planted at the subject property shall be planted at off-site locations approved by the County. At least ninety (90) days prior to any construction associated with the 230kV Davis-Miami portion of the Turkey Point 6 & 7 project, FPL shall submit a Planting Plan as a post-certification submittal to Miami-Dade County to satisfy Condition #13 of Resolution Z-56-07 and Condition #14 of Resolution Z-l-13, pursuant to Section A.XIX. for review based on compliance with these conditions of certification. All material to be planted off-site shall be native material appropriate to the planting area as verified by MDC and shall be Florida Number 1, Grade A. or better, in accordance with latest edition of Florida Grades and Standards. All materials shall be planted within the timeframes specified by the County, and FPL shall comply with all applicable County standards for planting of landscaping. (Condition No. 14 of Z-1-13 and Condition No. 13 of Z-56-07].

[FPL Stipulation – 8/1/13]

B. Plant Access Roads

1. Plant access roadway improvements west of the L-31E approved in the CDMP Amendment Ordinance 10-26 shall not go beyond those depicted on Figure 3.1 (Temporary Roadways and Roadway Improvements In connection with the Construction of Turkey Point Units 6 & 7) of the CDMP Transportation Element. All roadway improvements associated with the construction of Turkey Point Units 6 & 7 as shown in Figure 3.1 are to be temporary, per the CDMP, and shall satisfy the criteria outlined in the Future Traffic Circulation Map Series of the CDMP Transportation Element. (Future Traffic Circulation Map Series of the CDMP Transportation Element, Ordinance 10-26)

2. 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). FPL shall restore the wetlands impacted by the roads in compliance with the Wetland Mitigation Plan Rev 2 (July 2011).

b. FPL shall install the proposed potable water line below wetland grade at an appropriate depth and alignment so that the installation of the pipeline complies with applicable construction standards, including minimum cover criteria in the Public Works Manual, and does not interfere with the wetland restoration where required in areas of pipeline construction.

3. The construction access roads shall not adversely impact the capacity of Miami Dade County's existing drainage network. FPL shall provide final construction plans to DEP and Miami-Dade County at least 90 days prior to commencement of access road construction. The plans shall demonstrate compliance with the requirements of Miami Dade County Code Section 24-48.3(1) (b), (d) & (e) and by reference with any applicable regulations cited within these sections. The plans shall address the drainage system associated with the roads to accommodate stormwater from the roads and maintain the capacity of any pre-existing County drainage features that are modified or removed by construction of the roads. The plans shall also describe how the County drainage system will be reconstructed when the roadway improvements are removed.

4. To the extent practicable, restoration of public and private roadways shall be in a manner complementary to planned and funded County wetlands restoration projects. MDC and FPL shall jointly determine if practicable opportunities exist at the time of roadway restoration to complement wetlands restoration projects.

5. Following completion of project construction for Units 6 &7, to the extent feasible, FPL shall reconstruct SW 117 Avenue between SW 344 Street and SW 328 Street as a 2-lane paved road with a continuous ditch or canal on the eastern side, unless MDC and FPL agree to a different configuration. On SW 117 Avenue south of SW 344 Street, FPL and MDC may agree that no road is necessary upon removal of the construction access roadways.

6. The construction access roadways associated with the non-transmission features of the Project area shall not be inconsistent with the Biscayne Bay Coastal Wetlands (BBCW) CERP project, pursuant to Policy CON-7J of the CDMP and shall be consistent with Condition 9 of Z-56-07.

7. 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. Given the uncertainties associated with the Licensee's roadway improvements, including when the improvements would commence and when the deconstruction of the roadway would occur, the water conveyance feature must either be constructed as part of the roadway improvement project; or a portion of the ROW must be set aside in advance of FPL construction to ensure that neither project prevents, constrains, or delays the other. The water conveyance feature may include a lined canal, pressure culvert and/or control structures.

8. FPL shall demonstrate, prior to construction, that all access roads west of the L-31E canal comply with the requirements of the Fire Water &. Engineering Bureau and the Florida Fire Prevention Code (FFPC) and National Fire Protection Association (NFPA) standards.

9 All access roads associated with the operation of the nuclear power plant and ancillary structures and equipment shall conform to the minimum standard identified in the "Miami-Dade Fire Rescue Access Road Synopsis" along with all prevailing Miami Dade Fire Rescue access road standards at the time of certification.

10. FPL shall provide wayfinding signage, meeting the approval of the Parks, Recreation and Open Space Department (PROS), as part of the construction of roadway improvements to SW 328th Street (between SW 137th Ave and SW 117th Ave) and SW 117th Ave (south of SW 328th St) to direct travelers to Homestead Bayfront Park and Marina. Such signage shall comply with the PROS Sign Implementation Manual.

[FPL Stipulation – 8/1/13; CDMP Policy R05-3E]

C. Earthwork And Materials Disposal

1. For all approved work, fill material will be utilized as described in FPL's Conceptual Earthwork and Materials Disposal Plan (June 3, 2011).

2. 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

3. Within thirty (30) days of completion of excavated material disposal activities associated with the certified facilities, FPL shall provide to RER-DERM copies of all excavated material disposal receipts and/or disposal records for contaminated materials that were disposed of at an approved off-site facility. (MDC Code Section 24-44.)

4. Excavated material that meets the MDC Soil Reuse Guidance limits may be stockpiled for future use, reused or managed within the cooling canals system.

5. Spoil material (Material) resulting from the excavation activities associated with the construction of the Units 6 & 7 project and non-linear features and facilities on the Turkey Point Units 6 & 7 site shall be stored or disposed of at the Spoil Areas specifically identified in Figure 5.1-1 of the SCA. Permanent storage or disposal of spoil material resulting from these Project features on areas outside those specifically identified in Figure 5.1-1 is prohibited unless approved under Section B.VII.D.9. below. Any storage in excess of 180 days shall be considered permanent storage.

6. Material resulting from the excavation activities associated with the construction of the Units 6 & 7 Project may be placed on Spoils Areas A and C without testing. However, if undocumented contamination of regulated pollutants, contaminant, or hazardous substance as defined in F.S 376.301 or F.S 403.031, is discovered, or in the event of a discharge as defined in F.S 376.301 of regulated pollutants, contaminant, or hazardous substances as defined in F.S 376.301 or F.S 403.031, during project related activities, FPL is required to notify RER-DERM within 48 hours. The impacted material shall be segregated, characterized and managed in accordance with applicable state and local regulations or reused in accordance with the Soil Reuse Guidance for MDC dated March 22, 2004 (http://www.miamidade.gov/environment/pollution-remediation.asp). Nothing herein releases FPL of its obligations to comply with all applicable federal, state, and local laws, rules and regulations.

7. Except as provided in Condition 8 below, *Materials* 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

b. Calculations indicating that the proposed protective measures are capable of retaining and controlling predicted storm water runoff from the *Material* stockpile such that overflow into the adjacent offsite wetlands and surface waters to the south of the CCS is minimized to the extent practicable.

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 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).

8. Permanent storage or disposal of *Material* excavated from off site locations, specifically the reclaimed water facility and pipeline area, temporary access road improvements areas and transmission structure pad location, and portions of the west preferred transmission corridor at Spoil Area B is not allowed without testing. The Material from offsite locations shall be tested and demonstrated (to the satisfaction of RER-DERM) to be free of contaminants of concerns, related to the current and historical land uses at the offsite locations at

which the material was generated, which could leach into the adjacent ground or surface waters at concentrations above applicable numeric and narrative water quality standards.

9. For any excavated material proposed to be transported off-site for reuse, FPL shall submit to RER-DERM a "Soil Reuse Proposal" for review and approval at least 90 days prior to transportation of the material offsite. The time required for this review and approval process will not be counted towards the 180 days limitation discussed in Section B.VII.D.5. above. The aforementioned proposal shall be prepared in accordance with the Soil Reuse Guidance for MDC dated March 22, 2004 (http://www.miamidade.gov/environment/pollution-remediation.asp).

10. All permanent, Project related onsite spoil areas shall be maintained to prevent the growth or accumulation of prohibited plant species as listed in Miami-Dade County Code.

11. Spoil storage related conditions associated with past zoning approvals for the CCS and Turkey Point site shall continue to remain in full force and effect.

[FPL Stipulation – 6/20/13]

E. Wastewaters/Sanitary Wastes

1. In the event of any breakdown or lack of proper functioning of any portion of FPL's facilities, which causes or may cause improperly treated or untreated potable water or sewage or hazardous materials or industrial wastes to be discharged from the plant or facility, or which causes or may cause a nuisance or sanitary nuisance or the emission of air contaminants in excess of the quantity permitted by the provisions of Chapter 24 the Code of Miami-Dade County, FPL shall notify RER-DERM within 24 hours at (305) 372-6600 and via email to EnvtlCompliants@miamidade.gov and shall take all actions necessary to prevent or minimize air, water or ground pollution. Within fourteen (14) days of becoming aware of any such occurrence or event, FPL shall submit to RER-DERM a written report describing the cause of the occurrence(s) and relevant response measures and procedures to prevent future occurrences.

2. Wastewater discharges associated with project activities shall be in compliance with applicable water quality standards. Wastewater discharges shall not cause any nuisance as defined in Section 24-5 and /or 24-28 of the Miami-Dade County Code.

3. Offsite disposal of liquid wastes shall be performed by liquid waste transporters permitted to operate in Miami-Dade County.

4. Prior to commencement of construction of the new sanitary wastewater treatment facility, the Licensee shall submit construction details and plans for that facility demonstrating the facility will comply with the applicable regulatory requirements.

5. With the exception of the septic tanks, currently serving the FPL Day Care facility on Palm Drive and the McGregor cottage on the Turkey Point peninsula, all existing septic tanks at the Turkey Point Plant facility shall be abandoned in accordance with all applicable state and local requirements, and the buildings and facilities that were being served by those septic tanks shall be connected to the new on-site sanitary wastewater treatment plant, upon commencement of operation of the proposed sanitary wastewater plant.

6. Except as provided in these conditions, the licensee's on-site sanitary wastewater treatment plant shall meet all applicable regulatory standards.

7. Notwithstanding any other condition, pursuant to Section 24-27 of the Miami-Dade County Code, licensee shall design, construct, operate and maintain the on-site sanitary wastewater plant so as not to cause, or allow to be caused, any nuisance as defined in Section 24-5 and/or 24-28 by the construction, maintenance, or operation of the on-site sanitary wastewater treatment plant.

8. FPL's request for a variance from Section 24-43.1(6) of the MDC Code for the on-site sanitary wastewater treatment plant is granted as the Siting Board determined that the granting of the variance will not be detrimental to the public health, welfare and safety, will not create a nuisance and will not materially increase the level of pollution in Miami-Dade County. Pursuant to the stipulation between Miami-Dade County and FPL, dated June 20, 2013, the County professional staff, which makes recommendations regarding such variances, agrees that such a determination is justified under the circumstances presented.

[FPL Stipulation – 6/19/13; MDC Code Chapter 24 Section 24-20; MDC Code Chapter 24 Sections 24-5 and 24-46]

F. Exotic Vegetation

1. Within all areas of work (to be defined as all temporarily or permanently impacted areas including a 50 ft lateral buffer) for the Turkey Point 6&7 Project and all non-linear associated facilities:

a. FPL shall not plant the controlled species of exotic vegetation listed in Attachment K.

b. FPL shall not plant, import, or propagate prohibited species of exotic vegetation listed in Attachment L.

2. During construction, FPL shall use best efforts to remove prohibited and controlled species listed in Attachment L, and shall perform exotic species maintenance at regular intervals, but no less often than annually, to control those listed prohibited and controlled species

3. Within all areas of work within FPL's construction access road rights-of-way:

a. FPL shall implement the Exotic Vegetation Management Plan (dated May 3, 2013) (Attachment M) prior to construction of the access roads, and until the access roads are removed, including areas within FPL's access road ROW and adjacent "maintenance areas" as defined in the Management Plan.

[FPL Stipulation – 6/19/13, Section 24-49.9(1), Section 18A-12, MDC Code]

G. Aviation Requirements

1. FPL shall not construct any permanent facilities whose height exceeds 200 ft in any location in Miami Dade County for this Project with the exception of the variances granted under MDC Zoning Resolution Z-56-07 (two structures up to 350' maximum height). Prior to construction of the two structures permitted under Z-56-07 or use of cranes at the site whose heights exceed 200 ft, FPL shall provide to Miami Dade County Aviation Department as a post-certification submittal, for purposes of assuring compliance with this condition of certification:

a. all information necessary for a complete "Airspace Letter of Determination" for all relevant structures; and

b. a copy of any approvals or determinations from the Federal Aviation Administration (FAA).

2. Prior to construction, FPL shall coordinate with Homestead Air Reserve Base regarding any proposed facilities to be located inside the impacted Height Zoning District (Inner Horizontal Surface) of HARB (Attachment Q).

[FPL Stipulation 7/16/13; MDC Resolution Z-56-07, MDC Code Sections 33-330 - 33-350, 33-388 - 33-403, 33-292 - 3-301, 33-372 - 33-387]

H. Rare, Threatened and Endangered Species

1. FPL will conduct listed species surveys for the species identified in the Miami-Dade County Comprehensive Development Master Plan Element 4, Appendices A and B of the plant and non-transmission linear facility work areas, report locations of evidence of presence of listed species and suitable habitat found to Miami-Dade County, and implement practicable wildlife and vegetation protection measures to avoid, minimize, mitigate, or otherwise address listed species issues. Listed plant surveys will be conducted by botanists experienced in the field identification and biology of rare, threatened, and endangered plants that occur in Miami-Dade County. Faunal surveys will be conducted in accordance with FWC conditions of certification Section B.IV.B and FWC regulations. All work, including preconstruction earthwork and clearing, is prohibited until FPL has demonstrated compliance with this condition prior to that portion of the work being initiated.

2. FPL will provide MDC with a copy of the results of the listed species survey conducted pursuant to Section B.IV.H.1. above within the plant and non-transmission linear facility work areas and identify any proposed wildlife protection measures that the Licensee will implement beyond those identified in these conditions of certification.

3. 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 344th Street. Along SW 359th Street and along the portions of SW 117th Avenue and SW 137th Avenue that are to be constructed south of SW 344th 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 359th 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 137th Avenue and SW 117th Avenue and the other between SW 117th 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.

4. FPL has documented the presence of an individual tree (*Bucida molinetii*, syn. *Bucida spinosa*, common name "spiny black olive") on an upland area within the Turkey

Point property. This exceedingly rare plant species potentially occurs in other areas where FPL has proposed impacts associated with the Units 6 & 7 project, and FPL shall make reasonable efforts to locate all individuals of this species in proposed project areas, preserve such individuals wherever possible, and relocate individuals and/or establish ex situ populations for reestablishment where preservation is not possible.

5. Where protection of rare, endangered, threatened, or potentially endangered native plants is not possible, FPL shall relocate individual plants where rare, endangered, threatened, or potentially endangered native plants, are located within a construction zone, where practical.

[FPL Stipulation – 6/20/13; Zoning Resolution No. Z-56-07, Chapter 24 of MDC Code, Comprehensive Development Master Plan Policies CON-9B and CON-9C, Comprehensive Development Master Plan Transportation Circulation Element text accompanying Figure 3.1]

I. Reclaimed Water Pipeline

a. Construction of the reclaimed water pipeline shall not adversely impact existing sheetflow and groundwater flow across the area where these features will be located. Culverts located along the alignment of the reclaimed water pipeline shall be replaced with a larger capacity culvert or conveyance as needed to accommodate increased water flows that could result from future wetland restoration projects. FPL shall provide construction plans to DEP and Miami Dade County at least 90 days prior to commencement of reclaimed water pipeline construction. The plans shall demonstrate compliance with the requirements of Miami-Dade County Code Section 24-48.3(1) (b), (d) & (e) and by reference with any applicable regulations cited within these sections.

b. Trimming or alteration of mangrove trees for the purpose of constructing or maintaining the reclaimed water pipeline is prohibited outside the reclaimed water pipeline ROW, unless exempt pursuant to Florida Statutes, and shall require a permit or written authorization and mitigation as well as restoration of the affected area.

c. Exotic vegetation in the reclaimed water pipeline ROW that occurs within wetland mitigation and restoration areas of the project shall be controlled in accordance with the Mitigation Plan Rev.2 (July 2011). Exotic vegetation in the reclaimed water pipeline ROW that occurs within the eastern transmission ROW shall be managed in accordance with the transmission exotic vegetation management conditions in Section C.VII.M. below.

d. All vegetative debris shall be removed and properly disposed of in accordance with all applicable local regulations.

e. Once the pipeline has been installed and the trench has been covered, FPL shall be responsible for restoring the pipeline corridor back to the pre-construction elevation.

f. Dewatering for construction of the reclaimed water pipeline in all areas in and adjacent to contaminated areas and in areas with chloride or nutrient concentrations exceeding county or state water quality standards shall be prohibited unless FPL demonstrates through a post certification submittal of a dewatering plan that dewatering effluent will be adequately treated prior to final discharge at the approved discharge point to ensure compliance with Section 24-42(4), Miami-Dade County Code, and other applicable water quality standards.

[FPL Stipulation – 8/1/13]

J. Reclaimed Water Treatment Facility

The reclaimed water treatment facility shall only be developed on the 'Alternate Site' as depicted on Figure 1.4-1 (rev. 2) of the SCA.

[FPL Stipulation – 8/1/13; MDC Zoning Resolution Z-1-13]

K. Real Property Interests

1. Non-Transmission Linear Facilities - Upon identification of final Turkey Point Units 6 & 7 potable water pipeline, reclaimed water pipeline, and roads rights of way within certified corridors, as a post-certification submittal pursuant to Section A.Condition XIX, FPL shall submit the design information required by Ch. 24, Article IV, Div.1 of the County Code for a Class III permit for features that cross or are parallel to existing MDC canals or ditches to Miami-Dade County for review and approval, which shall not be unreasonably withheld. FPL shall demonstrate that the potable water pipeline, reclaimed water pipeline, and roads do not interfere with Miami-Dade County Water Control Plan and/or with Miami-Dade County water management operations within the Miami-Dade County canal system.

2. Temporary roadway improvements on FPL's privately owned property shall not be open to the general public to the greatest extent practicable. Miami-Dade County and other agencies with needed access shall, after providing proper notification to FPL, be granted access across FPL's temporary construction access roadway west of the L-31E. FPL shall provide appropriate contact information for notification and access coordination 90 days prior to roadway construction and will update as needed to address staffing changes. Coordination shall occur no less often than annually. At FPL's expense, all temporary roadway improvements south of SW 344th Street shall be patrolled by security personnel when in active use. In addition, FPL shall maintain security gates or other appropriate security measures during inactive periods on privately owned roadway improvements. To the greatest extent possible, FPL shall deter access by the general public on temporary roadways south of SW 344th Street.

3. In addition to the facilities currently in operation, FPL shall allow the access of Miami-Dade County personnel to the plant and non-transmission line facilities covered under the Units 6 & 7 Project certification at reasonable times during construction, operation, and maintenance phases for the purpose of conducting inspections to ensure compliance with the conditions of certification.

4. An unobstructed utility easement to the Miami-Dade Water and Sewer Department shall be provided along SW 360 Street from SW 117 Avenue to the Turkey Point facility. (Condition No.2 of Z-1-135.)

5. FPL shall provide Miami-Dade County with an easement along section line road right of way on the SW 344 Street alignment east of Levee L-31 for purposes consistent with public land management, monitoring, and restoration activities, prior to any work on FPL's property related to the Units 6 & 7 Project Certification, including any preconstruction work such as earthwork or clearing. All work approved under Resolution No. Z-1-13, including preconstruction earthwork and clearing is prohibited unless the subject easement has been approved and accepted by Miami-Dade County.

[FPL Stipulation – 8/1/13]

L. Equipment Barge Unloading Area

1. Grounding of any vessel associated with the project and the dredging or scouring of submerged lands resulting from the grounding shall be reported by FPL and its contractor, or their designee to the FDEP, United States Coast Guard - Sector Miami, and the Coastal and Wetlands Resources Section of RER-DERM within 24 hours of the event. In addition, grounding of any vessels associated with construction of Units 6 & 7 occurring within the boundaries of the Biscayne Bay Aquatic Preserve or Biscayne National Park shall be reported to the Aquatic Preserve Manager and the Biscayne National Park Director as applicable, within 24 hours of the grounding event.

[FPL Stipulation – 6/19/13; MDC Code Chapter 24, Sections 24-2, 24-18, 24-27, 24-48.3]

2. Pursuant to Section 24-48.3(3) no permit shall be issued for the equipment barge docking facility unless adequate water depth exists (as defined by Section 24-5, County Code), including when the vessels are fully loaded. In addition and pursuant to the Miami-Dade County Manatee Protection Plan sufficient water depth shall be required. In order to protect manatees and to prevent avoidable impacts to benthic resources in both the Aquatic Preserve as well as Biscayne National Park, tugs and barges shall navigate via marked channels and routes affording the greatest water depth so as to provide the most clearance with the bay bottom in order to prevent vessel grounding or scouring of the submerged lands. Vessels and barges associated with construction of the Units 6 & 7 project shall be prohibited from leaving the marked navigation channel at Turkey Point when traveling to and from the facility from locations landward of the outer marker of the Turkey Point Channel.

[FPL Stipulation – 6/19/13; MDC Code Chapter 24, Sections 24-2, 24-5, 24-18, 24-27 and Section 24-48. 3(1)(e), 24-48.3(3), CDMP Objective CM-4, Policy 4-F, Miami-Dade County Code Manatee Protection Plan Section III.C.]

3. The equipment barge docking facility shall be constructed and utilized preserving adequate width for manatees to avoid vessels and shall include a fendering system that provides a minimum four foot stand off from the bulkhead or wharf under maximum compression. Additionally, only one barge shall occupy the equipment barge docking facility at any time and the maximum draft of any barges or vessels utilizing this area shall be 6.5 feet when fully loaded.

[FPL Stipulation – 6/19/13; MDC Code Chapter 24, Section24-48. 3(1)(e), CDMP Objective CM-4, Policy 4-F, Miami-Dade County Code Manatee Protection Plan Section III.C.]

M. Water

1. Except for Parcel "A", as described in MDC Resolution No. Z-1-13, FPL shall not apply for any water withdrawal from the Biscayne Aquifer as a source of cooling water for Nuclear Units 6 & 7. In Parcel "A", FPL shall not apply for any water withdrawals from the Biscayne Aquifer for a primary source of cooling water for Nuclear Units 6 & 7."

2. FPL shall monitor the quality and quantity of the reuse/reclaimed water provided by Miami-Dade County. FPL shall maintain documentation including but not limited to laboratory analysis and any other monitoring data. If monitoring indicates that the quality or the quantity of the reclaimed water has decreased to the point where it no longer meets the

thresholds defined in paragraph 3.3.2 of the Joint Participation Agreement signed by both Miami-Dade County and FPL (R-813-1 0) or successor agreements, FPL shall provide notification to Miami-Dade County WASD within 24 hours of such a determination. FPL shall maintain all records relating to this monitoring for review by Miami-Dade County and provide such records within 30 days upon request. FPL shall utilize reclaimed water as the primary source of cooling water, when it is available in sufficient quantities and quality as defined by Paragraph 3.3.2 of the Joint Participation Agreement.

3. Construction of the radial collector wells, including but not limited to dewatering activities, shall not result in violation of the water quality standards set forth in Section 24-42(4) of the Code of Miami-Dade County. Construction activities, including but not limited to de-watering shall be in compliance with applicable water quality standards. All dewatering associated with the construction of the radial collector wells shall be directed to the cooling canals or to approved deep injection wells unless otherwise approved by Miami-Dade County RER-DERM; discharges of any kind associated with dewatering to wetlands or Biscayne Bay are prohibited without prior written approval from Miami-Dade County RER-DERM.

4. FPL shall provide the agencies with notice prior to any sampling activity conducted as part of the Radial Collector Well System Monitoring Plan (RCWSMP), and shall allow access to agency staff during sampling for the purpose of collecting split samples to provide independent characterization and supplemental information as necessary.

[FPL Stipulation – 6/19/13]

N. Open Burning

1. Pursuant to Section 24-41.5 of the Code of Miami-Dade County, the Licensee may conduct open burning of land clearing debris associated with the construction of the Project. All open burning of land clearing debris shall be conducted in accordance with the conditions and limitations contained in the Miami-Dade Fire Rescue Department Application for Open Burning Permit. Before conducting open burning of land clearing debris, the Licensee shall notify the Director of the Department of Regulatory and Economic Resources- Division of Environmental Resources Management and the Chief of the Miami-Dade Fire Rescue Department. Those officials may inspect the site where open burning is occurring to observe the burning. FPL may conduct open burning on weekends if necessary, and within 300 feet of public roads provided the visibility is not reduced to less than 1,000 ft and upon notice to the listed County officials. The Licensee shall also comply with Condition A. VIII.B Open Burning.

[FPL Stipulation – 6/20/13; MDC Code Sections 24-41.4 and 24-41.5]

2. Pursuant to Section 24-41.4 of the Code of Miami-Dade County, no person shall ignite, cause to be ignited, permit to be ignited or suffer, allow or maintain any open outdoor fire except as provided in Section 24-41.5 of the Code. All applicable permits shall be obtained prior to conducting any open burning activities. Notwithstanding any other conditions of this certification and pursuant to Section 24-27 of the Miami-Dade County Code, FPL shall not cause, or allow to be caused, any nuisance as defined in Section 24-5 and/or 24-28 by conducting open burning activities.

[FPL Stipulation – 6/20/13; MDC Code Chapter 24 Sections 24-5, 24-27, 24-28, 24-41.4 and 24-41.5]

O. Wetland Impacts and Mitigation

1. FPL shall provide mitigation for the plant site, access roads, radial collector wells, reclaimed water treatment facility, nuclear administration building, training building, and parking area, in accordance with the Mitigation Plan Rev. 2 (July 2011) (hereinafter "Mitigation Plan") as supplemented by these conditions. Mitigation for impacts caused by construction activities at the plant site, access roads, radial collector wells, reclaimed water treatment facility, nuclear administration building, training building, and parking area shall be initiated concurrent with commencement of any work or construction that cause impacts to wetlands including preconstruction earthwork (including but not limited to clearing, grubbing, excavation, demucking, or filling) associated with these areas. As part of the Mitigation Plan, in order to ensure the maximum ecological value will result from restoration activities under the Uniform Mitigation Assessment Methodology, FPL shall provide an additional 8.4 credits, in addition to those under FPL's proposed Wetland Mitigation Plan, by conducting additional applicant-sponsored mitigation activities that achieve the equivalent wetland lift.

2. FPL will provide detailed methodology to be employed within the 320th Street and NW Restoration Sites as a post-certification submittal. The information shall include the proposed methods for exotic vegetation control and removal of ditches in a manner that minimizes the use of heavy equipment and impacts to existing native wetland vegetation. For the proposed restoration of mosquito ditches, use of heavy equipment will be restricted to the immediate work area where possible. FPL will also fill the three east-west canals within the NW Restoration Site and plug their discharge to the east.

3. In accordance with MDC approved mitigation pursuant to the requirements of Resolutions Z-56-07 and Z-1-13 and the MDC Code, FPL shall mitigate for impacts to mangroves and associated habitat at the Units 6 and 7 site, by permanently deducting 148.4 coastal credits from the Everglades Mitigation Bank (EMB) prior to any earthwork or construction at the Unit 6 and 7 site. FPL shall also mitigate for impacts to habitat associated with the nuclear administration building, training building, and parking area, and reclaimed water treatment facility, by permanently deducting from the Everglades Mitigation Bank 52.9 coastal credits prior to any earthwork or construction at the nuclear administration building, training building, parking area, and reclaimed water treatment facility. FPL shall provide 0.14 EMB credits per acre for the time lag associated with restoration following reclaimed water pipeline installation. The type of credits to compensate for the pipeline's impacts (coastal, forested, freshwater) shall be based on the habitat to be impacted. These credits must be permanently deducted from the EMB prior to any earthwork, or construction and prior to any other impacts to vegetation or habitat anywhere along the reclaimed water pipeline route. These credits are in addition to the required restoration of the reclaimed water pipeline corridor. All required earthwork to restore the wetlands impacted from construction of the reclaimed water pipeline shall be completed prior to the operation of the pipeline. For all wetland impacts associated with pipeline installation proposed for restoration, the wetlands shall be fully restored within the time frames assumed in the UMAM analysis. Wetlands associated with pipeline installation not fully or timely restored may require supplemental planting, maintenance or monitoring as required by DEP.

4. Construction or use of the roadways that impact mangroves or wetlands shall not occur prior to initiation of the mitigation for those impacts.

5. Prior to any impacts in mangrove or wetland habitats and prior to restoration activities at the off-site mitigation areas, proposed conservation easements or proposed restrictive covenants running with the land shall be submitted by FPL. Upon acceptance by MDC and other jurisdictional agencies, those documents shall be executed and recorded in the public records by MDC. Flowage easements shall be executed and recorded in favor of MDC and SFWMD in the off-site wetland mitigation areas to allow sheetflow that does not adversely affect the restored wetland communities within the mitigation areas.

6. 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.

7. 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.

8. FPL shall mark in a conspicuous fashion the boundaries or limits of work/fill areas in proximity to undisturbed mangroves, wetlands, mitigation areas and preservation areas. This may be accomplished with fencing, flagging, buoys, silt barriers, hay bales, or other forms of durable demarcation.

9. FPL shall install field markers for work in tidal waters, wetlands, or mangroves. Field markers shall include survey benchmarks or reference points that can be compared to submitted construction plans and drawings. Prior to construction in tidal waters, wetlands or mangroves, FPL shall provide the layout of the field markers to MDC as a post-certification submittal. The markers shall be maintained for the entirety of construction in the work area.

10. Construction Access Roads: In the final design of the access roads, FPL shall avoid and minimize impacts to tree islands and wetlands to the extent practicable. FPL shall provide a post-certification submittal to MDC demonstrating compliance with this requirement. For unavoidable impacts to wetlands, FPL shall provide mitigation in accordance with the Mitigation Plan Rev 2 (July 2011) and these Conditions of Certification.

11. Reclaimed Water Pipeline:

a. The wetland areas impacted by the construction of the reclaimed water pipeline shall be restored pursuant to the Mitigation Plan Rev 2 (July 2011).

b. In the final design of the reclaimed water pipeline, FPL shall avoid and minimize impacts to existing native vegetation to the extent practicable. Prior to the commencement of construction of the reclaimed water pipeline, FPL shall provide a post-certification submittal to MDC demonstrating compliance with this requirement.

c. FPL shall not store excavated material, vehicles or heavy equipment, fill, building materials, construction debris, dead vegetation, waste or any other materials associated with the construction, operation or maintenance of any of the certified facilities in undisturbed wetlands.

12. For the access roads and pipelines, FPL shall preserve specimen trees (trunk > 18 inch diameter at breast height) to the extent practicable. Should upland construction damage or require removal of any upland trees, FPL shall replace upland tree canopy in accordance with the requirements of Article IV of Chapter 24, MDC Code. This requirement also applies to trees along FPL entrance roads and existing landscaped areas and for all upland areas including uplands within the non-transmission linear facilities to be constructed for the FPL Units 6&7 Project, and shall be in addition to all other mitigation including wetland mitigation.

13. Prior to commencement of work within each segment of linear facilities (roads or pipelines), FPL shall revise the tree survey previously submitted in response to MDC completeness question 5-MDC–D-11 (July 2011). The revised tree survey will show all upland trees proposed to be removed, as well as a tree planting plan to mitigate for the tree canopy to be removed as required by Section 24-49 of Miami-Dade County Code. Miami-Dade County (or applicable municipalities) will review the survey and plan for compliance with these conditions of certification. Removal of trees from botanic gardens or state approved nurseries is not subject to the tree or canopy replacement requirements contained herein. For purposes of this condition, state approved nurseries shall mean those nurseries with a valid certificate of registration from the Division of Plant Industry. Mangrove and wetland mitigation requirements are described in other conditions of certification and trees located within wetlands are not subject to these tree or canopy replacement requirements.

[FPL Stipulation – 6/19/13; Sections 24-48.3, 24-48.4, and 24-49, MDC Code CDMP Objective TC-6, Policy TC-6C, and Policy CON-7A; Conditions #1, 9, and 11 of Resolution Z-56-07; Condition #15 of Resolution Z-1-13.]

P. Radial Collector Well System Monitoring

1. The requirements of these Conditions are for the purpose of monitoring potential adverse impacts to ecological and water quality resources of Biscayne Bay, adjacent nearshore areas, surrounding wetlands, and groundwater resources resulting from the construction and operation of the Turkey Point Units 6 & 7 radial collector well system (RCWS). If adverse impacts further defined herein as Harm in the section entitled "General Conditions for Secondary Cooling Water Supply Sources" in Section B.VII.P.7.a. b. and c. below are identified, additional measures shall be required to evaluate and abate or mitigate such impacts.

2. 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 of Biscayne Bay, including nearshore areas, surrounding wetland areas and groundwater resources of the Biscayne aquifer, 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, benthic and macroalgae communities and on near-shore salinity and water quality above the RCW laterals in Biscayne Bay, as well as any impacts to surrounding wetlands and groundwater resources.

b. At least 2 years prior to the expected commencement of construction of the first caisson for the RCWS, the Licensee shall submit a RCWSMP to the DEP SCO (with copies provided to FWC the SFWMD and MDC) for review in accordance with Section A, General Conditions, XIX, Procedures for Post-Certification Submittals. Once finalized, any proposed revision to the RCWSMP shall be submitted to the DEP for review prior to implementation.

c. The RCWSMP shall, at a minimum, meet all DEP, FWC, MDC and SFWMD requirements for the plan included in the Conditions of Certification. The Plan shall be developed to avoid unnecessary duplication of monitoring requirements of the several agencies to ensure that the Plan is efficient and effective in achieving its purpose of monitoring and identifying any adverse impacts to Biscayne Bay and its resources, surrounding wetlands, and groundwater resources of the Biscayne aquifer as a result of construction and operation of the RCWS.

d. Should the FWC or SFWMD Conditions of Certification be modified such that DEP applicable non-procedural requirements are no longer addressed, DEP may modify this Section to include Conditions to satisfy those applicable nonprocedural requirements of the Department no longer being addressed within the FWC or SFWMD Conditions.

e.

3. Radial Collector Well System Monitoring & Reporting

a. All reports and data submitted to satisfy requirements of the final RCWSMP shall be sent to the DEP SCO with copies provided to FWC, the SFWMD and MDC.

b. Submittals shall be reviewed by DEP, in consultation with FWC the SFWMD and MDC, for impacts to resources under their respective authority to protect, and for impacts as identified in those agencies' respective Conditions.

c. If the DEP, upon consultation with FWC, SFWMD and MDC determines that pre-construction (baseline) monitoring, construction monitoring or post-construction monitoring data indicate adverse impacts, further defined herein as Harm in Section B.VII.P.1. above, to ecological or water resources of Biscayne Bay, adjacent nearshore areas and surrounding wetlands, or the Biscayne aquifer, then additional measures shall be required to evaluate, and abate or mitigate such impacts. These measures may include enhanced monitoring, modeling, or mitigative measures.

[FPL Stipulation – 6/19/13; Chapters 18-18, 62-330, 62-342, and 62-345, F.A.C.]

4. Radial Collector Well System Biological Monitoring

a. The "Radial Collector Well System Monitoring Plan" (RCWSMP) being required by the Department of Environmental Protection's Siting Certification Office under these conditions shall be submitted to the FWC, the SFWMD and MDC and shall be consistent with the provisions below for the purposes of determining whether there are impacts to the fish and wildlife resources of Biscayne Bay including near shore areas, and surrounding wetlands resulting from construction or operation of the radial collector well system (RCW).

b. In order to accurately assess potential impacts to listed species dependent on resources within Biscayne Bay, monitoring of seagrass cover and benthic fauna for potential impacts to state listed species in the vicinity of the proposed construction and operation of the RCW shall be conducted by the Licensee prior to RCW construction, during RCW construction and post-RCW construction as follows:

i. Pre-construction (baseline) monitoring shall be conducted for a period of two years prior to the onset of RCW system construction.

ii. Construction monitoring shall be conducted from the onset of RCW construction through completion of RCW construction.

iii. Post-construction monitoring shall be conducted for two years after Turkey Point Units 6 & 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 monitoring period, one year of quarterly monitoring shall be conducted following the first two RCW operational events.

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 for a total of seven sampling locations per transect. At each sampling station, a 0.25-m2 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 days) of monitoring activity ("annual reports"). Reports shall be submitted to the DEP SCO FWC and MDC 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 control data and to the pre-construction monitoring (baseline) data.

e. If the DEP, upon consultation with SFWMD, FWC and MDC - determines that the comparison of pre-construction (baseline) monitoring, construction monitoring or post-construction monitoring data indicate adverse impacts, further defined herein as Harm in section I. above, to the fish and wildlife, ecological or water resources of Biscayne Bay, adjacent nearshore areas and surrounding wetlands, or to groundwater resources of the Biscayne aquifer, resulting from RCW construction and/or operation activities, then additional measures shall be required to evaluate and abate or mitigate such impacts. These measures may include enhanced monitoring, modeling, or mitigative measures.

[FPL Stipulation – 6/19/13; Article IV, Sec. 9, FL. Const.; Sections 379.2291 and 379.2431, F.S.; Chapter 68A-27, F.A.C.]

5. Radial Collector Well System Monitoring Plan (RCWSMP)

Licensee shall implement a RCWSMP to confirm that no adverse impacts, further defined herein as Harm in section I. above, occur to ecological and water resources of Biscayne Bay, adjacent nearshore areas and surrounding wetlands, and the Biscayne aquifer resulting from the construction and operation of the RCW system. The data collected from the RCWSMP will help monitor the effects, if any, of the RCWS operations on seagrass and macroalgae communities, and on near-shore salinity, hydroperiod in surrounding wetlands and water quality.

a. Plan Scope. The RCWSMP shall address, at a minimum: the initial and periodic monitoring associated with secondary water supply operation of the RCW system; appropriate biological and water quality parameters; necessary monitoring equipment; locations, maps, figures, capability of site access for monitoring locations; frequencies of sampling; and reference monitoring locations and reporting intervals. The RCWSMP shall include a work schedule, if necessary, to ensure the plan is ready to be implemented.

b. Plan Content. The RCWSMP shall include, monitoring of surface water and groundwater quality as further described herein. Monitoring of biological resources within Biscayne Bay in the vicinity of the proposed RCW system, including but not limited to distribution and abundance by species.

c. Quality Assurance. The RCWSMP shall include a quality assurance/quality control plan. The quality assurance plan shall include protocols for maintaining in-situ monitoring devices to ensure accuracy of results and collection and laboratory analysis of surface and groundwater samples. Field observers using the Braun-Blanquet method shall be cross-trained with an established monitoring program for the BBCW Project Observations shall be calibrated so that results are consistent with BBCW Project.

d. Plan Development. Licensee shall coordinate with SFWMD, DEP, FWC, MDC and other affected agencies to complete development of the RCWSMP. The RCWSMP shall be coordinated with any other similar monitoring plan for the certified project and shall not duplicate any monitoring required by other agencies or conditions of certification. Coordination with SFWMD on the RCWSMP will ensure that data collected in accordance with the RCWSMP will complement contemporaneous data collection associated with the BBCW Phase I project. In designing details of the RCWSMP Licensee may consult the Project Monitoring Plan for the BBCW Phase I project found in Annex E, Part III of the BBCW Phase I PIR. Licensee may, upon review of submitted data from this BBCW monitoring plan and other sources, recommend to the SFWMD in writing that the RCWSMP be modified to more appropriately collect necessary data.

e. Plan Review. Licensee shall submit a final RCWSMP to DEP SCO, with copies provided to SFWMD, FWC and MDC, for review in accordance with Section A, General Condition XIX. Procedures for Post-Certification Submittals, prior to implementing the plan. The Plan shall include the location of the monitoring control sites, the seagrass linear transect locations, the benthic and macroalgae, and surface and groundwater water quality sampling station locations and monitoring locations for measuring the water elevation in surrounding wetlands, as well as the quality assurance/quality control plan. The SFWMD and MDC will have the opportunity to review the final RCWSMP and propose changes if necessary.

f. Plan Duration. Licensee shall implement the RCWSMP before, during and after RCW system construction. Licensee shall conduct quarterly pre-construction (baseline) monitoring for a period of two years prior to commencing RCW system construction. Licensee shall conduct quarterly monitoring during entire RCW construction period. Licensee shall conduct quarterly monitoring immediately following the Turkey Point Units 6 & 7 commercial operation date for a period of two years including the first two RCW operational events. If two RCW operational events do not occur within the two year post-construction monitoring period, one year of quarterly monitoring shall be conducted following each of the first two RCW operational events. If none of the RCW operational events during the two years following the commercial operation date or later involve operation of the RCW system at full capacity for more than fifteen (15) consecutive days, the Licensee shall conduct quarterly monitoring for one year after the first such event.

g. Adverse Impacts. If the DEP, upon consultation with FWC, SFWMD and MDC determines that pre-construction (baseline) monitoring, construction monitoring or post-construction monitoring data indicate adverse impacts, further defined herein as Harm in Section B.VII.P.1. above, to the ecological resources of Biscayne Bay, adjacent nearshore areas, surrounding wetlands, or to groundwater resources of the Biscayne aquifer, are determined to have been caused by the operation of the RCWS, then Licensee shall be required to evaluate and abate or mitigate such impacts. These measures may include additional monitoring, modeling or mitigation.

h. Plan Modifications. Any proposed modifications to the RCWSMP shall be submitted to DEP SCO with copies provided to SFWMD, FWC and MDC, for review and concurrence at least thirty (30) days prior to implementation.

[FPL Stipulation – 6/19/13; Chapter 373, Part II, F.S.; Rule 40E-2.091, F.A.C.; "Basis of Review of Water Use Permit Applications within SFWMD]

6. RCW Testing

a. Upon completion of construction of the first radial collector well (RCW), Licensee shall conduct a full-scale radial collector well test (RCWT).

i. The RCWT shall include attributes listed below. The RCWT shall be conducted by pumping the caisson and associated laterals at the caisson's design pumping rate. The RCWT shall include measuring pumping rate and flows from individual laterals, seepage (either by meters installed in the bay bottom substrate or an alternative method approved by DEP in consultation with SFWMD and MDC) to determine the hydraulic conditions between the Bay and subsurface conditions in the area and confirm the predicted amounts of water originating from the Bay withdrawn by the RCWs, and observing water levels and water quality as specified below. The effects of tidal fluctuations, barometric pressure, precipitation, and pumping associated with operation of Units 1 through 4 (including the operations of the CCS circulating pumps and the Interceptor Ditch pumps) shall be recorded along with canal stage in the L-31E and Florida City Canals. Non-RCW pumping influences such as these shall be removed from the pumping and recovery test data prior to the test analysis described below.

ii. 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 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.

iii. 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 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 start-up testing phase and 3) to verify the amount of time necessary for full recovery of the aquifer and surrounding water bodies after this initial test and 4) 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. The long term monitoring component shall generate sufficient hydrologic and water quality data necessary to evaluate and confirm that full scale operation of the Radial Collector Well 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 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.

iv. Monitoring locations for the 30-day pump test shall include the RCW effluent, existing stations MW-2, MW-3, MW-4, upgraded stations MW-1 and MW-5 (upgraded to tri-zone wells) [or replacement well(s) at nearby location(s)], existing tri-zone wells TPGW-1, TPGW-10, TPGW-12, two surface water locations adjacent to Turkey Point peninsula, and two additional stations (for water elevation only) located in the surrounding wetlands (one located in wetlands in the vicinity of the RWTF, and the other located in wetlands west of L31-E borrow canal. Physical Parameters shall include temperature, specific conductance, dissolved oxygen, pH, salinity, and water elevation. Chemical analysis shall include the ions (chloride, sodium, sulfate and sulfide), nutrients (total ammonia and unionized ammonia, NOx-N, TKN, and total phosphorus) and Tritium. The 30-day pumping test shall include a background period of at least three (3) days prior to pumping. Physical parameters shall be recorded continuously during the background period through completion of the 30 day pump test. Ions shall be collected at all stations four times during the background period (twice during high tide and twice during low tide), twice during pump operations (within 24 hours after pump start-up, and within 24 hours prior to pump shut down on day 30). Nutrients and tritium shall be collected once at high tide and once at low tide at stations MW-1, MW-2, MW-3, MW-4, and MW-5, once at TPGW-1, TPGW-10, TPGW-12, and at both surface water stations, during the background period. Nutrients and tritium shall be collected at all stations twice during pump operations (within 24 hours after pump start-up, and within 24 hours prior to pump shut down on day 30).

v. All effluent water generated by the 30 day pumping test must be disposed of via deep well injection to the boulder zone in order to prevent the discharge of this water from influencing the results of the pumping tests.

7. Monitoring and Reporting

a. The licensee shall provide to DEP, the SFWMD, FWC and MDC, a detailed report including all raw data and statistical analysis and interpretation of all the data generated during the 72-hour and 30-day tests. The report shall be provided to the aforementioned agencies within 90 days of completion of the respective 72-hour and 30-day pumping tests.

b. Licensee shall collect and report the monitoring data as described in the Radial Collector Well System Monitoring Plan described above. Licensee shall submit annual reports that include data collected in accordance with the RCWSMP and statistical

analyses of the data. The Licensee shall provide copies of those reports to DEP, SFWMD, FWC, MDC and other agencies.

c. FPL shall submit Monthly Operating Reports to Miami-Dade County RER DERM with monitoring requirements specific to the well field operations (i.e. idle, maintenance, and actual operation). Submittal of a Monthly Operating Report shall be required whether or not the wells have been operated in any particular month. Each Monthly Operating Report shall provide monthly groundwater data, including volume extracted and water quality data when the RCWs have been operated for cooling purposes. The water quality parameters to be included in the Monthly Operating Reports when the RCWs have been operated for cooling purposes are: specific conductance, temperature, pH, and salinity.

d. Licensee shall record withdrawal volumes on a daily, per caisson basis and Licensee shall submit the information to SFWMD on an annual basis. Licensee shall specify the water accounting method used and a description of means of calibration in each report.

e. RCW equipment maintenance records shall be retained by Licensee.

f. The Licensee shall utilize reclaimed or reuse water to the maximum extent possible, in accordance with the requirements of the South Florida Water Management District (SFWMD).

[FPL Stipulation – 6/19/13; Chapter 373, Part II, F.S.; Rule 40E-2.091, F.A.C.; "Basis of Review for Water Use Permit Applications within the South Florida Water Management District, March 18, 2010"]

8. General Conditions for Secondary Cooling Water Supply Sources

a. Interference with Existing Legal Uses

Licensee shall mitigate interference with existing legal uses, in existence at the time of issuance of the Certification Order, caused in whole or in part by Licensee's withdrawals, consistent with an approved mitigation plan. As necessary to offset the interference, mitigation may include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means. Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1 in 10 year drought event that results in the (1) Inability to draw water consistent with the provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; (2) Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent; or (3) Inability of an existing legal user to meet its permitted demands without exceeding the permitted allocation.

[FPL Stipulation – 6/19/13; Rule 40E-2.301 (1)(f), F.A.C.]

b. Impacts to Existing Off-Site Land Uses

Licensee shall mitigate harm to existing off-site land uses caused by Licensee's withdrawals, as determined through reference to these Conditions of Certification and Chapter 373, F.S. When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the impacts. Harm, as determined through reference to these

Conditions of Certification include: (1) significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other government authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose of the original construction of the water body (e.g., fill for construction, mining, drainage canal, etc.); (2) damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; (3) land collapse or subsidence caused by reduction in water levels associated with consumptive use;

[FPL Stipulation – 6/19/13; Sections 373.223, F.S.; Rules 40E-2.091, 40E-2.301, and 40E-2.381, F.A.C.]

c. Impacts to Natural Resources

Licensee shall mitigate harm to natural resources caused by Licensee's withdrawals, as determined through reference to these Conditions of Certification and Chapter 373, Florida Statutes. When harm occurs, or is imminent, SFWMD will require Licensee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to these Conditions of Certification includes: (1) reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface; (2) reduction in water levels that harm the hydroperiod of wetlands; (3) significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond; (4) harmful movement of contaminants in violation of state water quality standards; or (5) harm to the natural system including damage to habitat for rare or endangered species.

[FPL Stipulation – 6/19/13; Sections 373.223, F.S.; Rules 40E-2.091, 40E-2.301, and 40E-2.381, F.A.C.]

d. Water Supply Systems Operation

At any time, if there is an indication that the well casing, pipes, valves, or controls associated with the RCW system leak or have become inoperative, Licensee shall be responsible for making the necessary repairs or replacement to restore the water supply system(s) to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be the cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter 40E-3, F.A.C.

[FPL Stipulation – 6/19/13; Sections 373.308 and 373.316, F.S; Rules 40E-3.041, 40E-3.101, 40E-3.411 and 40E-3.500-531, F.A.C.]

e. Request for Modification of Withdrawals

A modification of the RCW system withdrawals for consumptive use authorized by this Certification may be requested in accordance with the provisions of Section 403.516, F.S. and Rule 62-17.211, F.A.C. Any request for an increase in water withdrawals shall be made pursuant to the provisions of Section 403.516, F.S., and Rule 62-17.211, F.A.C.

[FPL Stipulation – 6/19/13]

Q. Stormwater Management and Water Quality

1. FPL shall design, construct, and operate the plant and non-transmission facilities such that there is no harmful obstruction or undesirable alteration of the natural flow of

water, material injury to adjacent property, or adverse environmental impact from changes to water quality or quantity to Section 24-48.2(II)(B)(4)(a)(i-iv), Miami-Dade County Code.

2. Prior to occupancy or use of any newly developed facility, including but not limited to the nuclear administration and training building, reclaimed water treatment plant, power block, and associated parking facilities, FPL shall provide as-built plans for the stormwater management system. The plans shall be sufficiently detailed to allow a determination of any new impervious area associated with each feature, such that stormwater utility fees may be calculated in accordance with Miami-Dade County Code, Section 24-51.4(3).

3. Environmental controls and Best Management Practices shall be implemented to minimize any materials related to construction from entering waters surrounding the features of FPL's proposed project. Turbidity and erosion controls (including, but not limited to, turbidity curtains, silt screens, staked hay bales and vegetated berms) shall be utilized during construction to prevent encroachment and adverse impacts to any adjacent wetlands, or surface waters, and to ensure compliance with the water quality standards. FPL shall be responsible for ensuring that turbidity and erosion control devices and procedures are inspected periodically and maintained in working order during all phases of construction authorized by this certification until all areas that were disturbed during construction are sufficiently stabilized to prevent erosion, siltation, and turbid discharges in accordance with the guidelines and specifications in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual. 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. Construction of permanent parking areas, walkways, and amenities shall use semi-pervious materials to reduce runoff where feasible and compatible with safety requirements.

[FPL Stipulation – 8/1/13]

R. Environmentally Endangered Lands Adjacent to Non-Transmission Facilities

1. FPL shall comply with Article 7 of the MDC Home Rule Charter and shall design Project facilities, including but not limited to construction access roads, to avoid impacts to MDC EEL owned or managed parcels.

2. FPL shall fully restore any unauthorized impacts on MDC EEL owned or managed parcels that are caused by FPL or their contractors, including but not limited to those resulting from the installation or maintenance of the project features and any associated roads or rights of way to the satisfaction of the EEL Program in accordance with timeframes required by the property owner. FPL shall demonstrate through a postcertification submittal that there will not be any material injury to EEL property as a result of the proposed work.

[FPL Stipulation – 8/1/13]

VIII. BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

A. Submerged Land Easement for Radial Collector Well Laterals

Upon its execution and thereafter, the Licensee shall comply with any Sovereign Submerged Land Easement for Radial Collector Well Laterals directed to be issued by the Order of Certification for this facility (Attachment H-a.). After the radial collector well laterals are constructed, FPL shall submit an as-built survey of their location to the Division of State Lands, and the area subject to this easement shall be adjusted to include only the land within five feet on either side of the wells laterals. Any renewals of the easement shall be submitted by the Licensee to the Siting Coordination Office.

[Section 258.397, F.S. and Rule 18-18, F.A.C.]

IX. CITY OF HOMESTEAD

A. Right – of – Way (ROW) – Potable Water Pipeline and Temporary Construction Access Roads

Licensee shall provide information on the Licensee's final selected rights-of-way within the City of Homestead's boundaries to the City in a post-certification submittal under the procedures under DEP General Condition of Certification A.XIX. Those submittals shall depict the final rights-of-way and provide other relevant information on the location and construction of the water pipeline and temporary roads within the City, including any facilities that are to be placed within or crossing any of the City's properties or works. In this post-certification submittal, Licensee shall submit the information necessary for a City Utility Rights-of-Way Use Permit Application. Licensee shall construct the water pipeline and access roads in accordance with the information provided in the SCA and with the applicable non-procedural requirements of the City's ordinances and adopted Public Works Manual, as established under section 28·2, Code of the City of Homestead.

B. ROW Use

Pursuant to section 403.509(6), Florida Statutes, within 30 days following the Licensee's submittal of information necessary for completion of the City's Utility Rights-of-Way Use Permit Application, the City of Homestead shall issue to the Licensee any license or easement from the City that is necessary for the use, connection, or crossing of the City's properties and works, to the extent that such works are located on property owned by the City. and do not impair City operations, by the water pipeline and temporary access roads, subject only to the conditions set forth in this certification. FPL shall complete the work in a timely manner, notwithstanding any other time limitations specified in the City's regulations or the City Utility Rights-of-Way Use Permit Application.

[FPL Stipulation – 7/5/13; City of Homestead Code, Section 28-2]

SECTION C: SPECIFIC CONDITIONS – TRANSMISSION LINES

I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

A. Process for Review of ROW Location

1. Prior to the finalization of the ROW location, three copies of the most recent available aerial photographs at a scale of 1" = 400' with wetland locations generally identified shall be submitted to DEP Siting Coordination Office, and one copy each to DEP Southeast District Office, DOT, SFWMD, South Florida Regional Planning Council, Miami-Dade County and the affected municipality, delineating the corridors of the Certified Transmission Lines and the transmission lines' ROW for the areas within each agency's jurisdiction. In addition, Licensee shall note on the aerial photographs new construction within the corridors that has occurred since the photograph was taken. Licensee shall notify all parties of such filing and, if needed, shall meet with DEP to discuss the ROW location. This information may be submitted in segments and on a line-by-line basis. The agencies receiving the aerial photographs from Licensee shall have an opportunity to review the photographs and to notify DEP, within 12 days of Licensee's submittal of the aerial photographs to the agencies, of any apparent conflicts with applicable regulations and/or requirements of the Conditions of Certification. However, this paragraph shall not operate to avoid the need for post-certification submittals and compliance reviews otherwise required by the Conditions of Certification.

2. After review of the aerial photographs and comments from the other reviewing agencies, if DEP Siting Coordination Office has reason to believe that the construction of the transmission lines, (including access roads or pads) within Licensee's designated ROW cannot be accomplished in compliance with the Conditions of Certification, Licensee shall be so notified in writing, with copies to other parties to the certification proceeding of the particular basis for DEP's conclusion, and possible corrective measures which would bring the Project into compliance. If such notice is not received within 15 days of Licensee's submittal of the aerial photographs to the agencies, Licensee may proceed with design of the transmission lines on the noticed ROW.

3. The acquisition of a particular ROW or the expenditure of funds toward acquisition of a particular ROW prior to the agencies' review pursuant to this condition will be at Licensee's risk, and no party will be stopped by such acquisition to seek disapproval of the construction of the transmission lines or access road within the ROW in accordance with these Conditions of Certification.

4. After Licensee has acquired interest in the entire length of the transmission lines' ROW, Licensee shall:

a. File a statement with the clerk of the circuit court for each county through which the corridors pass certifying that all lands required for the transmission lines' ROW within the corridors have been acquired. Licensee shall also file with the appropriate county Planning Department a map at the scale of 1" = 400' showing the boundaries of the acquired ROW.

b. File with DEP Siting Coordination Office a map at a scale of 1" = 400' showing the boundaries of the acquired ROW, if such boundaries are different from those shown in the filing required by paragraph A above. Such maps shall comply with the

requirements of paragraph A. If the boundaries have not changed, Licensee shall file a statement with DEP Siting Coordination Office accordingly.

[Sections 403.511, F.S.; 62-17.191, F.A.C.]

B. Miami River Crossing

Prior to employing any trenchless technology activities under the Miami River, the Licensee shall submit a Trenchless Technology Plan to the DEP Southeast District Environmental Resources Section for review to include implementation of Best Management Practices to minimize the potential for adverse environmental impacts during trenchless technology activities.

C. Replacement for Restoration of System Integrity

1. Replacement of all or a portion of a Certified Facility that is necessary to restore system integrity following an emergency as defined by Sections 252.34(6), (7) or (9), F.S., and requiring deviation from any COC shall not be considered a modification pursuant to Section 403.516, F.S. A verbal report of the emergency replacement for restoration of system integrity shall be made to the Department as soon as possible. Within 30 days after correction of the emergency condition requiring a replacement for system integrity, a report to the Department shall be made outlining the details of the emergency condition requiring the replacement and the steps taken for its relief. The report shall be a written description of all of the work performed and shall set forth any pollution control measures or mitigative measures which were utilized or are being utilized to prevent pollution of waters, harm to sensitive areas or alteration of archaeological or historical resources.

2. The Department will use its enforcement discretion when evaluating violations that result from operating a Certified Facility under emergency conditions. During and after the emergency conditions, the Licensee must use due diligence to bring the facility back into compliance as soon as possible. In addition, the Licensee must use its best efforts and best management practices to minimize adverse environmental impacts. The Licensee shall notify the SCO and the SED when the emergency condition has ended. Furthermore, the Licensee must include all monitoring data, which would otherwise be required under normal operating circumstances, recorded during emergency conditions when submitting reports as required by these conditions. Any exceedances and/or violations recorded during emergency conditions shall be reported as such, but the Department acknowledges that it intends to use its enforcement discretion during this timeframe. This acknowledgement by the Department does not constitute a waiver or variance from any requirements of any federal permit. Relief from any federal agency must be separately sought.

[Section 403.511, F.S.]

II. DEPARTMENT OF TRANSPORTATION

A. Access Management to the State Highway System:

All access modifications to State roadway facilities will be subject to the access management standards pursuant to Rule Chapter 14-97, Access Management Classification and Standards, Florida Administrative Code, in accordance with Sections 334.044(2) and 335.182 to 335.188, Florida Statutes.

[Sections 334.044(10)(a), 335.182 - 335.188, F.S.; FPL Stipulation -6/25/13]

B. Overweight or Overdimensional Loads:

Operation of overweight or overdimensional loads by the Licensee on State transportation facilities during construction and operation of the utility facility will be subject to safety and permitting requirements of Chapter 316, F.S., and Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, F.A.C.

[Chapter 316, F.S.; Chapter 14-26, F.A.C.; FPL Stipulation -6/25/13]

C. Use of State of Florida Right of Way or Transportation Facilities:

All usage of State of Florida right of way or transportation facilities will be subject to the applicable non-procedural requirements of Chapter 14-46, Utilities Installation or Adjustment, F.A.C.; Florida Department of Transportation's Utility Accommodation Manual (Document 710-020-001);

[Sections 337.403 and 337.404, F.S.; Rules 14-15 and 14-46, F.A.C.; FPL Stipulation -6/25/13]

D. Standards:

The US Federal Highway Administration's Manual on Uniform Traffic Control Devices; Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operation on the State Highway System; Florida Department of Transportation's Standard Specifications for Road and Bridge Construction; Florida Department of Transportation's Utility Accommodation Manual; Florida Department of Transportation's Plans Preparation Manual; and pertinent sections of the Department of Transportation's Project Development and Environment Manual will be adhered to in all circumstances involving the State Highway System and other State owned transportation facilities.

[Rule 14-15, F.A.C.; FPL Stipulation -6/25/13]

E. Drainage:

Any drainage onto State of Florida right of way and transportation facilities will be subject to the applicable non-procedural requirements of Chapter 14-86, Drainage Connections, F.A.C.

[Chapter 14-86, F.A.C.; FPL Stipulation -6/25/13]

F. Use of Air Space:

Any newly proposed structure or alteration of an existing structure will be subject to the applicable non-procedural requirements of Chapter 333, F.S., and Rule 14- 60.009, Airspace Protection, F.A.C. Additionally, notification to the Federal Aviation Administration (FAA) is required prior to beginning construction, if the structure exceeds notification requirements of 14 CFR Part 77, Objects Affecting Navigable Airspace, Subpart B, Notice of Construction or Alteration. Notification will be provided to FAA Southern Region Headquarters using FAA Form 7460-1, Notice of Proposed Construction or Alteration in accordance with instructions therein. A subsequent Determination by the FAA stating that the structure exceeds any federal obstruction standard of 14 CFR Part 77, Subpart C, for any structure that is located within a 10-nautical-mile radius of the geographical center of a public use airport or military airfield in Florida will be required to submit information for an Airspace Obstruction Permit

from the Florida Department of Transportation as a post-certification submittal under Condition of Certification XIX or variance from local government depending on the entity with jurisdictional authority over the site of the proposed structure. The FAA Determination regarding the structure serves only as a review of its impact on federal airspace and is not an authorization to proceed with any construction. However, FAA recommendations for marking and/or lighting of the proposed structure are made mandatory by Florida law. For a site under Florida Department of Transportation jurisdiction, application will be made by submitting Florida Department Transportation Form 725-040-11, Airspace Obstruction Permit Application, in accordance with the instructions therein as a post-certification submittal under Condition of Certification XIX.

G. Specific

1. All work within, and materials, and equipment used on FDOT right-of-way shall be subject to inspection and review by FDOT as a post-certification submittal.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

2. A project schedule shall be provided prior to beginning construction of the project and updates shall be provided on a routine basis and shall be provided to FDOT 48 hours prior to the beginning of all construction events within FDOT right-of-way. Separate schedules may be submitted for segments or portions of the certified facilities.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

3. The construction and maintenance of the project shall not interfere with the property and rights of a prior FDOT Permittee, easement holder, or subordinated interest.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

4. All review/approval is for permissive use only and shall not operate to create or vest any property right in FPL.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

5. In the event a FDOT project requires adjustment of the facilities installed within FDOT right-of-way as part of the project and the work is scheduled to be done simultaneously with the FDOT's construction work, FPL will coordinate with the FDOT before proceeding and shall cooperate with the FDOT's contractor to arrange the sequence of work so as not to delay the work of the FDOT's contractor, defend any legal claims of the FDOT's contractor due to delays caused by FPL's failure to comply with the approved schedule, and shall comply with all provisions of the law and the FDOT's current UAM. FPL shall not be responsible for delay beyond its control.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

6. The rights and privileges to place portions of the certified transmission line facility within FDOT right-of-way herein set out are granted only to the extent of the State's right, title and interest in the land to be entered upon and used by FPL, and FPL will, at all times, and to the extent permitted by law, assume all risk of and indemnify, defend, and save harmless the State of Florida and the FDOT from and against any and all loss, damage, cost or expense

arising in any manner on account of the exercise or attempted exercises by FPL of the aforesaid rights and privileges.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

7. During construction, all safety regulations of the FDOT related to connections to the state highway system shall be observed and FPL must take measures, including placing and the display of safety devices that may be necessary in order to safely conduct the public through the project area in accordance with the Federal MUTCD, as amended by the UAM. At least 90 days prior to commencement of construction, FPL shall submit to DEP and DOT as a post-certification submittal pursuant to General Condition XIX a traffic control plan for handling construction-related traffic on state roads in compliance with the requirements and standards of Chapter 14-96, F.A.C.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

8. Should FPL be desirous of keeping its utilities in place and out of service, FPL, acknowledges its present and continuing ownership of its utilities located between and within the FDOT's right-of-way as set forth above. Whenever FPL removes its facilities, it shall be at FPL's sole cost and expense. FPL, at its sole expense, shall promptly remove said out of service utilities located within FDOT right-of-way whenever the FDOT determines said removal is in the public interest.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

9. In the event substances or material suspected of being hazardous waste, asbestos, oil of any kind or in any form, gasoline, pesticides, ammonia, chlorine, and derivatives thereof, excluding liquefied petroleum gas, is encountered by FPL or its contractors within the construction limits in FDOT right-of-way, FPL shall immediately cease work and notify the FDOT. The FDOT shall notify FPL of any suspension of work to allow contamination assessment and remediation. Said suspension or revocation shall remain in effect until otherwise notified by FDOT.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

10. For any excavation, construction, maintenance, or support activities performed by or on behalf of the FDOT, within its right of way, FPL may be required by the FDOT or its agents to perform the following activities with respect to FPL facilities: physically expose or direct exposure of underground facilities, provide any necessary support to facilities and/or cover, de-energize or alter aerial facilities as deemed necessary for protection and safety.

[Utility Accommodation Manual; Rule 14-46, F.A.C.; FPL Stipulation -6/25/13]

11. Pursuant to Section 337.401(2), Florida Statutes, FPL shall be responsible for damage resulting from or in connection with FPL's use of FDOT's right-of-way or airspace. The FDOT may initiate proceedings as provided in Section 120.69, Florida Statutes, to enforce provisions of this condition or any rule or order issued or entered into pursuant thereto.

[Sections 120.69 and 337.401(2), F.S.; FPL Stipulation -6/25/13]

12. Pursuant to Section 337.402, Florida Statutes, when any public road or publicly owned rail corridor is damaged or impaired in any way because of the installation, inspection, or repair of a utility located on such road or publicly owned rail corridor, the owner of the utility shall, at his or her own expense, restore the road or publicly owned rail corridor to its original condition before such damage. If the owner fails to make such restoration, the authority is authorized to do so and charge the cost thereof against the owner under the provisions of Section 337.404, Florida Statutes.

[Section 337.402, F.S.; FPL Stipulation -6/25/13]

13. FPL shall comply with all provisions of Chapter 556, Florida Statutes, Underground Facilities Damage Prevention and Safety Act.

[Chapter 556, F.S.; FPL Stipulation -6/25/13]

14. The proposed FPL transmission line corridors will intersect and/or be co-located adjacent to facilities identified as part of the Florida Intrastate Highway System (FIHS), Strategic Intermodal System's (SIS), and State Highway System (SHS) facilities. The placement of the transmission line should take into consideration the planned widening of these facilities, including but not limited to US1, as outlined in the most recent versions of the FDOT Work Program and Miami-Dade MPO's Long Range Transportation Plan. The cost of removal, relocating, or reconstructing Project facilities within FDOT facilities will be borne by the Licensee to the extent required by Section 337.403, Florida Statutes, Rule Chapter 14-46, Florida Administrative Code and the UAM. The provisions of Section 337.403 and 337.404, Florida Statutes, apply to the transmission lines.

[Sections 337.403 and 337.404, F.S.; Rules 14-15 and 14-46, F.A.C.; FPL Stipulation – 6/25/13]

III. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

A. Listed-Species Conditions

The following table (Table 2) contains state and federally listed species that occur in the State of Florida and are likely to occur within the transmission line corridor and associated facilities. The table contains species that are potentially impacted by the activities proposed within the corridor. Therefore, these conditions of certification apply to the species listed in this table that are found within the transmission line corridors and associated facilities. Listed Species Occurring or Potentially Occurring in the transmission line corridors and associated facilities as of June 2011[1]:

Table 2. State and Federally Listed Species in Florida

Common Name	Scientific Name	Fl status	Fed status
American alligator	*Alligator mississippiensis*	SSC	T*
American crocodile	*Crocodylus acutus*	E	T

[1] Species' legal statuses are subject to change. Recent changes to 68A-27, Florida Administrative Code (F.A.C.) make it likely that statuses of species listed may change before the Licensee commences work. The Licensee shall refer to the law in effect at the time it begins an activity subject to being affected by listed species regulations.

American oystercatcher	*Haematopus palliates*	SSC	
Bald eagle	*Haliaeetus leucocephalus*	***	***
Black skimmer	*Rhynchops niger*	SSC	
Brown pelican	*Pelecanus occidentalis carolinensis*	SSC	
Burrowing owl	*Athene cunicularia*	SSC	
Cape Sable seaside sparrow	*Ammodramus maritimus mirabilis*	E	E
Eastern indigo snake	*Drymarchon couperi*	T	T
Everglades mink	*Mustela vison evergladensis*	T	
Florida bonneted (mastiff) bat	*Eumops glaucinus floridanus*	E	
Florida black bear	*Ursus americanus floridanus*	T**	
Florida mouse	*Podomys floridanus*		
Florida Panther	*Puma concolor coryi*	E	E
Florida pine snake	*Pituophis melanoleucus mugitus*	SSC	
Florida sandhill crane	*Grus canadensis pratensis*	T	
Gopher frog	*Lithobates capito*	SSC	
Gopher tortoise	*Gopherus polyphemus*	T	
Least tern	*Sterna antillarum*	T	
Little blue heron	*Egretta caerulea*	SSC	
Limpkin	*Aramus guarauna*	SSC	
Piping plover	*Charadrius melodus*	T	T
Reddish egret	*Egretta rufescens*	SSC	
Rim rock crown snake	*Tantilla ooliticus*	T	
Roseate spoonbill	*Platalea ajaja*	SSC	
Everglades snail kite	*Rostrhamus sociabilis plumbeus*	E	E
Snowy egret	*Egretta thula*	SSC	
Southeastern American kestrel	*Falco sparverius paulus*	T	
Tricolored heron	*Egretta tricolor*	SSC	
West Indian manatee	*Trichechus manatus latirostris*	E	E
White-crowned pigeon	*Patagioenas leucocephala*	T	
White ibis	*Eudocimus albus*	SSC	
Wood stork	*Mycteria Americana*	E	E

SSC = Species of Special Concern; E = Endangered; T = Threatened
* Due to similarity to another federally threatened species
** Except in Baker and Columbia counties or in Apalachicola National Forest
*** While the bald eagle has been both state and federally delisted, it is still governed by the state bald eagle management plan and the federal Bald and Golden Eagle Protection Act.

[Chapter 68A-27, Florida Administrative Code (F.A.C.)]

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.

[Article IV, Sec. 9, Fla. Const; Section 379.2291, *F.S., Sections 403.507 and 403.5113(2), F.S., and Chapter 68A-27, Florida Administrative Code (F.A.C.).*

C. Specific Listed Species Surveys

Before land clearing and construction activities within a transmission line right-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 endangered, threatened, or 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 in 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 and FWC post certification review.

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 project that may be affected.

3. This survey shall identify locations of breeding sites, nests, and burrows for listed wildlife species. Nests and burrows may 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, 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) including a wildlife-based habitat classification scheme such as the Comprehensive Wildlife Conservation Strategy (FWC 2005), Descriptions of Vegetation and Land Cover Types (FWC 2004), or Natural Communities Guide (FNAI 1990) of each community that is contained within the transmission line right-of-way prior to land clearing and construction activities using GIS.

[Article IV, Sec. 9, Fla. Const; Sections 379.2291, 403.526 and 403.5317, F.S); and Chapters 68A-27, 68A-4, 68A-16, F.A.C.]

D. Listed Species Locations

Where any suitable habitat or evidence is found of the presence of listed species within the right-of-way, the Licensee shall report those locations to, and confer with, the appropriate regulatory agencies for possible additional pre-clearing surveys, including those specified in E-N below, and to identify potential mitigation, or avoidance recommendations. If pre-clearing surveys are required, they shall be timed to be reasonably compatible with the construction schedule, considering the anticipated date for the start of construction within a certified transmission corridor. 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 Siting Coordination Office, the appropriate DEP District Office(s), the FWC, the appropriate WMD, the appropriate local government(s), the USFWS, and the National Park Service as appropriate.

2. Species Management Plan:

If 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 Wildlife Management Plan and submitted to the FWC.

[Article IV, Sec. 9, Fla. Const; Sections 379.2291, 403.526 and 403.5113(2), F.S.; and Chapter 68A-27, F.A.C.]

E. Gopher Tortoise

1. The Licensee shall conduct surveys for gopher tortoises (*Gopherus polyphemus*), in accordance with the FWC-approved Gopher Tortoise Management Plan (revised April 2013) and the FWC-approved Gopher Tortoise Permitting Guidelines, or subsequent FWC-approved versions of the Plan or Guidelines. A burrow survey covering a minimum of 15% of the potential gopher tortoise habitat to be impacted by development is required in order to apply for a relocation permit. Immediately prior to capturing tortoises for relocation, a 100% survey is required to effectively locate and mark all potentially occupied tortoise burrows and to subsequently remove the tortoises. Burrow survey methods are outlined in Appendix 4 of the Gopher Tortoise Permitting Guidelines, "Methods for Locating Gopher Tortoise Burrows on Sites Slated for Development". Surveys must be conducted within 90 days prior to a post-certification submittal of the online gopher tortoise relocation permit application (Temporary Exclusion Permit) to the FWC, as described in E.3 below. Surveys shall not be conducted within 30 days of any ground disturbance or clearing activities on the donor site. All surveys completed by authorized agents or other licensees are subject to field verification by the FWC. The results of the gopher tortoise surveys shall be provided to the appropriate land management state agency for portions of the transmission lines that cross state-owned lands, for informational purposes.

2. FWC is not required to provide a monitoring compliance assessment for activities that occur more than 25 feet from a gopher tortoise burrow entrance, provided that such activities do not harm gopher tortoises or violate rules protecting gopher tortoises. Examples of

such violations noted in the past by the FWC include, but are not limited to, killing or injuring a tortoise more than 25 feet away from its burrow; harassing a tortoise by blocking access to its burrow, and altering gopher tortoise habitat to such an extent that resident tortoises are taken.

3. The Licensee shall coordinate with and provide the FWC detailed gopher tortoise relocation permit application (as required by a Temporary Exclusion Permit) in accordance with the FWC-approved Gopher Tortoise Management Plan and Gopher Tortoise Permitting Guidelines as a postcertification submittal. This permit application shall provide details on the location for on-site recipient areas and any off-site FWC-approved temporary contiguous habitat, as well as appropriate mitigation contributions per tortoise, as outlined in the Gopher Tortoise Permitting Guidelines.

4. Any commensal species observed during the burrow excavations that are listed by the FWC shall be relocated in accordance with the applicable guidelines for that species.

5. To the maximum extent practicable or feasible, all staging and storage areas shall be sited to avoid impacts to gopher tortoise burrows and habitat.

[Article IV, Sec. 9. Fla. Const.; Section 403.526. FS. and Rule 62-17.660. F.A.C.: Section 379.2291. F.S.; Chapter 68A-27. F.A.C.]

F. Wood Stork Wading Bird Colonies

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 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. *Conservation Biology 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 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 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.

Transects shall be centered on any observed flight lines as 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 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.

[Article IV, Sec. 9, Fla. Const.; Section 403.526 and F.S., Rule 62-17.660, F.A.C.; Section 379.2291, F.S.; Chapter 68A-27, F.A.C. and Rule 68A-16.001, F.A.C.]

G. Everglades Snail Kite

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 (*Paspalidium geminatum*), spikerushes (*Eleocharis spp.*), panicum (*Panicum spp.*), or beakrushes *(Rhynchospora spp.*)].
- 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.
- Appropriate water depth (0.2-1.3 m deep) under nesting substrate.
- Nesting substrate an adequate distance (>150 m) from upland.
- Proximity of nearest wading bird colony.

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 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.

- FPL and FWC will meet to discuss the specific issues and mitigation alternatives.
- 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.
- FPL will provide a monitoring report after a designated period to document effectiveness of the mitigation plan.
- 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.

[Article IV, Sec. 9, Fla. Const., Section 403.526, F.S., Rule 62-17.660, F.A.C., Section 379.2291, F.S., and Chapter 68A-27 F.A.C.]

H. Bald Eagle

1. The Licensee shall avoid impacts to bald eagle (*Haliaeetus leucocephalus*) nests where possible. If construction activities cannot be avoided within a 660-foot nest buffer zone, construction activities shall be conducted consistent with the FWC Eagle Management Guidelines, outlined in the FWC-approved Bald Eagle Management Plan, dated April 9, 2008, or any subsequent FWC-approved versions. In areas where bald eagle nests are present, efforts shall be made to avoid construction activities during the nesting season (October 1 - May 15, or when eagles are present before October I or after May 15).

2. In accordance with the FWC Eagle Management Guidelines, for construction areas that fall within 330 feet of an active or alternate bald eagle nest, construction activities shall be conducted only during the non-nesting season (May 16 - September 30). Any construction activities that fall within 660 feet of the nest during the nesting season shall be conducted following USFWS-approved Bald Eagle Monitoring Guidelines, dated 2007, or subsequent USFWS-approved versions.

3. In areas where adverse impacts to nests cannot be avoided, resulting in nest disturbance, the information required for an FWC Eagle Permit shall be obtained from the

FWC, as authorized by Section 372.072, F.S., and Rule 68A-16.002, F.A.C, and minimization, and conservation measures outlined in the FWC Bald Eagle Management Plan shall be followed, as applicable.

[Article IV, Sec. 9, Fla. Const.; Section 403.526, F.S., and Rule 62-17.191, *F.A.C.; Chapter 68A-27, F.A.C., and Rule 68A-16.002, F.A.C.]*

I. Southeastern American Kestrels

The Licensee shall coordinate with the FWC prior to conducting surveys for Southeastern American kestrels *(Falco sparverius paulus)* to ensure that surveys are in accordance with the FWC-approved protocol.

1. The Licensee shall provide the FWC with the Southeastern American kestrel survey results and identify where impacts to kestrels cannot be avoided.

2. The Licensee shall mitigate loss of kestrel nest trees by placing approved nest boxes in appropriate habitat along the transmission line right-of-way where feasible, practical, and where landowner consent can be obtained, and shall follow the FWC-approved protocol for construction and installation of nest boxes.

3. The Licensee shall coordinate all nest box installation with the FWC.

[Article IV, Sec. 9, Fla. Const., Section 403.526, F.S. , Rule 62-17.660, F.A.C., Section 379.2291, F.s., and Chapter 68A-27 F.A.C.]

J. Florida Panther

The Licensee shall take proper precautions during clearing and construction to protect panthers from accidental injury due to conditions on the transmission right-of-way during construction.

1. Construction policies and practices identified by the FWC to protect panthers shall be used whenever feasible. These include:

- Limit speeds on transmission patrol roads to 45 mph or less and adjust transmission patrol road trucking activities and material delivery schedule within the panther consultation area to reduce speeds in wooded zones, at dawn and dusk.
- Conduct frequent and unannounced site inspections to monitor for compliance with the above.

2. FPL shall report any panther observations (dead or alive) by employees or contractors within 24 hours to the FWC after verification by a qualified expert.

[Article IV, Sec. 9, Fla. Const.; Section 403.526 and F.S., Rule 62-17.660, F.A.C.; Chapter 68A-27, F.A.C.]

K. Florida Black Bear

The Licensee shall take proper precautions during clearing and construction to protect black bears from accidental injury due to conditions on site during construction.

1. If there is any chance that food waste will be stored on or near the site at any time, bear-resistant garbage containers or dumpsters shall be used.

2. Additional construction policies and practices to protect bears shall be used whenever feasible. These include:

- Prohibit clearing, blasting and burning of forested habitat during the December-March denning season for bears while in a primary or secondary bear range.
- Require clean construction sites with wildlife-resistant containers for workers to use for food-related and other wildlife attractant refuse; require frequent trash removal and the use of proper food storage and removal on work sites.
- Adjust trucking activities and material delivery schedule to mandate slower speed in wooded zones, at dawn and dusk, and during the June and July breeding season for bears.
- Conduct frequent and unannounced site inspections to monitor for compliance with the above.
- FPL personnel or contractors will also report any black bear observations (dead or alive) within 24 hours to the FWC.

[Article IV, Sec. 9, Fla. Const.; Section 403.526, F.S., Section 403.5317, F.S., and Rule 62-17.660, F.A.C.; Section 379.2291, F.S.; Chapter 68A-27, F.A.C.]

L. Everglades Mink

1. A survey by an experienced biologist (individual or firm with documented experience with this species or with mustelids) shall be conducted in areas where suitable potential habitat exists in the transmission line right-of-way, prior to the initiation of construction activity, to help determine whether any mink are present in the right-of-way, and if any den areas may be present. To the extent practicable, the survey shall be done during the mink mating season, which extends from September through November. Although chalkdusted trackboards and anal scent attractant has proven effective in detecting the Everglades mink (Humphrey and Zinn 1982), camera traps are another option, and are current! y being tested as an alternate survey method in the Fakahatchee Strand (David Shindle, The Conservancy of Southwest Florida, pers. comm.)

References: Humphrey, S.R. and T.R. Zinno 1982. Seasonal habitat use by river otters and Everglades mink in Florida. Journal of Wildlife Management 46:375- 381.

2. In the event that surveys determine that a project transmission line has the potential to impact Everglades Mink on the transmission line right-of-way, the following measures shall be used to minimize and mitigate for these impacts.

- FPL and FWC will meet to discuss the specific issues and mitigation alternatives.
- 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.

- FPL will provide a monitoring report after a designated period to document effectiveness of the mitigation plan.
- Corrective action alternatives will be determined and implemented if necessary.

[Article IV, Sec. 9, Fla. Const.; Section 403.526, F.S., and Rule 62-17.660, F.A.C.; Section 379.2291, F.S.; Chapter 68A-27, F.A.C.]

M. Florida Manatee

With respect to construction, maintenance and operation of the project transmission lines:

1. The Standard Manatee Conditions for In-Water Work (revision 2012) shall be followed for all in-water activity located where waters are accessible to manatees. These are listed in Attachment F. Blasting as a dredge method shall be prohibited in or adjacent to waters accessible to manatees. If no other alternative exists, a modification of these conservation measures can be requested. An adequate Blast and Protected Species Watch Plan must be submitted to the Imperiled Species Management Section of the FWC for post-certification review prior to these methodologies being used.

2. At least 60 days prior to the beginning of in-water construction located where waters are accessible to manatees, the Licensee shall contact the FWC to determine whether observers shall be required, how many observers will be needed and who those observers will be. If observers are recommended, manatee observers must be on site during all in-water construction activities and will advise personnel to cease operation upon sighting a manatee within 50 feet of any in-water construction activity. Movement of a work barge, other associated vessels, or any in-water work associated with construction or demolition activities shall not be performed after sunset. Following project completion, a report summarizing manatee sightings, collisions or injuries shall be prepared by FPL and this report shall be submitted within 30 days following project completion to the FWC's Imperiled Species Management Section at imperiledspecies@myfwc.com

3. If a cofferdam is used during in-water construction to minimize release of sediment, the area inside (behind) the cofferdam must be checked for the presence of manatees during and after installation of the barrier before further work occurs to determine that manatees have not been entrapped.

[Article IV, Sec. 9, Fla. Const.; Section 403,526, F.S., Section 403.5317, F.S., and Rule 62-17.660, F.A.C.; Sections 379.2291 and 379.2431, F.S.; and Chapter 68A-27, F.A.C.]

N Avian Protection Plan

The Licensee shall coordinate with the FWC in the development of an Avian Protection Plan that delineates a program 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. Guidelines for the Avian Protection Plan can be found on the USFWS website. http://www.fws.gov/rnigratorybirdS/CurrentBirdlssuesIHazards/APP/ A VIAN%20PROTECTION%20PLAN%20FINAL %204%2019%2005 .pdf

[Article IV. Sec. 9. Fla. Const.; Section 403.526, F.S., Rule 62-17.660. F.A.C., Section 379.2291. F.S.; Chapter 68A-27. F.A.C. and Rule 68A-16.001, F.A.C.]

IV. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES

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 Miami Dade County Office of Historic Preservation (at 305-375-4958) and the Licensee shall consult with DHR to determine appropriate action.

[Sections 267.061, 403.531, and 872.02, F.S.; FPL/MDC Stipulation – 6/19/13]

V. DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

Only herbicides registered by the U.S. Environmental Protection Agency and the Florida Department of Agriculture and Consumer Services shall 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.

[Chapter 487, F.S.]

VI. SOUTH FLORIDA WATER MANAGEMENT DISTRICT

A. General

For purposes of these conditions of certification, "SFWMD real property interests" is defined as SFWMD rights-of-way, Works of the District, and any property interest evidenced by being recorded in the public records.

1. "Licensee" as used herein includes Licensee's employees, contractors, subcontractors, invitees, authorized representatives, affiliates, parent, subsidiaries, and/or anyone acting on Licensee's behalf.

2. If this Certification is transferred from the Licensee to another party, the Licensee from whom the Certification is transferred shall remain liable for corrective actions that may be required as a result of any violations that occurred prior to the transfer.

[Sections 373.044, 373.085, 373.223, 373.342, and 373.413, F.S.; Rules 40E-2.091, 40E-2.301, 40E-2.381, 40E-3.101(1), and 40E-6.351, F.A.C.]

3. This project must be constructed, operated, and maintained in compliance with and meet all non-procedural requirements and criteria set forth in Chapter 373, F.S., and

Chapters 40E-2 (Consumptive Use), 40E-6 (Works or Lands of the District), and 40E-20 (General Water Use Permits), F.A.C.

4. It is the responsibility of the Licensee to avoid or minimize and mitigate any impacts to the water resources during the construction, operation, and maintenance of the project in accordance with these conditions of certification.

[Chapter 373, F.S.; Rules 40E-2.091, 40E-2.381, and 40E-6, F.A.C.]

5. The Licensee shall be responsible for the construction, operation, and maintenance of all facilities installed for the proposed project.

[Sections 373.309, 373.413, and 373.416, F.S.; Rule 40E-6.381, F.A.C.]

6. Information submitted to SFWMD subsequent to Certification, in compliance with these Conditions of Certification, shall be for the purpose of SFWMD determining the Licensee's compliance with the non-procedural criteria contained in Chapter 373, F.S., Chapters 40E-2, 40E-6, and 40E-20, F.A.C., as applicable prior to the commencement of the subject construction, operation, and/or maintenance activity covered by these Conditions of Certification.

[Rule 62-17.191, F.A.C.]

7. SFWMD may confer with DEP to request that DEP take any and all lawful actions that are necessary to enforce any condition of this Certification based on the authorizing statutes and rules of SFWMD.

[Sections 373.223, 373.319, and 373.603, F.S.; Rules 40E-2.091, 40E-2.301, 40E-2.381, 40E-6.501, F.A.C.; Section 403.514, F.S.]

8. It is understood that the Licensee and SFWMD shall strive to resolve disputes by mutual agreement. However, SFWMD retains its right to seek any and all available relief under Florida law for the protection of the health, safety, and welfare of persons and property within its jurisdictional boundaries.

[Sections 373.044, 373.085, 373.113, 373.129, 373.413 and 373.429, F.S.; Rules 40E-1.601, 40E-4.331, 40E-6.331, and 40E-6.341, F.A.C.]

9. With concurrence from DEP, SFWMD and the Licensee may jointly agree to vary the informational requirements.

[Sections 373.085 and 373.229, F.S.; Rules 40E-2.101(1) and 40E-6.101(1), F.A.C.]

10. Licensee shall maintain the status (exempt from public disclosure) in a confidential manner of any documents received from SFWMD, including communications systems and building plans, blueprints, schematic drawings, and diagrams, in preliminary draft and final formats, which depict the internal layout and structural elements of a building or water structure, or other SFWMD facility, owned and operated by SFWMD, which are exempt from the Public Records law, unless required to disclose such documents pursuant to Section 119.071(3)(b)3., F.S., as also agreed to in an executed Confidentiality Agreement, the form of which shall be the same as Attachment V. All such documents exempt from public disclosure shall be listed as an exhibit to the Confidentiality Agreement and clearly marked as "EXEMPT" by SFWMD before delivery to Licensee.

11. Indemnification / Insurance

Licensee shall also be responsible for the following:

a. For good and valuable consideration received, and to the fullest extent permitted by law, Licensee agrees to defend, indemnify, and hold harmless SFWMD, its Board members, Directors, employees, and agents (collectively, the "Indemnified Parties") from and against any and all claims, suits, loss, including, but not limited to, bodily injury, death, and property damage and all other damage, including reasonable attorneys' fees and costs, sustained by the SFWMD Entities to the extent caused by or arising from Licensee's and its agents' (which includes Licensee's officers, employees, contractors, subcontractors, agents, representatives, and invitees) planning, engineering, design, construction, alteration, operation, maintenance, removal, abandonment of facilities on, activities upon and access over SFWMD real property interests or activities undertaken under this Certification (including post certification reviews, amendments or modifications, collectively the "Certification") unless Licensee can establish that the damages were attributable solely to the negligent or willful actions of one or more Indemnified Parties or third parties other than Licensee and its agents. SFWMD shall have the right to approve, in SFWMD's reasonable discretion, Licensee's legal counsel in connection with this indemnity.

b. Licensee shall obtain and maintain in full force through self-insurance and independent insurance as further set forth herein during the period that the Licensee or its agents access SFWMD real property interests, undertake activities under this Certification, and six months thereafter. Such coverage shall include but not be less than:

i Licensee shall certify to SFWMD initially, and in subsequent years, in the form of an affidavit or letter (Attachment T) that Licensee is self-insured up to $3,000,000 for commercial general liability insurance coverage as set forth in subsection (ii) below, and shall provide an additional $7,000,000 in commercial general liability insurance coverage as set forth in subsection (ii) below by independent insurance for a total of $10,000,000 coverage per occurrence and in the aggregate, and worker's compensation insurance coverage as set forth in subsection (iii) below. Licensee shall submit to SFWMD an audited financial statement to support its affidavit or letter of self-insurance and certificate as evidence of Licensee's financial ability to comply with the conditions stated herein. In the event that audited financial statement discloses Licensee's financial inability to comply with such conditions, SFWMD may require independent insurance coverage in lieu of the coverage described herein.

ii Commercial General Liability Insurance against claims for bodily injury, death, or property damage arising out of or in any way related to or resulting from Licensee or its agents (including, but not limited to, its contractors, subcontractors, agents, representatives, and invitees) access over or adjacent to SFWMD right-of-way, Works of the District or real property interests recorded in the public records, interference with SFWMD communication systems, or activities undertaken under this Certification, including planning, engineering, design, construction, operation, and maintenance of facilities, endorsed to include premises-operations, completed operations-products, independent contractors, pollution, explosion, collapse and underground property damage hazards, liability imposed under the terms and conditions of this Certification (including covering Licensee's indemnity obligations), broad form property damage, and fire liability coverage with a combined single limit of $10,000,000 per occurrence and $10,000,000 in the aggregate. Licensee may self-insure the first $3,000,000 of coverage, provided that Licensee assumes the defense obligations of the insurer providing insurance pursuant to this paragraph for all lawsuits or claims against SFWMD. This obligation

to defend SFWMD and its agents shall begin immediately upon the filing of any lawsuit or claim that would be defended by the insurance required hereunder and continue until such time as the self-insured retention has been met or the insurance required hereunder provides a defense to SFWMD and its agents.

iii. Workers compensation insurance covering all persons employed by Licensee or its contractors in accordance with statutory benefits. Licensee may self-insure the coverage as it is a qualified self-insurer in the state of Florida in accordance with applicable law.

c. Independent insurance shall be written by companies reasonably acceptable to SFWMD. The Commercial General Liability Policy shall name SFWMD and its agents as additional insureds and shall include a waiver of subrogation in favor of SFWMD and its agents. All insurance, including self-insurance, shall be primary to any liability or property insurance or self-insurance carried by the SFWMD or its agents and shall also provide that any loss otherwise payable shall be payable not withstanding any act or omission of SFWMD or its agents which might, absent such provision, result in a forfeiture of all or a part of such insurance payment. Licensee shall furnish to SFWMD Certificates of Insurance (or certified copies of all insurance coverage, if requested) prior to Licensee entry upon SFWMD real property interests.

d. All insurance coverage required by or provided to Licensee by its agents engaged by Licensee under this Certification shall be extended to the SFWMD and its agents with the same protection and insurance coverages required by and afforded to Licensee. Licensee shall require that its agents include SFWMD and its agents as additional insureds on all such insurance. Licensee shall furnish to SFWMD Certificates of Insurance (or certified copies of all insurance coverage, if requested) of its agents prior to Licensee's agents entry upon SFWMD real property interests.

e. Any insurance provided by Licensee and its agents naming SFWMD and its agents as an additional insured, including self-insurance, shall respond first and defend and indemnify SFWMD and its agents with respect to any and all claims or suits arising out of Licensee's or its agents access over or adjacent to SFWMD right-of-way, Works of the District or real property interests recorded in the public records, interference with SFWMD communication systems, or activities undertaken under this Certification, including design, construction, operation, and maintenance of facilities. If and only if such insurance does not apply or is otherwise not available with respect to a particular matter, the indemnity provisions in the first paragraph of this section will apply.

f. It is expressly agreed that this Section shall survive the termination or expiration of this Certification.

[Sections 373.016, 373.085(1)(b), and 373.1391, F.S and Rules 40E-6.051(3), 40E-6.381(6), 40E-6.221(2)(i), 62-17.133(3), F.A.C.]

12. Consistency with SFWMD Existing and Planned Projects

a. During the planning and design of the certified transmission lines and prior to the final design of the transmission lines right-of-way to be located on SFWMD real property interests, Licensee shall coordinate with SFWMD to obtain SFWMD's plans including detailed design plans and specifications for any existing SFWMD project and the latest detailed information available for planned projects, including but not limited to ecosystem restoration projects, and shall coordinate all Licensee's project activities with SFWMD in such a manner as to avoid inconsistencies with SFWMD existing or planned projects. "Planned project" shall mean any project or facility of SFWMD for which SFWMD is authorized to be a non-federal

sponsor that is 1) in the construction phase, 2) in the final construction design phase with approved funding for design, or 3) is a CERP project component as defined in Sec. 373.1501(1)(g), F.S., and as listed in Attachment R-a. Attachment R-a can be amended by SFWMD, to the extent that any new planned projects meet the definition in Condition VI.A.12.a.(1) and (2) above, upon consultation with Licensee.

b. No later than thirty (30) days after receipt of Licensee's post-certification submittal of the proposed transmission line right-of-way location as required by DEP Condition XIX, SFWMD will submit to Licensee any SFWMD plans for existing or planned projects.

c. To the extent practicable, Licensee will undertake its preliminary design of the certified transmission facilities to be located on SFWMD real property interests to accommodate and avoid inconsistencies with SFWMD existing and planned projects.

d. At the time of design of the certified transmission facilities, Licensee shall submit to SFWMD a preliminary design demonstrating compliance with paragraph 12(c) above, so that SFWMD can review this information. SFWMD must review Licensee's preliminary design within ninety (90) days following SFWMD receipt of Licensee's preliminary design. If SFWMD does not respond within ninety (90) days, Licensee can proceed with final design consistent with the submitted preliminary design. If SFWMD's review indicates an inconsistency exists, the parties will strive to achieve an agreeable solution in accordance with Condition VI.A.8. of these conditions of certification. Agreeable solutions may include Licensee's modification of Licensee facilities or if no practicable design alternatives can be identified, SFWMD may agree that its facilities can be modified. If SFWMD modifies its facilities as the agreeable solution, Licensee shall reimburse SFWMD for any and all costs, including direct and indirect (including overhead costs), incurred by SFWMD.

e. At least ninety (90) days prior to construction, Licensee shall submit to SFWMD a final design demonstrating compliance with its preliminary design and any agreeable solutions for design modifications identified pursuant to paragraph 12(d), so that SFWMD can review this information for consistency with SFWMD identified existing and planned projects. SFWMD must review Licensee's final design within ninety (90) days following SFWMD receipt of Licensee's final design. If SFWMD does not respond within ninety (90) days, Licensee can proceed with construction consistent with the submitted final design. If SFWMD's review indicates an inconsistency exists, the parties will strive to achieve an agreeable solution in accordance with Condition VI.A.8 of these conditions of certification. Agreeable solutions may include Licensee's modification of Licensee facilities or if no practicable design alternatives can be identified, SFWMD may agree that its facilities can be modified. If SFWMD modifies its facilities as the agreeable solution, Licensee shall reimburse SFWMD for any and all costs, including direct and indirect (including overhead costs), incurred by SFWMD.

f. If two (2) years elapse after Licensee submittal of its final design demonstrating compliance with paragraph 12(c) above without commencement of construction of Licensee's project, Licensee shall request a list of new or updated planned project information. If SFWMD provides a list of new or updated planned project information within thirty (30) days of Licensee's request, Licensee shall incorporate this new or updated information to achieve compliance with paragraph 12(c) above. In the event that new or updated information is provided by SFWMD to Licensee, the coordination process as described in paragraph 12(d) above shall be followed.

g. For the purpose of this condition, "inconsistency" shall mean any significant incompatibility, encroachment, or obstruction that hinders, compromises, or detrimentally affects SFWMD projects, scheduling, costs, goals, benefits, functions, operation, maintenance, repair, replacement, rehabilitation, performance, or life expectancy as defined in and hereto incorporated into the Conditions of Certification Attachment R-a (the list of SFWMD existing and planned projects), Attachment R-b (a map showing the SFWMD existing and planned projects Attachment R-a and the FPL Proposed Linear Facility Corridors) and Attachment R-c (a table explaining the projects listed in Attachment R-a.

[FPL Stipulation –6/20/13; Federal Water Resources Development Acts of 1992, 1996 and 2000, Sec. 601(b)(2)(C); 33 C.F.R. 208 and 385; Sections 373.1501 and 373.085(1)(b), F.S.; Rules 40E-6.011 (2) and 62-17.133(3), F.A.C.]

13. Reimbursements and Costs

In addition to any requirements specified elsewhere in these conditions, the Licensee shall also be responsible for the following:

a. Modifications to Licensee Project Facilities

Where the certified transmission line(s) will cross or use lands where SFWMD holds a real property interest, Licensee shall design any future modifications to its transmission line(s), including its structures and access roads, to avoid inconsistency with any SFWMD existing or planned project utilizing the process described in condition Condition VI.A.12. above. Licensee shall undertake at its own expense any necessary alterations to Licensee's project as a result of such inconsistencies as defined in condition VI.A.12.g.

b. Payment Timeliness and Other Remedies

Licensee shall make reimbursements within sixty (60) days following receipt of invoices submitted by SFWMD. Each invoice must be accompanied by an itemization of the time and expenses incurred in accordance with state auditing procedures. In the event a dispute arises as to the appropriateness of the request for reimbursement of one or more cost items, the dispute may be resolved pursuant to the dispute resolution process specified in Section A, Condition X. Dispute Resolution. However, this provision is not intended to be an exclusive remedy and does not preclude the exercise of any other rights and remedies available under law or equity. Reimbursement of a disputed cost shall be held in abeyance until the dispute is resolved.

[FPL Stipulation –6/20/13; Rules 40E-6.381(3),(4) and 62-17.133(3), F.A.C.]

14. Licensee Access to SFWMD Areas of Real Property Interest

a. For informational purposes and to the extent practicable, and subject to any easements or other agreements between Licensee and SFWMD, Licensee shall meet with SFWMD representatives no less than six (6) months prior to construction to identify all of Licensee's major construction activities on SFWMD real property interests. For the purpose of this condition, "major construction activities" shall mean mobilization, earthwork, construction, erection, installation or maintenance involving construction related to Licensee's project. Licensee shall also meet with SFWMD representatives no less than one (1) month prior to commencement of construction to coordinate with SFWMD Licensee's construction schedule and non-major activities on SFWMD real property interests. Licensee is encouraged to discuss coordination with SFWMD any minor activities that arise unexpectedly.

[FPL Stipulation –6/20/13; Rules 62-17.133(3), F.A.C.]

b. Licensee shall be responsible for any mitigation or permitting

arising from impacts to any state or federally listed threatened or endangered species where SFWMD holds a real property interest occurring from the construction, operation, or maintenance of the proposed transmission line facilities, in accordance with the terms and conditions of any local, state, or federal approvals, and all applicable regulatory laws, including, but not limited to the conditions in this Certification.

[FPL Stipulation –6/20/13; Sections 373.085 and 373.086, F.S; Rules 40E-6.221(2), 40E-6.091(1) and 62-17.133(3), F.A.C. and SFWMD Volume V, Permit Information Manual, Criteria Manual for Use of Works of the District, Section IX.S.]

c. Licensee, its agents, employees, contractors and subcontractors shall be prohibited from removing any items of historical, architectural, archaeological, or cultural significance on lands where SFWMD holds a real property interest.

[FPL Stipulation –6/20/13; Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.; 40E-6.311(3) and 62-17.133(3), F.A.C.]

d. For purposes of this Certification, "Pollutant" shall mean any hazardous or toxic substance, material, or waste of any kind or any contaminant, pollutant as defined by Rule 62-150 F.A.C., and 42 USC 9601 paragraph 4, in addition to petroleum, petroleum product, or petroleum by-product. "Release" shall mean the release, storage, use, handling, discharge or disposal of such Pollutants. Any release of Pollutants on District real property interests, whether caused by the Licensee or any other third party, shall be reported to the SFWMD within twenty-four (24) hours upon the knowledge thereof by the Licensee. The Licensee shall be solely responsible for the entire cost of cleanup of any release of Pollutants resulting from the activities of the Licensee, its contractors, subcontractors, agents, and/or assigns discovered in or on canals or lands where SFWMD holds a real property interest.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

e. SFWMD does not waive sovereign immunity in any respect.

[Rules Chapter 40E-6.091(1) and 40E-6.381(7), F.A.C.]

f. No vehicular maintenance or repair activities or substances or parts associated with the repair or maintenance of vehicles or equipment will take place, be used, stored or discarded within lands where SFWMD holds a real property interest nor shall these lands be used for storage or parking of equipment, associated machinery, or construction trailers unless specifically authorized by these Conditions of Certification.

[FPL Stipulation –6/20/13;40E-6.091(1), 40E-6.081(8), and 62-17.133(3), F.A.C.]

g. Licensee shall not stockpile excavated material in the canal or within lands where SFWMD has a real property interest, except as specifically authorized by SFWMD. Licensee shall be responsible for the removal of all construction materials and debris from SFWMD canal and right-of-way; and, for the repair, replacement, and restoration of any sections of SFWMD right-of-way damaged or disturbed resulting from the authorized activity. Repair, replacement and restoration shall be to pre-existing conditions or better using current SFWMD engineering standards provided by SFWMD as guidance (i.e., for backfill material, density/compaction, stabilization and maintainability). Site-specific engineering considerations and decisions shall be undertaken by the Professional Engineer in charge. Furthermore, such restoration, when required, shall include grading/re-shaping, seeding, re-sodding with bahia,

Argentine, or other species recognized by SFWMD as a drought tolerant species. Licensee is also responsible for removal of all excess project-related material from SFWMD rights-of-way, unless otherwise authorized in these conditions of certification.

[FPL Stipulation –6/20/13;40E-6.091(1), 40E-6.081(8), and 62-17.133(3), F.A.C.]

h. Licensee shall comply with the following concerning removal of exotic vegetation as listed in Table 3 below.

[FPL Stipulation –6/20/13;40E-6.091(1) and 62-17.133(3), F.A.C.; SFWMD Volume V, Permit Information Manual, Criteria Manual for Use of Works of the District, Section IX.S, p. 122.]

i. Licensee shall remove all exotic vegetation throughout the limits of the transmission line right-of-way from lands where SFWMD holds a real property interest and keep these lands free of said exotic vegetation throughout the life of the project.

ii Licensee is put on notice that successful removal of the exotic vegetation may require the application of a suitable herbicide on cut stumps, etc. by following manufacturer's label instructions.

iii. Licensee shall take all precautions to not damage or destroy existing native (indigenous) vegetation located within the SFWMD rights-of-way throughout the project limits.

iv. Licensee shall not remove, or treat with herbicide applications any mangrove or other native shoreline vegetation.

v. Licensee shall maintain the project area on a regular cycle basis and keep Licensee's rights of way free of excessive weeds and exotic vegetation.

Table 3. Exotic Vegetation to be Removed by Licensee.

Scientific Name	Common Name
Schinus terebinthifolius	Brazilian Pepper
Melaleuca quinquenervia	Melaleuca
Casuarina cunninghamiana	Australian Pine
Lygodium microphyllum	Old World Climbing Fern
Ardesia crenata	Ardesia
Psidium guajava	Guava

15. SFWMD Approval Limitations

No right of review, inspection, or approval by SFWMD under this Certification: 1) shall be deemed a waiver of any of SFWMD rights under the Certification or at law or in equity; 2) shall be deemed to be an assumption of such responsibility by SFWMD for any defect, error, omission; or 3) shall relieve Licensee of its responsibility for the performance of its obligations under the Certification and the accuracy, competency, adequacy, fitness, suitability, or coordination of its postcertification responsibilities and deliverables under this Certification. Approval by any governmental or other regulatory agency or other governing body, including DEP, shall not relieve Licensee of responsibility for the strict performance of its obligations under this Certification. Licensee expressly accepts the risk that defects in its performance, if

any, may not be discovered until after completion of the transmission line project for Turkey Point Units 6 and 7. Licensee's post-certification submittal may be submitted in segments and/or on a line-by-line basis. SFWMD's failure to timely object to a particular post-certification submittal for any particular segment or line does not waive SFWMD's right to object to the same information for another post-certification submittal.

[FPL Stipulation –6/20/13; Rule 40E-6.381, F.A.C.]

16. These conditions of certification shall not operate to revoke any rights, terms or conditions of any permit, license, easement, or other property interest, over SFWMD-owned lands, for the uses identified in those instruments.

B. Central and Southern Florida Project

1. Communication Systems

a. Licensee's project, as described in the Site Certification Application and in post-certification submittals, shall not result in harmful interference or other adverse impacts to the South Florida Water Management District Communication System and Facilities (WMDCSF). WMDCSF refers to the SFWMD Information Technology (IT) Systems and Supervisory Control and Data Acquisition (SCADA) systems necessary for the operations and maintenance of the SFWMD and C&SF Flood Control Project. The IT Systems are the collection of microwave sites, communications towers, antenna sub-systems, microwave radios, SCADA base stations, mobile radio base stations, multiplex electronics, data internet protocol (IP) electronics, direct current (DC) power systems, standby power systems, and shelters. The SCADA systems are the collection of base radios, remote terminal unit (RTU) radios, antenna sub-systems, antenna support pole, RTUs, data loggers, wireline communications, enclosures, sensors, and instrumentation. The SCADA systems include the central software applications that monitor, control, collect, and store data.

b. Prior to initiation of detailed design, Licensee shall request an updated list of WMDCSF identifying existing and planned communication facilities within 2,000 feet of the certified transmission line corridor. "Planned communication facilities" are those facilities that are either in the construction phase or in the final construction design phase with approved funding for design.

c. Licensee shall take the WMDCSF into consideration during its design to avoid harmful interference, as defined by the FCC, or adverse impacts to WMDCSF. Adverse impacts to WMDCSF shall be defined as any manifestation of performance degradation, misinterpretation, or loss of information beyond the range of normal variation in signal strength that would not otherwise happen in the absence of unwanted energy or physical obstructions.

d. The Consulting Engineer shall take the following WMDCSF technical specifications into consideration in the proposed transmission line design. Any proposed alternatives to these specifications shall be documented in the Preliminary Evaluation Report.

i. For maintenance of microwave communications performance and reliability purposes, the design for the electrical transmission lines shall be such that:

1) Electrical transmission line towers are not located within the 0.3F1 at K=2/3 and 1.0F1 at K=4/3 of a SFWMD microwave path (GTE Lenkurt Inc., "Engineering Considerations for Microwave Systems", Section 7, "Clearance Criteria").

2) Electrical transmission line conductors are not located within the first Fresnel zone of a SFWMD microwave path when the conductors are located within 2 kilometers of a microwave site (Seizawa, Y., Takeshita, K. Takeshita, S., "Influence of Microwave Scattering by Power Transmission Lines on Digital Radio Communications", IEEE Transactions on Electromagnetic Compatibility, Volume 31, No.4, pp 346-352, November 1989).

ii. For maintenance of land mobile radio voice communications base station and area coverage performance and reliability purposes, the design for the electrical transmission lines shall be such that the RF noise floor, in either clear or rainy conditions, attributable to the electrical transmission lines, is not sufficient to cause harmful interference or other harmful impacts to WMDCSF.

iii. For maintenance of SCADA telemetry communications performance and reliability purposes, the design for the electrical transmission lines shall be such that the RF noise floor, in either clear or rainy conditions, is increased to an amount that reduces the fade margin for SCADA base station and RTU fade margin to less than 30 dB for the primary communications path and 20 dB for the secondary communications path (SFWMD Design Standard). For SCADA systems that have fade margins less than the SFWMD Design Standard any reduction in fade margin shall be eliminated or mitigated.

e. Licensee, in consultation with SFWMD, shall identify and retain an independent Consulting Engineer(s) with demonstrated knowledge of and/or experience with RF and SCADA communications systems such as the WMDCSF for the purpose of conducting the evaluations, including modeling and measurements, required by these SFWMD Communications Conditions (collectively referred to as the "Evaluation Program"). Licensee shall be responsible for payment of fees charged by the Consulting Engineer(s).

f. The Consulting Engineer, in consultation with Licensee and SFWMD, shall develop a scope of work and schedule to accomplish the Evaluation Program. Licensee shall submit the proposed scope of work and schedule for the Evaluation Program, together with any revisions proposed by Licensee, to SFWMD as a post-certification submittal for review pursuant to DEP General Condition XIX. At a minimum, the scope shall include:

i. Identification of the location and characteristics of all existing and planned WMDCSF within 2,000 feet of the certified transmission line corridors that have the potential to experience harmful interference or other adverse impacts from the certified transmission facilities.

ii. Identification of the appropriate evaluation methodology to assess whether harmful interference or any other adverse impact to WMDCSF will occur due to Licensee's facilities.

iii. The Preliminary Evaluation, shall include:

1) Based on Licensee's preliminary design of its transmission line facilities, a modeling and analysis effort to determine the potential for transmission line harmful interference or adverse impacts to operation of the WMDCSF.

2) Field measurements, and review of SFWMD maintenance and performance records for the WMDCSF, to establish environmental baseline operability of the WMDCSF where the modeling and analysis in Section C.VI.B.1.f.iii.(1). above

show a potential for harmful interference or adverse impacts to operation of the WMDCSF, and ambient or preexisting electromagnetic and radio-interference conditions in the vicinity of the WMDCSF. The Baseline Testing shall be conducted during the wet season or during other times as agreed upon by SFWMD and Licensee for a period sufficient to capture significant weather events and establish signal strength profiles.

iv. A report that will communicate the findings of the Preliminary Evaluation, and identify specific potential interference issues that should be addressed in Licensee's final design of the transmission line facilities to avoid harmful interference or adverse impacts to WMDCSF.

v. Review of Final Transmission Line Design. The Consulting Engineer shall advise the Licensee and SFWMD of any potential harmful interference or adverse impact issues identified in the Preliminary Evaluation report that do not appear to have been addressed in the final transmission line design.

vi. Construction Acceptance Test Program shall include:

1) If construction is commenced more than two (2) years following field measurements under Section C.VI.B.1.f.iii.2. above, verification of baseline conditions and WMDCSF operability during the wet season immediately prior to initiation of construction.

2) Measurement of post-construction conditions and WMDCSF operability immediately following transmission line energization and load condition during the next wet season or during other times as agreed upon by SFWMD and Licensee.

vii. Provision of methodology for collection of all test data.

viii. Provision of a report from the Consulting Engineer to Licensee analyzing the pre- and post-transmission line construction testing data and communicate the findings of the Construction Acceptance Test Program, and identify any specific harmful interference or adverse impacts to the WMDCSF that Licensee must address through avoidance (i.e., redesign) or mitigation or determine that no harmful interference or adverse impacts are created by Licensee's project.

g. Sixty (60) days prior to any planned testing or invasive measurements of WMDCSF, Licensee shall submit a calendar schedule to allow for District coordination of access, water management operation change control, District observation of testing, and staff support.

h. Licensee shall submit its preliminary design of transmission facilities necessary for the evaluation in Section C.VI.B.1.f.iii. above to the Consulting Engineer, with an informational copy to SFWMD.

i. Licensee shall submit the Preliminary Evaluation Report as a post-certification submittal for review pursuant to Section A., Condition XIX.

j. If the results of the Evaluation Program indicate that harmful interference or adverse impacts are likely to occur or are occurring, Licensee shall avoid or mitigate for such harmful interference or adverse impacts. Licensee shall either revise the design of the transmission facilities, or work with SFWMD to develop a mitigation plan for enhancement of the WMDCSF or other remedial redesign of affected WMDCSF. Should the mitigation plan involve service-affecting operations, Licensee shall develop a Cutover Plan that details the timeframes WMDCSF service will be affected and coordinate with SFWMD on scheduling activities. The Cutover Plan shall be included in the mitigation plan submitted as a post-certification submittal for review pursuant to Section A., Condition XIX. All mitigation

costs attributable to Licensee-created harmful interference or adverse impacts shall be the responsibility of Licensee. Such mitigation will be implemented on a mutually agreeable schedule upon determination that the transmission facilities will produce or are producing harmful interference or adverse impacts to WMDCSF. Design and mitigation solutions to offset adverse impacts to existing and planned WMDCSF shall be submitted to SFWMD as a post-certification submittal pursuant to Section A., Condition XIX and may include, but are not limited to:

i. Redesign of Licensee's transmission facilities, such as upgrades to the phase-conductor design to lower the corona-produced radio frequency interference generated by the transmission lines, relocation of poles, and changing height of phase conductors.

ii. Enhancements to SFWMD's system, such as larger antennas; raising, lowering, adjusting or relocating SFWMD's antennas, antenna-mounting structures, poles, or transmitters; a dedicated fiber optic circuit or communications link to be deployed during and/or after Licensee's construction activities; temporary facilities and systems to maintain operations during construction; relocating or hardening of SCADA monitoring stations; working with SFWMD to enhance the communication system signal strength or coverage areas near the transmission facilities.

iii. An implementation schedule.

k. Licensee shall submit its final transmission line design to SFWMD as a post-certification submittal pursuant to Section A., Condition XIX and to the Consulting Engineer at least ninety (90) days prior to commencement of construction, identifying design features that have been incorporated to address all potential harmful interference issues or adverse impacts identified in the Consulting Engineer's report under Section C.VI.B.1.f.iv. above.

l. Licensee shall submit the report of the Construction Acceptance Test Program, together with any Licensee comments, to SFWMD as a post-certification submittal for review pursuant to Section A., Condition XIX.

m. Licensee shall immediately investigate all complaints of harmful interference or other adverse impacts disrupting communications through any portion of WMDCSF in proximity to Licensee's certified transmission facilities. If such investigation indicates the harmful interference or other adverse impacts are caused by Licensee's transmission lines, Licensee shall implement appropriate mitigation.

[FPL Stipulation –6/20/13; 33 C.F.R. 208.10 and C.F.R. 385.37; Sections 373.085(1)(b) and 373.086(1); Rule 62-17.133(3), F.A.C.]

C. Operations & Maintenance / Right-of-Way

The term "SFWMD right(s)-of-way" when used in SFWMD Conditions is intended to mean those lands acquired by SFWMD in fee, easement, or other type of grant, for the purpose of operations and maintenance of SFWMD's canal and levee system, spoil areas, and access and other easements.

[Chapter 40E-6, F.A.C.]

1. General Conditions

a. At least ninety (90) days prior to the commencement of construction of any portion of the transmission lines on SFWMD right-of-way; Licensee shall provide SFWMD with the final right-of-way location within the certified corridor.

[Sections 373.085(1) and 373.413(2), F.S.]

b. At least ninety (90) days prior to the commencement of construction of any portion of the transmission lines over, across, or using any SFWMD canal or levee right-of-way to facilitate the construction or maintenance of the transmission line, Licensee shall submit complete scaled or fully-dimensioned 8½" x 11" drawings to SFWMD showing the proposed facilities for SFWMD monitoring for compliance with the non-procedural requirements of Chapter 40E-6, F.A.C. The drawings shall depict the proposed electrical transmission line crossings along with the adjacent towers or support structures, in both plan and profile views, and shall show, at a minimum, information consistent with Appendix E-1A and E-2 of the Criteria Manual for Use and Occupancy of Works of the District.

[Sections 373.085, 373.086, and 373.413(2), F.S.

c. Prior to use of SFWMD right-of-way for construction access, the Licensee shall provide a time schedule for use of the right-of-way, including a plan identifying the proposed route, type, and number of vehicles and the frequency of such use.

[Section 373.085 and 373.086, F.S.; Rules 40E-6.091(1) and 40E-6.201(1)(j), F.A.C.]

d. The Licensee shall maintain the area of SFWMD right-of-way utilized for access or occupied by Licensee's facilities at all times in a condition as good or better than the condition existing prior to Licensee's use.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

e. If deemed necessary to accommodate unimpeded continuous access by SFWMD vehicles and equipment, the Licensee shall construct vehicle turn-around/passing areas to meet SFWMD requirements or coordinate with SFWMD when construction activities that may impede access are scheduled to occur.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

f. Vertical clearances for any aerial crossings over SFWMD canals and rights-of-way shall meet SFWMD non-procedural criteria and requirements in effect at the time of Licensee's submittal of drawings in sub-paragraph (b) above, as set forth in Chapter 40E-6, F.A.C.

[Sections 373.085(1) and 373.086(1), F.S.; Rule 40E-6.091, F.A.C.; and Criteria Manual for Use and Occupancy of Works of the District.]

g. Subsequent to Certification, any requests for use of SFWMD right-of-way that would otherwise require a waiver to SFWMD Right Of Way Occupancy Permit Criteria, as set forth in Rule 40E-6, F.A.C., if deemed acceptable by SFWMD in writing shall not require an amendment or modification to this Certification.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

h. The Licensee is responsible for identifying potential conflicts with existing facilities owned by third parties permitted by SFWMD and for coordinating relocation of previously permitted facilities, as required, including obtaining the necessary right-of-way occupancy permit modifications for those previously permitted facilities. Similarly, if during the course of future permit application reviews, SFWMD notices a proposed facility that potentially interferes with the transmission lines, SFWMD will require the applicant to coordinate with Licensee to resolve potential conflicts.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

i. The Licensee shall only have the right to utilize SFWMD right-of-way for those activities, uses, and purposes specifically authorized in this Certification for the purpose of construction, operation, and maintenance of the certified transmission facilities unless otherwise agreed to by SFWMD and Licensee in writing. All other activities, uses, and purposes on SFWMD right-of-way by Licensee not specifically authorized in this Certification are prohibited. Furthermore, the Licensee shall not have the right to authorize any other person or entity to utilize SFWMD right-of-way for any activity, use, or purpose without the prior written consent of SFWMD.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

j. SFWMD reserves the right of priority access in order to perform its regional water management missions and the Licensee shall not interfere with that access, particularly during emergencies. Uninterrupted SFWMD access shall be maintained at all times.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, and Rule 40E-6.381, F.A.C.]

k. The Licensee does not have any authority to incur liens for labor or materials on SFWMD rights-of-way. All persons contracting with the Licensee, all material, men, contractors, mechanics, and laborers are hereby charged with notice they must look to the Licensee, and to the Licensee only, to secure the payment of any bill for work done or any materials furnished during the term of this Certification. Pursuant to Sections 713.01(26), F. S., SFWMD right-of-way shall not be subject to liens for improvements and such liability is expressly prohibited. This paragraph shall be included in all contracts with the Licensee for materials or services involving SFWMD right-of-way. In the event that the Licensee does not, within thirty (30) days following Licensee's notice of the imposition of any such lien, cause the same to be released of record by payment or posting of a bond or other means acceptable to SFWMD, SFWMD shall have, in addition to all other remedies provided herein and by law, the right, but not the obligation, to cause the same to be released by such means as it shall deem proper, including payment of the claim giving rise to such lien. All such sums paid by SFWMD, including, but not limited to reasonable attorney's fees and expenses incurred by it in connection therewith, together with interest at the maximum rate allowed by law, shall be payable to SFWMD by the Licensee on demand.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

l. SFWMD, its Governing Board members, employees, contractors, and subcontractors, are not responsible or liable for any claims by the Licensee, or any partner, parent, affiliate, or subsidiary, for damages (including special and consequential), loss, expense, or costs with respect to the Licensee's project or other property or improvements arising directly,

indirectly, or proximately from water level fluctuations, water flows, or operations of water control structures, if operated in compliance with the USACE Master Water Control Manual for the C&SF Project and the Operations and Maintenance (O&M) Manual for the C&SF Project (see Attachment R-d, TP6&7 Project Features – Intersecting C&SF System and Works of the District Project Features).

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

m. Licensee shall be responsible for incremental costs of SFWMD facility improvement projects within the certified corridors for transmission facilities. "Facility improvement project" is a SFWMD project that involves modifications to infrastructure (conveyance canals, water control structures, levees, borrow canals or other SFWMD facilities within the SFWMD right-of-way) as may be necessary in the future to preserve public health, safety and welfare associated with the Central and Southern Florida Flood Control Project. SFWMD routine maintenance is not considered SFWMD facility improvement projects for purposes of this Certification. "Incremental costs" are costs attributed to a facility improvement project due to the presence of Licensee facilities within the SFWMD right-of-way. Licensee shall not be required to comply with changes made to applicable non-procedural requirements of the SFWMD Criteria Manual after Licensee facilities are designed or incur incremental costs as a result of modifications to Licensee facilities in order to meet the new criteria. SFWMD will notify Licensee when SFWMD initiates a facility improvement project [by conducting a Reconnaissance Study, a Project Implementation Report (PIR) or Feasibility Study, for example] whose construction may incur incremental costs as defined above. SFWMD and Licensee will then initiate the following process if the estimated construction costs include "incremental costs".

i. Design Phase

1) Upon receipt of the Design Documentation Report for Basis of Design, and Opinion of Probable Construction Cost (OPCC) SFWMD will provide copies to Licensee. Licensee shall have the opportunity to review SFWMD's package on the same timetable identified in the schedule.

2) Licensee shall have the option to develop design alternatives to avoid or minimize incremental costs for SFWMD consideration during the SFWMD Preliminary Design phase.

3) In addition, at the option of Licensee, Licensee, in consultation with SFWMD, shall identify and retain an independent Consulting Engineer(s) with demonstrated knowledge of and experience with SFWMD and Licensee facilities. Licensee shall be responsible for the payment of fees charged by the Consulting Engineer(s).

4) The Consulting Engineer shall evaluate SFWMD facility improvement project plans and anticipated incremental costs and will report findings to Licensee and SFWMD for the purpose of confirming or refining incremental costs. At the option of Licensee, the Consulting Engineer will identify design options and construction methods to achieve the planned SFWMD facility improvements, including alterations to SFWMD or Licensee existing facilities.

5) The Consulting Engineer's evaluation shall include a comparison of costs of the various design options and construction methods and shall recommend the design option that represents the option that achieves the objectives of the SFWMD facility improvement project and involves the lowest cost and least impacts to Licensee and SFWMD and their facilities.

6) Licensee shall submit its Consulting Engineer's evaluation to SFWMD before the preparation of Intermediate Plans and Specifications is complete. SFWMD will consider this evaluation; however, SFWMD is under no obligation to accept or incorporate the recommendations contained in the evaluation.

7) Licensee and SFWMD will reach written agreement on the maximum incremental costs to be paid by Licensee. In the event agreement on cost cannot be reached, the parties shall pursue dispute resolution pursuant to Condition of Certification X (Section A, General Conditions).

8) SFWMD will provide Licensee copies of the Final Plans and Specifications for Advertising for Construction, Final Design Documentation Report, Final Construction Schedule and Final Opinion of Probable Construction Cost at least sixty (60) days prior to soliciting bids from contractors.

ii. Construction Phase

1). In accordance with applicable SFWMD procurement policies in effect at the time, SFWMD will select a Contractor as the lowest responsive and responsible bidder to construct the facility improvement project. SFWMD shall provide Licensee copies of the awarded bid, construction schedule and a timetable of estimated incremental costs

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

2) Licensee shall pay SFWMD for incremental costs within sixty (60) days of receipt of written invoice from SFWMD of actual incremental costs of the facility improvement project in accordance with the agreement on maximum incremental costs identified in paragraph 7) above.

n. The Licensee shall only use the access points and gates authorized by SFWMD. Upon payment of applicable key deposit fees and submission of complete key permit applications, SFWMD agrees to issue, as a ministerial act, Licensee the necessary key permits allowing access to SFWMD roads to support the construction, operation, and maintenance needs of the Licensee. The Licensee shall take all necessary measures practicable to preclude the general public from accessing those portions of the right-of-way under construction such as posting of designated construction zones.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

o. Licensee shall not utilize SFWMD right-of-way for the general servicing or maintenance of its vehicles or construction equipment or for the storage of any contaminant, hazardous substance, fuel, or other petroleum products unless agreed to by SFWMD in writing.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

p. To the extent practicable, Licensee shall expedite the preparation and implementation of any repair, remediation, mitigation, and/or related plans required to address damages and/or any other adverse impacts to SFWMD facilities or systems caused by the Licensee during the design, construction, operation, and/or maintenance of the certified facilities. The time frames specified in these conditions shall be considered maximum allowable time frames, unless adjusted by mutual agreement between SFWMD and Licensee.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

2. Standard Limiting Conditions

a. All structures on SFWMD works or lands constructed by Licensee shall remain the property of Licensee, who shall be solely responsible for ensuring that such structures and other uses remain in good and safe condition. The Licensee is advised that other federal, state, and local safety standards may govern the occupancy and use of SFWMD lands or works. SFWMD assumes no duty with regard to ensuring that such uses are so maintained and assumes no liability with regard to injuries caused to others by any such failure.

[Rule 40E-6.381(1), F.A.C.]

b. Licensee solely acknowledges and accepts the duty and all associated responsibilities to incorporate safety features that meet applicable engineering practice and accepted industry standards into the design, construction, operation, and continued maintenance of the authorized facilities/use. This duty shall include, but not be limited to, the Licensee's consideration of SFWMD regulation and potential fluctuation, without notice, of water levels in canals and works, if operated in compliance with the USACE Master Water Control Manual for the C&SF Project and the Operations and Maintenance (O&M) Manual for the C&SF Project as well as the Licensee's consideration of upgrades and modifications to the authorized facilities/use that may be necessary to meet any future changes to applicable engineering practice and accepted industry standards (See Attachment R-d, TP6&7 Project Features – Intersecting C&SF System and Works of the District Project Features). The Licensee acknowledges that SFWMD review of this project including, but not limited to, any post-certification reviews and field inspections performed by SFWMD, does not in any way consider or ensure that the authorized use/facilities are planned, designed, engineered, constructed, or will be operated, maintained or modified so as to meet applicable engineering practice and accepted industry standards, or otherwise provide any safety protections. The Licensee further acknowledges that any inquiries, discussions, or representations, whether verbal or written, by or with any SFWMD staff or representative during the post-certification review process, including, but not limited to, any field inspections, shall not in any way be relied upon by Licensee as SFWMD assumption of any duty to incorporate safety features, as set forth above, and shall also not be relied upon by the Licensee in order to meet Licensee's duty to incorporate safety features, as set forth above.

[Rule 40E-6.381(2), F.A.C.]

c. The Licensee shall not engage in any activity regarding the authorized use that interferes with the construction, alteration, maintenance, or operation of the works of the SFWMD, including:

i. discharge of debris or aquatic weeds into the works of the SFWMD;

ii. causing erosion or shoaling within the works of the SFWMD;

iii. planting trees or shrubs or erecting structures that limit or prohibit access by SFWMD equipment and vehicles, except as may be authorized by this Certification.

iv. leaving construction or other debris on SFWMD right-of-way or waterway;

v. damaging SFWMD berms and levees; removal of SFWMD-owned spoil material; removal of or damage to SFWMD locks, gates, and fencing; opening of SFWMD rights-of-way to unauthorized vehicular access; or running or allowing livestock on SFWMD rights-of-way.

Licensee shall be responsible for any costs incurred by the SFWMD resulting from any such interference, as set forth in i through v above. Should the authorized activities or placement of the authorized facilities within SFWMD right-of-way or maintenance of same contribute to sloughing, erosion, or wash-outs of SFWMD right-of-way, berm, or side slope of the canal, it is the Licensee's sole responsibility and expense to, upon notification from SFWMD, immediately take appropriate steps to restore the right-of-way to pre-existing conditions or better using current SFWMD engineering standards provided by SFWMD as guidance. Site-specific engineering considerations and decisions shall be undertaken by the Professional Engineer in charge (i.e., for backfill material, density/ compaction, stabilization, and maintainability).

[373.085(1)(b) and (2), F.S.; Rules 62-17.133(3) and 40E-6.381 (2), (3) and (8), 40E-6.091(1) and 40E-6.221 (1), (2) and (10), F.A.C.]

d. SFWMD is not responsible for any personal injury or property damage that may directly or indirectly result from the use of water from SFWMD's canal or any activities that may include use or contact with water from the SFWMD canal, since SFWMD periodically sprays its canals for aquatic weed control purposes and uses substances that may be harmful to human health or plant life.

[Rule 40E-6.381(9), F.A.C.]

e. SFWMD has the right to change, regulate, limit, schedule, or suspend discharges into, or withdrawals from, works of the SFWMD in accordance with criteria established by SFWMD or USACE for the works of the SFWMD (See Attachment R-d, TP6&7 Project Features – Intersecting C&SF System and Works of the District Project Features).

[Rule 40E-6.381(13) and 62-17.133(3), F.A.C.]

f. Licensee shall be responsible for the repair or replacement of any existing facilities located within SFWMD right-of-way that are damaged as a result of Licensee's installation or maintenance of the authorized facilities.

[Rule 40E-6.381(19), F.A.C.]

g. It is the responsibility of the Licensee to make prospective bidders on construction contracts for the certified facilities aware of the pertinent terms and conditions of this Certification.

[Rule 40E-6.381(21), F.A.C.]

[Sections 373.044, 373.113, 373.085(1), 373.086, 373.103, 373.129, and 373.603, F.S.; Rule 40E-6.381, F.A.C.]

3. Special Conditions

a. A copy of the Certification application, Certification order, and SFWMD post-certification submittals will be available for review by SFWMD upon request.

b. At no time shall Licensee place permanent or semi-permanent above-ground encroachments or facilities within the 40-foot-wide strip of land lying parallel to any SFWMD canal as measured from the top of the existing canal bank landward, unless otherwise authorized in this Certification or agreed to by SFWMD in writing.

c. At no time shall Licensee place facilities crossing over SFWMD structures or project culverts, unless otherwise authorized in this Certification or agreed to by SFWMD in writing.

d. At no time shall Licensee place permanent or semi-permanent above-ground structures within SFWMD one-hundred (100) foot-long equipment staging areas defined as being immediately upstream and downstream of all bridges and pile-supported utility crossings of SFWMD canals, unless otherwise authorized in this Certification, or agreed to by SFWMD in writing. Temporary placement of equipment or materials is allowable as long as the equipment or materials can be removed by Licensee within forty-eight (48) hours of notice given by SFWMD that a tropical storm watch has been declared for MDC or at times when post-storm debris removal activities must be undertaken by SFWMD.

e. Within thirty (30) days of completion of the authorized work, the Licensee shall contact the SFWMD field representative at the Miami or Homestead Field Station to schedule a final inspection for compliance with right-of-way conditions of certification.

f. For culvert connections to SFWMD works, the Licensee shall comply with the following:

i. The crown of the authorized connection shall be set at a minimum of one-half foot below the design water surface elevation or lower.

ii. The top of the rip-rap headwall must match the elevation of the existing ground.

iii. The Licensee shall construct the endwall/headwall to include adequate returns to prevent erosion.

iv. The Licensee shall take all feasible measures acceptable to SFWMD to prevent the discharge of debris or aquatic weeds into SFWMD works by the authorized use.

v. All culverts 36 inches in diameter or larger that serve to connect to works of the SFWMD must be equipped with a skimmer or baffle that effectively precludes the discharge of aquatic weeds into SFWMD works by the authorized use.

vi. Licensee is solely responsible for maintenance of the skimmer or baffle.

vii. Licensee shall adequately identify all culvert connections with a permanent type, aboveground marker placed within SFWMD right-of-way at location(s) specified by the SFWMD field representative.

viii. Culverts to be installed in association with structure pads and pad access ramps connecting to SFWMD levee access roads shall be of adequate design to prevent adverse impacts to wetlands or weakening of the levee due to impoundment of water.

g. Licensee shall comply with the following requirements during use of SFWMD right-of-way for construction, maintenance, and operation activities:

i. Prior to commencement of construction or utilization of SFWMD right-of-way, the Licensee is required to contact the SFWMD field representative at the Miami or Homestead Field Station to schedule a pre-construction meeting. The Licensee shall prepare and present the following at the pre-construction meeting:

(a) A list of 24-hour contact personnel. The list shall include the contractor and alternate contact, their titles, and telephone numbers for 24-hour contact.

(b) A written inventory of the type of vehicles, construction equipment, other machinery, and materials that will be located within SFWMD right-of-way.

(c) Written procedures for the clearing of all construction materials, machinery, equipment, and vehicles from the canal and the area immediately adjacent to the canal within 24 hours notice from SFWMD.

(d) A list of the names and contact numbers of the designee and alternate contact responsible for the various operations involved in the clearing procedures.

ii. This authorization is for the use of the Licensee and the Licensee's contractor(s)/sub-contractor(s) only.

iii. The Licensee shall be responsible for locking SFWMD access gates upon entering and leaving SFWMD right-of-way. The Licensee shall take all necessary measures to preclude the general public from accessing the right-of-way with motorized vehicles.

iv. The Licensee is responsible for posting a watchman at any SFWMD vehicular access gates unlocked by Licensee during any working hours that the gate remains unlocked. At no time shall a SFWMD gate unlocked by Licensee be left unlocked and unattended by Licensee.

v. The Licensee is responsible for providing and utilizing acceptable dust control measures during the duration of the proposed work.

h. The Licensee shall comply with the following concerning storm event notifications and requirements during construction activities:

i. If storm, hurricane, or emergency circumstances are developing, SFWMD will attempt to provide a 48-hour notice. The Licensee will be contacted by telephone or a visit to the construction site wherein the Licensee will be informed of the emergency situation. The Licensee is put on notice that the 48-hour notice is a warning that SFWMD may or may not be able to provide the Licensee.

ii. If storm, hurricane, or emergency circumstances have developed, SFWMD will contact the Licensee by telephone or visit the site to place the Licensee on 24-hour alert. At this time, the Licensee and the Licensee's contractor(s) and sub-contractor(s) must begin securing the project site in accordance with Special Condition g.i.(c) of this subsection.

iii. The Licensee is advised that SFWMD's hurricane, storm event, and/or emergency alert may differ from the National Hurricane Center or the local news and weather. SFWMD takes into consideration the numerous factors concerning construction within the canal rights-of-way. As such, upon SFWMD notification to the Licensee of a pending emergency, storm event, or hurricane, the Licensee has 24 hours or less to comply with SFWMD orders.

i. In the event of floods or other natural or civil disaster or emergencies affecting SFWMD or SFWMD right-of-way, the Licensee shall cooperate with SFWMD to facilitate mitigation of the impact of such emergencies. The Licensee shall immediately notify SFWMD of any emergency situation observed on SFWMD right-of way.

j. Licensee shall be responsible for obtaining any and all other necessary federal, state, local, special district, private, and underlying owner authorizations in connection with its activities conducted under this Certification. In the event the Licensee does not obtain such authorizations from the underlying owner, the Licensee shall acquire or otherwise satisfy any interest or claims made by such underlying owners with respect to this Certification.

k. If required by the Florida Department of Transportation (FDOT) to prepare a Maintenance of Traffic (MOT) Plan that involves SFWMD property, the Licensee shall provide SFWMD with a copy of the MOT Plan upon submittal to FDOT. The Licensee shall provide SFWMD with a copy of the Final MOT Plan reviewed by the FDOT.

l. Licensee shall be required to install facilities in accordance with minimum clearance requirements specified in SFWMD Criteria Manual for Use or Occupancy of Works of the District, including Section XIV, Appendix E-1, in effect at the time of design of the certified transmission lines for crossing Works of the District, unless otherwise agreed in writing.

m. Licensee acknowledges that Licensee's proposed activities contemplated under this Certification may be subject to USACE 33 U.S. Code Section 408 approval requirements. Licensee further acknowledges and agrees, that in the event of future USACE projects or modification of existing USACE projects, it shall be the responsibility of the Licensee to implement any and all necessary modifications to Licensee's facilities including, but not limited to, relocations thereof required by the USACE at Licensee's sole cost and expense.

[FPL Stipulation –6/20/13;Federal Water Resources Development Acts of 1992, 1996 and 2000; 33 U.S.C. 408; 33 C.F.R. 385 and 208; Sections 373.1501 and 373.103(2), F.S.; Rule 62-17.133(3), F.A.C.]

D. Land Management / Ecosystem Restoration

1. The Licensee shall avoid impacting wetlands to the extent practicable. When necessary and feasible, the location of the span between power poles shall be maximized or varied to eliminate or reduce wetland impacts.

[FPL Stipulation –6/20/13; Section 373.1391(1)(a) and (5), F.S.; Rules 40E-6.221 (2) and (10), 62-17.133(3), 40E-4.301 and 40E-4.302, F.A.C; SFWMD Environmental Resource Permit Information Manual, Volume IV.]

2. On SFWMD lands, the Licensee shall employ at-grade roads, geoswales that would not extend above existing wetland grades, elevated roadways to bridge slough features, or other appropriate construction methods or techniques to maintain historical drainage

patterns and sheetflow, to the extent practicable. For those areas where wetland impacts will occur, wetland control elevations shall be established to maintain or improve pre-construction hydroperiods within all affected areas.

[Section 373.1391, F.S.; Rules 40E-4.301 and 40E-4.302, F.A.C.; Basis of Review for Environmental Resource Permits, Section 4.2.3.3.]

3. The Licensee shall, to the extent practicable, use adjacent existing public roads for access to the right-of-way for construction, operation, and/or maintenance purposes before using non-public roads or building new roads.

[FPL Stipulation –6/20/13; Section 373.1391, F.S.]

4. At new access points created by Licensee's transmission facilities, transmission line access roads shall be designed to include locked gates, or other appropriate methods or techniques to prevent illegal access to SFWMD-owned lands including but not limited to lands within Model Lands, Southern Glades, and Pennsuco Wetlands. Licensee shall maintain these access points by repairing illegal breaches within thirty (30) days of being notified of or discovering such breaches.

[FPL Stipulation –6/20/13; Section 373.1391, F.S; Rules 40E-6.311, 40E-6.091 and SFWMD Volume V, Permit Information Manual, Criteria Manual for Use of Works of the District, Section IX.M.]

5. Upon request by Licensee prior to final design of the certified transmission facilities, SFWMD shall provide Licensee with a list of SFWMD lands that are subject to planned burns. SFWMD shall provide advance notice to Licensee of any planned burns in the vicinity of the certified transmission rights-of-way.

[FPL Stipulation – Stipulated 6/20/13; Section 373.1391, F.S.; Rules 40E-6.311 and 40E-6.221(10), F.A.C.]

6. Licensee shall provide SFWMD with final construction drawings of all Licensee's facilities that encroach or cross SFWMD lands, works, or projects.

[Sections 373.085(1)(b) and 373.1391, F.S]

E. Water Use

1. Prior to the commencement of construction of those portions of the project that involve dewatering activities, unless the proposed dewatering activity meets the "no notice" criteria of Rule 40E-20.302 (3), F.A.C. and Section 2.5.1 of the Basis of Review for Water Use Permits, the Licensee shall submit a detailed plan for the proposed dewatering activities to SFWMD for an assessment of consistency with the non-procedural requirements of Chapters 40E-2, 40E-3 and 40E-20, F.A.C., in effect at the time of submittal and impact monitoring if necessary (Rule 62-17.133, F.A.C.). The following information, referenced to North American Vertical Datum of 1988 (NAVD88) where appropriate, shall be submitted:

a. A detailed site plan that shows the location(s) for each proposed dewatering area

b. The method(s) used for each dewatering operation

c. The maximum depth for each dewatering operation

d. The location and specifications for all proposed wells and/or pumps associated with each dewatering operation

e. The duration of each dewatering operation

f. The discharge method, route, and location of receiving waters generated by each dewatering operation, including the measures (Best Management Practices) that will be taken to prevent water quality problems in the receiving water(s)

g. An analysis of the impacts of the proposed dewatering operations on any existing on and/or off-site legal users, wetlands, or existing groundwater contamination plumes

h. The location of any infiltration trenches and/or recharge barriers. All plans must be signed and sealed by a Professional Engineer or a Professional Geologist registered in the state of Florida.

F. Corridor-Specific Conditions

1. East Preferred Corridor

a. Central and Southern Florida Project

Licensee has proposed to cross SFWMD C-2 (Snapper Creek) Canal with its transmission facilities just west of SW 70th Avenue or in the vicinity of U.S. Highway 1. Based on the District's proprietary interests, Conditions i and ii below apply to these locations, respectively.

i. Licensee may install the electrical transmission line support structures parallel to and within the SFWMD C- 2 Canal right-of-way north of the Dadeland Mall only between the west side of 77th Avenue and 70th Avenue, provided that: 1) conductors shall not overhang any part of the Canal; 2) no placement of permanent or semi-permanent structures within 100 feet of the 70th Avenue bridge, to comply with C.3.d. above; and 3), Licensee's placement of electrical transmission line support structures shall not impair the integrity of the C-2 canal bank or side slope or reduce the conveyance capacity of the C-2 canal.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

ii. Licensee may install transmission facilities that cross the C-2 Canal on the east side of U.S. Highway 1 within SFWMD right-of-way. However, due to existing SFWMD C-2 Canal and right-of-way access and maintenance constraints in the vicinity of U.S. Highway 1 Licensee shall consult with and obtain written concurrence from SFWMD for transmission facilities to be installed on the west side of U.S. Highway 1 within SFWMD right-of-way.

[Sections 373.085 and 373.086, F.S.; Chapter 40E-6, F.A.C.]

2. West Preferred Corridor

a. Protection of Everglades Habitat Associated with CERP Restoration

i. Aerial Surveys. SFWMD adopts and incorporates by reference Florida Fish and Wildlife Conservation Commission (FWC) condition F, "Wood Stork and Wading Bird Colonies", in its entirety.

ii. Ground Surveys. In conjunction with FWC Condition F, Licensee shall conduct ground surveys of wood storks during nesting for currently-known

colonies along Tamiami Trail (East 1, East 2, and West) and the 3B Mud East colony. The ground surveys shall be conducted prior to and during fledging of juvenile wood storks.

iii. Licensee shall consult with SFWMD prior to finalizing design of aerial and ground surveys.

iv. Licensee shall provide SFWMD copies of all post-certification submittals, including the ground and aerial surveys referenced in Conditions i and ii herein, in accordance with time frames set forth in Section A, Condition XIX.

v. Licensee shall provide SFWMD a calculation of wood stork foraging habitat loss based on application of the United States Fish and Wildlife Service (USFWS) Habitat Assessment Foraging Model developed specifically for South Florida and a mitigation plan. Licensee shall consult with SFWMD prior to the plan being finalized.

[FPL Stipulation –6/20/13; Federal Water Resources Development Acts of 1992, 1996 and 2000, Section 601(h)(3)(C); 33 C.F.R. 385.26(c) and 385.20(e)(2); Sections 373.085(1)(b) and 373.1501, F.S.; Rules 40E-6.091(1) and 62-17.133(3), F.A.C.]

b. Central and Southern Florida Project

i. L-29 / L-30 / L-31N Levee Procedures / Requirements

(a) Pre-Construction Surveys / Inspections

(1) Within thirty (30) days of written request from the Licensee, SFWMD shall provide the Licensee with a copy of the most recent levee inspection reports for the levees within SFWMD right-of-way that the Licensee is proposing to access for construction and/or maintenance activities.

(2) In areas where the transmission line access will be located on SFWMD levee(s), the Licensee shall conduct surveys, including a level survey at the toe and crest of the levee and cross-section surveys every 500 feet (including both toes of the levee) and at locations agreed between SFWMD and Licensee as potential problem areas. Potential problem areas will be identified by visual inspection or where there are significant changes proposed to the levee. Upon completion of the surveys, Licensee shall submit certified, signed, and sealed copies of the surveys to SFWMD. The surveys will be used to establish a baseline of the pre-construction topographic features of the levee(s) including, but not limited to, top-of-levee width and elevation and side slopes in NAVD88. If any post-certification submittals are provided prior to 2014, the Licensee shall consult with SFWMD concerning the need to include National Geodetic Vertical Datum of 1929 (NGVD29) measurements in addition to NAVD88 measurements. The surveys shall document the condition of the levee(s) with respect to the most recent East Coast Protection Levee Evaluation Report at the time of the surveys. As an alternative, the Licensee can use surveys conducted by SFWMD, if the studies were completed less than three (3) years prior to the Licensee's anticipated construction commencement date.

(3) In addition to surveys, the Licensee shall also perform a visual inspection of the levee(s), documented by videotape or photographs, to assess the structural integrity of the levee(s). Where video or photographic documentation is used, station markers and GPS coordinates should be installed or used so that exact locations can be determined for reference.

(4) If Licensee surveys, visual inspection, or other assessment methods indicate that further investigation is needed to accurately assess the integrity of the levee(s), Licensee shall conduct additional investigations in consultation with SFWMD. Further investigations may include, but shall not be limited to, soil borings, piezometer

installations/monitoring, laboratory tests, modeling, etc. The Licensee shall provide its written findings, conclusions, and recommendations, certified by a Florida-registered Professional Engineer, to SFWMD. Licensee shall conduct additional investigations or assessments, as necessary, to satisfy SFWMD non-procedural requirements, prior to any construction activities on SFWMD levees.

(b) Pre-Construction Safety, Maintenance, and Construction Plans

(1) Prior to construction of the certified electrical transmission line facilities, the Licensee shall provide SFWMD with a Levee Safety and Maintenance Plan that addresses steps the Licensee will take to maintain the integrity of the levee(s), including any improvements proposed by the Licensee. The Plan shall be reviewed by SFWMD for compliance with the applicable SFWMD nonprocedural requirements.

(2) Prior to construction of the certified electrical transmission line facilities, the Licensee shall provide SFWMD with a Levee Construction Plan that addresses the steps the Licensee will take in constructing the certified transmission line facilities. The Plan shall be reviewed by SFWMD for compliance with the applicable SFWMD non-procedural requirements.

(c) Pre-Construction Levee Improvement Standards/Requirements

(1) Any improvements made by the Licensee within SFWMD L-29, L-30, and L-31N Canal rights-of-way shall be performed such that the structural integrity of the levee(s) shall be maintained to a level as good as or better than the conditions in existence immediately prior to the Licensee's commencement of work activities, as documented pursuant to Section C.VI.F.2.b.i.a. (Pre-Construction Surveys/Inspections). For construction of any proposed improvements, Licensee may be required to first obtain approval from USACE, as set forth in 33 U.S. Code, Section 408 and pursuant to Section C.VI.C.3.j (Special Conditions).

(2) Licensee shall not commence construction activities on SFWMD rights-of-way without prior postcertification review by SFWMD of Licensee Levee Safety and Maintenance Plan and Levee Construction Plan. In the event that SFWMD identifies any non-compliance with SFWMD applicable non-procedural requirements in these plans, SFWMD shall within ninety (90) days identify any applicable requirements that SFWMD believes the Licensee's improvements do not satisfy.

(d) Monitoring and Structural Integrity During Construction

(1) Pre-existing or latent defects related to the structural integrity of the levee(s), identified by Licensee's investigations, shall be remedied by SFWMD through its routine maintenance schedules, if deemed necessary by SFWMD. If not deemed necessary by SFWMD, any preexisting or latent defects shall be remedied by the Licensee, if deemed necessary by the Licensee. If not deemed necessary by the Licensee, any pre-existing or latent defects shall be monitored by the Licensee throughout construction of the certified electrical transmission line facilities in the vicinity of the levee(s). Any further deterioration or changes to the levee(s) found as a result of Licensee's monitoring of the levee(s) conditions that could be detrimental to the integrity of the levee(s) shall be immediately communicated in writing to SFWMD. If the further deterioration or changes are caused by the Licensee's construction activities, the further deterioration or changes shall be remedied by the

Licensee to pre-construction conditions or better as documented in Section C.VI.F.2.b.i.a, (Pre-Construction Surveys/Inspections).

(2) SFWMD reserves the right to halt any and all construction activities due to concerns related to the structural integrity of the levee(s). If SFWMD requires a halt to construction activities, SFWMD shall provide the Licensee with a description of its concerns regarding the structural integrity of the levee(s) within forty-eight (48) hours of the halt, including the alleged causes of concern and potential remedies for the Licensee to consider. Following the halt of construction activities, the Licensee shall provide SFWMD with a proposed Remedial Construction Plan that addresses SFWMD concerns within three (3) working days or such longer time as agreeable to both SFWMD and Licensee. SFWMD failure to respond to Licensee within five (5) working days after Licensee's submittal of the Remedial Construction Plan shall constitute SFWMD confirmation that Licensee's Remedial Construction Plan complies with SFWMD applicable non-procedural requirements.

(e) Damages During Construction

(1) The Licensee shall be responsible for the repair or replacement of SFWMD L-29, L-30, or L-31N levees damaged as a result of Licensee's construction, operation, or maintenance of the certified electrical transmission line facilities, including SFWMD access to the levees. Repair of damages to the levee(s) that occurs during the Licensee's construction activities in location(s) not identified by the Licensee's pre-construction investigation as having pre-existing or latent defects shall be the responsibility of the Licensee and the Licensee shall commence repair work promptly.

(f) Inspections During and After Construction

(1) SFWMD personnel shall have access and the opportunity to inspect improvements to the L-29, L-30, and L-31N Canal levees during construction or operation at all times. Licensee shall engage a third-party inspector to conduct SFWMD post-construction inspection, jointly selected by SFWMD and Licensee. The purpose of the post-construction inspection will be to confirm that Licensee has maintained or returned the L-29, L-30 and L-31N levees to as good as or better than preconstruction conditions as documented in C.VI.F.2.b.i.a, (Pre-Construction Surveys/Inspections)). If any SFWMD inspections will interfere with Licensee construction activities, advance notification of such inspections should be given.

(g) Post-Construction

(1) Licensee shall provide as-built drawings showing all levee improvements within the L-29, L-30, and L-31N canal rights-of-way within ninety (90) days of completion of each phase of construction. The as-built drawings shall be signed and sealed by a Florida-registered Professional Engineer and shall be referenced to NAVD88. Licensee and SFWMD may use the drawings as a reference for maintenance or improvements of ingress and egress areas to the levees that are utilized by the Licensee for ongoing operation of the adjacent electrical transmission line facilities, or until modified/utilized by other parties.

(2) If Licensee's improvements within SFWMD canal rights-of-way are modified / utilized by parties other than the Licensee, the Licensee shall not be responsible for any impacts to the levee(s) caused by such third party use. The third party user and/or SFWMD shall be responsible for approval of any changes to the as-built drawings to reflect said third party use of the Licensee's improvements.

[FPL Stipulation –6/20/13; Federal Water Resources Development Acts of 1992, 1996 and 2000, Section 601(h)(3)(C); 33 C.F.R. 208 and 385; Sections 373.085(1)(b) and 373.1501, F.S.; Rules 40E-6.091(1) and 62-17.133(3), F.A.C.]

ii. Unless authorized in this certification or mutually agreed in writing between Licensee and SFWMD authorized representative, electrical transmission line support structures and overhead wires shall not be placed on the east sides of the L-30 and L-31N canal rights-of-way between S.W. 120th Street and the southern boundary of the Krome Avenue access corridor, with the exception of aerial wire crossings for the Clear Sky-Levee #1 and #2 500 kV transmission lines and the Clear-Sky Pennsuco 230 kV transmission line over the east side of the L-30 Canal, immediately south of and adjacent to the southern boundary of the Krome Avenue Access Corridor.

[FPL Stipulation –6/20/13;Federal Water Resources Development Acts of 1992, 1996 and 2000, Sections 373.085(1)(b), 373.086(1) and 373.089, F.S.; Rules 40E-6.011 (1), (2) and (12), 40E-6.041 (1) and (2), 40E-6.221 (1), (2) and (10) and 62-17.133(3), F.A.C.]

iii. Unless authorized in this certification or mutually agreed in writing between Licensee and SFWMD authorized representative, within the West Preferred Corridor, access shall be restricted to the west sides of the L-30 and L-31N canals. Longitudinal access on the east sides of the L-30 and L-31N Canals is prohibited, except for Krome Avenue.

[FPL Stipulation –6/20/13;Federal Water Resources Development Acts of 1992, 1996 and 2000, Sections 373.085(1)(b), 373.086(1) and 373.089, F.S.; Rules 40E-6.011 (1), (2) and (12), 40E-6.041 (1) and (2), 40E-6.221 (1), (2) and (10) and 62-17.133(3), F.A.C.]

iv. The Licensee shall comply with the following conditions concerning use of the Ratner Bridge, S-334 service bridge, and S-335 service bridge:

(a) The Licensee's proposed use is secondary to SFWMD and USACE proposed use and shall not interfere with SFWMD proposed use.

(b) The Licensee shall inspect the bridges prior to and after construction activities in accordance with FDOT standards.

(c) Prior to construction, the Licensee shall provide load rating calculations for specific high frequency and special vehicles that will need to use the bridges.

(d) Maximum load criteria shall not be exceeded.

(e) Prior to construction, the Licensee shall provide SFWMD with videos and/or photographs documenting the condition of the bridges.

(f) The Licensee shall be responsible for paying the cost of any necessary bridge improvements required to accommodate Licensee's activities.

(g) The Licensee shall be responsible for repairing or paying the cost of repairing any damage to the bridge as a result of Licensee's activities. Within thirty (30) days of completion of construction activities, the bridge and its immediate surroundings shall be restored to its original condition prior to construction, including, but not limited to, concrete/asphalt repairs, canal bank repairs, gravel, and sod.

(h) The Licensee shall provide SFWMD with uninterrupted access acceptable to SFWMD for the duration of any necessary repair work.

(i) The Licensee shall obtain consent from the underlying fee owners for use of lands adjacent to the Ratner Bridge and related access road and shall submit a copy of said documentation to SFWMD prior to use.

(j) Prior to Licensee's use of the S-334 and S-335 service bridges, Licensee shall submit to SFWMD a Bypass Pumping Plan. The Plan shall address, to SFWMD's satisfaction, bypass pumping, in the event water control structures S-334 or S-335 are damaged as a result of Licensee's use thereof, such that the conveyance capability of water control structures S-334 or S-335 is impacted. The Bypass Pumping Plan must contemplate on-site facilities in order to effectuate immediate implementation in the event of damage to the S-334 or S-335 water control structures.

[FPL Stipulation –6/20/13;Federal Water Resources Development Acts of 1992, 1996 and 2000, Sections 373.085(1)(b), 373.086(1) and 373.089, F.S.; Rules 40E-6.011 (1), (2) and (12), 40E-6.041 (1) and (2), 40E-6.221 (1), (2) and (10) and 62-17.133(3), F.A.C.]

v. Transmission line support structures (poles) shall be placed a minimum of forty (40) feet from the toe of the water conservation area side of the levee.

[FPL Stipulation –6/20/13;Federal Water Resources Development Acts of 1992, 1996 and 2000; Sections 373.085(1)(b), 373.086(1) and 373.089, F.S.; Rules 40E-6.011 (1), (2), (4), (5), (6), (7) and (12), 40E-6.041 (1) and (2), 40E-6.221 (1), (2) and (10), and 62-17.133(3), F.A.C.]

c. Land Management / Ecosystem Restoration

i. At least thirty (30) days prior to construction of the transmission line segments that are along SFWMD L-29, L-30, or L-31N levees, Licensee shall submit a construction schedule and a coordination plan to SFWMD for review and post-certification compliance. The coordination plan will be for the purpose of coordinating Licensee and SFWMD construction activities in areas where both entities will have ongoing simultaneous construction activities.

[Sections 373.1391, 373.1501(4)(d), 373.1502(2)(a), and 373.4592, F.S.]

ii. Prior to final design of the certified transmission facilities, Licensee shall consult with SFWMD regarding design and placement of transmission line support structures and access roads between the Krome Avenue Detention Center and the southern limits of the existing rock mines owned by Kendall Properties and Investment within Licensee's West Preferred Corridor.

[Sections 373.1501(4)(d), 373.1502(2)(a) and 373.4592, F.S.]

3. Alternate Corridors

a. Definitions

i. "Alternate Corridors" for the following conditions of certification specifically applies to five (5) corridors proposed during the Site Certification process by Third Parties as alternates to FPL's West Preferred and West Secondary corridors: three (3) proposed by the Miami-Dade Limestone Products Association (M-DLPA); one (1) proposed by the National Parks Conservation Association (NPCA) and one (1) collectively proposed by the Village of Pinecrest and City of Coral Gables (PCG).

ii. "M-DLPA AC-1" refers to the alternate corridor filed by M-DLPA on May 2, 2011.

iii. "M-DLPA AC-2" refers to the alternate corridor that tracks the FPL West Preferred Corridor in the vicinity of the SFWMD L-31N levee and borrow canal (L-31N) then departs from the FPL West Preferred Corridor and turns to the east approximately one mile south of Tamiami Trail, and was filed on December 10, 2012

iv. "M-DLPA AC-3" refers to the alternate corridor that departs from the FPL West Preferred Corridor approximately six miles south of Tamiami Trail. M-DLPA AC-3 was filed December 10, 2012.

v. "NPCA AC-A" refers to the alternate corridor filed by NPCA on December 10, 2012.

vi. "PCG-AC" refers to the alternate corridor filed by the Village of Pinecrest and City of Coral Gables in May 2011.

vii. "Transmission facilities" refers to the proposed transmission lines, as defined in Section 403.522(22), Fla. Stat., in the FPL Turkey Point 6&7 Project Site Certification Project, including the Clear Sky-Turkey Point 230-kV transmission line, the Clear Sky-Davis and Davis-Miami 230-kV transmission lines, and Clear Sky-Levee #1 and #2 500-kV transmission lines and Clear Sky-Pennsuco 230-kV transmission line.

b. Protection of Everglades Habitat Associated with CERP Restoration

i. If Alternate Corridor M-DLPA AC-1 is certified and Licensee plans to place transmission facilities within this corridor then Section C.VI.F.2.a.ii above shall be modified to exclude ground surveys of wood storks during nesting for the Tamiami 3B Mud East colony.

ii. If Alternate Corridor M-DLPA AC-2 is certified and Licensee plans to place transmission facilities within this corridor then Section C.VI.F.2.a.ii above shall be modified to require ground surveys of wood storks during nesting for only the Tamiami East 2 colony.

iii. If Alternate Corridors M-DLPA AC-3 or NPCA AC-A is certified and Licensee plans to place transmission facilities within either of these corridors then Licensee shall not be required to comply with Section C.VI.F.2.a.ii above.

c. The following conditions apply to the M-DLPA AC-1, M-DLPA AC-2, M-DLPA AC-3 and NPCA AC-A alternate corridors:

i. For the bridge located over SFWMD C-4 Canal that is public access to Rifle Range Road from the Tamiami Trail and whose use would be required to use the access corridor for segments of the corridor north of Tamiami Trail, Licensee shall coordinate with Miami-Dade County to ensure compliance with all conditions of the SFWMD-issued Right-of-Way Occupancy Permit issued to Miami-Dade County. Placement of additional facilities or modification of facilities other than those specifically authorized by the Right-of-Way Occupancy Permit will require a permit modification to be issued by SFWMD. SFWMD and Miami-Dade County will work collaboratively with Licensee to address any such facilities or modifications.

ii. SFWMD C-4 Emergency Detention Basin.

(a) Licensee's use and occupancy of the SFWMD C-4 Emergency Detention Basin works, including levees and access roads, shall comply with Section C.VI.F.2.b. above titled "L-29 / L-30 / L-31N Levee Procedures / Requirements".

(b) Licensee's use is secondary to that of SFWMD and shall not interfere with SFWMD use.

(c) Any proposed levee improvements shall be designed and constructed so as not to cause a significant reduction in the C-4 Emergency Detention Basin existing water storage capacity.

iii. Transmission line facilities in the Pennsuco Regional Mitigation Area shall comply with Section C.VI.D. above.

d. The following conditions apply to the M-DLPA AC-2, M-DLPA AC-3 and NPCA AC-A alternate corridors:

i. Licensee shall work collaboratively with SFWMD to address any proprietary interests or issues arising with respect to the placement of transmission facilities on SFWMD real property interests within any alternate transmission line corridor having any encumbrance, such as those having a federal interest as described in the June 1999 SFWMD and U.S. Department of Interior (DOI) Grant Agreement for Everglades Watershed Restoration in accordance with the DOI and Related Agencies Appropriations Act, 1999, Public Law 105-277, Stat. 2681 (Grant Agreement), as specified in the paragraph below.

ii. Use of SFWMD Parcels Subject to Encumbrances: FPL shall bear the SFWMD's administrative costs (e.g., surveying, appraisals, and title searches) of release of encumbrances within the proposed transmission line rights-of-way.

e. The following conditions apply to the PCG-AC Alternate Corridor:

i. The subaqueous electric transmission line crossing of the Miami River shall be constructed so as not to impact the flow conveyance capacity of the Miami River.

ii. Downstream of SFWMD water control structure S-26, any crossing of or bulkhead wall use or construction on the Miami River must adhere to SFWMD permit criteria.

f. The following conditions apply to the M-DLPA AC-2 Alternate Corridor:

i. All Licensee transmission facilities placed on the west side of L-31N shall comply with all conditions in Section C.VI.F.2.b. above.

ii. Use of SFWMD East L-31N Right-of-Way (from Tamiami Trail southward to approximately S.W. 100th St).

(a) 230 kV Facilities: If placed within the east District right-of-way the single 230 kV, un-guyed (except for heavy angles) transmission facilities, shall not occupy more than fifty (50) feet westward from the east SFWMD right-of-way boundary.

(b) 500kV Facilities: Where the 500 kV transmission facilities cross SFWMD L-31N, the crossing shall extend to beyond the eastern boundary of the SFWMD L-31N right-of-way.

(c) 160' Clear Zone: Guy wires necessary for the transmission facilities associated with heavy angles may be placed within District Right-of-Way but shall not be placed within one hundred sixty (160) feet of the eastern top-of-bank of the SFWMD L-31N.

iii. Use of SFWMD East L-31N Right-of-Way (Specific Segments): In recognition of the District's and FPL's interests in balancing the environmental impacts (such as potential impacts to wetlands, Everglades National Park, and avian species) and impacts to the District's L-31N/ L-30 property interests arising from the construction, operation and maintenance of the west transmission lines associated with the Turkey Point 6&7 Project, the SFWMD agrees to allow use of its rights-of-way and properties, in exchange for no siting of transmission facilities on the west side of the L-31N canal in Segment 3, notwithstanding the provisions of the 2008 Cooperation Agreement to the contrary, as specified in more detail below:

(a) Segment 3 (Northern Segment): North from approximately SW 56th Street, Licensee agrees that, as part of this Alternate Corridor, in the area north from the westward extension of approximately SW 56th Street, all transmission facilities will be sited east of the SFWMD L-31N Right-of-Way unless Licensee is prevented from utilizing this area (east of the SFWMD right-of-way) by regulatory or proprietary impediments. If such impediments prevent Licensee from utilizing this area, the conditions in Sections C.VI.A. through C.VI.F.2.b. above apply. ("Proprietary impediments" in this provision refers to impediments to the use of property, property interests, or works of any public or governmental agency.)

(b) Segment 2 (Central Segment): In the area between approximately SW 56th Street and the southern boundary of Government Lot 2 Licensee may place transmission facilities associated with a single 230 kV transmission line within the SFWMD east right-of-way.

(1) For purposes of these conditions the SFWMD L-31N east right-of-way line shall be as depicted on Attachment W, including a map and "Sketch and Description Portions of Section 35, Township 54 South, Range 38 East and Government Lot 2 of the Hiatus between Township 54 South and Township 55 South, Range 38 East," dated October 31, 2008.

(2) Licensee shall coordinate with Permittee of SFWMD Standard Permit No. 12872 to ensure compatibility of design and operation of Licensee transmission facilities with Permittee's authorized use of SFWMD right-of-way, or work with permittee and the SFWMD to modify the above-referenced permit. SFWMD proposed conditions and Licensee anticipated compliance therewith in no way constitutes a waiver or variance of the above referenced permit.

(3) Licensee shall design the transmission facilities to be compatible with the SFWMD South Miami microwave tower (B-90) and in compliance with Communication Systems condition in Section C.VI.B. above; if compatibility

requires modification of the SFWMD tower or tower facilities, such modification shall be at Licensee's expense.

(c) Segment 1 (Southern Segment): In the area south of the southern boundary of Government Lot 2 Licensee may place facilities associated with a single 230 kV transmission line within the SFWMD east right-of-way in this segment only to the extent there is mutual agreement between FPL and SFWMD on the placement of transmission facilities within the SFWMD right-of-way.

iv. FPL may use the existing SFWMD access roadways on the L-31N levee and east of the L-31N Canal within the SFWMD ROW, other public roadways, and newly constructed access roads within the corridor boundaries for access to transmission structures within the West Consensus Corridor south of Tamiami Trail.

v. The Licensee shall only have the right to utilize SFWMD right-of-way for those activities, uses, and purposes specifically authorized in this Certification for the purpose of construction, operation, and maintenance of the certified transmission facilities unless otherwise agreed to by the SFWMD Executive Director or his/her designee and Licensee in writing.

[FPL Stipulation – 10/25/13]

VII. MIAMI DADE COUNTY (MDC)

A. General Conditions

The construction, operation and maintenance of all transmission lines shall be in full compliance with applicable non-procedural requirements of Chapter 24 and the MDC Public Works Manual.

[MDC Code, Chapter 24]

B. Noise

FPL shall comply with the applicable non-procedural requirements of MDC's noise ordinance in Section 21-28 of the MDC Code in the construction, operation, and maintenance of the proposed transmission lines.

[FPL Stipulation –7/16/13; MDC Code, Chapter 21, Article IV]

C. Environmentally Endangered Lands (EEL)

1. FPL shall place no transmission line structures or facilities and conduct no construction or maintenance activities within the Sunny Palms EEL Preserve (Parcel ID Number 3078340000140).

2. Impacts to any Environmentally Endangered Lands parcel ("EEL parcel") outside the certified corridor(s) are prohibited, including activities that may result in adverse impacts to EEL parcels, such as encroachment by equipment or other construction materials, the dumping of cut vegetation, and the use of herbicides or pesticides on EEL lands. If the transmission line ROW will be located immediately adjacent to any EEL parcels (see parcels shown in pink on map, Attachment O), FPL shall install high-visibility barriers during construction between the transmission line ROW and any EEL parcels immediately adjacent thereto; however, under no circumstances shall such barriers be located on EEL parcels. These

barriers shall be sufficient to prevent encroachment of fill, sediment, or debris that may result in adverse impacts to EEL parcels, and shall be maintained in good condition and remain in place for the duration of construction. EEL parcels with the potential to be immediately adjacent to the transmission line ROW are:

a. Sunny Palms Pineland EEL Preserve

b. Tamiami Pineland Complex Addition EEL Preserve

c. South Dade Wetlands EEL Preserve

3. Miami-Dade County may acquire additional EEL parcels (see parcels shown in green on map, Attachment O), and upon FPL's submittal of the proposed ROW location within the certified corridor pursuant to Section C. Condition I.A.1. and prior to FPL's final design of the transmission facilities, Miami-Dade County shall notify FPL of EEL acquisitions that may be adjacent to the transmission line ROW. If the transmission line ROW will be located immediately adjacent to such EEL parcels of which FPL has been notified, FPL shall install high-visibility barriers during construction between the transmission line ROW and any EEL parcels immediately adjacent thereto; however, under no circumstances shall such markers be located on EEL parcels. These barriers shall be sufficient to prevent encroachment of fill, sediment, or debris that may result in adverse impacts to EEL parcels, and shall be maintained in good condition and remain in place for the duration of the construction project. Such EEL acquisitions may include, but would not be limited to, additional lands that would be added to the South Dade Wetlands EEL Preserve, as well as the King's Highway Pineland. For the Kings' Highway Pineland Complex Addition EEL Preserve, the above requirements for barriers would apply to that portion of the property that is outside of the transmission line ROW.

[FPL Stipulation –6/19/13; Chapter 24, Article IV, Division 3 of MDC Code; Article 7 of MDC Charter.]

D. Fill within the Transmission Rights of Way

All fill material proposed to be placed within any certified transmission line ROW shall meet the clean fill/soil criteria, pursuant to the definition of Chapter 24-5 of the Code of Miami-Dade County, or shall be compliant with the Soil Reuse Guidance for Miami-Dade County dated March 22, 2004 or the FPL Conceptual Earthwork and Materials Disposal Plan (June 3, 2011), attached as Attachment S, as applicable. Fill from permitted commercial rock mines will not be tested by FPL. If the material is from other off-site sources, FPL will meet with MDC DERM to determine the appropriate testing requirements to ensure that the material complies with the requirements set forth in this section.

[FPL Stipulation –11/1/13; MDC Code, Chapter 24-48.3(4), Article IV, Division 1]

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 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).

[FPL Stipulation – 6/19/13; MDC Code, Chapter 16A]

F. Kings Highway Natural Forest Community (Parcel Folio Number 30-7810-000-0140)

1. Within the Kings Highway Pineland Natural Forest Community (NFC), as defined in Section 24-5 of MDC Code, FPL shall minimize the permanent impacts (defined as the location of pole pads and anchors and other infrastructure that remains post-construction) of the proposed transmission lines to no more than ten percent of the total NFC acreage, without providing appropriate mitigation. To the extent practicable and unless an engineering or safety concern arises, FPL will use best efforts to accommodate the County's preference for the alignment shown on Attachment P (drawing: Figure 2 from FPL's completeness response no. MD(3)-04) regarding the NFC.

2. Within the Kings Highway Pineland NFC, FPL shall avoid and/or minimize the temporary impacts of the proposed transmission lines, including the following measures, to the extent practicable:

a. FPL shall place any new access road outside the designated NFC boundary.

b. FPL shall maintain the substrate and understory within the NFC, utilizing best management practices such as mats and rubber tired vehicles for construction access.

c. FPL shall minimize clearing, grubbing and substrate disturbance within the NFC.

d. FPL shall not stage any equipment, materials, mulch, or debris within the NFC.

e. FPL shall only conduct minimum trimming, pruning or topping of native trees as necessary to maintain the minimum safety and electrical clearances in accordance with the most recent ANSI A-300 Standard Practices of Tree Care Operations.

f. All vegetative debris that is cut, trimmed, topped, or otherwise removed shall be removed by FPL from the NFC for proper disposal.

g. FPL shall install high-visibility barriers during construction to mark for protection any trees and vegetation within the NFC that are outside of the work areas within the ROW during construction. These barriers shall be sufficient to prevent construction impacts, including but not limited to, encroachment of fill, sediment, or debris that may result in adverse impacts to NFC, and shall be maintained in good condition and remain in place for the duration of the construction project.

h. FPL shall not construct roads or install fill for roads and pads within the Kings Highway Pineland Natural Forest Community, although FPL shall be allowed to place the back-fill needed for the installation of the poles required within that parcel.

i. FPL shall utilize low-impact methods for conductor stringing within the Kings Highway Pineland Natural Forest Community.

3. FPL shall eradicate or remove prohibited and controlled plant species and shall manage the transmission line ROW within the NFC to facilitate the regeneration of pine rockland plant species and discourage the growth and introduction of non-pine rockland plant species including hardwood hammock species and exotic species to the extent practicable, as specified in the Miami-Dade County Natural Areas Management Plan for Pine Rocklands.

4. Permanent and temporary impacts to the NFC outside FPL's transmission line ROW are prohibited.

[FPL Stipulation –6/19/13; Section 24-49, MDC Code.]

G. Flowage Easement

Prior to the construction of the TP 6 & 7 Project. FPL shall execute the Flowage Easement, attached hereto as Attachment J (May 2013).

[FPL – Stipulation 6/20/13]

H. Placement of Transmission Facilities within Transit Right-of-Way

1. FPL shall attach no facilities associated with the Davis-Miami transmission line to the Metrorail structure or guideway.

2. FPL shall place the Davis-Miami transmission line at a minimum of 30 ft from the Metrorail dripline or at the maximum practicable distance from the Metrorail structures, and shall in all instances place the transmission line to ensure the minimum clearances required by the National Electrical Safety Code (NESC) or Occupational Safety and Health Administration (OSHA). FPL poles must meet all federal, State and County requirements, including the MDT design criteria and roadway clear zones.

3. Within the East Preferred Corridor, to the extent practicable, FPL shall place transmission line facilities to maintain a minimum two-foot (2') clear zone from the M-Path edge. FPL shall relocate the M-Path if necessary, at FPL's expense, to facilitate this placement.

4. To the extent that FPL proposes to place or replace vegetation or trees within Miami-Dade Transit (MDT) right-of-way (ROW) associated with the Davis-Miami transmission line, FPL shall coordinate with MDT regarding the selection and placement of the vegetation or trees within MDT ROW. Such placement of vegetation or trees within MDT ROW shall be designed to be compatible with MDTs' operational and maintenance needs and as

described in the MDT Manual of Landscaping Standards. The issue of maintenance of any vegetation to be placed within MDT ROW shall be resolved prior to any such placement of vegetation within MDT ROW.

5. FPL shall provide MDT for review the preliminary design, the 50% design drawings and the 100% final design plans showing the pole locations along the Metrorail and Busway corridors, to the MDT to demonstrate compliance with these conditions of certification, as a post-certification submittal, and MDT shall review these plans.

6. A License Agreement shall be developed between FPL and MDT to address the technical issues (including but not limited to, electro-magnetic interference, pole placement, and pole inspection) and legal issues (including but not limited to liability and indemnification) relating to the placement of transmission facilities within MDT ROW, generally in accordance with the License Agreement for the 138-kV Transmission Line at Brickell Station (Miami-Simpson transmission line), with appropriate revisions to address the increased voltage of the new transmission line. Neither party shall unreasonably withhold agreement on the development and implementation of such Agreement. The License Agreement shall be executed by the parties upon final plans acceptable to MDT.

7. FPL's placement of the Davis-Miami transmission line within MDT right-of-way shall be subject to approval of the Federal Transit Administration and Florida Department of Transportation, as appropriate.

8. During the preliminary design, 50% design and the 100% final design of the Davis-Miami transmission line to be placed within MDT right-of-way, FPL shall coordinate with MDT, FDOT and Miami Dade Expressway (MDX) regarding any potential future expansions of MDT, FDOT or MDX facilities. FPL's design shall incorporate the best-available information at the time of final design regarding any future expansion of MDT, FDOT or MDX facilities within the MDT ROW currently being used as the Busway. In the event that MDT, FDOT or MDX may expand or develop new facilities within the MDT ROW in the future, FPL's placement of the Davis-Miami transmission line within the MDT ROW is at risk to FPL of relocation at FPL's expense, pursuant to Section 337.403, F.S.

9. During construction within proximity to Metrorail facilities, FPL shall be required to comply with the applicable non-procedural requirements of the MDT Adjacent Construction Manual, such as having a MDT spotter on-site, at FPL's cost, to coordinate FPL's activities with MDT to ensure safety of mass transit patrons and the MDT system and facilities.

10. FPL work shall not interrupt MDT passenger train service. Any FPL work anticipated to impact MDT passenger train service must be performed during non-service hours.

11. FPL and MDT shall coordinate to identify a transmission line alignment in proximity to the Douglas Road Metrorail Station parcel. FPL shall develop a technically feasible alignment and design, acceptable to MDT, in the Douglas Road Metrorail Station area.

12. All cost to perform any work as stipulated above relating to the Davis-Miami 230kv transmission line, except as may be applicable to paragraph 4, shall be borne by FPL.

[FPL Stipulation –6/20/13; MDC Code Chapter 30-B - Transit Agency Rules and Regulations; Landscape Manual, Chapter 18A; Chapter 24]

I. Mitigation for Mangrove, Wetland and Upland Tree Impacts

1. Prior to any construction within wetlands along the transmission rights-of-way, wetlands impact shall be mitigated in accordance with the Mitigation Plan Rev. 2 (July 2011) (hereinafter "Mitigation Plan").

2. For mitigation proposed at the Hole in the Donut (HID) Mitigation Bank, FPL will utilize the approved functional assessment methodology for the HID at the time of mitigation credit purchase. If the HID has not adopted the Uniform Mitigation Assessment Methodology or a HID-specific functional assessment methodology, FPL will calculate the amount of mitigation credits required based upon ratios for wetland restoration in accordance with the FDEP/SFWMD ERP Basis of Review (B.O.R.) ranging from 1.5:1 to 4:1 [B.O.R. section 3.3.2.1.1(b)]. Mitigation ratios will be determined based upon the quality of impacted wetlands in consultation with FDEP and Miami-Dade County upon final transmission design.

3. Mitigation for impacts to forested wetlands or tree islands shall be mitigated through in-kind mitigation at a mitigation bank or with a project.

4. In FPL's transmission line rights-of-way, FPL must remove cut vegetation from wetland areas. Cut vegetation shall not be dumped in wetlands, should be transported for disposal to an approved facility; all handling shall be in accordance with solid waste disposal regulations.

5. In the final design of the transmission lines, FPL shall avoid and minimize impacts to mangroves and wetlands to the extent practicable. For unavoidable impacts to wetlands, FPL shall provide mitigation by implementing the Mitigation Plan Rev 2 (July 2011) and consistent with the conditions herein. Prior to the commencement of construction of the transmission lines, FPL shall provide a post-certification submittal to MDC demonstrating compliance with this requirement.

6. In the area of the Wink Eye Slough, transmission construction work must maintain an equivalent level of sheet flow to that which currently exists in the slough. FPL shall identify access road design and construction techniques to meet that objective and to accommodate the increased flowage anticipated from the 50cfs pump proposed to be constructed linking the Florida City Canal with Wink Eye Slough under the CERP BBCW Alternative O. In selecting designs to meet these objectives, FPL shall assess the practicability of each option assessed (considering a balance of environmental impacts, land use impacts, engineering constraints and costs).

7. For the transmission lines, FPL shall preserve specimen trees (trunk > 18 inch diameter at breast height) to the extent practicable. Should upland construction damage or require removal of any upland trees, FPL shall replace upland tree canopy in accordance with the requirements of Article IV of Chapter 24, MDC Code. This requirement applies to trees within any newly established FPL transmission line rights-of-way.

8. Prior to commencement of work within each segment of transmission line within uplands on newly established transmission line right-of-way (including site clearing or tree removal), FPL shall submit to Miami-Dade County (or applicable municipalities) for review as a post-certification submittal a tree survey for that segment showing all upland trees proposed to be removed, as well as a tree planting plan to mitigate for the tree canopy to be removed for that segment as required by Section 24-49 of Miami-Dade County Code. Miami-Dade County

(or applicable municipalities) will review the survey and plan for compliance with these conditions of certification. Removal of trees from botanic gardens or state approved nurseries is not subject to the tree or canopy replacement requirements contained herein. For purposes of this condition, state approved nurseries shall mean those nurseries with a valid certificate of registration from the Division of Plant Industry. Mangrove and wetland mitigation requirements are described in other conditions of certification, mangroves and trees located within wetlands are not subject to these tree or canopy replacement requirements.

[FPL Stipulation –6/20/13; Section 24-48(4) and 24-49 MDC Code, CDMP Objective TC-6, Policy TC-6C, and Policy CON-7A; Condition #9 of Z-56-07.]

J. Exotic Vegetation

1. Within FPL's transmission line rights-of-way, FPL shall not plant, import, or propagate, or permit any third party to plant, import, or propagate, prohibited species of exotic vegetation listed in Attachment L (Attachment 2 of MDC's TL Agency Report – the list of 57 Prohibited Species in MDC CDMP).

2. Within FPL's transmission line rights-of-way, during initial construction, FPL shall use best management practices to eliminate the prohibited species of exotic vegetation listed in the Attachment L, such as mechanical methods and selective application of herbicides.

3. Within FPL's transmission line rights-of-way, FPL shall perform periodic maintenance (at least once each three years), or more often as required by current control technology for invasive species such as Lygodium, and use best management practices to control prohibited species of exotic vegetation listed in Attachment L.

4. Within FPL's transmission line rights-of-way, FPL shall not plant the controlled species of exotic vegetation listed in Attachment K (list that currently appears on page IV-15 of the CDMP).

5. Prior to construction, FPL shall provide the County with its Vegetation Management Prescription for the proposed transmission lines, or any other such equivalent documentation relating to use of pesticide, decontamination, and management of exotic vegetation, and shall inform the County when such documentation is updated.

[FPL Stipulation –6/19/13; Section 24-49.9(1), Section 18A-12, MDC Code]

K. Prescribed Burns

1. FPL shall allow MDC or its agents or designees to perform prescribed burns, as approved by the Florida Fire Service (FFS), within the FPL ROW as specified below:

a. Prior to facility construction, in areas where MDC owns or manages property immediately adjacent to or within the FPL ROW, and where the FPL ROW is currently unimproved (i.e. no FPL facilities) FPL shall allow a prescribed maintenance burn within the FPL ROW, except where it would be incompatible due to existing mangrove vegetation or agricultural uses.

b. Following construction, when compatible with electrical clearances required for the lines and if fuel load has been reduced to minimize potential fire intensity and smoke, and upon MDC notice and coordination with FPL, FPL shall allow prescribed maintenance burns at appropriate intervals, within the FPL ROW where MDC owns

or manages property except where it would be incompatible due to existing mangrove vegetation or agricultural uses;

c. If at any time a prescribed burn conducted by MDC results in a line outage, the conditions in this paragraph to allow burning in the FPL ROW shall no longer apply. Any requests for prescribed burning by MDC shall thereafter be considered by FPL on a case by case basis, and permission shall not unreasonably be withheld.

2. Upon request by MDC, FPL shall meet with MDC staff to discuss controlled burn plans adjacent to the FPL ROW to resolve any issues regarding details of those burn plans, including the timing and schedule for proposed controlled burning and reduction of fuel load to reduce fire intensity and smoke. Where the burn plans involve property not owned by MDC or FPL, MDC shall be responsible for obtaining approval from affected property owners as necessary.

[FPL Stipulation –6/19/13; Sections 14-27, 24-41.4, 24-41.5, and Chapter 24, Article IV, Division 3, MDC Code]

L. Within the Proposed Transmission Line ROW in Simpson Park

1. Within the Simpson Park Natural Forest Community (NFC), as defined in Section 24-5 of MDC Code, FPL shall avoid and minimize impacts.

2. To the extent practicable and unless an engineering or safety concern arises, FPL will use best efforts to avoid placement of any transmission facilities within the Simpson Park NFC boundaries.

3. If placement of transmission line facilities within the Simpson Park NFC is unavoidable, FPL shall avoid and/or minimize the temporary as well as permanent impacts of the proposed transmission line to the portion of Simpson Park that is designated a Natural Forest Community (NFC), including the following measures, to the extent practicable:

a. FPL shall place no access road in the portions of Simpson Park that is designated a NFC.

b. FPL shall not stage any equipment, materials, mulch, or debris within the Simpson Park NFC.

c. FPL shall only conduct minimum trimming, pruning or topping of trees as necessary to maintain the minimum safety and electrical clearances in accordance with the most recent ANSI A-300 Standard Practices of Tree Care Operations.

d. All vegetative debris that is cut, trimmed, topped, or otherwise removed shall be removed by FPL from the Simpson Park NFC for proper disposal.

e. FPL shall install high-visibility barriers during construction to mark for protection any trees and vegetation within Simpson Park that are outside of the work areas within the ROW. These barriers shall be sufficient to prevent construction impacts, including but not limited to, encroachment of fill, sediment, or debris that may result in adverse impacts to the Simpson Park NFC, and shall be maintained in good condition and remain in place for the duration of the construction project.

f. FPL shall eradicate or remove prohibited and controlled plant species within the acquired transmission line ROW within Simpson Park NFC and shall manage the transmission line ROW to control those species to the extent practicable.

g. Permanent and temporary impacts to NFC and to Simpson Park outside FPL's transmission line ROW are prohibited unless the impacts are consistent with the requirements of the Section 24-49.

[FPL Stipulation –6/20/13; Resolution Z-56-07, Condition 20; Section 24-49, MDC Code; CDMP Policy CON-8C]

M. Homestead Bayfront Park

1. Within Homestead Bayfront Park, FPL will minimize impacts to the park facilities and uses to the extent practicable by:

a. Locating the new transmission line to be parallel and immediately adjacent to the existing transmission facilities within the existing easement located within the Park;

b. Maintaining, for the new transmission line, the similar span lengths and pole locations as the existing transmission facilities within the existing easement located within the Park; and

c. Using, for the new transmission lines, the same access facilities as the existing transmission facilities within the existing easement located within the Park.

2. FPL shall provide as a post-certification submittal to MDC drawings demonstrating compliance with this condition, including as-built conditions and easement boundaries.

[FPL Stipulation –6/20/13; CDMP Objective LU-3, Policy LU-3B]

N. Rare, Threatened, and Endangered Species

1. FPL shall conduct listed faunal species surveys of the transmission line rights-of-way, report locations of evidence of presence of listed species and suitable habitat found, and implement practicable protection measures to avoid, minimize, mitigate, or otherwise address listed species issues. Listed faunal species protection measures shall be in accordance with FWC regulations and FWC conditions of certification. FPL shall provide MDC with a copy of the listed faunal species survey results along the transmission line rights-of-way and confer with MDC on the proposed protection measures.

2. In areas within or immediately adjacent to natural areas including wetlands pinelands or hammocks that are anticipated to be impacted by transmission line construction, FPL shall conduct federal and state listed floral species surveys of the transmission line rights-of-way and report locations of evidence of presence of listed floral species to MDC. Where practicable FPL shall implement protection measures to avoid and minimize impacts to listed floral species. Where impacts cannot be avoided, FPL shall provide MDC notice and opportunity to salvage or remove any such listed floral species identified in the surveys prior to construction.

[FPL Stipulation –6/20/13; Zoning Resolution No. Z-56-07, Chapter 24 of MDC Code]

O. East Corridor

1. Placement in Established Right-Of-Way in Areas under Miami-Dade County Jurisdiction:

a. The construction, operation and maintenance of the proposed transmission lines in areas under Miami-Dade County's jurisdiction in either the FPL East Preferred Corridor or Pinecrest/ Coral Gables Alternate Corridor ("East Corridor") shall be in a currently existing right of way (ROW), to the extent practicable. The currently existing ROW shall be existing MDC road or MDT ROW, or other previously existing easement or ROW.

b. Where the transmission line will not be located in currently existing ROW, FPL shall establish a ROW prior to construction of the transmission line. Where new ROW is established on private property in the East Corridor under Miami-Dade County's jurisdiction, to the extent practicable, FPL shall not:

i. reduce parking below the minimum required for the use on the subject property (this condition shall not apply if current requirements for parking are not met with current conditions);

ii. adversely impact traffic flow relating to owners or patrons of the subject property;

iii. modify existing signage without owner consent and appropriate approvals (which shall not be unreasonably withheld);

iv. permanently eliminate required landscaping on the subject property without providing for replacement; or

v. modify existing structures without owner consent and appropriate approvals (which shall not be unreasonably withheld).

2. MDC-Approved Development in Corridor:

Upon request by FPL, MDC shall identify for FPL the location of approved but not-yet constructed development within Miami-Dade County's jurisdiction within the East Corridor so that in the design of the 230-kV transmission line within the East Corridor, FPL can plan to avoid or minimize conflicts with any approved but not-yet built development within the transmission line alignment. If no information is provided within 60 days of request by FPL, FPL shall proceed with preliminary design of the transmission line within the East Corridor.

3. Line Placement near Metrorail Stations:

In the design of the 230-kV transmission line within the East Corridor, to the extent practicable, the FPL transmission line alignment shall:

a. Within the Miami-Dade County Rapid Transit Zone (RTZ) boundaries of the Coconut Grove Metrorail Station, avoid placement of the line west of the Metrorail Guideway and avoid the MDT ROW from SW 29th Ave to SW 27th Ave; and

b. Within the RTZ boundaries of the Vizcaya and South Miami Metrorail Stations, avoid placement of the line west of the Metrorail Guideway; and.

c. Within the RTZ boundaries of University Metrorail Station, place the line as shown in the drawings dated 04/01/2010, except as amended herein or as mutually agreed between FPL and the City of Coral Gables; and

d. Within the RTZ boundaries of the Brickell Metrorail Station, avoid placement of the line along SW 1st Avenue or SE 1st Avenue; and

e. Avoid the private property outside the existing MDT ROW (area west of the existing MDT ROW), from SW 98th Street to SW 136th Street (only if MDT agrees to placement of the FPL transmission line alignment within MDT ROW in this location); and

f. Avoid the area shown on Attachment U as the Exclusion Area (from SW 98th Street to the Snapper Creek Expressway (SR 878); and to the extent practicable, place poles within an established ROW and/or co-locate with existing facilities outside of the Exclusion Area.

g. In the event that FPL identifies to MDC in the preliminary design for the transmission line that the avoidance or placement of the areas discussed above is not practicable, FPL and MDC shall work collaboratively to identify a mutually acceptable final design for the 230-kV transmission line in those areas.

4. Transmission Line Poles

a. Pole Design: To the extent practicable, in the East Corridor, FPL shall utilize single pole construction and minimize the use of guy wires, consistent with safe design of the transmission facilities.

b. Pole locations: At least ninety (90) days prior to any construction associated with any segment of the East Corridor, including removal of any vegetation, FPL shall submit a plan showing proposed pole locations to the County pursuant to DEP Condition No. A(XIX) for review for DEP to determine, in consultation with the County, whether the plan complies with these conditions of certification. Plans may be submitted on a segment-by-segment basis.

5. Collocation: For the East Corridor, FPL shall make best efforts to co-locate existing electrical utility facilities with the new transmission line in the East Corridor, where appropriate. As an example, FPL shall under-build distribution facilities on the new transmission line, where practicable.

6. Sidewalks: To the extent practicable, transmission line poles and support structures in the East Corridor shall not be located within existing sidewalks in areas within MDC's jurisdiction. If the poles cannot be located outside of the existing sidewalk, FPL shall either:

a. locate the poles in private easement to avoid the existing sidewalk; or

b. relocate the sidewalk at the same width as the existing sidewalk within the County ROW at FPL's expense to a location identified in consultation with MDC.

c. If neither section 6.1 nor 6.2 are practicable, FPL shall make adjustments to the existing sidewalk to comply with the Americans with Disabilities Act (ADA).

7. Canopy Vegetation:

To the extent practicable, FPL shall design the transmission line within the East Corridor to avoid or minimize impacts to significant existing canopy vegetation.

P. West Corridor and East Corridor

1. Post-Certification Review by Miami-Dade County for Transmission Line Placement:

a. Preliminary Design:

FPL shall identify the preliminary design and alignment for the transmission line alignment for review by MDC as a post-certification submittal pursuant to Section C. Condition I.A.1.

b. Final Design:

Prior to construction, FPL shall provide to MDC the proposed ROW locations as a post-certification submittal, pursuant to DEP Condition No. A(XIX), for review for compliance with these conditions of certification.

2. Public Works Manual Compliance:

In the design of the certified transmission line facilities, to the extent practicable, the FPL transmission line alignment shall:

a. In all locations where a new transmission line is installed in or along County ROW, poles shall be sited to ensure safe sight distance triangles for motorists at all appropriate intersections and along all roadways in the immediate vicinity, to the extent practicable, in accordance with Section G5.3 of the MDC Public Works Manual. FPL shall submit drawings to demonstrate compliance with this condition to the County prior to any construction on the East Corridor or West Corridor. (This requirement is not applicable where right turn on red is prohibited.) All plans shall be signed and sealed by P.E. registered in Florida. Installation of all Transmission poles shall comply with Stopping Sight Distance and Sight Triangle requirements as defined in The Florida Green Book and FDOT Index 546 as applicable.

b. FPL shall design transmission line and pole placements in accordance with the following provisions of the MDC Public Works Manual as applicable:

i. The utility's work, while in progress, shall be properly protected at all times with suitable barricades, flags, lights, flares or other devices as required by the Manual on Uniform Traffic Control Devices, FDOT Roadway and Traffic Design Standards and/or any requirements of the Public Works Department to protect all members of the public using the portion of the streets involved or adjacent property. The utility shall at all times employ due care and shall install, maintain and use commonly accepted methods and devices for preventing failures and accidents which are likely to cause damage, injuries or nuisances to the public. All of the utility's structures and lines, equipment and connection in, over, and upon the public rights-of-way of the County wherever situated or located shall at all times be kept and maintained in a safe, suitable, substantial condition, and in good order and repair. Particular

emphasis must be placed on safety devices for vehicular traffic. Any work that may create a hazard at night shall be well lighted from sunset to sunrise with lamps or lanterns visible from all approaches.

ii. Upon completion of the work, FPL shall restore the entire area disturbed or affected by this work (both public and private property) to the same or equal condition that existed prior to the work. The restoration of the area shall include, but is not limited to, the removal of surplus or unused materials, rubbish, and temporary structures. Disposal of such materials shall not be made in a manner that will violate any portion of the County Code.

iii. All transmission poles erected within the County's rights of way shall be so located as to cause minimum interference with the proper use of streets, alleys, and other public ways and places, and to cause minimum interference with the rights and reasonable convenience of property owners who may join any of the said street, alleys or other public ways and places.

iv. Transmission poles located within Miami-Dade County Rights-of-ways will not willfully, or otherwise, obstruct, damage, destroy or interfere in any way with the functioning of any drain or drainage system. Poles will not be installed within the drain field of a drainage system.

v. All poles shall be placed at the right-of-way line whenever possible.

vi. FPL shall furnish, install, and supervise the traffic control and warning devices, including use of Uniformed Police Officer when specified, without cost to County. When traffic detours are used, 24 hours advance notice shall be given to law enforcement and fire protection services. FPL shall provide to Public Works Department detour plans for review at least three (3) days in advance and variable message signs will be used to alert the public.

vii. Overhead crossings of power lines above Miami-Dade County canals must have a 40 ft. minimum clearance above ground surface, per Section D4.04, Part 2 – Public Works Manual.

viii. FPL shall demonstrate in a post-certification submittal that it meets the applicable requirements of Section D4.04, Part 2 – Public Works Manual, and Chapter 24 of the Code of Miami-Dade County (MDC), for work in or over Miami-Dade County canals by submitting drawings that depict the proposed crossing in both plan and profile views and the following information:

1) The canal right-of-way lines;
2) The top of the canal bank and its elevation;
3) The centerline of the levee and its elevation;
4) The canal maintenance berm and its elevations at its highest point;

5) The location of any poles, towers, and/or access roads located within the County's right-of-way;

6) The location of any anchors, downguys, or spanguys within the County's right-of-way;

7) The elevation of the lowest line, wire, or cable crossing over the County's right-of-way, given at the lowest point of sag in the span within the County's right-of-way; and

8) The location of the facilities in relation to a section line, major road, or other, prominent well-known landmark by which the facilities may be located in the field.

ix.) Should FPL desire to utilize Miami-Dade County's canal rights-of-way for access during construction of the transmission lines and/or for inspection and maintenance after construction, FPL shall submit to the County a detailed plan identifying the proposed route, type and number of vehicles to be used on County canal rights-of-way, and frequency of such use.

[FPL Stipulation- 7/16/13]

Q. Aviation

1. FPL shall not construct any transmission line facilities whose height exceeds 200 ft in any location in Miami Dade County.

2. FPL shall not construct any transmission line facilities whose height exceeds the maximum permitted height as defined for each respective airport (Miami International Airport, Kendall-Tamiami Executive Airport, Homestead General Aviation Airport, and Homestead Air Reserve Base) in Chapter 33, Art. XXXV (Homestead Air Force Base), Art. XXXVII (Miami International Airport) (Wilcox Field), Art. XXXIX (Homestead General Aviation Airport), and Art. XL (Kendall Tamiami Executive Airport) of the County Code.

3. For any transmission line facilities to be located or cranes to be used within any impacted Height Zoning Districts of Miami International Airport, Kendall-Tamiami Executive Airport or Homestead General Aviation Airport (Attachment Q provided for illustrative purposes only), prior to construction, FPL shall provide to Miami Dade County Aviation Department as a post-certification submittal, for purposes of assuring compliance with this condition of certification:

a. all information necessary and fees (in accordance with the Aviation Department Fee Schedule) for a complete "Airspace Letter of Determination" detailing latitude/ longitude locations for all relevant poles;

b. all information necessary for a complete "Permissible Crane Height Determination" application showing proposed crane heights and locations; and

c. a copy of any approvals or determinations from the Federal Aviation Administration (FAA).

4. Prior to construction, FPL shall coordinate with Homestead Air Reserve Base regarding any proposed facilities to be located inside the impacted Height Zoning District (Inner Horizontal Surface) of HARB (Attachment Q provided for illustrative purposes only)

which may include providing HARB with information and documentation equivalent to that described in paragraph 3.

[FPL Stipulation –7/16/13: MDC Resolution Z-56-07, MDC Code Sections 33-330 - 33-350, 33-388 - 33-403, 33-292 - 3-301, 33-372 - 33-387]

R. Trail Glades Park Specific Conditions

1. FPL shall comply with the applicable non-procedural requirements of Chapter 26, MDC Code relative to Trail Glades Range Park.

[MDC Code, Chapter 26]

S. Wellfields:

1. Only herbicides registered by the U.S. Environmental Protection Agency and the Florida Department of Agriculture and Consumer Services shall be used on certified transmission line rights-of-way. 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.

2. With the exception of herbicides as provided in the paragraph above, FPL, its agents and contractors shall not generate, transport, use, handle, dispose of, or store hazardous wastes or hazardous materials as defined pursuant to Section 24-5 of Miami-Dade County Code within any portion of the transmission lines located within a well field protection area in Miami-Dade County.

[FPL Stipulation –11/1/13; Section 24-43, MDC Code]

T. Access Controls:

1. In areas where new transmission access roads provide access to sensitive areas that were previously inaccessible to the public, FPL shall provide gates to manage access. Such newly accessible sensitive areas shall be identified by FPL in consultation with MDC.

2. FPL shall work with MDC to identify new or existing FPL transmission access roads for MDC staff or agents to access adjacent or nearby County-owned or –managed lands and will coordinate with MDC to provide access for MDC staff through such locked gates (double locks, master keys, etc.)

3. Prior to construction of the transmission access roads, FPL will inspect the final ROW to identify where vandalism to FPL gates has occurred, and prepare and implement a plan to repair, improve, or maintain such gates.

4. Within 6 months of certification, FPL and MDC shall exchange appropriate contact information for notification and access coordination. The contact information will be updated as needed to address staffing changes. Coordination shall occur no less often than annually.

[FPL Stipulation –11/1/13]

U. Public Uses of Transmission Line Rights-of-Way:

Following construction of the transmission lines, FPL will work with the County 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.

[FPL Stipulation –11/1/13]

F. Water and Sewer

1. During construction of the certified transmission lines, FPL shall maintain emergency and maintenance access to all MDC water and sewer facilities to the extent practicable. FPL shall notify MDWASD prior to construction in proximity to MDWASD facilities and shall, in accordance with DEP Condition A.XIX, submit a plan for DEP to determine, in consultation with MDC, that access to MDWASD facilities will be maintained should an emergency need arise during the course of construction.

2. Prior to final design, FPL will obtain mapping files of locations of MDWASD facilities and consider those locations in the final design of the certified transmission lines.

[FPL Stipulation –11/1/13; County Public Works Manual, Sections 24.02, 375 and 380.01]

W. Earthwork and Material Handling and Disposal

In the area not covered by the Conceptual Earthwork and Materials Disposal Plan (Rev 0 June 3, 2011), at least 90 days prior to beginning construction of the transmission lines or any associated features, including but not limited to maintenance roadways or structure pads, FPL shall provide to MDC a material management/disposal plan which shall include the following:

1. A Soil reuse proposal for any excavated material proposed to be transported off-site for reuse. The proposal shall be prepared in accordance with the Soil Reuse Guidance for MDC dated March 22, 2004 (http://www.miamidade.gov/environment/pollution-remediation.asp). FPL shall submit a soil reuse proposal to demonstrate, in a post-certification submittal to RER-DERM, compliance with the following standards for soil reuse. Materials to be reused will be inspected in accordance with Chapter 24, MDC Code, or Soil Reuse Guidance (referenced above), or the FPL Earthwork and Materials Disposal Plan, as applicable. Material that meets the MDC Soil Reuse Guidance limits may be stockpiled for future use, reused on- or off- site, or disposed of at an approved facility; material that does not meet the MDC Soil Reuse Guidance limits will be disposed of at an approved facility.

2. Provisions for proper handling and disposal of vegetative debris, including burning, generated during the construction of the transmission line infrastructure.

3. If undocumented contamination of regulated pollutants, contaminant, or hazardous substance as defined in F.S 376.301 or F.S 403.031, is discovered, or in the event of a discharge as defined in F.S 376.301 of regulated pollutants, contaminant, or hazardous substance as defined in F.S 376.301 or F.S 403.031, during project related activities, FPL is required to notify RER-DERM within 48 hours. The impacted material shall be segregated, characterized and managed in accordance with applicable state and local regulations or reused in accordance

with the Soil Reuse Guidance for MDC dated March 22,2004 http://www.miamidade.gov/environment/pollution-remediation.asp). Nothing herein releases FPL of its obligations to comply with all applicable federal, state, and local laws, rules and regulations

[FPL Stipulation –11/1/13]

X. Access to Transmission ROW

FPL shall utilize adjacent existing public roads for access to the transmission line ROW for construction, operation, and/or maintenance purposes, to the extent practicable.

[FPL Stipulation –11/1/13]

Y. Wetland Mitigation Protection Requirements:

Prior to final design, FPL shall request from MDC all records of permit documents and legal instruments including but not limited to Miami-Dade County Zoning Approvals and/or Permits relating to wetlands located in the certified corridor including Class IV Permits, Restrictive Covenants, wetland determinations and platting and zoning comments. Any information provided by MDC within thirty (30) days of FPL's request shall be used by FPL to inform the final design in order to avoid and to minimize impacts to wetlands and mitigation areas as required herein. To the extent required by law, FPL agrees to abide by the aforementioned approvals, permits and other legal instruments unless such are modified by Miami-Dade County.

[FPL Stipulation –11/1/13]

Z. Protected Tree and Vegetation

All tree islands shall be preserved within the Bird Drive Everglades and North Trail Wetland Basins.

[MDC Code Section 24-48.3(5)(b)]

VIII. CITY OF CORAL GABLES (CCG)

A. Transmission Line Project.

FPL shall construct the Transmission Project within the CCG only to the extent that it will be connected in time and electrical connection and similar in design to the transmission facilities in the City of South Miami and the City of Miami and along the FPL East Preferred Corridor as proposed in the Site Certification Application, immediately to the north and south of the CCG.

B. Transmission Line Design.

1. The location, number, height, and size of poles for this Transmission Project within the CCG shall be as shown in the drawings dated 04/01/2010, except as amended herein or as mutually agreed between FPL and the City.

2. FPL shall place no transmission poles with an above-ground height higher than the height shown in the permit drawings dated 04/01/2010, and no poles with an above-ground height greater than 98.0' within the CCG. The sway of the wires shall not exceed a range of 10-18.5'

3. FPL shall place no transmission poles with a ground-level diameter greater than the diameter shown in the permit drawings dated 04/01/2010, and no poles with a ground-level diameter greater than 4.1' within the CCG.

4. FPL shall place no more than forty-nine (49) to fifty-one (51) transmission poles within the CCG.

5. FPL shall place no appurtenances with the Transmission Project within the CCG.

6. The Transmission Project shall involve the removal of the existing transmission line poles and replacement of those poles with new poles, at FPL's expense, as set forth in B.1.above.

C. Tree Replacement and Vegetation Management

In accordance with FPL's drawings of 4/01/2010, the Transmission Project shall involve the removal of 7 royal palms (to be replanted elsewhere), 7 canary date palms (to be replanted in the same general location farther away from the transmission poles), and 1 Washingtonian palm.

1. Prior to construction, FPL shall provide a Compliance Plan identifying the planned replacement or replanting of trees by FPL at FPL's expense in the vicinity of the Transmission Project, or contribution to the City's Tree Fund, to demonstrate compliance with the CCG Code Chapter 82, Article II, unless FPL and the CCG reach agreement in writing on other measures to demonstrate compliance with these requirements. The Compliance Plan shall give due weight to canopy protection and maximum tree retention and tree replacement. FPL shall commit that FPL shall relocate trees as a first option as needed, and only when relocation is not feasible, FPL shall replace trees on at least a one-to-one basis.

2. Prior to construction, FPL shall conduct a field meeting with appropriate City staff to review the location of existing trees within the transmission line work area.

3. Within 60 days of completion of construction, FPL shall notify the CCG of same in order that the CCG may conduct an inspection to confirm FPL's compliance with these conditions, in accordance with Section 82-30(f) of the CCG Code.

4. In accordance with Section 82-32(a) of the CCG Code, to the extent practicable, FPL is responsible for any damage to trees caused by FPL during construction, and will restore or replace any damaged trees. In the unlikely event that any tree should need to be temporarily relocated during construction, FPL shall notify the CCG in advance of said relocation and its successful replanting.

5. All trees planted or transplanted by FPL pursuant to this condition shall be maintained alive and healthy in the site of planting or transplantation for a period of 24 months from planting or transplantation. Any of such trees that die or are effectively destroyed within such 24 months shall be replaced by FPL

6. During operation of the transmission line, FPL shall use best management practices to retain existing native vegetation where it does not interfere with the safe, reliable operation of the electrical facilities, in compliance with section 163.3209, Florida Statutes, which incorporates by reference National Electrical Reliability Corporation (NERC) standard FAC-003-1, American National Standards Institute (ANSI) standards A300 (Part 1)-2001 and Z133.1-2000, and National Electrical Safety Code (NESC) standards adopted by the Florida Public Service Commission. Prior to conducting scheduled routine vegetation maintenance and tree pruning or trimming activities within the transmission line right-of-way, FPL shall meet with the CCG to coordinate such activities. In accordance with the typical practice between FPL and the

City, FPL shall coordinate with the CCG on transmission line vegetation management activities within the City.

D. Restoration and Use of City ROW Following Construction

1. FPL shall locate the Transmission Project within or adjacent to existing public ROW as set forth in B above.

2. FPL shall restore the areas of work, including City rights-of-way, to the conditions as good or better as those existing prior to FPL's construction activities. This provision applies to areas of excavation, sidewalks, pavement, curbs, sod or shrubs, and similar areas of work within the City, whether within or outside the transmission line right-of-way.

3. FPL shall repair or restore any bike trails or sidewalks that are damaged by FPL during its construction of the transmission line within the City. FPL shall coordinate with the CCG and Miami Dade County as to any work related to the Transmission Project and involving the M-Path immediately adjacent to City rights-of-way.

4. Upon request from the City, FPL shall coordinate with the CCG to allow shared or multiple uses of the transmission line area to the extent compatible with the safe, reliable operation of the Transmission Project and other electrical facilities.

E. Drainage

FPL shall cause no adverse impacts to drainage in the construction, operation, and maintenance of the transmission line within CCG.

F. Solid Waste

Prior to completion of construction within the City, FPL shall collect, remove, and dispose of debris and solid waste from FPL work areas.

G. Historic Preservation:

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 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).

H. Construction and Traffic Management

1. Prior to construction of the Transmission Project as a post-certification submittal FPL shall

a. provide all information necessary for a complete *Application for Permit for Construction In Public Right-of-Way,* including compliance with the applicable substantive requirements of the CCG Public Works Department Standard Details and Chapter 62 of the CCG Code, including detailed construction plans, dates for construction, timing of construction activities, and any work activities within CCG rights-of-way, and

b. pay the appropriate fees.

2. Prior to construction of the Transmission Project, FPL shall coordinate with the CCG:

a. FPL shall conduct a field meeting with appropriate City staff to review the proposed work areas within the transmission line right-of-way and adjacent thereto.

b. FPL shall coordinate with the CCG Manager regarding any additional notifications to be provided to CCG residents in the immediate vicinity of the construction work.

c. FPL shall comply with the Maintenance of-Traffic Plans submitted to the City on 4/28/2010 and 4/29/2010, or as amended by mutual agreement between FPL and the CCG, which provide:

i. Names of public roadways to be used in transportation of transmission poles;

ii. Period of time for construction work within City ROW; and

iii. Period of time for completion of construction within CCG ROW. The Maintenance-of-Traffic Plans shall be insubstantial accordance with the CCG's Standard Operating Procedure (SOP) #57.

iv. If construction of the Transmission Project Is not commenced within three years of July 2, 2013, FPL shall provide annual updates to and coordinate with the CCG regarding progress of construction.

I. Noise of Transmission Line Construction:

1. During construction of the Transmission Project, FPL proposes to mitigate and minimize the potential noise impacts of construction by scheduling activities to be completed during weekdays and during daylight hours (7:30 am to 6:00 pm) to the extent practicable.

2. To the extent that night-time construction of the Transmission Project is required, FPL will coordinate with the CCG at least seven (7) days in advance of such night time construction and will use best management practices to provide (at FPL 's cost) appropriate notification to adjacent landowners. Construction work in the vicinity of Ponce de Leon Boulevard and Red Road, for the installation of structure 82A12, may require night-time work for no more than two (2) nights, and FPL shall consult with the CCG Manager in advance of any night time work.

J. Noise of Transmission Line Operation

In the unlikely event that the normal operations of FPL's Transmission Project causes noise that can be heard within the CCG's Fire Station No.2 building and that is disruptive to the operations of the CCG's Fire Station No. 2 and/or CCG firefighters, FPL agrees that it will, within twelve (12) hours of notice from the CCG of such audible noise, begin immediate, exhaustive and decisive measures to remedy the disruption caused by FPL's Transmission Project on a case-by-case basis, at no cost to the CCG. FPL shall at all times comply with the CCG's Noise Ordinance with respect to noise levels anticipated to be potentially audible to the adjacent residential neighborhoods including the mixed-use development district.

K. Maintenance of Pedestrian and Bicycle Traffic

During construction activities, FPL shall minimize impacts to pedestrian and bicycle traffic to the greatest extent practicable.

L. Emergency Management

FPL shall coordinate with the CCG regarding the Davis-Miami 230-kV transmission line during times of emergency.

M. Communications Systems

FPL's Transmission Project shall not result in harmful interference or other adverse impacts to the CCG Communications System and Facilities (CGCSF), as described below. The CGCSF are the collection of the microwave relay system, the 800 MHz city-wide communications system, and systems at other radio frequencies licensed and operated by the CCG.

1. Prior to initiation of detailed design of the Transmission Project, FPL shall request an updated list from Coral Gables identifying existing communication facilities within 500 feet of the certified transmission line corridor.

2. FPL shall take the CGCSF into consideration during its design to avoid harmful interference, as defined by the FCC, or adverse impacts to CGCSF. Adverse impacts to CGCSF shall be defined as any manifestation of performance degradation, misinterpretation, or loss of information beyond the range of normal variation in signal strength that would not otherwise happen in the absence of unwanted energy or physical obstructions.

3. The Consulting Engineer shall take the following CGCSF technical specifications into consideration in the proposed transmission line design.

i. For maintenance of microwave communications performance and reliability purposes, the design for the Transmission Project shall be consistent with GTE Lenkurt Inc., "Engineering Considerations for Microwave Systems", Sections C.5 "Terrain Effects" and C.7 "Clearance Criteria".

ii. For maintenance of land mobile radio voice communications base station and area coverage performance and reliability purposes, the design for the Transmission Project shall be such that the radio frequency (RF) noise floor, in either clear or rainy conditions, attributable to the Transmission Project, is not sufficient to cause harmful interference or other harmful impacts to CGCSF.

4. Coral Gables anticipates installing a new microwave link between its microwave antenna at Fire Station No.2 and a public safety facility at the University of Miami (UM Project). In designing the UM Project, Coral Gables shall use all normal measures to avoid and mitigate interference that could be caused by the Transmission Project. Coral Gables will advise FPL when final location and design of that UM Project is being identified, and FPL shall have the option to participate in identifying reasonable measures to avoid or mitigate any interference that could be caused by FPL's Transmission Project to that new microwave link.

5. In the event FPL chooses to conduct evaluations, including modeling and measurements for the UM Project, required or authorized by the conditions of certification, FPL in consultation with Coral Gables, shall identify and retain an independent Consulting Engineer(s) with demonstrated knowledge of and/or experience with RF and microwave communications systems such as the CGCSF for the purpose of conducting the evaluations. FPL shall be responsible for payment of fees charged by the Consulting Engineer(s).

6. If the Consulting Engineer determines that harmful interference or adverse impacts are likely to occur despite implementation of normal measures to avoid and mitigate interference with the CGCSF or the UM Project, FPL shall avoid or mitigate for such harmful interference or adverse impacts. All mitigation costs attributable to FPL-created harmful

interference or adverse impacts shall be the responsibility of FPL. Such mitigation will be implemented on a mutually agreeable schedule upon determination that the transmission facilities will produce or are producing harmful interference or adverse impacts to CGCSF. Design and mitigation solutions to offset adverse impacts to the CGCSF or the UM Project shall be submitted to Coral Gables as a post-certification submittal pursuant to DEP General Condition XIX.

7. CCG Fire Station No.2 - Microwave Relay Station. As a baseline, the CCG will provide FPL, prior to FPL's commencement of construction, with the most recent copy of the maintenance document for CCG's Alcatel Microwave radio system that is currently in production at both ends of the link. This maintenance document will include the RSSI (received signal strength indication) and BER (bit error rate) for the link between the CCG Fire Station No.2 and 2800 Ponce de Leon Boulevard in order to allow for a comparison of radio configurations both before and after (a) the installation of FPL's Transmission Project, (b) after the energization at 138 kV of the Transmission Project, and (c) after the energization at 230 kV of the Transmission Project. The CCG will also provide FPL with circuit requirements and location endpoint information for both ends of the microwave relay path, to allow FPL to secure a Tl line temporarily required to serve CCG emergency communications needs, if needed, as a result of construction activities during FPL's installation of the Transmission Project. If necessary in order to ensure maintenance of uninterrupted operation of the CCG's emergency communications system, FPL will provide the CCG with appropriate remedial measures including, but not limited to, larger antennas, taller transmission structures, raising or lowering the CCG's antenna, or a temporary T1 circuit during FPL's construction activities. If necessary, FPL will provide the CCG with a point-to-point path study of the microwave link for the current production system to confirm the measured RSSI.

8. City Wide Radio Network - As a baseline, the CCG will provide FPL, prior to FPL's commencement of construction, with a report of the most recent "drive test" of their 800 MHz radio communications system. The "drive test" will be performed by an entity selected in advance and mutually agreed upon by the CCG's and FPL's respective RFI experts to have training and experience in identifying and locating sources of RFI; the "drive-test" will capture the current performance of the CCG's existing radio communications system. FPL acknowledges and agrees that the CCG's radio network serves a public safety/life safety function and cannot be interrupted. FPL agrees that it will not cause radio blocking or radio frequency interference (collectively, RFI) on any of the CCG's local, state, and/or federally-licensed radio frequencies. In the unlikely event that FPL's Transmission Project does cause RFI on CCG's federally-licensed radio frequencies, despite FPL's best efforts to avoid such RFI, FPL agrees that it will, within twelve (12) hours of notice from the CCG, begin immediate, exhaustive and decisive measures to remedy the disruption caused by FPL's Transmission Project on a case-by-case basis, at no cost to the CCG.

9. Other Frequencies - FPL acknowledges there are other radio frequencies licensed and operated by the CCG, including VHF, UHF and 220 MHz frequencies. In the unlikely event that FPL's Transmission Project does cause RFI on the CCG's other local, state, and/or federally-licensed radio frequencies, despite FPL's best efforts to avoid such RFI, FPL agrees that it will, within twelve (12) hours of notice from the CCG, begin immediate measures to remedy the disruption caused by FPL's Transmission Project on a case-by-case basis, at no cost to the CCG.

10. Identifying RFI. FPL and CCG acknowledge and agree that each has the ability to identify RFI on CCG's facilities and the RFI source. In the event of a dispute between CCG and FPL as to the source of RFI on CCG's facilities, the Parties agree that a third party RFI expert, selected in advance and mutually agreed upon by the CCG's and FPL's respective RFI experts to have training and experience in identifying and locating sources of RFI, will investigate and identify the source of the RFI on CCG's facilities. In the event that FPL is determined by the third-party RFI expert to be the cause of the RFI on CCG's facilities, FPL will pay the costs and expenses associated with such third-party RFI expert; in all other instances, the CCG shall be responsible for all costs and expenses associated with the third-party RFI expert. CCG and FPL shall cooperate with one another in any efforts to identify the source of RFI on CCG's facilities and/or to remediate the effects of RFI on CCG's facilities.

11. In the unlikely event that FPL's Transmission Project does cause RFI on CGCSF, despite FPL's best efforts to avoid such RFI, FPL agrees that it will, within twelve (12) hours of notice from the CCG, begin immediate measures to remedy the disruption caused by FPL's Transmission Project on a case-by-case basis, at no cost to the CCG.

12. CCG and FPL Contact Information. For routine communications, City and FPL can be reached at the following numbers:

City Manager's Office (cc: CCG Attorney's Office, Chief of Police)
Emergency Contact: 305-442-1600, ask for on-call radio tech

FPL: FPL's Coral Gables Representative
Emergency Contact: 305-552-4357 or 305-442-5731

CCG and FPL shall verify this contact information in writing to the other Party on October 1 and April 1 of each calendar year.

13. Notices. All notices, requests, consents and other communications required or permitted under this Memorandum shall be in writing and hand delivered or sent by reliable overnight courier to the address for the recipient Party set forth at the top of page one of this Memorandum. Unless there is a disruption of Public Safety communications, then the most expedient method shall be used.

N. Detailed Construction Schedule

FPL shall meet with and coordinate with the CCG to provide a detailed timetable for the construction sequencing within the CCG's boundaries. The schedule shall be routinely updated and coordinated with the Office of the CCG Manager.

O. Monitoring

Monitoring reports providing the status and condition of the Transmission Project construction activities shall be provided to the CCG upon request until all on-site construction is completed.

P. Indemnification

The CCG shall in no way be liable or responsible for any accident or damage that may occur in the construction, operation or maintenance by FPL of the Transmission Project hereunder, and the acceptance of this Memorandum shall be deemed an agreement on the part of FPL to indemnify, defend, and hold harmless the CCG against any and all liability, loss, cost, damage or expense which may accrue to the CCG by reason of the negligence, default or

misconduct of FPL in the construction, operation or maintenance of the Transmission Project hereunder.

[FPL Stipulation –7/3/13]

IX. CITY OF DORAL (COD)

A. Noise

FPL shall comply with the applicable non-procedural noise requirements in the construction, operation, and maintenance of the proposed transmission line.

[COD, Chapter 26-128]

B. Open Burning

If any open burning is necessary for the construction, operation, and maintenance of the proposed transmission line, FPL shall consult with the city manager.

[COD Code, Chapter 20-3]

X. CITY OF MIAMI (COM)

A. Archaeological Resource Preservation

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.

[COM Code, Chapter 23; FPL Stipulation – 10/25/13]

B. Scenic Transportation Corridor

Any work done along a "Scenic Transportation Corridor" (starting at SW 13th street and continuing along Coral Way) requires documentation that would meet the applicable non-procedural requirements of a certificate of approval pursuant to Chapter 17, Article II, Sec 17-33, City Code.

[COM Code, Chapter 17, Article II]

C. Maintenance of Pedestrian and Bicycle Traffic

1. During construction activities, FPL will minimize impacts to pedestrian and bicycle traffic to the greatest extent practicable.

2. Placement of the transmission line poles shall be located off sidewalks and bicycle lanes, to the extent practicable, and ADA access must be accommodated at all times during construction. Where portions of the transmission poles are along the M-path, those sections shall be refurbished after construction.

[FPL Stipulation – 10/25/13]

D. Informational Submittal of Final Design Plan

1. Prior to construction, FPL will submit as a post-certification submittal, pursuant to S. 403.5113, F.S., to the COM a final design plan of the Davis-Miami 230 kV transmission line within the City, as applicable, showing:

a. The proposed right-of-way location overlaid on aerial photographs depicting existing conditions;

b. Number and size of all proposed facilities within the proposed right-of-way;

c. Property boundary lines within the proposed right-of-way;

d. Construction timetables and schedules for work within the City; and

e. Plans to maintain traffic within the City to the extent practicable during construction activities.

[COM Code, Chapter 54; FPL Stipulation – 10/25/13]

2. Noise

FPL shall comply with the substantive requirements of the City of Miami's noise ordinance, Chapter 36, Code of the City of Miami, in the construction, operation and maintenance of the proposed transmission line. During construction of the proposed transmission line, FPL will mitigate and minimize the potential noise impacts of construction by scheduling activities to be completed as much as practicable during daylight hours (8 am to 6 pm) in accordance with the substantive requirements of Chapter 36, Code of the City of Miami. To the extent that nighttime construction is required, FPL will notify the City in advance of such nighttime construction.

[COM Code, Chapter 36; FPL Stipulation – 10/25/13]

3. Construction Trailer

FPL shall comply with the applicable non-procedural requirements pursuant to Chapter 62 for construction trailers.

[COM Code, Chapter 62; FPL Stipulation – 10/25/13]E.

E. Emergency Management

FPL will coordinate with the COM Office of Emergency Management (or designee) regarding the Davis-Miami 230-kV transmission line during times of emergency.

[FPL Stipulation – 10/25/13]

F. Communication Systems

FPL's Transmission Project shall not result in harmful interference or other adverse impacts to the City of Miami Communications System and Facilities (CMCSF), as described below. The CMCSF are the collection of the microwave relay system, the 800 MHz city-wide communications system, and systems at other radio frequencies licensed and operated by the City.

1. Prior to initiation of detailed design of the Transmission Project, FPL shall request an updated list from the City identifying existing communication facilities within 500 feet of the certified transmission line corridor.

2. FPL shall take the CMCSF into consideration during its design to avoid harmful interference, as defined by the FCC, or adverse impacts to CMCSF. Adverse impacts to CMCSF shall be defined as any manifestation of performance degradation, misinterpretation, or loss of information beyond the range of normal variation in signal, strength that would not otherwise happen in the absence of unwanted energy or physical obstructions.

3. In the event FPL chooses to conduct evaluations, including modeling and measurements for the CMCSF, required or authorized by the conditions of certification, FPL in consultation with the City, shall identify and retain an independent Consulting Engineer(s) with demonstrated knowledge of and/or experience with RF and microwave communications systems such as the CMCSF for the purpose of conducting the evaluations. FPL shall be responsible for payment of fees charged by the Consulting Engineer(s). If the Consulting Engineer determines that harmful interference or adverse impacts are likely to occur despite implementation of normal measures to avoid and mitigate interference with the CMCSF, FPL shall avoid or mitigate for such harmful interference or adverse impacts. All mitigation costs attributable to FPL created harmful interference or adverse impacts shall be the responsibility of FPL. Such mitigation will be implemented on a mutually agreeable schedule upon determination that the transmission facilities will produce or are producing harmful interference or adverse impacts to CMCSF. Design and mitigation solutions to offset adverse impacts to the CMCSF shall be submitted to the City as a postcertification submittal pursuant to Section A. Condition XIX.

[FPL Stipulation – 10/25/13]

G. Restoration of Conditions in City ROW

Upon conclusion of construction activities, FPL shall restore any pavement, surfacing, grass, plantings, driveway curbs, walks, or other surface structures affected by the construction operations, together with all sod and shrubs, to their original conditions, whether within or outside the transmission line right-of-way.

[FPL Stipulation – 10/25/13]

XI. CITY OF SOUTH MIAMI (CSM)

A. ROW Location Conditions:

1. FPL shall employ best management practices, construction techniques, and adequate culverting in order to maintain existing drainage patterns along the Certified Transmission ROW.

[CSM Code, Chapter 10A,]

2. FPL shall not block streets or close streets without notice to the CSM for police supervision and protection.

[CSM Code, Chapter 17]

3. FPL shall notify the CSM of any road closures.

[CSM Code, Chapter 17-8.1]

4. FPL shall comply with the CSM's hours of work.

[CSM Code, Chapter 15-91]

B. Solid Waste

FPL shall collect, convey, and dispose of all garbage, refuse and solid waste accumulated within the city limits by and through the public works department of CSM or a private franchised refuse collection firm. No person, firm or corporation shall, for a fee, collect and dispose of or transport over the city streets any garbage, refuse and solid waste except as provided in Chapter 11.

[CSM Code, Chapter 11]

C. Emergency Management

1. FPL shall coordinate with CSM City Manager during times of an emergency or evacuation.

2. FPL shall submit an emergency response plans to assist the CSM should an emergency arise relating to local contacts for FPL, and local plan of action to ensure the safety to the community, including evacuation of the area, and/or diligent repair of downed lines and/or plants, amongst other criteria.

[CSM Code, Chapter 14]

D. Noise and Demolition

FPL shall comply with the applicable non-procedural requirements noise ordinance and noise reduction program. No building operations or demolition activity shall be conducted on Mondays-Fridays between the hours of 6:00pm and 7:00am, Saturdays before 9:00am and after 5:00pm and all day on Sundays except with consultation with city manager and only in case of emergency.

[CSM Code, Chapters 15-91 and 7-15.2]

XII. VILLAGE OF PINECREST (VOP)

A. Nuisances

1. Unlawful accumulations of materials; disposal and storage of goods.

FPL shall not place, sweep, scatter, throw or dump or cause to be placed, swept, scattered, thrown or dumped for any purpose whatsoever, any refuse, rubbish, or trash of any kind, any commercial trash, industrial waste, tree trimmings, or similar material in or upon:

a. Any road, street, parkway, sidewalk, park, lake or bank of any river, stream, lake, watercourse or pool, or any portion thereof, within the limits of VOP, or upon

any VOP owned real property, except under the rules and regulations promulgated for the handling of such material, at a designated place, and with the consent of VOP or its designated agents or employees. Garbage shall be placed in secured containers (i.e. garbage cans) in order to prevent disturbance of contents by animals.

b. Private property not owned or controlled by FPL, within VOP limits, without the consent of the owner of said private property.

2. Commercial vehicles/equipment in residential districts.

a. FPL shall refrain from the outside storage of any commercial equipment, steel storage containers, supplies, or materials within the Village.

b. FPL shall refrain from storing tractor-trailers, tractor-trucks, semitrailers, mobile homes, trailers, and portable dwelling units on any parcel of land within the village. Tractor-trailers may be permitted for purposes of loading and unloading. Port-a-potties shall not be placed on swales and must be located 15 feet from the property line. The use of a construction trailer is prohibited within the Village.

c. Litter/waste.

i. *Waste liquid or refuse upon public ways.* FPL shall not permit waste water, oil, grease or other waste liquids to drain from its East Preferred Corridor work site upon and across, or permit or cause waste matter or refuse of any nature whatsoever to rest or accumulate upon the sidewalks, streets or other public ways of VOP, except in alleys in receptacles approved by the enforcement official.

ii. *Litter in public places.* FPL shall not throw or deposit litter in or upon any street, sidewalk or other public place within VOP except in public receptacles, in authorized private receptacles for collection, or in official trash stations.

iii. *Placement of litter in receptacles.* FPL, when placing litter in public receptacles or in authorized private receptacles, shall do so in such a manner as to prevent it from being carried or deposited by the elements upon any street, sidewalk or other public place or upon private property.

iv. *Sweeping litter into public ways.* FPL shall not sweep into or deposit in any gutter, street or other public place within VOP the accumulation of litter from any building or lot or from any public or private sidewalk or driveway. During periods of construction, maintenance, and operation of the transmission facilities, FPL shall keep the sidewalk adjacent to the transmission right-of-way free of litter.

v. Litter in parks. FPL shall not throw or deposit litter in any park within VOP except in public receptacles and in such a manner that the litter will be prevented from being carried or deposited by the elements upon any part of the park or upon any street or other public place. Where public receptacles are not provided, all such litter shall be carried away from the park by the person responsible for its presence and properly disposed of elsewhere as provided herein.

vi. Posting notices prohibited. FPL shall not post or affix any notice, poster or other paper or device, calculated to attract the attention of the public, to any lamppost, public utility pole or shade tree, or upon any public structure or building, except as may be authorized or required by law.

vii. Litter on occupied private property. FPL shall not throw or deposit litter on any occupied private property within VOP, unless FPL is in control of said private property for the purposes of constructing maintaining, or operating the transmission facilities, in which case, FPL may maintain thereon private receptacles for collection in such manner that litter will be prevented from being carried or deposited by the elements upon any street, sidewalk or other public place or upon any private property.

viii. Owner to maintain premises free of litter. In the event that FPL is in control of any private property for the purpose of constructing, maintaining, or operating the transmission facilities, whether said property is occupied or vacant, FPL shall at all times maintain the premises free of litter. FPL shall, however, be permitted to store litter on such private property in authorized private receptacles for collection.

ix. Litter on vacant lots. FPL shall not throw or deposit litter on any open or vacant private property within VOP whether owned or controlled by FPL or not.

[VOP Code, Chapter 15, Article 1]

B. Emergency Management.

FPL shall comply with applicable VOP ordinances concerning emergency management.

[VOP Code, Chapter 12, Article 3]

XIII. VILLAGE OF PALMETTO BAY (VPB)

To the extent that any portion of the Davis-Miami 230kV transmission line is located within the Village of Palmetto Bay, FPL shall comply with the following conditions:

A. Informational Submittal of Final Design Plan

Prior to construction, FPL will submit as a post-certification submittal to the Village a final design plan of the Davis-Miami 230-kV transmission line within the Village as applicable, showing:

1. The proposed right-of-way location overlaid on aerial photographs depicting existing conditions;
2. Number and size of all proposed facilities within the proposed right-of way
3. Property boundary lines within the proposed right-of-way;
4. Locations of known above-ground and under-ground utilities within the proposed right-of-way;
5. Construction timetables and schedules for the work within the Village;
6. Plans to maintain traffic within the Village to the extent practicable during construction activities.

B. Drainage:

Prior to construction, FPL will submit as a post-certification submittal to the Village information showing replacement of existing facilities within the FPL easement east of and immediately adjacent to US 1. There will be no changes to existing grade as part of the construction, operation or maintenance of the certified transmission line.

C. Use of Village Rights of Way:

The Davis-Miami 230kV transmission line right-of-way will not be located on Village rights-of-way.

D. Stormwater:

The Davis-Miami 230-kv transmission line right-of-way will involve no stormwater management facilities within the Village.

E. Construction Activities within the Village:

No long-term staging areas for the Davis-Miami 230-kV transmission line construction will be located within the Village.

F. Maintenance of Pedestrian and Bicycle Traffic:

During construction activities, FPL will minimize impacts to pedestrian and bicycle traffic to the greatest extent practicable.

G. Emergency Management:

FPL shall coordinate with the Village of Palmetto Bay Emergency Management Department regarding the Davis-Miami 230-kV transmission line during times of emergency.

H. Noise

FPL shall comply, with the Village's noise ordinance in the construction, operation and maintenance of the proposed transmission line. During construction of the proposed transmission line, FPL will mitigate and minimize the potential noise impacts of construction by scheduling activities to be completed as much as practicable during the daylight hours (7am to 6pm) in accordance with Chapter 15 of the Village Code of Ordinances. To the extent that nighttime construction is required, FPL will notify the Village in advance of such nighttime construction.

I. Vegetation Tree Trimming:

FPL shall comply with Chapter 29 of the Village's Code of Ordinances with respect to vegetation trimming within the Village, as applicable. For any replacement planting by FPL, FPL will provide a post-certification submittal to the Village demonstrating compliance with the Village's landscaping plans and "Right Tree-Right Place Guidelines".

J. Restoration of Conditions:

Upon conclusion of construction activities, FPL shall restore any pavement, surfacing, driveway curbs, walks, or other surface structures affected by the construction operations, together with all sod and shrubs, to their original conditions, whether within or outside the transmission line right-of-way.

[VPB Code, Chapter 14, Article III, Section 14-84; Chapter 15, Section 15-54, Article III; and Chapter 29, Article II, Section 29-53; FPL Stipulation 5/30/13]

XIV. BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

A. Submerged Land Easement for Transmission Line Crossing of the Miami River

1. Upon its execution and thereafter, the Licensee shall comply with any Sovereign Submerged Land Easement for Transmission Line Crossing of the Miami River directed to be issued by the Order of Certification for this facility (Attachment H-b). After the submerged transmission line crossing of the Miami River is constructed, FPL shall submit an as-built survey of the transmission line and its location to the Division of State Lands, and the area subject to this easement shall be adjusted to include only the land within 50 feet on either side of the transmission line conduit. Any renewals of the easement shall be submitted by the Licensee to the Siting Coordination Office.

2. Prior to the issuance of any Sovereign Submerged Land Easement for Transmission Line Crossing of the Miami River directed to be issued by the Order of Certification for this facility, FPL must provide the Division of State Lands written consent or other appropriate evidence of consent or acquisition of the rights of any existing legal users.

B. Upland Easement

1. Upon its execution and thereafter, the Licensee shall comply with any Upland Easement for Transmission Line Right of Way directed to be issued by the Order of Certification for this facility (Attachment H-c, to be provided). Any renewals of the easement shall be submitted by the Licensee to the Siting Coordination Office.

a. Prior to the issuance of the upland easement, FPL must pay to the Division of State Lands an easement fee in accordance with the provisions of Section 253.02(2) of the Florida Statutes and Chapter 18-2, F.A.C.

b. Prior to the issuance of the upland easement, FPL must provide to the Division of State Lands written consent or appropriate evidence that Vecellio & Grogan, Inc., has either consented to the easement over lands which it currently leases from the State of Florida, or that FPL has acquired the portion of Vecellio & Grogan, Inc's. leasehold proposed to be encumbered by the requested easement by purchase, assignment or condemnation.

[Section 258.397, F.S. and Rule 18-18, F.A.C.]

XV. MIAMI-DADE EXPRESSWAY AUTHORITY (MDX)

A. Occupancy License

When a final alignment is determined by FPL, and the requisite approvals are obtained for implementation of that alignment, MDX will negotiate with FPL conditions upon which MDX will grant a license to FPL to occupy a portion of MDX right-of-way or right-of-way air space, which must also comply with the Florida Department of Transportation Utility Accommodation Manual, as may be amended.

[FPL Stipulation –7/1/13]

B. Impacts to MDX Right-of-Way

Any license granted by MDX to FPL shall not negatively impact the MDX right-of-way limited access lines or transportation facilities; or interfere with the associated tolling equipment, specifically but not limited to the electronic data monitors and sensory equipment.

[FPL Stipulation- 7/1/13]

C. Property Interest

Any license granted by MDX to FPL shall not create a property interest and therefore cannot be transferred by FPL to any other party including heirs, subsidiaries or assigns without the written prior consent of MDX.

[FPL Stipulation- 7/1/13]

Attachment A

Maps

To be attached subsequent to certification pursuant to

Section A, General Conditions, I.D. to I.G.

Attachment B

Surface Water Management System Plans

To be attached subsequent to certification if necessary, pursuant to:

Section A, General Condition, XXVI.B.

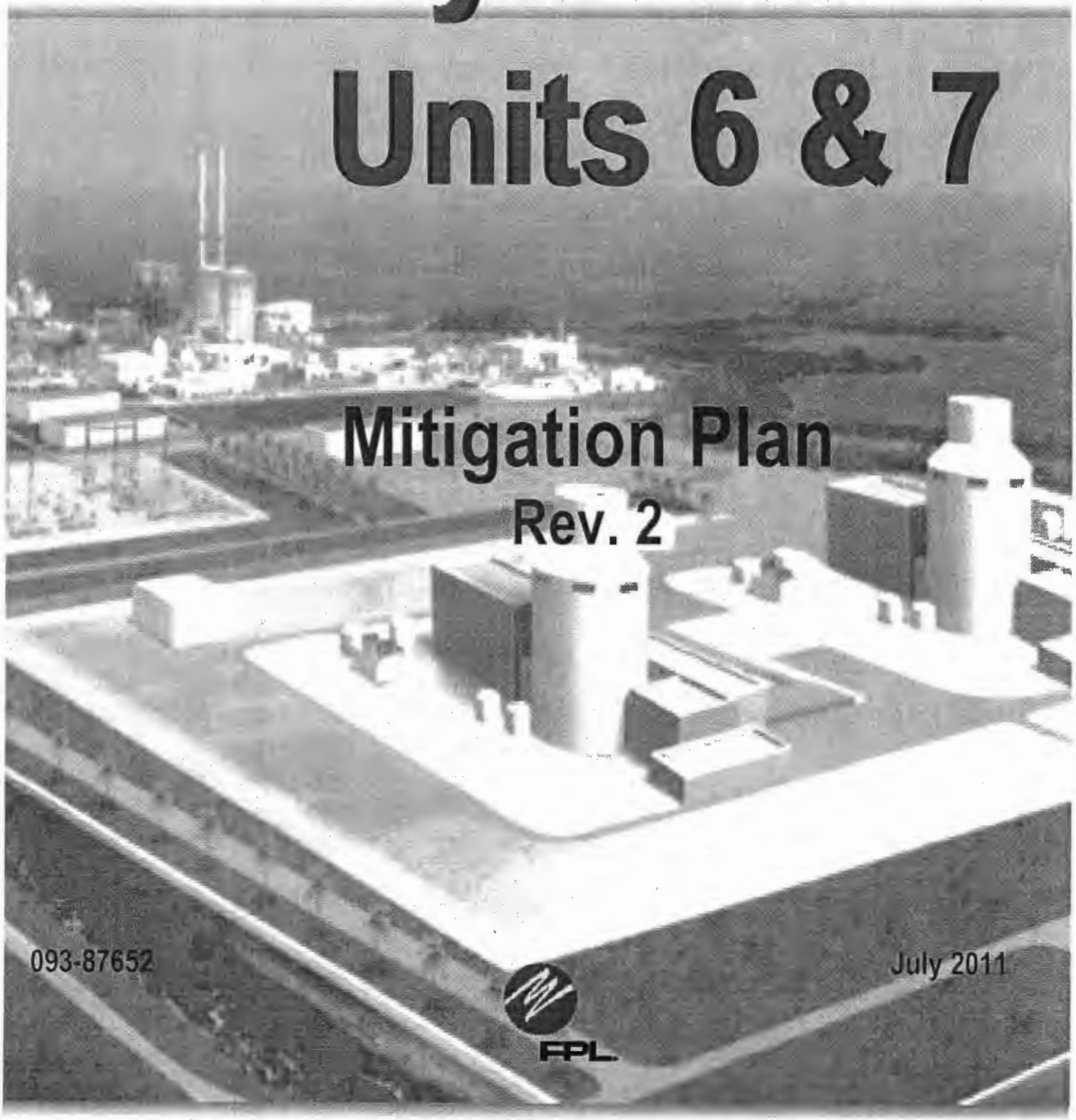
Section B, Specific Conditions – Power Plant and Associated Facilities (Excluding Transmission Lines), II.A.2.c.

Attachment C

Wetland Mitigation Plan (Rev. 2, July 2011)

Turkey Point

Units 6 & 7



Mitigation Plan

Rev. 2

093-87652

July 2011

FPL

Table of Contents

1.0 INTRODUCTION 3
2.0 WETLAND IMPACT FUNCTIONAL ASSESSMENT 8
2.1 Methods 8
2.1.1 Uniform Mitigation Assessment Method (UMAM) 8
2.1.2 Wetland Assessment Technique for Environmental Review (W.A.T.E.R.) 10
2.2 HID In-lieu Fee 11
2.3 Results 12
2.3.1 Units 6 & 7 Site 12
2.3.2 Associated Non-Linear Facilities 13
2.3.3 Associated Linear Facilities 16
3.0 PROPOSED MITIGATION PLAN 20
3.1 Northwest Restoration Site 20
3.1.1 Existing Condition 21
3.1.2 Target Community 22
3.1.3 Methods 22
3.1.4 Environmental Lift 24
3.2 SW 320th Street Restoration Site 25
3.2.1 Existing Condition 26
3.2.2 Target Community 27
3.2.3 Methods 28
3.2.4 Environmental Lift 29
3.3 Mitigation Banks 30
3.3.1 Everglades Mitigation Bank 30
3.3.2 Hole in the Donut Mitigation Bank 31
3.4 Pipeline Restoration 32
3.4.1 Methods 32
3.4.2 Environmental Lift 32
3.5 Sea Dade Canal Crocodile Sanctuary 35
3.5.1 Existing Condition 35
3.5.2 Target Community 35
3.5.3 Methods 35
3.5.4 Environmental Lift 36
3.6 Temporary Construction Access Road Restoration 38
4.0 MONITORING AND SUCCESS CRITERIA 39
5.0 CONCLUSION 40

List of Tables

Table 1-1 Units 6 & 7 Project Wetland Impact Summary
Table 1-2 Mitigation Alternative Summary
Table 2-1 Units 6 & 7 Site Wetland Functional Assessment Summary
Table 2-2 Associated Non-Linear Facilities UMAM Wetland Functional Assessment Summary
Table 2-3 Associated Non-Linear Facilities W.A.T.E.R. Wetland Functional Assessment Summary
Table 2-4 Associated Non-Transmission Linear Facilities Wetland Functional Assessment Summary
Table 2-5 Conceptual Transmission Line Corridor Rights-of-Way Wetland Functional Assessment Summary
Table 3-1 Northwest Restoration Site Functional Assessment Summary
Table 3-2 SW 320th Street Restoration Site Functional Assessment Summary
Table 3-3 Pipeline Restoration Areas Functional Assessment Summary
Table 3-4 Sea Dade Canal Crocodile Sanctuary Functional Assessment Summary

List of Figures

Figure 1 – Proposed Facilities – Site and Associated Non-linear Facilities
Figure 2 – Proposed Facilities – Non-transmission Linear Facilities
Figure 3 – Proposed Facilities - Transmission
Figure 4 – Mitigation Alternatives Location Map
Figure 5 – Location of Transmission Line Corridors Showing Segments
Figure 6 – Northwest Restoration Site Aerial Map
Figure 7 – Northwest Restoration Site Existing Landuse/Landcover
Figure 8 - Northwest Restoration Site Proposed Landuse/Landcover
Figure 9 – Northwest Restoration Site Conceptual Cross-Section
Figure 10 – Northwest Restoration Site Conceptual Illustration
Figure 11 – SW 320th Street Restoration Site Aerial Map
Figure 12 – SW 320th Street Restoration Site Existing Landuse/Landcover
Figure 13 – SW 320th Street Restoration Site Proposed Landuse/Landcover
Figure 14 – Everglades Mitigation Bank Service Area
Figure 15 – Hole in the Donut Mitigation Bank Service Area
Figure 16 – Pipeline Restoration Aerial Map
Figure 17 – Sea Dade Canal Crocodile Sanctuary Aerial Map
Figure 18 – Sea Dade Canal Crocodile Sanctuary Existing Landuse/Landcover
Figure 19 - Sea Dade Canal Crocodile Sanctuary Conceptual Design

List of Appendices

Appendix A UMAM Functional Assessment
Appendix B W.A.T.E.R. Functional Assessment
Appendix C Mitigation Area Photographs

EXECUTIVE SUMMARY

The Turkey Point Units 6 & 7 Project offers a portfolio of uniquely beneficial environmental opportunities that are a result of its design attributes and the overall magnitude of the Project. The benefits are provided in three key areas: inherent environmental benefits that result from Project design, mitigation offered in response to unavoidable wetland impacts, and associated regional restoration projects.

The Mitigation Plan (Rev. 0) submitted with the Site Certification Application (SCA) in June 2009 and amended (Rev. 1) in May, 2010 identified several mitigation opportunities for consideration that collectively provide more functional lift than required to offset the Project's wetland impacts. The Plan has been further refined to focus upon those mitigation options that have received a positive reception from regulatory agency staff and cumulatively provide the functional lift required to offset the Project's wetland impacts. The Plan includes a conservative assessment of functional lift required, as areas of temporary impact associated with the construction access roadway improvements are proposed to be mitigated as permanent impacts, and wetland impacts associated with transmission facilities are anticipated to be reduced following detailed engineering and facility design.

By design, the Turkey Point Units 6 & 7 Project offers inherent environmental benefits while addressing two key environmental issues affecting South Florida: greenhouse gas emissions and the conservation of regional water resources. First, the application of nuclear generation technology will avoid the emission of 7 million tons of carbon dioxide (CO_2) annually, as compared to current combined cycle natural gas technology. Second, in selecting reclaimed water from Miami-Dade County as the Project's primary cooling water source, FPL will contribute to environmental protection by reusing a regional resource that is currently discarded, thereby avoiding disposal of treated wastewater via ocean outfall and reducing the volume of water currently discharged by two-thirds. This utilization of reclaimed water also assists Miami-Dade County in achieving its regulatory obligations to increase reclaimed water usage in the County in a cost-effective manner. Selection of this Project allows the County to avoid a minimum of $122 million of additional capital costs that County water and sewer customers would otherwise pay. Additionally, FPL will compensate the County for operation and maintenance costs of approximately $200 million over the first 40 years of plant operation.

The Project's Mitigation Plan was initially formulated in consultation with members of the Compatibility Working Group (CWG), which was formed by FPL in 2007 specifically to solicit input on the Project. The CWG is comprised of representatives of the South Florida Water Management District (SFWMD), Florida Department of Environmental Protection (FDEP), Miami-Dade County Department of

Environmental Management (DERM), Miami-Dade County Planning and Zoning, Miami-Dade County Water and Sewer Department (MDWASD), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), Biscayne National Park (BNP), and Everglades National Park (ENP). The Project and the associated Mitigation Plan have been refined in consultation with the regulatory agencies to avoid and minimize wetland impacts to the greatest extent practicable, and to incorporate several mitigation opportunities to replace the loss of wetland functions due to unavoidable wetland impacts. Avoidance and minimization efforts focused on minimizing impacts to high-quality wetlands in Site selection, reducing the acreage of impact with regard to the design of associated facilities, and utilization of previously impacted areas to the greatest extent practicable.

In accordance with regulatory guidelines of the FDEP and USACE, FPL proposes that the loss of wetland habitat associated with the Project be mitigated through a combination of regional wetland restoration, enhancement, and preservation initiatives furthering the regional restoration goals of the Comprehensive Everglades Restoration Plan (CERP) within the Biscayne Bay Coastal Wetlands (BBCW) study area, as well as the use of FDEP- and USACE-approved mitigation banks. FPL has collaboratively worked with local, state and federal agencies during the development of the Project to identify mitigation opportunities of regional interest. The refined Mitigation Plan includes over 800 acres of applicant-sponsored wetland restoration, enhancement, and preservation opportunities combined with purchase of credits from regional mitigation banks. The proposed mitigation sites are broadly focused on two geographic areas, the BBCW area adjacent to the L-31E Canal north of the Turkey Point Plant, and the Model Lands Basin west of the Turkey Point Plant. Mitigation activities proposed within the BBCW area include restoration, enhancement, and preservation of large wetland parcels adjacent to the L-31E Canal that will benefit regional ecosystem restoration plans. The conveyance of some of these FPL mitigation parcels to the public trust would connect the restored lands with state and federal environmentally protected lands to the east, completing acquisition of an important segment of the of the BBCW project. Mitigation proposed within the Model Lands Basin is designed to provide an increase in wetland/wildlife habitat through creation of a crocodile nesting sanctuary, continuing FPL's role as an environmental steward for this endangered species, , as well as restoration of sawgrass marsh wetlands associated with the temporary construction access roadways.

1.0 INTRODUCTION

FPL proposes to construct and operate two new nuclear generating units (Units 6 & 7) and supporting facilities at a Site within the existing Turkey Point plant property boundaries, as well as new transmission lines and other off-site associated linear and non-linear facilities. The Project has been described in the Site Certification and Federal Dredge and Fill Applications submitted to FDEP and USACE, respectively, in June 2009 and amended in May 2010, as well as the SCA Completeness Responses submitted from 2009 through 2011.

The Project's Mitigation Plan was initially formulated in consultation with members of the Compatibility Working Group (CWG), which was formed by FPL in 2007 specifically to solicit input on the Project. The CWG was comprised of representatives of the SFWMD, FDEP, DERM, MDC Planning and Zoning, MDWASD, USACE, USFWS, BNP, and ENP. Although meetings of the CWG were not continued past the submittal of the SCA, numerous meetings with each of the representative groups during the SCA review process have occurred to discuss the components of the Mitigation Plan. The Project and the associated Mitigation Plan have been refined to avoid and minimize wetland impacts to the greatest extent practicable, and to incorporate several mitigation opportunities for consideration to replace the loss of wetland functions due to unavoidable wetland impacts.

Avoidance and minimization efforts are focused on minimizing impacts to high-quality wetlands in Site selection, reduction in the acreage of impact with regard to the design of associated facilities, and utilization of previously impacted areas to the greatest extent practicable. The proposed locations of Project features are illustrated in Figures 1 through 3. The location for the Units 6 & 7 Site lies within the existing Turkey Point permitted industrial wastewater facility. Utilization of this previously impacted area allows for avoidance of over 200 acres of impact to coastal mangrove and/or freshwater marsh wetlands. Parking and laydown areas were initially located adjacent to SW 359th Street and 117th Avenue, impacting approximately 159 acres of wetlands, including large areas of high-quality sawgrass-dominated freshwater marsh. Avoidance and minimization efforts associated with the relocation of the parking and laydown areas to locations within the existing Turkey Point Plant and industrial wastewater facility resulted in significant reduction in wetland impacts. The reconfigured and relocated parking and laydown areas, reduced in size and limited to previously-impacted, low-quality wetlands, reduced the wetland impact acreage by approximately 100 acres (66 percent) compared to the initial locations and designs. The restoration of roadways within the construction access improvements corridor by returning existing public roads to their current lane configuration and restoring SW 359th Street to a transmission access road after construction of Units 6 & 7 provides further minimization of Project impacts.

Additional avoidance and minimization efforts focused on identification of a potential alternative location for the FPL reclaimed water treatment facility within an area of lower quality wetlands at the Turkey Point Plant. The potential 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 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 the potential 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. If the reviewing agencies prefer this alternative location for the reclaimed water treatment facility and that alternative location is selected during the ongoing permitting proceedings, then FPL is willing to accept a condition of certification requiring submittal of final design details on the reclaimed water treatment facility and its location as part of the post-certification submittals for the Project. For purposes of the mitigation plan, the impacts associated with construction of the FPL reclaimed water treatment facility are presented for both the potential alternative location as well as the originally proposed location.

Avoidance and minimization efforts associated with the Project's linear facilities (i.e., reclaimed water pipelines, access roads, and transmission lines) include selection of corridors that maximize opportunities for co-location with disturbed linear facilities such as existing roadways, canals, and rights-of-way. Co-location with existing linear features minimizes the amount of additional clearing of rights-of-way required for construction and reduces wetland impacts. Additional avoidance and minimization efforts associated with the transmission line corridor include exchange of the existing FPL right-of-way through the ENP for a replacement right-of-way located adjacent to the existing L-31N Canal. Exchange of the existing right-of-way provides the opportunity to minimize impacts to high quality wetlands within the ENP by co-locating the new transmission facilities with existing disturbed linear features.

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 result in up to approximately 320 acres of permanent wetland impact, 6.4 acres of temporary wetland impact, and 3 acres of secondary wetland impact. The majority of this impact (approximately 250 acres) is associated with the Units 6&7 Site, which is wholly contained within the existing industrial wastewater treatment facility.

As discussed in Chapter 9.0 of the SCA, the Project's associated linear facilities (transmission lines, FPL reclaimed water pipelines, access road improvements, and potable water pipelines) have generally been located within corridors proposed for certification rather than within specific rights-of-way. Locating linear facilities within corridors allows flexibility in routing to address site-specific constraints and incorporation of additional wetland avoidance/minimization opportunities during the final design of the transmission lines, pipelines, and access road improvements. For purposes of wetland impact assessment, a conservative "enveloping" scenario was utilized for linear facilities in order to ensure that the mitigation plan would provide more than sufficient mitigation to offset all impacts following final route selection and refinement of linear facility engineering design. In the case of the transmission corridors, this enveloping approach results in a worst-case scenario of wetland impacts that will be reduced during final engineering design. Using the conservative assumptions, the total estimated wetland impacts resulting from construction of the associated linear facilities include up to 308 acres of permanent wetland impact for the transmission line structure pads and associated access roads, approximately 82 acres of permanent and 45 acres of secondary wetland impact associated with the Units 6 & 7 temporary access road improvements, and approximately 44 acres of temporary wetland impact associated with installation of the underground reclaimed water and potable water pipelines. A summary of the Project's wetland impacts is provided in Table 1-1.

TABLE 1-1

UNITS 6 & 7 PROJECT WETLAND IMPACT SUMMARY

Area	Wetland Impacts (acres)			Functional Loss (UMAM Credits)
	Direct	Secondary[a]	Temporary	
Units 6 & 7 Site	250.2			128.3[b]
Associated Non-Linear Facilities	69.8[c]	3	6.4[d]	53.4[b]
Access Roads	81.6	45		80.6
Reclaimed Water Pipelines			43.6[e]	4.5[e]
Transmission Line Corridors	308.2[f]			241[f]
TOTAL	**710[c]**	**48**	**50[c]**	**508[c]**

[a] Secondary wetland impact calculated as 25-foot zone surrounding areas of wetland fill; functional loss for secondary impacts calculated as 60 percent of direct impact.

[b] Functional loss calculated via W.A.T.E.R. functional assessment methodology for the Units 6 & 7 Site = 148.4 W.A.T.E.R. credits; nuclear administration/training building and parking area = 19.9 W.A.T.E.R. credits; FPL reclaimed water treatment facility original location = 39 W.A.T.E.R. credits; FPL reclaimed water treatment facility alternative location = 33 W.A.T.E.R. credits

[c] Summary includes impacts resulting from construction of FPL reclaimed water treatment facility at the originally proposed location. Utilization of the potential alternative location reduces direct wetland impacts by approximately 4.1 acres, reduces temporary pipeline wetland impacts by approximately 3.4 acres, and reduces total functional loss by approximately 5.4 UMAM credits

[d] Loss of functional value for temporary impacts associated with pipeline installation will be replaced through in-situ restoration. Additional mitigation credits to offset functional loss associated with time lag of in-situ restoration are provided.

[e] Summary includes temporary impacts resulting from installation of reclaimed water pipeline to FPL reclaimed water treatment facility potential alternative location. Installation of reclaimed water pipeline to the originally proposed location for the FPL reclaimed water treatment facility reduces temporary wetland impacts by approximately 5.3 acres and reduces functional loss by approximately 0.4 UMAM credits.

[f] Transmission line impacts were approximated utilizing conservative estimates regarding road and pad design layout within corridor and average functional assessment scores within the corridor segments; actual wetland impacts will be reduced upon completion of detailed engineering design. Acreage of clearing and conversion of forested to herbaceous wetlands will be calculated upon completion of detailed engineering design.

In accordance with regulatory guidelines of the FDEP and USACE, as well as the Miami-Dade County Unusual Use Approval Conditions, FPL proposes that the loss of wetland habitat associated with the Project be mitigated for through a combination of wetland restoration, enhancement, and preservation consistent with the regional restoration goals of the CERP within the BBCW study area and Model Lands Basin, as well as use of the Everglades Mitigation Bank (EMB) and the Hole in the Donut Mitigation Bank (HID).

In consultation with the CWG, the Mitigation Plan submitted with the SCA was developed to identify several mitigation options for consideration that collectively provide more functional lift than required to offset the Project's wetland impacts. Based upon feedback from regulatory agencies, the refined Plan incorporates those mitigation options that cumulatively provide the necessary functional lift to offset the

Project's wetland impacts. A summary of the various mitigation options included in the refined Plan is presented in Table 1-2 and illustrated in Figure 4.

TABLE 1-2

MITIGATION SUMMARY

Mitigation Option	Activity	Acreage	Functional Lift (UMAM)
Northwest Restoration Site	Vegetative enhancement, hydrologic restoration, preservation, recreational facilities	238	35.7
SW 320th St. Restoration Site	Vegetative enhancement, preservation	574	56.8
Everglades Mitigation Bank	Mitigation Credits	1,409	175.8 (UMAM)/ 201.3 (W.A.T.E.R.)
Hole in the Donut Mitigation Bank	Mitigation Credits	308	241 (UMAM)/ 308 (Ratio)
Pipeline Restoration	Vegetative restoration	46.6	N/A[a]
Sea Dade Canal Crocodile Sanctuary	Creation of saline lagoon and crocodile nesting habitat	6.4	N/A[b]
Temporary Construction Access Roadway Restoration	Removal of temporary roadways, vegetative restoration	TBD[c]	N/A[b]
TOTAL		**2,582**	**509 (UMAM)**

[a]Temporary impacts associated with pipeline installation to be restored in-situ; additional mitigation to be provided to offset time lag factors. See Section 3.4.

[b]Additional mitigation activity conducted without credit for the generation of functional lift. Sea Dade Canal Crocodile Sanctuary and restoration of temporary construction access roads considered "additional mitigation activities".

[c]Acreage of temporary construction access roadway restoration will be determined post-certification upon final engineering designs for construction and post-construction roadways.

2.0 WETLAND IMPACT FUNCTIONAL ASSESSMENT

2.1 Methods

Rather than an acre-for-acre mitigation or the use of mitigation ratios, the calculation of wetland mitigation requirements typically involves use of a wetland functional assessment value multiplied by the acreage of impact to determine the required number of mitigation credits to offset the loss of wetland functions. Wetland functional assessments involve ranking the subject wetland relative to several variables, such as vegetation, wildlife utilization, hydrology, and surrounding landscape conditions. The goal of the functional assessment is to determine the ecological value of the wetland prior to disturbance to ensure that mitigation will replace the wetland's ecological functions rather than merely replacing the acreage of fill. Using this rationale, a 2-acre wetland dominated by exotic vegetation with altered hydrology and little wildlife utilization would have a lower functional value and thus require fewer mitigation credits to offset unavoidable impacts as compared to a 2-acre wetland supporting a diverse assemblage of native flora and fauna and an unaltered hydrologic regime.

Wetland functional assessment protocols used for the Units 6 & 7 Project include the FDEP UMAM and the EMB W.A.T.E.R., as described in Subsections 2.1.1 and 2.1.2, respectively. In the case of the HID mitigation bank, credits are calculated utilizing an in-lieu fee in accordance with the bank's FDEP permit, as described in Subsection 2.1.3.

2.1.1 Uniform Mitigation Assessment Method (UMAM)

The UMAM functional assessment protocol was utilized to evaluate the ecological condition of all wetlands associated with the Units 6 & 7 Project, as well as to evaluate the amount of functional lift generated through the Project's various mitigation alternatives.

The FDEP UMAM is designed to be used for wetland systems occurring throughout the state, to provide a standard functional assessment methodology applicable to a variety of wetland habitats. The UMAM quantifies wetland quality or health through evaluation of several variables, including location and landscape support, water environment, and community structure. The variables are defined in Chapter 62-345, Florida Administrative Code (F.A.C.), and are summarized in the following sections.

Location and Landscape Support – The value of functions provided by an assessment area to fish and wildlife are influenced by the landscape position of the assessment area and its relationship with surrounding areas. Many species that nest, feed, or find cover in a specific habitat or habitat type are also dependent in varying degrees upon other habitats that are present in the regional landscape, including upland, wetland, and other surface waters. The location of the assessment area is considered to the extent that fish and wildlife utilizing the area have the opportunity to access other habitats necessary to fulfill

their life history requirements. The availability, connectivity, and quality of offsite habitats and offsite land uses that might adversely impact fish and wildlife utilizing these habitats are factors considered in assessing the location of the assessment area. The location of the assessment area is considered relative to offsite and upstream hydrologic contributing areas and to downstream and other connected waters to the extent that the diversity and abundance of fish and wildlife and their habitats are affected in these areas. The opportunity for the assessment area to provide offsite water quantity and quality benefits to fish and wildlife and their habitats downstream and in connected waters is assessed based on the degree of hydrologic connectivity between these habitats and the extent to which offsite habitats are affected by discharges from the assessment area.

Water Environment – The quantity of water in an assessment area, including the timing, frequency, depth, and duration of inundation or saturation, flow characteristics, and the quality of that water, may facilitate or preclude its ability to perform certain functions and may benefit or adversely impact its capacity to support certain wildlife. Hydrologic requirements and tolerance to hydrologic alterations and water quality variations vary by ecosystem type and the wildlife utilizing the ecosystem. Hydrologic conditions within an assessment area, including water quantity and quality, are evaluated to determine the effect of these conditions on the functions performed by area and the extent to which these conditions benefit or adversely affect wildlife. Water quality within wetlands and other surface waters is affected by inputs from surrounding and upstream areas and the ability of the wetland or surface water system to assimilate those inputs.

Community Structure (Vegetation and Structural Habitat) – The presence, abundance, health, condition, appropriateness, and distribution of plant communities in surface waters, wetlands, and uplands can be used as indicators to determine the degree to which the functions of the community type identified are provided. Vegetation is the base of the food web in any community and provides many additional structural habitat benefits to fish and wildlife. Overall condition of a plant community can often be evaluated by observing indicators such as dead or dying vegetation, regeneration and recruitment, size and age distribution of trees and shrubs, fruit production, chlorotic or spindly plant growth, structure of the vegetation strata, and the presence, coverage, and distribution of inappropriate plant species. Human activities such as mowing, grazing, off-road vehicle activity, boat traffic, and fire suppression constitute more direct and easily observable impacts affecting the condition of plant communities. Although short-term environmental factors such as excessive rainfall, drought, and fire can have temporary impacts, human activities such as flooding, drainage via groundwater withdrawal and conveyance canals, or construction of permanent structures such as seawalls in an aquatic system, can permanently damage these systems. The plant community is evaluated to consider whether natural successional patterns for the

community type are permanently altered. Inappropriate plants, including invasive exotic species, other invasive species, or other species atypical of the community type being evaluated, do not support the functions attributable to that community type and can out-compete and replace native species. Native upland and wetland vegetation, such as wax myrtle, pines, and willow, which are not typically considered as invasive, can occur in numbers and coverage not appropriate for the community type and can serve as indicators of disturbance. The relative degree of coverage by inappropriate species, inappropriate vegetation strata, condition of vegetation, and both biotic and abiotic structure all provide an indication of the degree to which the functions anticipated for the community type identified are being provided.

Time Lag and Risk – Additional mitigation credits have been calculated to address time lag and risk associated with the proposed enhancement and restoration activities. The time lag associated with mitigation activities addresses the period of time between when the functions are lost at an impact site and when those functions are replaced through mitigation. Wetland creation generally has a greater time lag to establish certain wetland functions than most enhancement activities. The time lag, in years, is used to determine the time lag factor (T-factor) to reflect the additional mitigation needed to account for the delay in replacement of wetland functions. Mitigation risk accounts for the degree of uncertainty that the proposed mitigation activity will achieve the proposed conditions. Typically, mitigation projects that require longer periods of time to replace lost functions are considered to have a higher risk. Risk is scored on a scale from 1 (*de minimus* risk) to 3 (high risk). Time lag and risk factors for the proposed mitigation alternatives are discussed in Section 3. Offsite mitigation through the purchase of credits from the EMB or HID already incorporates time lag and risk in the calculation of credits available for purchase. Alternatively, the preservation of wetland acreage adjacent to the Biscayne National Park (BNP) does not include significant risk or lag time.

2.1.2 Wetland Assessment Technique for Environmental Review (W.A.T.E.R.)

When utilizing a mitigation bank, the applicant must use the functional assessment methodology approved for the specific mitigation bank to assess impact sites for the purpose of determining mitigation credits, as described in Rule 62-345.100(6), F.A.C. The EMB functional assessment protocol, W.A.T.E.R., is similar to the UMAM protocol. W.A.T.E.R. must be used to establish credits obtained from the EMB and is directly applicable to the conditions present in southeast Florida.

The W.A.T.E.R. functional evaluation matrix includes four main categories: fish and wildlife, vegetation, landscape/hydrology, and salinity. These main categories are further subdivided to represent most of the important ecological components and factors of the Everglades and coastal ecosystems of southeast Florida. Variables within the four main categories are scored from 0 to 3, with half-point increments allowable. For each wetland assessment area, the sum of all variable scores is then divided by the total

possible score to derive an overall W.A.T.E.R. functional assessment score ranging between 0 and 1. Parameters that cannot be attributed to direct wetland function are termed site suitability parameters, which are used to calculate a site suitability multiplier. The site suitability multiplier assesses a wetland based upon how it contributes to the functional attributes of other wetlands, addressing the anthropogenic importance and/or socioeconomic value of the wetland. The site suitability multiplier is multiplied by the acreage of impact and functional assessment score to determine the total number of EMB mitigation credits required to offset wetland impacts.

The W.A.T.E.R. protocol was used to assess the functional value of hypersaline wetlands within the industrial wastewater facility (Units 6 & 7 Site), as well as mangrove and sawgrass wetlands associated with the FPL reclaimed water treatment facility and the nuclear administration building, training building, and parking area. Wetland mitigation credits from the EMB will be purchased to offset impacts to wetlands within the Units 6 & 7 Site, as well as the FPL reclaimed water treatment facility and nuclear administration building, training building, and parking area.

2.2 HID In-lieu Fee

An in-lieu fee program involves the restoration, establishment, enhancement, and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources management entity to satisfy compensatory mitigation requirements. Similar to a mitigation bank, an in-lieu fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu program sponsor.

The HID was permitted as an in-lieu fee mitigation bank prior to adoption of 62-345.100(6), F.A.C., therefore the quantification of required mitigation credits is calculated using the methodology in place when the bank was permitted. As stated in 62-345.100(6), F.A.C.:

> *Pursuant to paragraph 373.414(18)(b), F.S., an entity that has received a mitigation bank permit issued by the Department of Environmental Protection or a water management district under Sections 373.4135 and 373.4136, F.S., prior to the adoption of this rule (UMAM) must have impact sites assessed for the purpose of deducting bank credits using the credit assessment method, including any functional assessment methodology, that was in place when the bank was permitted.*

According to the HID permit (FDEP permit # 132416479, issued 2/15/1995), "mitigation for wetland impacts within the Mitigation Service Area will consist of a set dollar amount per acre of impact." Although the HID was permitted prior to the ERP Basis of Review (BOR) and Uniform Mitigation Assessment

Method (UMAM), the BOR ratios for restoration range from 1.5:1 to 4:1. Based on June 2011 consultation with HID managers, the assessment methodology of the bank may be revised in the future to comply with the UMAM. Following completion of detailed transmission line design and prior to construction, FPL will comply with the assessment methodology of the HID, as approved by the FDEP and USACE, to determine the appropriate number of credits required to compensate for the impacts associated with construction of the proposed transmission facilities.

2.3 Results

The following summarizes the existing, pre-development functional assessment scores, acreage of impact, and mitigation credits required to offset the loss of wetland functions associated with construction of the Project within the Units 6 & 7 Site, associated non-linear facilities, and associated linear facilities. UMAM functional assessment forms are provided in Appendix A; W.A.T.E.R. functional assessment forms are included in Appendix B.

2.3.1 Units 6 & 7 Site

Wetlands within the Site have low functional value[1]. The area is wholly isolated within the boundaries of the industrial wastewater treatment facility, with no connection to Biscayne Bay for over 35 years. The Site is periodically inundated by hypersaline water used for cooling purposes and provides limited habitat for aquatic biota, evidenced by the limited number of aquatic taxa that can tolerate hypersaline waters, elevated temperatures, and low dissolved oxygen. The area is part of the permitted existing Turkey Point industrial wastewater treatment facility. The altered hydrology, soils, salinity, and temperature reduce the functional value of mangrove systems compared to undisturbed tidal mangroves of Biscayne Bay. Wetland functional value is influenced by the surrounding landscape characteristics, specifically the existing power generation facility, the extensive industrial wastewater facility/cooling canal system, and lack of natural tidal inundation. The industrial wastewater facility alters the timing, frequency, and duration of inundation of wetlands within the Site when compared to the historical tidal hydroperiod. Although nuisance and/or exotic species such as Australian pine (*Casuarina equisetifolia*), Brazilian pepper (*Schinus terebinthifolius*), and half-flower (*Scaevola sericea*) occur within the Site, these species are not widespread and are primarily restricted to upland areas or along the transitional upland-wetland ecotone. However, hydrologic alteration is prevalent throughout the Site. Vegetative communities are stressed, evidenced through decreased growth rates and high mortality. The hypersaline conditions and altered hydrology have resulted in vegetative communities with reduced value as wildlife habitat, and reduced capability to recover from natural environmental impacts such as storm events or freezing temperatures.

[1] The use of the term "wetlands" with reference to the Site is used solely as a descriptive term and is not used as a regulatory or jurisdictional term.

Table 2-1 summarizes the W.A.T.E.R. assessment results for the Units 6 & 7 Site. Scoring for the suite of variables contained within each assessment category and the site suitability evaluation is detailed in Appendix B. The UMAM assessment was also conducted at the Units 6 & 7 Site; results are provided in Appendix A.

TABLE 2-1

UNITS 6 & 7 SITE WETLAND FUNCTIONAL ASSESSMENT SUMMARY

FLUCFCS Code	Wetland Type	W.A.T.E.R. Score	Impact Acreage	Site Suitability Multiplier	Functional Loss (W.A.T.E.R. Credits)
510	Active Canals	0.54	4.1	1.05	2.32
511	Remnant Canals	0.59	8.4	1.05	5.20
531	Open Water/ Discharge Canal 1	0.54	12	1.05	6.80
612-A	Mangrove Heads	0.70	12.2	1.05	8.97
612-B	Dwarf Mangroves	0.65	16.9	1.05	11.53
650	Mud Flats	0.55	187.5	1.05	108.28
743-Wet	Wetland Spoil Areas	0.55	9.1	1.05	5.26
			250.2		**148.4**

2.3.2 Associated Non-Linear Facilities

Wetlands associated with the nuclear administration building, training building, and parking areas are reduced in functional value due to their isolated location within the Turkey Point facility, surrounding paved parking lots, encroachment of exotic/nuisance species of vegetation, lack of upland vegetative buffers, and hydrologic alteration.

Mangrove wetlands associated with the radial collector well delivery pipelines are higher quality systems connected to Biscayne Bay. These wetlands are slightly reduced in functional value due to the existing fill and roadways associated with the existing Turkey Point Plant, but exhibit minimal amounts of nuisance/exotic species, experience a relatively unaltered hydrologic regime, and provide significant wildlife habitat.

Freshwater sawgrass marsh and dwarf mangrove wetlands associated with the FPL reclaimed water treatment facility potential alternative location are reduced in functional value due to historic dredging for test cooling canal evaluations, resulting in upland spoil piles, excavated open water canals, and an upland access pathway. These areas are isolated from Biscayne Bay due to the historical construction of the primary Turkey Point Plant access road and contain upland and wetland areas dominated by the exotic species Australian pine. The treated reclaimed water pipeline between the FPL reclaimed water treatment

facility potential alternative location and the Site would be installed within construction access roadways, avoiding additional wetland impact.

Dwarf mangrove, sawgrass marsh, and mixed wetland hardwoods associated with the FPL reclaimed water treatment facility originally proposed location and treated water pipeline are slightly reduced in functional value due to hydrologic alteration and presence of exotic species of vegetation, although they are considered high-quality wildlife habitat. These areas are isolated from Biscayne Bay due to the historical construction of the primary Turkey Point Plant access road.

Expansion of the equipment barge unloading area will require excavation of upland fill material and approximately 0.1 acre of dredging adjacent to the existing man-made turning basin. The expansion is not expected to result in any impacts to adjacent surface waters through utilization of best management practices (BMPs) to isolate the construction area with turbidity curtains, silt screens, or other erosion and turbidity control measures.

A summary of the UMAM and W.A.T.E.R. functional assessment results for the associated non-linear facilities are provided below (Table 2-2); UMAM and W.A.T.E.R. wetland assessment forms are provided in Appendices A and B, respectively.

TABLE 2-2

ASSOCIATED NON-LINEAR FACILITIES
UMAM WETLAND FUNCTIONAL ASSESSMENT SUMMARY

FLUCFCS Code	Wetland Type	UMAM Score	Impact Acreage	Functional Loss (UMAM Credits)
Nuclear Administration Building, Training Building, and Parking Area				
612	Mangrove Swamps	0.67	18.5	12.4
612/618	Mangrove/Willow	0.63	7.6	4.8
		SUBTOTAL	**26.1**	**17.2**
Radial Collector Well Pipelines[a]				
612	Mangrove Swamps	0.87	**3**	**0.5[a]**
Treated Reclaimed Water Pipeline (Originally Proposed Location)				
6411/612-B	Sawgrass Marsh/Dwarf Mangroves	0.77	3.1	0.47
617	Mixed Wetland Hardwoods	0.70	0.3	0.04
		SUBTOTAL	**3.4**	**0.5**
FPL Reclaimed Water Treatment Facility (Potential Alternative Location)				
510/511	Canals/Ditches	0.50	3.2	1.7[b]
619	Exotic Wetland Hardwoods	0.47	3.7	1.8[b]
6411/612-B	Sawgrass Marsh/Dwarf Mangroves	0.77	32.6	26.8[b]
		SUBTOTAL	**39.5**	**30.3**
FPL Reclaimed Water Treatment Facility (Originally Proposed Location)				
6411/612-B	Sawgrass Marsh/Dwarf Mangroves	0.77	42.8	34.1[c]
617	Mixed Wetland Hardwoods	0.80	0.8	1.1[c]
		SUBTOTAL	**43.6**	**35.2**
Equipment Barge Unloading Area				
510	Barge Basin	0.50	0.1	N/A
	TOTAL		**76.2[d]**	**53.4[d]**

[a] Loss of functional value for temporary impacts associated with radial collector well pipelines installation will be replaced through in-situ restoration. Mitigation credits to offset time lag associated with in-situ restoration are provided (see Section 3.4.2).

[b] Includes 1.76 credits associated with 3.9 acres of secondary impacts surrounding FPL reclaimed water treatment facility potential alternative location.

[c] Includes 1.53 credits associated with 3.3 acres of secondary impacts surrounding FPL reclaimed water treatment facility originally proposed location.

[d] Total calculated utilizing FPL Reclaimed Water Treatment Facility originally proposed location and treated reclaimed water pipeline. Total utilizing potential alternative location = 68.7 acres, 48 UMAM credits

Mitigation for unavoidable wetland impacts associated with the FPL reclaimed water treatment facility, nuclear administration building, training building, and parking area is proposed through purchase of mitigation credits from the EMB. Wetland functional assessment for these non-linear associated facilities utilizing the EMB W.A.T.E.R. is summarized below (Table 2-3).

TABLE 2-3

ASSOCIATED NON-LINEAR FACILITIES
W.A.T.E.R. WETLAND FUNCTIONAL ASSESSMENT SUMMARY

FLUCFCS Code	Wetland Type	W.A.T.E.R. Score	Site Suitability Multiplier	Impact Acreage	Functional Loss (W.A.T.E.R. Credits)
Nuclear Administration Building, Training Building, and Parking Area					
612	Mangrove Swamps	0.74	1.05	18.5	14.4
612/618	Mangrove/Willow	0.69	1.05	7.6	5.5
			TOTAL	**26.1**	**19.9**
FPL Reclaimed Water Treatment Facility (Potential Alternative Location)					
510/511	Canal/Ditches	0.59	1.05	3.2	1.5[a]
6411/612-B	Sawgrass Marsh/ Dwarf Mangroves	0.81	1.05	32.6	29.6[a]
619	Exotic Wetland Hardwoods	0.48	1.05	3.7	1.9[a]
			TOTAL	**39.5**	**33[a]**
FPL Reclaimed Water Treatment Facility (Originally Proposed Location)					
6411/612-B	Sawgrass Marsh/ Dwarf Mangroves	0.81	1.05	42.8	37.6[b]
617	Mixed Wetland Hardwoods	0.83	1.05	0.8	1.1[b]
			TOTAL	**43.6**	**38.7[b]**

[a] Includes 1.95 credits associated with 3.9 acres of secondary impacts surrounding FPL reclaimed water treatment facility potential alternative location.
[b] Includes 1.68 credits associated with 3.3 acres of secondary impacts surrounding FPL reclaimed water treatment facility originally proposed location.

2.3.3 Associated Linear Facilities

Associated linear facilities include the reclaimed water pipelines, temporary construction access road improvements, potable water pipeline, and transmission line corridors. Wetlands associated with the associated linear facility corridors vary in functional value, primarily based upon prevalence of nuisance/exotic species of vegetation and degree of hydrologic alteration.

A portion of the temporary construction access road improvements, transmission facilities, and potable water pipeline corridors are co-located along SW 359th Street extending west across the L-31E Canal from the northwestern edge of the industrial cooling canals. Freshwater marsh wetlands associated with this portion of the linear facilities corridor located adjacent to SW 359th Street are of relatively high quality, dominated by sawgrass and other desirable native wetlands species; and, with the exception of occasional ditches and the existing transmission line access road, these areas are mostly undisturbed. Areas of relatively high-quality mangrove wetlands occur within the reclaimed water pipeline corridor and portion of the access road corridor adjacent to the L-31E Canal. In other areas of the temporary construction access road improvements and reclaimed water pipeline corridors, mixed wetland hardwood communities demonstrate a reduced functional value due to the prevalence of several exotic species,

primarily Brazilian pepper and Australian pine. These species are moderately widespread throughout the mixed wetland hardwood communities within the associated linear facility corridors. Areas dominated by exotic wetland hardwoods that provide limited wildlife habitat, reduced vegetative species diversity, and low functional value are prevalent within the linear facility corridors.

Temporary impacts associated with the reclaimed water pipeline will be restored in-situ, as described in Section 3.5. Following construction, the 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. The functional lift generated through post-construction restoration is considered "additional mitigation" and not included as part of the Project's overall credit ledger.

A summary of wetland type, functional assessment score, impact acreage, and amount of mitigation required to offset the loss of wetland functions for the reclaimed water pipelines and temporary construction access road improvement corridors is provided in Table 2-4.

TABLE 2-4

ASSOCIATED NON-TRANSMISSION LINEAR FACILITIES
WETLAND FUNCTIONAL ASSESSMENT SUMMARY

FLUCFCS Code	Wetland Type	UMAM Score	Impact Acreage		Functional Loss (Credits)
			Direct	Secondary	
Reclaimed Water Pipelines[a] Corridor (Potential Alternative Location)					
241-W	Wet Palm Tree Nursery	0.27	0.16		N/A[a]
510/ 511	Canals/ Ditches	0.50	1.7	0	0.02[a]
612/612-B	Mangroves /Dwarf Mangroves	0.77	19.51	0	2.92[a]
612/619	Mangrove/Exotic Wetland Hardwoods	0.60	4.47	0	0.27[a]
617	Mixed Wetland Hardwoods	0.70	8.34	0	1.17[a]
619	Exotic Wetland Hardwoods	0.50	2.31		N/A[a]
641	Freshwater Marshes	0.70	7.09	0	0.14[a]
SUBTOTAL			**43.6**		**4.5[a]**
Reclaimed Water Pipelines[a] Corridor (Originally Proposed Location)					
241-W	Wet Palm Tree Nursery	0.27	0.16		N/A[a]
510/ 511	Canals/ Ditches	0.50	1.7	0	0.02[a]
612/612-B	Mangroves /Dwarf Mangroves	0.77	17.17	0	2.58[a]
612/619	Mangrove/Exotic Wetland Hardwoods	0.60	4.47	0	0.27[a]
617	Mixed Wetland Hardwoods	0.70	8.46	0	1.18[a]
619	Exotic Wetland Hardwoods	0.50	2.31		N/A[a]
641	Freshwater Marshes	0.70	4.07	0	0.08[a]
SUBTOTAL			**38.3**		**4.1[a]**
Temporary Construction Access Road Improvement Corridor[b]					
510/ 511/ 534	Canals/ Ditches/ Reservoirs	0.50	7.3	3.6	4.7
612-B	Dwarf Mangroves	0.77	7.5	3.1	7.2
617	Mixed Wetland Hardwoods	0.70	9.1	8.0	9.7
617/641	Mixed Wetland Hardwoods/Freshwater Marshes	0.77	5.6	5.9	7.0
619	Exotic Wetland Hardwoods	0.60	4.2	4.2	4.0
641	Freshwater Marshes	0.80	47.9	20.2	48.0
SUBTOTAL			**81.6**	**45**	**80.6**
TOTAL			**125.2[c]**	**45**	**85.1[c]**

[a] Loss of functional value for temporary impacts associated with reclaimed water pipeline installation will be replaced through in-situ restoration. Mitigation credits to offset time lag associated with in-situ restoration are provided (see Section 3.4.2).

[b] Secondary wetland impact calculated as 25-foot zone surrounding areas of wetland fill; functional loss for secondary impacts calculated as 60 percent of direct impact. Temporary Construction Access Road Restoration described in Section 3.6

[c] Total calculated utilizing reclaimed water pipeline corridor to FPL Reclaimed Water Treatment Facility potential alternative location. Total utilizing originally proposed location = 119.9 acres, 84.7 UMAM credits

For purposes of impact assessment within the transmission line corridors, an enveloping approach was utilized to calculate a conservative maximum acreage of wetland impacts that could be associated with transmission structure pads, transmission access roads, and expansion of the existing Levee Substation. Conservative assumptions regarding transmission access road length, height and width, as well as placement of structure pads, were incorporated into the assessment to derive a "not to exceed" maximum scenario of wetland impact acreage. Upon detailed transmission line design, road engineering, culvert placement, and incorporation of avoidance and minimization efforts in the specific locations of structures and transmission access roads, the total acreage of wetland impacts are expected to be reduced. The current impact estimates, reflected in Table 2-5, are considered conservative to ensure that the amount of mitigation credits proposed will be more than sufficient to offset the final wetland impacts.

For each segment of the transmission line corridors, as illustrated in Figure 5, a summary of the conservative estimated acreage of wetland impact, average UMAM functional assessment scores for wetlands within each corridor segment, and resulting credits of functional loss is presented in Table 2-5.

TABLE 2-5

CONCEPTUAL TRANSMISSION LINE CORRIDOR RIGHTS-OF-WAY

WETLAND FUNCTIONAL ASSESSMENT SUMMARY

Corridor	Segment	Wetland Types (FLUCFCS Codes)	Estimated Maximum Wetland Impact (Acres)	Average UMAM Score	Estimated Functional Loss (Credits)
West	1A	612-B	4.91	0.80	3.93
West	1B	617, 641	23.65	0.83	19.63
West	1C	617, 641	19.89	0.83	16.51
West	1D	617, 619, 641, 643	44.76	0.70	31.33
West	2	641	2.70	0.60	1.62
West	3A	617, 619, 641	15.33	0.80	12.26
West	3B	617, 619, 641, 643	102.63	0.80	82.10
West	3C	617, 618, 619, 641	55.95	0.83	46.44
West	4	617, 619, 641, 643	27.69	0.70	19.38
West	5A	619, 631, 641, 643	1.06	0.70	0.74
West	5B	619, 641, 643	0.28	0.70	0.20
West	Levee Substation Expansion	619, 641	7.50	0.70	5.25
West	Tamiami Trail Access Corridor	641	1.63	0.80	1.30
West	Krome Avenue Access Corridor	619, 641	0.20	0.70	0.14
East	6	612	0.06	0.83	0.05
	TOTAL		**308**		**241**

3.0 PROPOSED MITIGATION PLAN

Wetland impacts will be mitigated through a combination of wetland restoration, enhancement, and preservation consistent with the regional restoration goals of the CERP within the BBCW study area and Model Lands Basin, as well as purchase of mitigation credits from the EMB and HID. Due to FPL's large land holdings in the area, there is an opportunity to offer a variety of mitigation activities that would not only offset the Project's wetland impacts, but support regional restoration goals benefitting BNP and CERP projects. FPL has proposed a suite of mitigation opportunities in compensation for wetland impacts, including wetland restoration through removal of exotic vegetation, topographic grading and installation of native wetland vegetation, wetland enhancement through hydrological improvements designed to restore historical fresh water flows, preservation of large areas of wetlands contiguous to SFWMD-owned parcels and Biscayne Bay, in-situ restoration of temporarily impacted wetlands associated with pipeline installation, wildlife habitat creation and preservation, and purchase of mitigation credits from the EMB and HID.

The current wetland mitigation proposal identifies several mitigation options that collectively provide the functional lift necessary to offset the Project's wetland impacts. Six mitigation options are discussed below as components of the final mitigation proposal: Northwest Restoration Site, SW 320th Street Restoration Site, EMB and HID Mitigation Banks, Pipeline Restoration, Sea Dade Canal Crocodile Sanctuary, and Temporary Construction Access Road Restoration (Figure 4).

3.1 Northwest Restoration Site

The Northwest Restoration Site consists of several FPL-owned parcels totaling 238 acres located adjacent to the L-31E Canal between SW 328th Street and SW 344th Street/Palm Drive, approximately 2 miles northwest of the Units 6 & 7 Site and directly west of the BNP (Figure 6). 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 SW 328th Street 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 area is located within the proposed Biscayne - Everglades Greenway at the entrance to BNP and could be incorporated into the Greenway's overall plan to provide a network of bicycle trails and walkways between the two parks.

3.1.1 Existing Condition

The area is impacted due to historic hydrologic alteration through a network of mosquito ditches and prevalence of exotic species, resulting in reduced quality of wildlife habitat and vegetative species diversity (Appendix C, Photographs 1 and 2). A network of mosquito control ditches (FLUCFCS 511) crosses the parcel, with adjacent spoil materials supporting the exotic species Australian pine and Brazilian pepper. The east-west mosquito control ditches are typically approximately 4 feet wide by 4 feet deep, while north-south ditches are approximately 3 feet wide by 2 feet deep. Construction of the L-31E, Florida City, and North Canals has isolated the area from tidal influence, altering the salinity to that more characteristic of an oligohaline marsh community. Habitats within the Northwest Restoration Site (Appendix C, Photographs 3 and 4) are dominated by sawgrass marsh (FLUCFCS 6411), mangroves (FLUCFCS 612), exotic wetland hardwoods dominated by Australian pine (FLUCFCS 619-AP), and mixed wetland hardwoods (FLUCFCS 617), as illustrated in Figure 7 and described below.

Sawgrass Marsh (FLUCFCS 6411)

The majority of the site is comprised of low salinity marsh dominated by sawgrass (*Cladium jamaicense*) (FLUCFCS 6411), with a variety of native and exotic subdominant species occurring within the marsh such as knotted spikerush (*Eleocharis interstincta*), Australian pine, buttonwood (*Conocarpus erectus*), white mangrove (*Laguncularia racemosa*), camphorweed (*Pluchea* sp.), red mangrove (*Rhizophora mangle*), mangrove vine (*Rhabdadenia biflora*), rosegentian (*Sabatia* sp.), arrowhead (*Sagittaria lancifolia*), creeping hempvine (*Mikania scandens*), beggarticks (*Bidens laevis*), and cattail (*Typha* spp.). Areas of marsh have been colonized by nuisance/exotic species, including Australian pine, melaleuca (*Melaleuca quinquenervia*), Brazilian pepper, shoebutton ardisia (*Ardisia elliptica*), and small-leaf climbing fern (*Lygodium microphyllum*).

Mangroves (FLUCFCS 612)

The eastern portion of the parcel is hydrologically connected to the L-31E Canal through culverts and supports areas of high-quality red mangrove, black mangrove (*Avicennia germans*), and buttonwood communities with relatively minimal colonization by exotic species. Additional areas classified as mangrove swamp occur within the north-central portion of the Site, supporting a mixture of red mangrove, white mangrove, buttonwood, wax myrtle (*Myrica cerifera*), and approximately 10 percent coverage of Australian pine.

Mixed Wetland Hardwoods (FLUCFCS 617)

The central portion of the site contains areas of tree islands vegetated with a mixture of native hardwoods, including red mangrove, black mangrove, white mangrove, buttonwood, pond apple (*Annona glabra*), cocoplum (*Chrysobalanus icaco*), and coastal plain willow (*Salix caroliniana*).

Exotic Wetland Hardwoods – Australian Pine (FLUCFCS 619-AP)

Areas dominated by the nuisance exotic species Australian pine occur primarily along the northern and southern boundaries of the site, adjacent to the Florida City Canal and SW 328th Street. In addition to Australian pine, these areas contain scattered Brazilian pepper, melaleuca, poisonwood (*Metopium toxiferum*), nettletree (*Trema micrantha*), nightshade (*Solanum* sp.), mysrine (*Myrsine cubana*), dahoon holly (*Ilex cassine*), coastal plain willow, strangler fig (*Ficus aurea*), whisk fern (*Psilotum nudum*), bracken fern (*Pteridium aquilinum*), common reed (*Phragmites australis*), and buttonwood.

3.1.2 Target Community

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 (Figure 8). The average hydroperiod for a sawgrass marsh is approximately ten months, but ranges from less than six months to almost continuous flooding. 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.

3.1.3 Methods

Restoration of wetlands at the Northwest Restoration Site involves hydrologic enhancement and exotic vegetation eradication to achieve the target community. The existing network of mosquito ditches will be backfilled with adjacent spoil materials and topographically graded to encourage sheetflow distribution of water throughout the restored area and to facilitate the success of target native vegetative communities (Figure 9). The spoil areas adjacent to mosquito ditches are dominated by Australian pine; removal of these exotic species will occur prior to backfilling. Due to potential soil subsidence within the spoil areas, it is anticipated that additional fill material may be required to adequately fill mosquito ditches and achieve the desired topographic conditions. Where necessary, clean fill material will be imported to the Site for this purpose.

Control of nuisance/exotic species will be achieved through applications of herbicides, hand removal, prescribed fire, and additional focused herbicide re-treatments to areas showing regrowth. Due to the presence of desirable wetland vegetation throughout the area, it is anticipated that regeneration from the seedbank will produce a diverse assemblage of native species. Supplemental exotic species control will be utilized to prevent re-colonization of the area following initial eradication efforts. Installation of wetland vegetation, as necessary, will be included where natural regeneration from the seedbank does not produce the target vegetative community.

Specific guidelines and scope of work for the control of exotic species of vegetation within the Northwest Restoration Site will be prepared in consultation with representatives of the FDEP, USACE, and DERM. Herbicide applications will be timed so as to occur prior to the onset of summer rains. The following provides a conceptual schedule of activities proposed for the Northwest Restoration Site:

YEAR	MONTH	ACTIVITY
1	Jan-March	Mechanical clearing, mosquito ditch removal, topographic grading
	March/April	Ground crew herbicide treatment and manual removal
	October	Monitoring event #1
2	March/April	Prescribed fire
	October	Monitoring event #2
3	March/April	Spot herbicide treatment by ground crews
	May	Installation of native herbaceous wetland species if necessary, as available
	October	Monitoring event #3
4	March/April	Spot herbicide treatment by ground crews if necessary
	May	Supplemental installation of native wetland species if necessary
	October	Monitoring event #4
5	October	Monitoring event #5

The following EPA-approved herbicides, for example, are effective for control of the target species and may be considered for use as part of the exotic control program:

Brazilian pepper *(Schinus terebinthifolius)* Australian pine (*Casuarina equisetifolia*) Melaleuca (*Melaleuca quinquefolia*) Shoebutton ardisia (*Ardisia elliptica*)	Potential herbicides: triclopyr (Garlon), glyphosate (Rodeo), imazapyr (Arsenal) Method: Cut surface treatments to eliminate larger undesirable stems. Basal treatments can be used in combination with cut surface treatments when large undesirable trees are mixed with smaller stems. Freshly cut stumps should be treated with water soluble amine herbicide formulations labeled for this use; previously cut stumps (up to several months old) may be treated with low volume basal herbicide mixtures.

Sources: Thayer, D.D., K. A. Langeland, W.T. Haller, and J.C. Joyce. 2003. Weed Control in Florida Ponds. University of Florida Institute of Food and Agricultural Sciences; Kline, W.N. and J.G. Duquesnel. 1964. Management of Invasive Exotic Plants with Herbicides in Florida. *Down to Earth*, (51)2.

Success criteria, to be negotiated in consultation with the FDEP, USACE, and DERM, will likely include maintenance of the mitigation area to include 5% or less cover by exotic species and with suitable coverage of native wetland species of vegetation for a period of at least 3 years following initiation of mitigation activities.

FPL proposes to provide public access to the mitigation parcel for passive recreation and environmental education opportunities. An elevated boardwalk may be constructed with interpretive kiosks and observation platforms for birdwatching, wildlife observation, and plant identification (Figure 10). 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.

3.1.4 Environmental Lift

The current UMAM wetland functional assessment scores for the Northwest Mitigation Site range from a low of 0.50 for the mosquito ditches to a high of 0.67 for mangrove areas. The functional scores reflect diminished ecological conditions as a result of the hydrological alterations and proliferation of exotic species. It can reasonably be expected that after exotic vegetation removal and maintenance, hydrologic enhancement through removal of mosquito ditches, establishment of native marsh vegetative communities, and preservation of the area, the UMAM functional assessment scores would range between 0.73 and 0.83 as a result of increased health of the vegetative community and subsequent increase of forage fish, macroinvertebrates, and wildlife utilization. A total of 35.7 credits of functional lift are generated through the restoration and preservation of 238 acres of wetlands within the Northwest Restoration Site. A summary of the functional assessment is provided in Table 3-1 and discussed below; UMAM spreadsheets are provided in Appendix A.

TABLE 3-1
NORTHWEST RESTORATION SITE FUNCTIONAL ASSESSMENT SUMMARY

Wetland Type (FLUCFCS Code)	Target Community (FLUCFCS Code)	Acres	UMAM Score		Time Lag x Risk	Lift per Acre	Functional Lift (Credits)
			Pre	Post			
Ditches (511)	Sawgrass Marsh (6411)	10.50	0.50	0.73	1.71	0.13	1.37
Freshwater/Sawgrass Marsh (641/6411)	Sawgrass Marsh (6411)	95.43	0.60	0.80	1.3	0.15	14.31
Mixed Wetland Hardwoods (617)	Mixed Wetland Hardwoods (617)	16.23	0.60	0.83	1.43	0.16	2.60
Exotic Wetland Hardwoods – Australian Pine (619)	Sawgrass Marsh (6411)	66.19	0.53	0.77	1.43	0.17	11.25
Periphyton Mat (655)	Periphyton Mat (655)	7.23	0.60	0.80	1.3	0.15	1.08
Mangrove (612)	Mangrove (612)	42.20	0.67	0.83	1.3	0.12	5.06
TOTAL		**238**					**35.7**

For areas of sawgrass marsh, freshwater marsh, and periphyton mat, utilizing the difference between pre- and post-mitigation UMAM functional scores (0.20) divided by the time lag (TL) and risk (R) factors (TL of 3 years = 1.07, R factor of 1.25, TL×R = 1.3), the resulting functional lift per acre is 0.15. Following restoration, the functional value of mixed wetland hardwood communities would increase from 0.60 to 0.83. Utilizing the difference between pre- and post-mitigation UMAM functional scores (0.23) divided by the time lag (TL) and risk (R) factors (TL of 5 years = 1.14, R factor of 1.25, TL×R = 1.43), which results in a lift per acre of 0.16. In the case of ditches, the difference between pre- and post-mitigation UMAM functional scores (0.23) divided by the time lag (TL) and risk (R) factors (TL of 5 years = 1.14, R factor of 1.5, TL×R = 1.71), the resulting functional lift per acre is 0.13. The difference between pre- and post-mitigation UMAM functional scores for exotic wetland hardwoods (0.24) divided by the time lag (TL) and risk (R) factors (TL of 5 years = 1.14, R factor of 1.25, TL×R = 1.43), results in functional lift per acre of 0.17. The resulting functional lift per acre is 0.12 for mangrove areas, utilizing the difference between pre- and post-mitigation UMAM functional scores (0.16) divided by the time lag (TL) and risk (R) factors (TL of 3 years = 1.07, R factor of 1.25, TL×R = 1.3). The total functional lift generated by the proposed wetland restoration and preservation within the Northwest Restoration Site is 35.7 credits.

3.2 SW 320th Street Restoration Site

The SW 320th Street Restoration Site is located approximately 4 miles northwest of the Units 6 & 7 Site and encompasses a total of 574 acres, comprised of parcels located on the north and south of the C-103 Canal and extending east toward SFWMD-owned parcels adjacent to the FPL transmission line, L-31E

Canal, and the BNP (Figure 11). Restoration and enhancement of these parcels will be achieved through the removal of exotic species of vegetation, removal of ditches to restore natural topography and enhance hydrology, supplemental planting of desirable native wetland vegetation, and preservation through a conservation easement. Following restoration of wetlands within the SW 320th Street Restoration Site, these parcels are proposed to be transferred to the public trust, under the management of the SFWMD, BNP, MDC, FDEP or other qualified entity, to further regional wetland conservation efforts within the BBCW area. The juxtaposition of the SW 320th Street Restoration Site adjacent to lands previously conveyed from FPL to SFWMD adjacent to the L-31E Canal and BNP (Appendix C, Photographs 5 and 6) will result in a significant increase in the overall acreage of conservation lands within the BBCW area. These lands will be restored, preserved, and protected from future development in the area.

3.2.1 Existing Condition

Current land use/land cover within the SW 320th Street Restoration Site is illustrated in Figure 12. The southwestern, central, and northwestern portions of the site are classified as exotic wetland hardwoods (FLUCFCS 619) infested by the nuisance/exotic species Brazilian pepper and Australian pine. A parcel of planted palm tree nursery (FLUCFCS 241) is located within the western portion of the site, with associated perimeter drainage ditches. Forested wetlands within the eastern portion of the site are classified as mixed wetland hardwoods/exotic wetland hardwoods (FLUCFCS 617/619), vegetated with a variety of native species but extensively colonized by the exotic species Australian pine and Brazilian pepper. The central portion of the SW 320th Street Restoration Site includes an approximately 219-acre parcel of former palm tree nurseries that have been restored to freshwater marsh (FLUCFCS 641) and native buttonwood. Representative photographs are included in Appendix C; the existing vegetative community composition within each of these habitats is described below.

Palm Tree Nursery (FLUCFCS 241)

Approximately 42 acres of the site is comprised of palm tree nurseries. Native vegetative communities occurring upon hydric soils were historically cleared and the area was graded for production of palms. Elevated rows of trees are separated by irrigation furrows, with perimeter drainage ditches.

Freshwater Marsh (FLUCFCS 641)

The northern and central portion of the Site is comprised of approximately 219 acres of former palm tree nurseries that have been restored to freshwater marsh and buttonwood. A variety of herbaceous species occur within the marsh (Appendix C, Photograph 7), including several species of spikerush (*Eleocharis cellulosa; E. geniculata; E. interstincta*), arrowhead (*Sagittaria lancifolia*), giant leather fern (*Acrostichum danaefolium*), southern amaranth (*Amaranthus australis*), bushy bluestem (*Andropogon glomeratus*), spangletop (*Leptochloa nealleyi; L. fusca fascicularis*), Mexican primrose willow (*Ludwigia*

octovalvis), whorled marsh pennywort (*Hydrocotyle verticillata*), water hyssop (*Bacopa monnieri*), camphorweed, widespread maiden fern (*Thelypteris kuntii*), and the nuisance species cattail (*Typha domingensis*) and torpedo grass (*Panicum repens*). Nuisance vegetation, specifically cattail and torpedo grass, are controlled through targeted herbicide application. Sparsely vegetated mudflat areas with exposed substrate and/or open water provide habitat suitable for shorebird and wading bird foraging (Appendix C, Photographs 8 and 9). A variety of avifauna have been observed within the restored marsh, including wood storks (*Mycteria americana*), great blue heron (*Ardea herodias*), tricolored heron (*Egretta tricolor*), white ibis (*Eudocimus albus*), glossy ibis (*Plegadis falcinellus*), little blue heron (*Egretta caerulea*), snowy egret (*Egretta thula*), least tern (*Sterna antillarum*), pied-billed grebe (*Podilymbus podiceps*), blue-winged teal (*Anas discors*), mottled duck (*Anas fulvigula*), cattle egret (*Bubulcus ibis*), great egret (*Casmerodius albus*), black-necked stilt (*Himantopus mexicanus*), and red shouldered hawk (*Buteo jamaicense*).

Mixed Wetland Hardwood/Exotic Wetland Hardwoods (FLUCFCS 617/619)

The eastern portion of the SW 320th Street Restoration Site supports native mixed wetland hardwoods interspersed with exotics, including Australian pine, Brazilian pepper, and shoebutton ardisia. The canopy is comprised of buttonwood, white mangrove, dahoon holly, cocoplum, Australian pine, wax myrtle, myrsine, and poisonwood, with understory vegetation including sawgrass, camphorweed, arrowhead, leather fern, mangrove vine, nettletree, spikerush, and cattail. The eastern edge of the SW 320th Street Restoration Site abuts SFWMD parcels of mixed wetland hardwoods currently being treated for Australian pine and Brazilian pepper (Appendix C, Photograph 10).

Exotic Wetland Hardwoods (FLUCFCS 619)

Areas dominated by the nuisance exotic species Australian pine and Brazilian pepper occur in the southwestern portion of the site, both north and south of the C-103 canal. In addition to dense coverage of Australian pine and Brazilian pepper, a variety of both native and nuisance exotic species are present, including shoebutton ardisia, groundsel tree (*Bachharis halimifolia*), willow, elderberry (*Sambucus canadensis*), buttonbush (*Cephalnathus occidentalis*), strangler fig, primrose willow (*Ludwigia* sp.), dogfennel (*Eupatorium capillifolium*), spikerush, nettletree, climbing hempvine (*Mikania scandens*), and cattail.

3.2.2 Target Community

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 (Figure 13). 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 (*Rhynchospora* spp.), camphorweed, leather 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 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.

3.2.3 Methods

Mitigation activities at the SW 320th Street Restoration Site will involve extensive exotic species eradication efforts to remove Australian pine, Brazilian pepper, and shoebutton ardisia infestation. Mechanical control methods will be used primarily where invasive plant densities are high and standing biomass limits accessibility. Bulldozers, mowers, choppers, feller-bunchers, chippers, chainsaws, and other machinery may be utilized. In areas that are not dominated by invasive vegetation, manual treatment with herbicides will occur. Herbicidal control involves the careful application of chemicals to the targeted plants, while minimizing impact to desirable native species of vegetation.

Herbicide applications will be timed so as to occur during the driest time of the year, prior to the onset of summer rains. Only EPA-approved herbicides will be used (see Section 3.1.3). Following mechanical and herbicide treatment of exotic vegetation, the areas will be topographically graded, including backfilling of agricultural ditches, and planted with native wetland species to encourage vegetative succession within the restored freshwater marsh wetlands. Herbaceous wetland plants will be planted on 3 foot centers to provide for rapid revegetation and effective competition against nuisance invader species. This will result in a density of approximately 4,800 plants per acre. Planting of bare root stock or small containerized stock will be done manually. Mixed wetland hardwood communities will be restored through natural regeneration from the seed bank and supplemental planting of desirable wetland species, as necessary. Subsequent treatments of exotic species of vegetation will be conducted as necessary to discourage regrowth of Brazilian pepper and Australian pine. The 219-acre freshwater marsh portion of the SW 320th Street Restoration Site, currently under restoration but not under a conservation easement, will be preserved and transferred to the public trust as part of the overall SW 320th Street Restoration Site mitigation alternative.

3.2.4 Environmental Lift

Within the SW 320th Street Restoration Site, the current UMAM functional score for Brazilian pepper and Australian pine-dominated wetlands (FLUCFCS 619) is 0.50. The functional score is a reflection of diminished ecological conditions as a result of the widespread proliferation of exotic species and historical hydrologic impacts. Within the eastern portion of the site, as native mixed wetland hardwoods increase in occurrence, the existing UMAM score is 0.57 due to continued prevalence of Australian pine and Brazilian pepper. Upland areas of active palm tree nursery were assigned a UMAM score of 0.27, due to presence of hydric soils but current lack of wetland vegetation and functions. The current UMAM functional score for areas of restored freshwater marsh is 0.57, resulting from the continued presence of exotic species within the restoration area. It can reasonably be expected that after exotic vegetation eradication and maintenance, removal of ditches, establishment of a native marsh and mixed wetland hardwood vegetative community, and preservation of the area, the functional value of the SW 320th Street Restoration Site would improve, with UMAM scores ranging from 0.60 to 0.73 as a result of increased health of the vegetative community, subsequent increase in wildlife utilization, and transfer of restored lands to the public trust. A total of 56.8 credits of functional lift are generated through the restoration and preservation of 574 acres within the SW 320th Street Restoration Site. A summary of the functional assessment is provided in Table 3-2 and discussed below; UMAM spreadsheets are provided in Appendix A.

TABLE 3-2

SW 320th STREET RESTORATION SITE
FUNCTIONAL ASSESSMENT SUMMARY

Wetland Type (FLUCFCS Code)	Target Community (FLUCFCS Code)	Acres	UMAM Score		Time Lag x Risk	Lift per Acre	Functional Lift (Credits)
			Pre	Post			
Wet Palm Tree Nursery (241)	Freshwater Marsh (641)	42	0.27	0.60	2	0.17	7.14
Mixed Wetland Hardwoods/Exotic Wetland Hardwoods (617/619)	Mixed Wetland Hardwoods (617)	169	0.57	0.73	1.43	0.11	18.59
Exotic Wetland Hardwoods (619)	Freshwater Marsh (641)	144	0.50	0.70	1.43	0.14	20.16
Freshwater Marsh (641)	Freshwater Marsh (641) - Preservation	219	0.57	0.63	0.9 (pres. adjust factor)	0.05	10.95
TOTAL		**574**					**56.8**

For areas of mixed wetland/exotic hardwoods adjacent to the C-103 Canal, utilizing the difference between pre- and post-mitigation UMAM functional scores (0.16) divided by the time lag (TL) and risk (R) factors (TL of 5 years = 1.14, R factor of 1.25, TL×R = 1.43), the resulting functional lift per acre is 0.11. For the restoration of wet palm tree nurseries to freshwater marsh, the difference in pre- and post-mitigation scores (0.33) was divided by an increased risk factor and 5-year time lag factor (TL of 5 years = 1.14, R factor of 1.75, TL×R = 2), with a resulting adjusted functional lift of 0.17 per acre. Areas of exotic wetland hardwoods to be restored to freshwater marsh were assigned a difference in pre- and post-mitigation scores of 0.20, which when divided by time lag and risk factors (TL of 5 years = 1.14, R factor of 1.25, TL×R = 1.43) yields an adjusted functional lift of 0.14 per acre. For the 219-acre parcel of freshwater marsh currently under restoration, the preservation of this area and transfer to the public trust would generate a functional lift of 0.06, which when multiplied by a preservation adjustment factor of 0.9 results in an adjusted lift of 0.05 per acre. For the entire SW 320th Street Restoration Site, the functional lift associated with restoration and preservation of 574 acres is 56.8 credits.

3.3 Mitigation Banks

Wetland mitigation banks are proposed to offset the loss of wetland functions associated with the Units 6 & 7 Site (Plant Area and adjacent laydown area), the nuclear administration, training and parking area located immediately north of the Units 6 & 7 Site, the FPL reclaimed water treatment facility, as well as impacts associated with the Project's transmission line corridors. Impacts to saline wetlands within the Site, FPL reclaimed water treatment facility, nuclear administration, training and parking area, and East Preferred Transmission Corridor will be mitigated through the purchase of coastal mangrove credits from the EMB, while impacts to freshwater wetlands within the West Preferred Transmission Corridor are proposed to be mitigated through the purchase of credits from the HID. As these banks are functioning in advance of Project impacts, they reduce the temporal losses of aquatic functions and values and reduce uncertainty or risk over the ecological success of the mitigation.

3.3.1 Everglades Mitigation Bank

Wetland impacts associated with the Units 6 & 7 Site, the FPL reclaimed water treatment facility, the nuclear administration, training and parking area, and the East Preferred Transmission Corridor will be mitigated through the purchase of 201 mitigation credits from the EMB, calculated in accordance with the W.A.T.E.R. functional assessment methodology. A mosaic of saline mangrove and freshwater marsh habitats have been enhanced within the EMB, including reconnection of tidal creeks' freshwater headwaters to benefit hypersaline mangrove parcels and removal of berms and roads that created isolated parcels of historically continuous mangrove wetlands. The Units 6 & 7 Site is located within the same watershed and service area of the EMB (Figure 14). Providing mitigation to offset impacts within the

same watershed to retain lost function within the same basin is a concept that eliminates cumulative impacts. The restoration work of the EMB will be protected from future development pressure by a conservation easement and a perpetual maintenance fund ensures oversight. Enhancement and restoration associated with 201 credits of mitigation corresponds to approximately 1,400 acres of improved wetlands within the EMB.

3.3.2 Hole in the Donut Mitigation Bank

The HID is a regional mitigation bank located within the ENP and operated by the National Park Service (NPS) (Figure 15). The HID contains over 6,000 acres of agriculturally-impacted lands historically infested with the nuisance exotic species Brazilian pepper. Historic farming activities utilized rock-plowing to break up the original limestone surface and mix it with the surficial marl soil, which increased ground surface elevations and in turn decreased the hydroperiod such that 1985 National Wetland Inventory surveys mapped the area as uplands. The return of wetland functions within the HID involves the complete removal of all existing exotic vegetation and complete removal of historical rock-plowed agricultural soils. Early attempts at restoration of native vegetation through seeding, planting, mechanical removal of exotics, herbicide application, fire, and mowing or discing of farmed areas proved unsuccessful for exotic vegetation control. In order to prevent re-establishment of Brazilian pepper, complete removal of anthropogenic soils was required. The removal of rock-plowed material reduced the land elevation, allowing restoration of a more typical wetland hydroperiod to support the target marl prairie wetland community.

According to FDEP permit # 132416479, issued 2/15/1995, "mitigation for wetland impacts within the Mitigation Service Area will consist of a set dollar amount per acre of impact." Conservative assumptions regarding transmission access road length, height and width, as well as placement of structure pads, were incorporated into the assessment to derive a "not to exceed" maximum scenario of wetland impact acreage. Wetland impacts within the West Preferred Transmission Corridor are proposed to be mitigated through purchase of up to 308 mitigation credits from the HID, reflecting the "not to exceed" maximum scenario of wetland impact acreage. The HID permit is scheduled for renewal in 2015; if the renewal includes revision of the HID credit ledger to utilize the UMAM functional assessment protocol, the appropriate number of UMAM credits will be purchased to offset the loss of wetland functions associated with construction of transmission facilities within the West Preferred Transmission Corridor. The exact acreage of wetland impact and resulting functional loss will be calculated following completion of detailed transmission engineering design and are expected to be reduced. Purchase of mitigation credits from the HID will provide significant benefit to regional wetland

restoration and conservation efforts, and directly benefit vegetative communities and wildlife habitat within the ENP.

3.4 Pipeline Restoration

A total of up to approximately 46.3 acres of temporary wetland impacts are associated with the installation of the radial collector well delivery pipelines and the reclaimed water pipelines between the Miami-Dade South District Wastewater Treatment Plant and the FPL reclaimed water treatment facility (Figure 16). These areas are proposed to be mitigated through in-situ restoration of wetlands temporarily disturbed during excavation of pipeline trenches.

All areas of temporary wetland impact associated with pipeline installation will be restored, thereby avoiding any permanent reduction in wetland acreage. Mitigation will be provided to offset the temporary loss of wetland functional values. The potable water pipelines will be installed within existing upland road medians and within the temporary access roadway improvements corridor, therefore no additional wetland impacts will occur in association with the potable water pipelines.

3.4.1 Methods

Within wetland areas traversed during pipeline installation, the upper layer of the soil horizon associated with the pipeline trench will be scraped and placed in a spoil bank located on adjacent uplands, segregated from the spoil resulting from the further excavation of the trench. Following installation of the pipeline segment, the upper layer of the soil horizon will be replaced and graded to restore wetland elevations allowing natural revegetation of the temporarily impacted work area from the native seed bank. FPL will control exotic species of vegetation within the restored areas through manual removal and/or herbicide application, in consultation with FDEP, USACE, and DERM. If natural recruitment from the seed bank does not comply with success criteria regarding vegetative community composition and coverage, supplemental planting of native wetland species will be conducted.

3.4.2 Environmental Lift

The in-situ restoration of temporary wetland impacts associated with pipeline installation will generate a total of up to 33.1 credits of mitigation, as calculated in accordance with the UMAM, depending upon the location of the FPL reclaimed water treatment facility and associated pipeline routes. However, due to the time lag required to restore temporarily disturbed areas to their pre-construction condition, in-situ restoration of pipeline areas does not fully replace the loss of wetland functions. A time lag of 10 years was applied to areas of forested wetland impact (mangroves and mixed wetland hardwoods), while a 2 year time lag was applied to herbaceous marsh wetlands as well as canals and ditches. Significantly disturbed or agriculturally altered areas classified as exotic wetland hardwoods and wet palm tree

nurseries were not assigned restoration time lag factors. A total of approximately 5 additional credits of mitigation are required following in-situ restoration when time lag factors are applied. These additional credits of mitigation required are included in the overall Project wetland impact summary (Table 1-1), as well as detailed in Tables 2-2 and 2-4.

The evaluation of functional lift associated with in-situ restoration of temporary impacts is summarized in Table 3-3 below.

TABLE 3-3

PIPELINE RESTORATION AREAS
FUNCTIONAL ASSESSMENT SUMMARY

Wetland Type (FLUCFCS Code)	Acres	Restoration Time Lag	UMAM Score		Functional Lift (Credits)		
			Target	Actual	Target	Actual	Deficit
Reclaimed Water Pipelines (Potential Alternative Location)							
Wet Palm Tree Nurseries (241-W)	0.16	1 year = 1.0	0.27	0.27	0.04	0.04	0
Canals/Ditches (510/511)	1.7	2 years = 1.03	0.50	0.49	0.85	0.83	0.02
Mangroves (612)	19.51	10 years = 1.25	0.77	0.62	15.02	12.10	2.92
Mangrove/Exotic Wetland Hardwoods (612/619)	4.47	10 years = 1.25	0.60	0.54	2.68	2.41	0.27
Mixed Wetland Hardwoods (617)	8.34	10 years = 1.25	0.70	0.56	5.84	4.67	1.17
Exotic Wetland Hardwoods (619)	2.31	1 year = 1.0	0.50	0.50	1.16	1.16	0
Freshwater Marshes (641)	7.09	2 years = 1.03	0.70	0.68	4.96	4.82	0.14
SUBTOTAL	**43.6**				30.55	26.03	**4.5**
Reclaimed Water Pipelines (Originally Proposed Location)							
Wet Palm Tree Nurseries (241-W)	0.16	1 year = 1.0	0.27	0.27	0.04	0.04	0
Canals/Ditches (510/511)	1.7	2 years = 1.03	0.50	0.49	0.85	0.83	0.02
Mangroves (612)	17.17	10 years = 1.25	0.77	0.62	13.22	10.65	2.57
Mangrove/Exotic Wetland Hardwoods (612/619)	4.47	10 years = 1.25	0.60	0.54	2.68	2.41	0.27
Mixed Wetland Hardwoods (617)	8.46	10 years = 1.25	0.70	0.56	5.92	4.74	1.18
Exotic Wetland Hardwoods (619)	2.31	1 year = 1.0	0.50	0.50	1.16	1.16	0
Freshwater Marshes (641)	4.07	2 years = 1.03	0.70	0.68	2.85	2.78	0.07
SUBTOTAL	**38.3**				26.72	22.61	**4.1**
Treated Reclaimed Water Pipeline (Originally Proposed Location)							
Sawgrass Marsh/Dwarf Mangroves (6411/612-B)	3.1	10 years = 1.25	0.77	0.62	2.39	1.92	0.47
Mixed Wetland Hardwoods (617)	0.3	10 years = 1.25	0.70	0.56	0.21	0.17	0.04
SUBTOTAL	**3.4**				2.60	2.09	**0.5**
Radial Collector Well Delivery Pipelines							
Mangroves (612)	**3**	10 years = 1.25	0.87	0.696	2.61	2.09	**0.5**
TOTAL	**46.6**[a]				**33.16**[a]	**28.12**[a]	**5.0**[a]

[a] Total calculated utilizing reclaimed water pipeline corridor to FPL Reclaimed Water Treatment Facility potential alternative location. Total utilizing originally proposed location = 44.7 acres, 5.1 UMAM credits

3.5 Sea Dade Canal Crocodile Sanctuary

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 located southwest of the industrial wastewater treatment facility, adjacent to the Sea Dade Canal and an existing meteorological tower (Figure 17).

3.5.1 Existing Condition

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 (*Byrsonima lucida*).

3.5.2 Target Community

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 (*Suriana maritima*), Florida silver palm (*Coccothrinax argentata*), willow bustic (*Sideroxylon salicifolium*), muhly grass (*Muhlenbergia capillaries*), and railroad vine (*Ipomea pes-capri*) 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.

3.5.3 Methods

The Sea Dade Canal Crocodile Sanctuary will be created in accordance with the methodology used to create the EMB crocodile sanctuary in 2008. Photographs of the crocodile sanctuary prior to enhancement and immediately following creation are presented in Appendix C (Photographs 11 and 12). This approximately 5-acre area was cleared of exotic vegetation, topographically graded to create freshwater ponds and nesting areas with a specific mixture of peat, marl, and sand to create ideal nesting substrate, and planted with native species of vegetation. The success of the design is evidenced through documented utilization of the area by a nesting female crocodile within the first year after construction.

Similar to the design utilized at the EMB crocodile sanctuary, areas of previously filled uplands within the Sea Dade Canal Crocodile Sanctuary will be graded and connected to existing borrow pond areas to create an open water lagoon habitat. The proven mixture of peat, marl, and sand will be used along the slopes and banks to create ideal crocodile nesting substrate. The lagoon will be connected to the Sea Dade Canal on the eastern edge near the existing access road. It will be connected to the western borrow pond and a second connection to the Sea Dade Canal will also be constructed within the western borrow pond to facilitate wildlife access to the sanctuary. Perched ponds designed to collect rainwater and provide low-salinity juvenile crocodile refugia will be created surrounding the primary lagoon.. Nesting mounds of peat, marl, and sand will be constructed adjacent to and surrounding the low-salinity ponds. Areas of forested wetland surrounding the lagoon and ponds will be maintained to include 5% or less cover by exotic species of vegetation through mechanical and herbicide treatment.

3.5.4 Environmental Lift

The Sea Dade Canal Crocodile Sanctuary is being proposed as additional mitigation, although the resulting functional lift is not included in the overall mitigation credit ledger. However, the W.A.T.E.R. functional assessment was utilized to quantify the benefit generated and is provided below for informational purposes. Utilizing the W.A.T.E.R. functional assessment protocol, a total of approximately 1.5 credits of functional lift are generated through the proposed 6.4 acres of wetland restoration and habitat creation associated with Sea Dade Canal Crocodile Sanctuary. A summary of the functional assessment is provided in Table 3-4 and discussed below; W.A.T.E.R. spreadsheets are provided in Appendix B.

TABLE 3-4

SEA DADE CANAL CROCODILE SANCTUARY
FUNCTIONAL ASSESSMENT SUMMARY

Existing Land Use (FLUCFCS Code)	Acres	Post-Restoration Land Use (FLUCFCS Code)	Acres	W.A.T.E.R. Score		Site Suitability Multiplier	Lift per Acre	Functional Lift (Credits)
				Pre	Post			
Borrow Pond (534)	0.77	Saline Lagoon (542)	0.77	0.49	0.77	1.08	0.30	0.23
Dwarf Mangroves (612-B)	0.75	Saline Lagoon (542)	0.04	0.75	0.77	1.08	0.02	<0.01
		Dwarf Mangroves (612-B)	0.71	0.75	0.82	1.08	0.08	0.06
Mixed Wetland Hardwoods (617)	3.08	Mixed Wetland Hardwoods (617)	2.75	0.69	0.77	1.08	0.09	0.25
		Saline Lagoon (542) and Low-Salinity Ponds (534)	0.31	0.69	0.77	1.08	0.09	0.03
		Dwarf Mangroves (612-B)	0.02	0.69	0.82	1.08	0.14	<0.01
Sawgrass Marsh (6411)	0.28	Sawgrass Marsh (6411)	0.28	0.75	0.82	1.08	0.08	0.02
Disturbed Open Land (744)	1.32	Saline Lagoon (542) and Low-Salinity Ponds (534)	0.82	0.13	0.77	1.08	0.69	0.57
		Mixed Wetland Hardwoods (617)	0.03	0.13	0.77	1.08	0.69	0.02
		Sawgrass Marsh (6411)	0.47	0.13	0.82	1.08	0.75	0.35
Roads (814)	0.19	Roads (814)	0.19	-	-	-	-	N/A
Electric Power Facilities (831)	0.04	Electric Power Facilities (831)	0.04	-	-	-	-	N/A
TOTAL	**6.4**		**6.4**					**1.5**

The current W.A.T.E.R. functional scores for disturbed open land and borrow pond areas within the proposed Sea Dade Canal Crocodile Sanctuary Site are 0.13 and 0.49, respectively. It can reasonably be expected that after creation of saline lagoon and low-salinity juvenile crocodile pond refugia, the functional value of these areas will improve to 0.77 as a result of increased health of the aquatic and vegetative community and subsequent increase in wildlife utilization. Utilizing the difference between pre- and post-mitigation W.A.T.E.R. functional scores for disturbed open lands (0.64) and borrow pond (0.28) multiplied by the site suitability multiplier (1.08), the resulting functional lift per acre is 0.69 and 0.30, respectively. In the case of disturbed open land conversion to sawgrass marsh, the difference between pre and post-mitigation W.A.T.E.R. functional scores (0.69) multiplied by the site suitability multiplier (1.08) yields 0.75 units of functional lift per acre. The current W.A.T.E.R. functional score for

mixed wetland hardwood wetlands within the proposed Sea Dade Canal Crocodile Sanctuary Site is 0.69. The functional score reflects slightly diminished ecological conditions resulting from the disturbed nature of the adjacent previously filled areas. It can reasonably be expected that after restoration, the functional value of the forested wetland areas would improve to 0.77 as a result of increased health of the vegetative community and subsequent increase in wildlife utilization. Utilizing the difference between pre- and post-mitigation W.A.T.E.R. functional scores for mixed wetland hardwood wetlands (0.08) multiplied by the site suitability multiplier (1.08), the resulting functional lift per acre is 0.09. Restoration of historically disturbed areas and increase in the quality of wildlife habitat will slightly increase the functional value of adjacent sawgrass marsh and dwarf mangrove areas within the Sea Dade Canal Crocodile Sanctuary. Using the difference between pre- and post-mitigation W.A.T.E.R. functional scores for sawgrass and dwarf mangrove wetlands (0.07) multiplied by the site suitability multiplier (1.08), the resulting functional lift per acre is 0.08. Therefore, the functional lift associated with enhancement and preservation of 6.4 acres of wetlands within the Sea Dade Canal Crocodile Sanctuary Site is 1.5 credits.

3.6 Temporary Construction Access Road Restoration

The restoration of temporary construction access roads is proposed as part of the Project's additional mitigation activities, conducted without the resulting functional lift included in the overall mitigation credit ledger. Temporary construction access road improvements are necessary to facilitate transportation of employees, construction workers, and materials and supplies to and from the Turkey Point Plant during the construction phase. The roadway improvements are uniquely required for safe and efficient construction of the facility, but not all are necessary post-construction. FPL is providing compensatory mitigation for all wetland impacts associated with the temporary construction access roads as if they are permanent. FPL proposes to remove lanes required for temporary construction access following construction and restore the temporarily-impacted wetlands. Following removal of temporary lanes, the area will be topographically graded to pre-construction elevation and planted with native species of vegetation, principally sawgrass, similar to the surrounding landscape. Permanent access road facilities on SW 359th Street will be limited to a transmission access road, with a typical 18' wide surface at a height of at least one foot above seasonal high water. The acreage of temporary construction access road restoration will be determined following detailed road design. It is anticipated that over 50% of the temporarily impacted area will be restored.

4.0 MONITORING AND SUCCESS CRITERIA

Mitigation monitoring methodology, frequency, and success criteria for each mitigation area will be developed in consultation with the FDEP, USACE and DERM. FPL will document implementation of the proposed mitigation projects and provide monitoring of mitigation success in accordance with the requirements of the FDEP, USACE and DERM. Monitoring reports will be provided to the FDEP, USACE and DERM detailing the condition of each mitigation project relative to the prescribed success criteria as required and proposed corrective actions to be implemented to achieve success criteria, as necessary.

Typical success criteria used to demonstrate achievement of required mitigation include:

- Nuisance/Exotic species occupy less than 5% of the total vegetative cover of the parcel;
- Percent cover by desirable wetland species, as listed in F.A.C. Rule 62-340, shall be 95% or greater;
- Wetland species shall be reproducing naturally in the ground, shrub, and canopy stratum; and
- Final success determination shall not be made less than two years from the completion of implementation of the initial mitigation measures and when the above-mentioned criteria have been continuously met for a period of a least one growing season without intervention in the of removal of undesirable vegetation.

The specific information to be included within the mitigation monitoring reports will be determined in consultation with the FDEP, USACE and DERM; typical requirements are as follows:

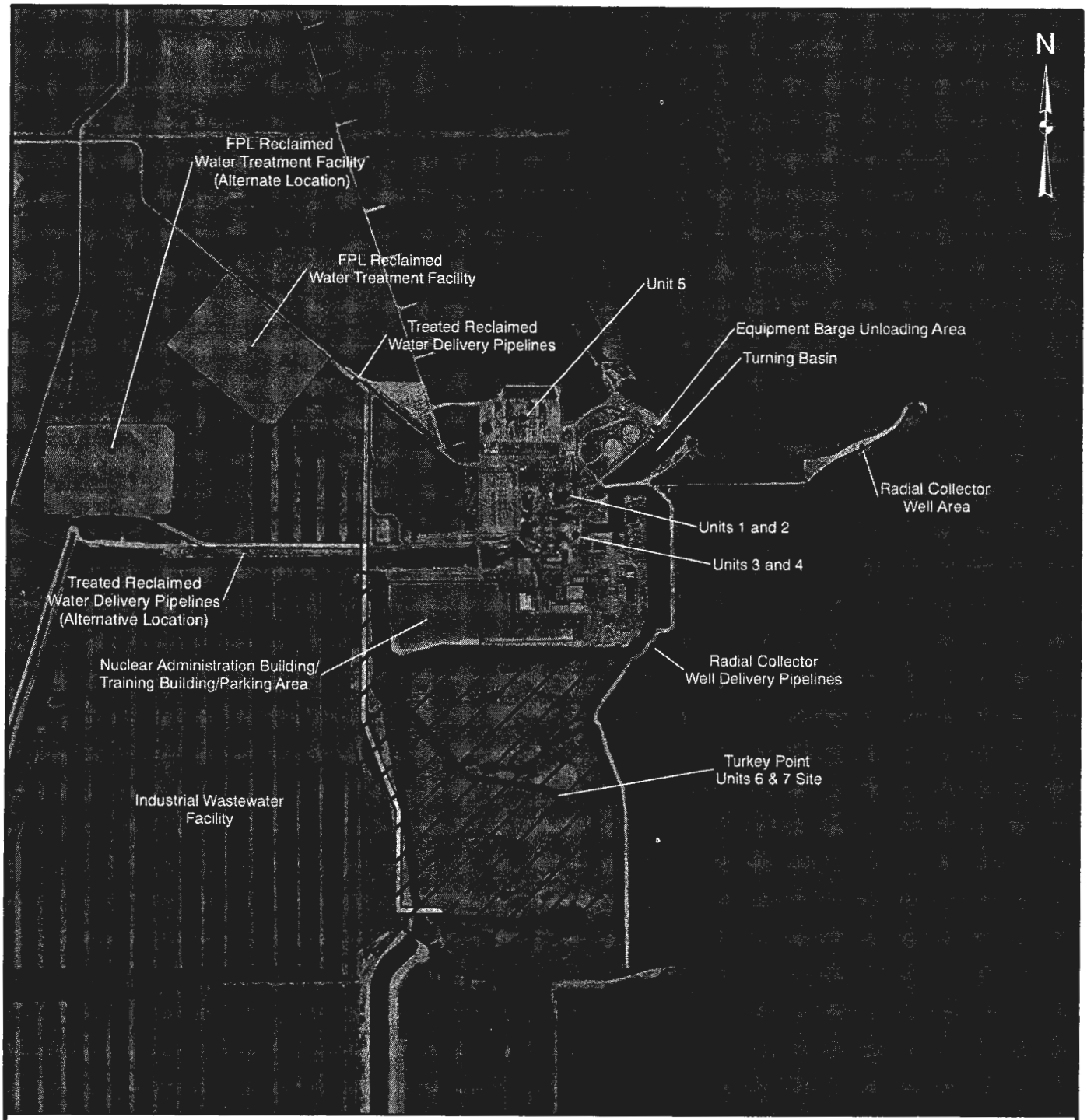
- Status of construction, with a description of the extent of work completed since previous report;
- Problems encountered and solutions undertaken;
- Anticipated work for the following year;
- Panoramic photographs taken from at least four permanent stations;
- Status of nuisance/exotic vegetation eradication on the parcel;
- Status of enhancement on the parcel;
- Herbicide listing and date of application; and
- Percentage survival, density, and cover of trees and herbaceous species.

5.0 CONCLUSION

Wetland impacts associated with the Turkey Point Units 6 & 7 Project will be mitigated through a combination of wetland restoration, enhancement, and preservation consistent with the regional restoration goals of the CERP within the Biscayne Bay Coastal Wetlands study area and Model Lands Basin, as well as purchase of mitigation credits from the EMB and HID. FPL has proposed a suite of mitigation opportunities to compensate for wetland impacts involving over 800 acres of applicant-sponsored wetland restoration and preservation over wetlands located within the BBCW area contiguous to SFWMD-owned parcels and Biscayne Bay; in-situ restoration of temporarily impacted wetlands associated with pipeline installation; creation and preservation of wildlife habitat designed to benefit the American crocodile, wading birds, and shorebirds; and purchase of mitigation credits from the EMB and HID. The mitigation alternatives not only offset the Project's wetland impacts, but also benefit BNP and CERP restoration projects, support regional conservation efforts through enhancement and preservation of significant acreage of wetland habitat, and provide opportunities for public recreation and environmental education.

This mitigation plan provides the functional lift required to offset the Project's wetland impacts. Detailed planting plans, topographic grading designs, and site-specific mitigation success criteria will be developed in consultation with the appropriate regulatory agencies during further refinement and finalization of the mitigation plan.

FIGURES



LEGEND

- Turkey Point Plant Property
- Turkey Point Units 6 & 7 Site
- Associated Non-Linear Facilities

1,800 0 Feet

REFERENCES

1. Imagery, Miami-Dade County, 2007.

PROJECT

TURKEY POINT UNITS 6 & 7
PROJECT

TITLE

PROPOSED FACILITIES
SITE AND ASSOCIATED NON-LINEAR FACILITIES

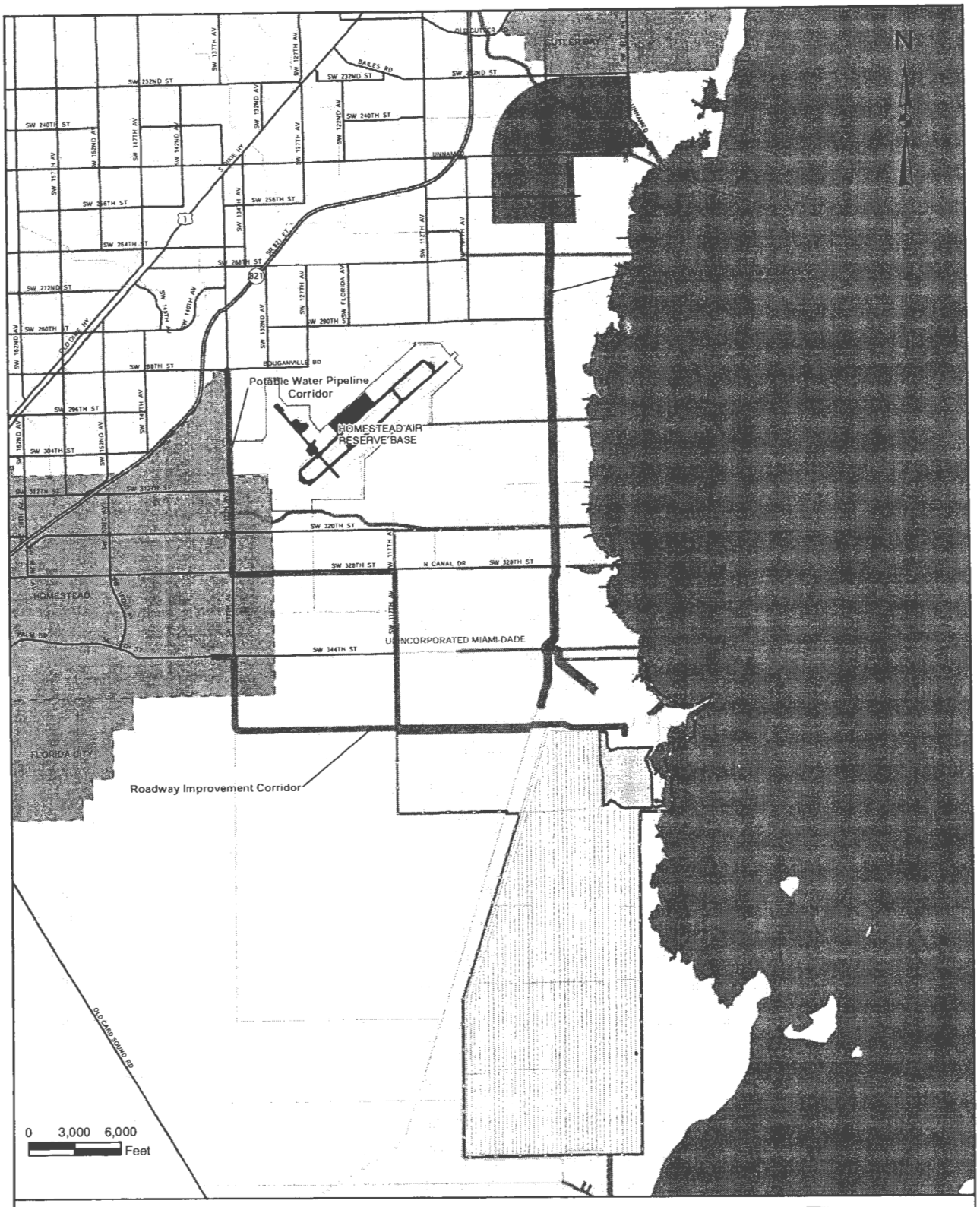
FPL

FILE No. 08387584_K025

REV. 0

PLOT DATE 8/22/2011

FIGURE
1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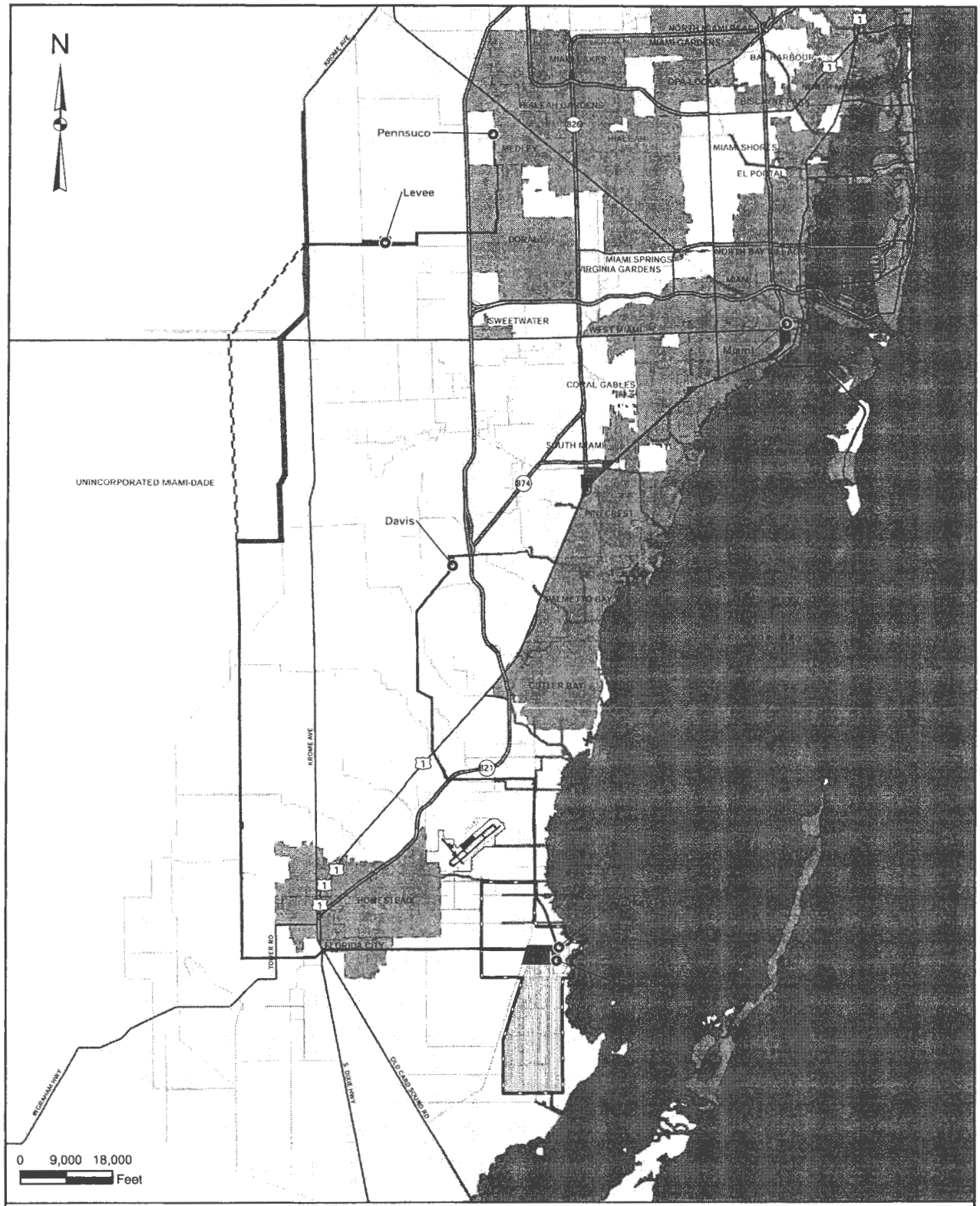
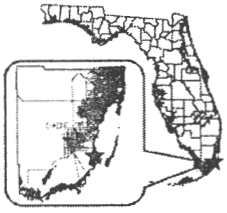


LEGEND

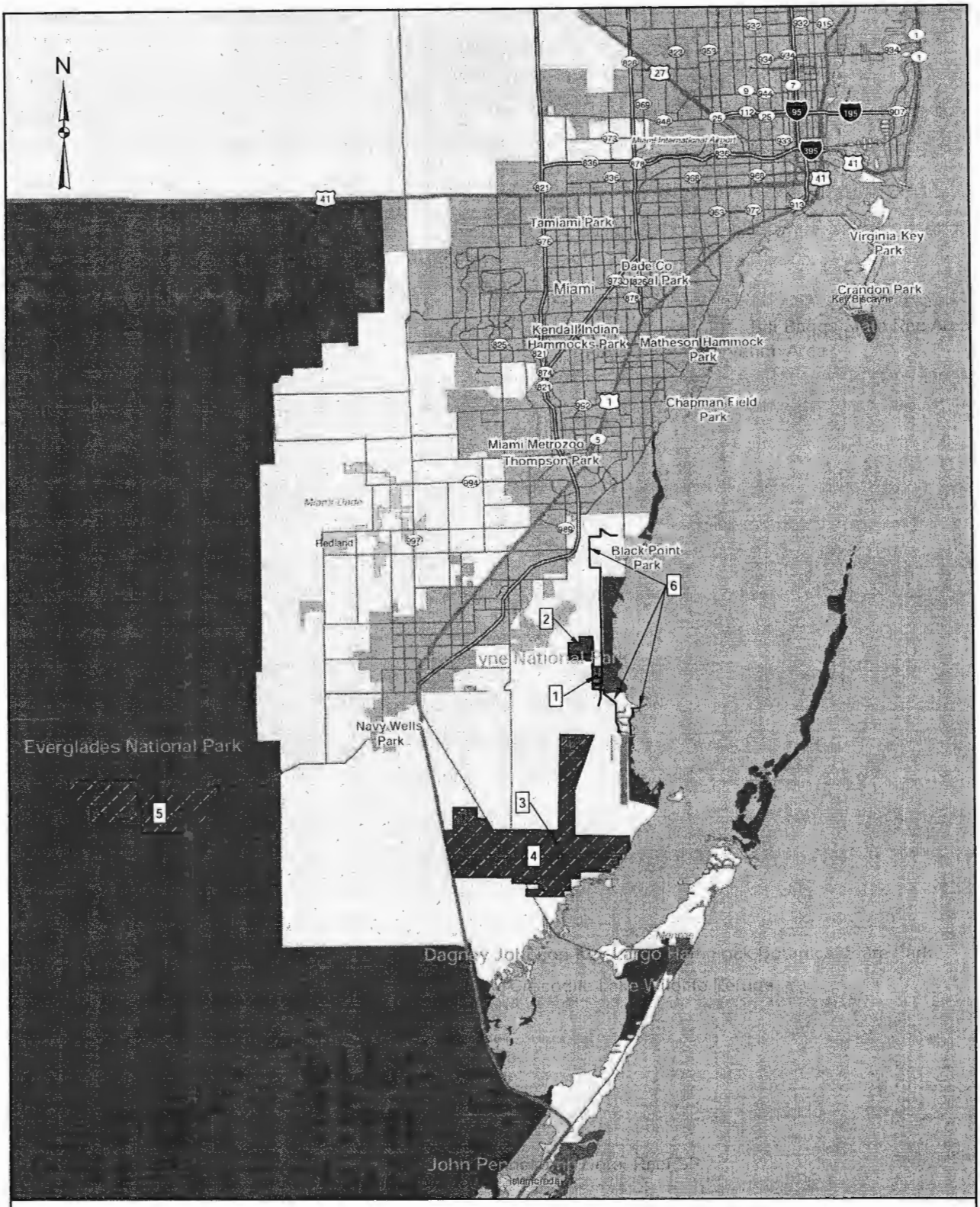
- FPL Substations
- Associated Linear Facilities - Transmission Lines and Corridors
- Secondary Corridor
- Turkey Point Plant Property



REFERENCES

1. Municipal Boundaries, Canals, Highways, Miami-Dade County GIS, 2006.

FIGURE 3	PLOT DATE 6/22/2011	REV. 0	FILE No. 0838784_K027	TITLE: PROPOSED FACILITIES TRANSMISSION	PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT	FPL



LEGEND

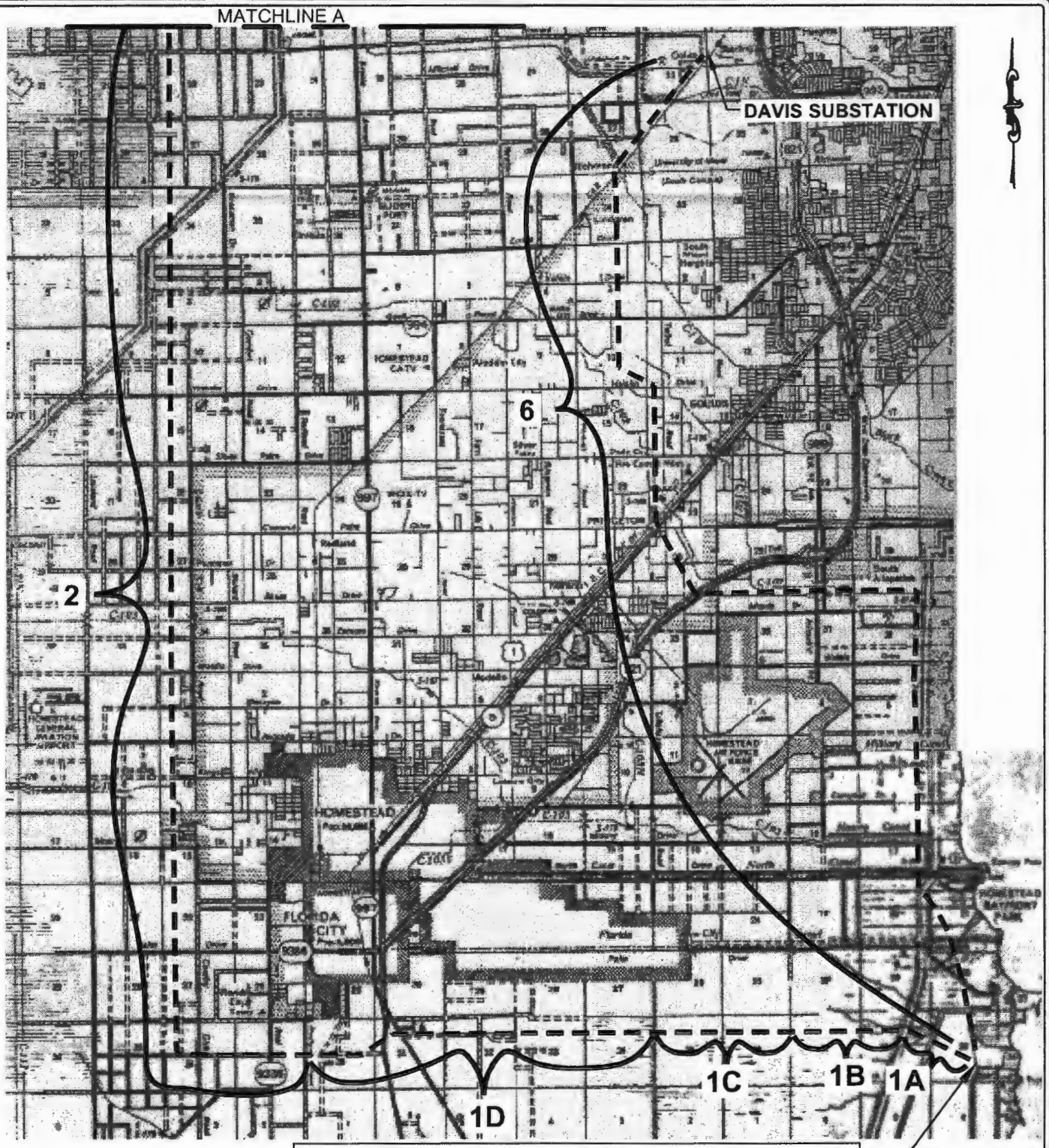
- Mitigation Banks
- Mitigation Alternatives
  - 1 - Northwest Restoration Site
  - 2 - SW 320th Street Restoration Site
  - 3 - Sea Dade Canal Crocodile Sanctuary
  - 4 - Everglades Mitigation Bank
  - 5 - Hole in the Donut Mitigation Bank
  - 6 - Pipeline Restoration Areas

REFERENCES

1. Water Control Structures, SFWMD, 2003.
2. Mitigation Banks, FDEP, 2006.

0 2 4 Miles

FIGURE 4	PLOT DATE 6/23/2011	REV. 3	FILE No. 08387584K001	TITLE: MITIGATION ALTERNATIVES LOCATION MAP	PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT	FPL



TURKEY POINT TRANSMISSION LINES

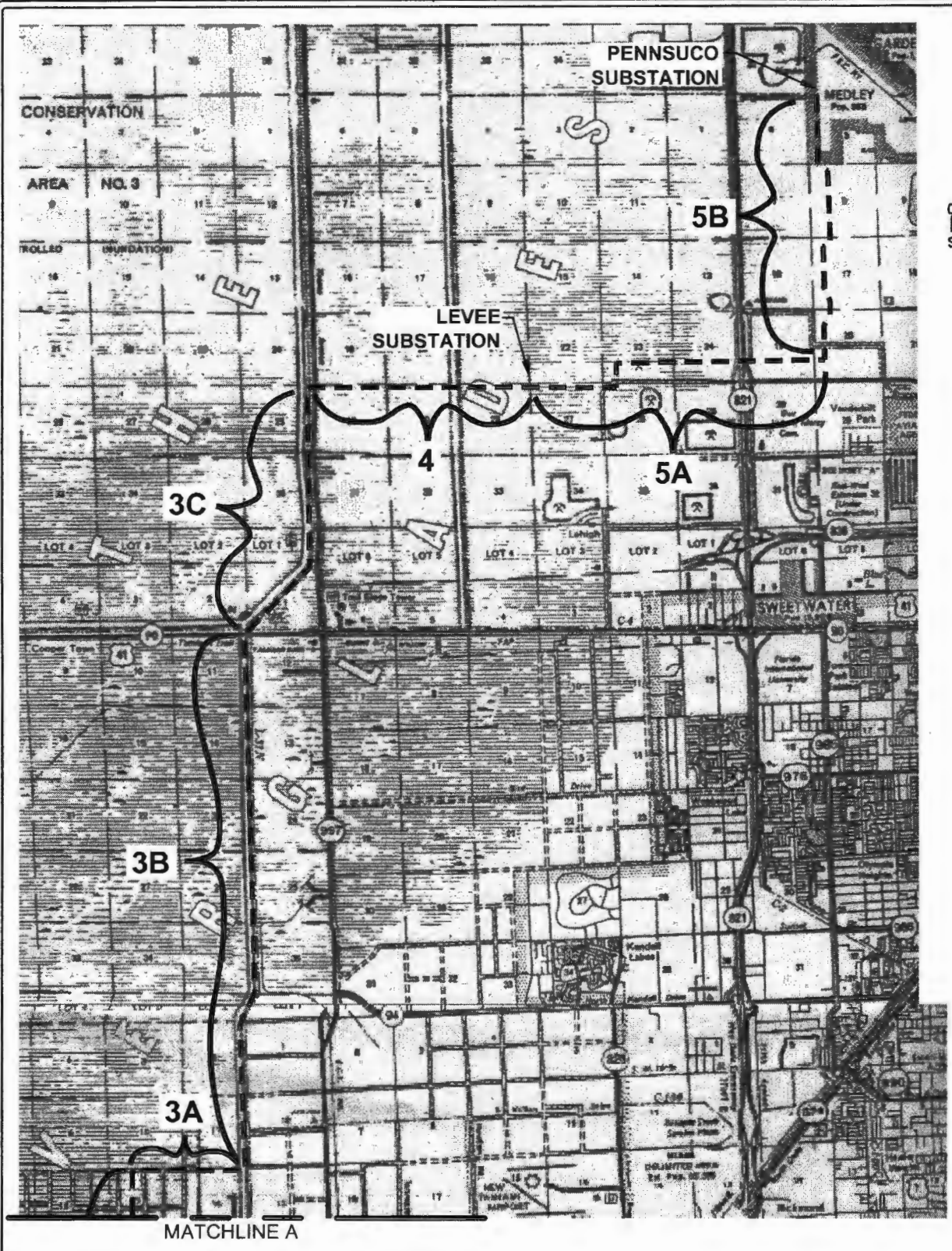
Figure 5 Sheet 1 of 2

Location of Transmission Line Corridors Showing Segments

Source: FDOT Highway Map, 1972.

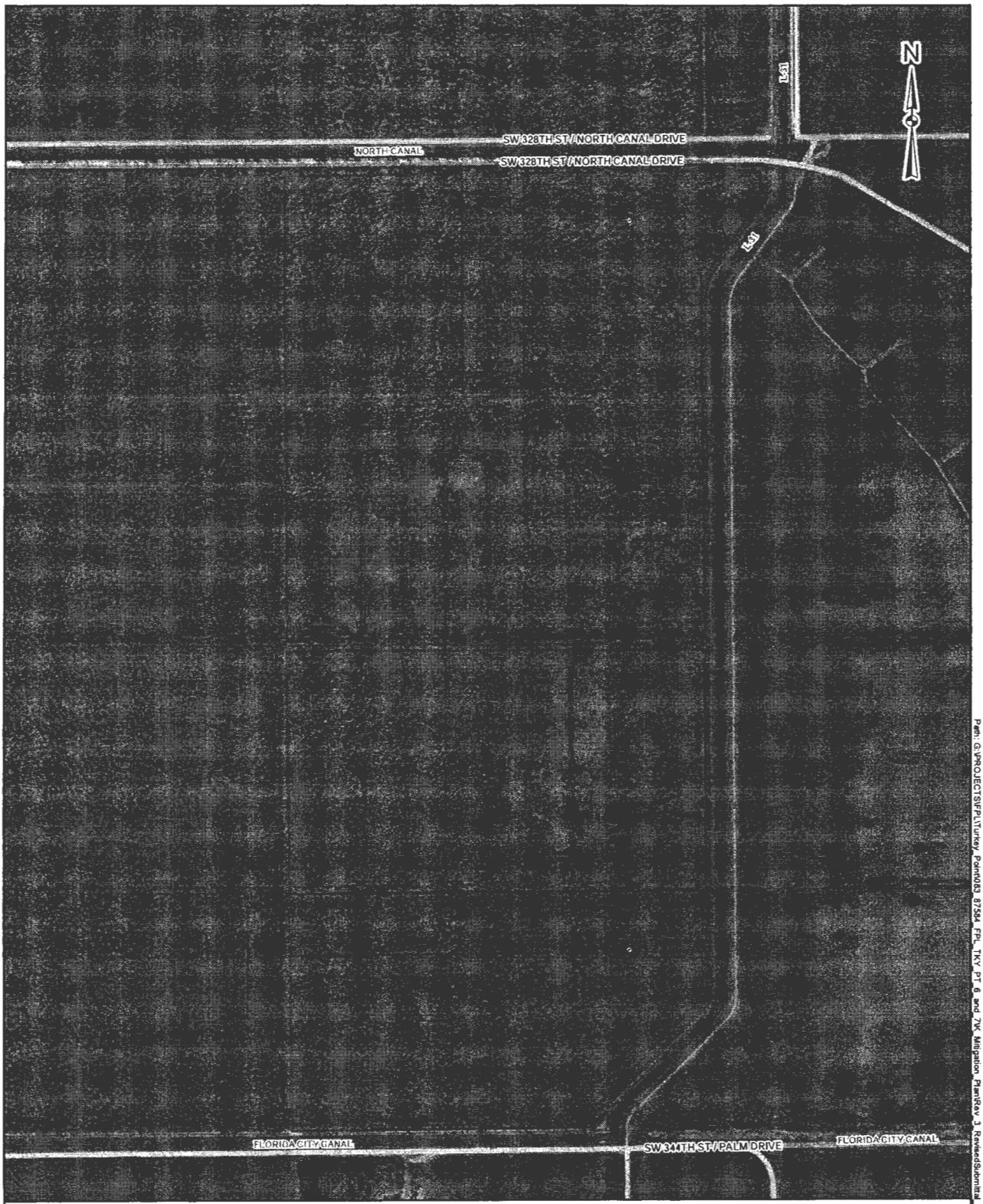
FPL

Drawing file: TP FIGURE 1.dwg May 21, 2009 - 11:34am



TURKEY POINT TRANSMISSION LINES	Figure 5 Location of Transmission Line Corridors Showing Segments *Source: FDOT Highway Map, 1972.*	Sheet 2 of 2 FPL

Drawing file: TP FIGURE 1.dwg May 21, 2009 - 11:34am



LEGEND

Northwest Restoration Site

REFERENCES

1. Imagery, Miami-Dade County 2007.

0 250 500 Feet

FIGURE 6

PLOT DATE 6/23/2011

REV. 3

FILE No. 0838784_K002

TITLE

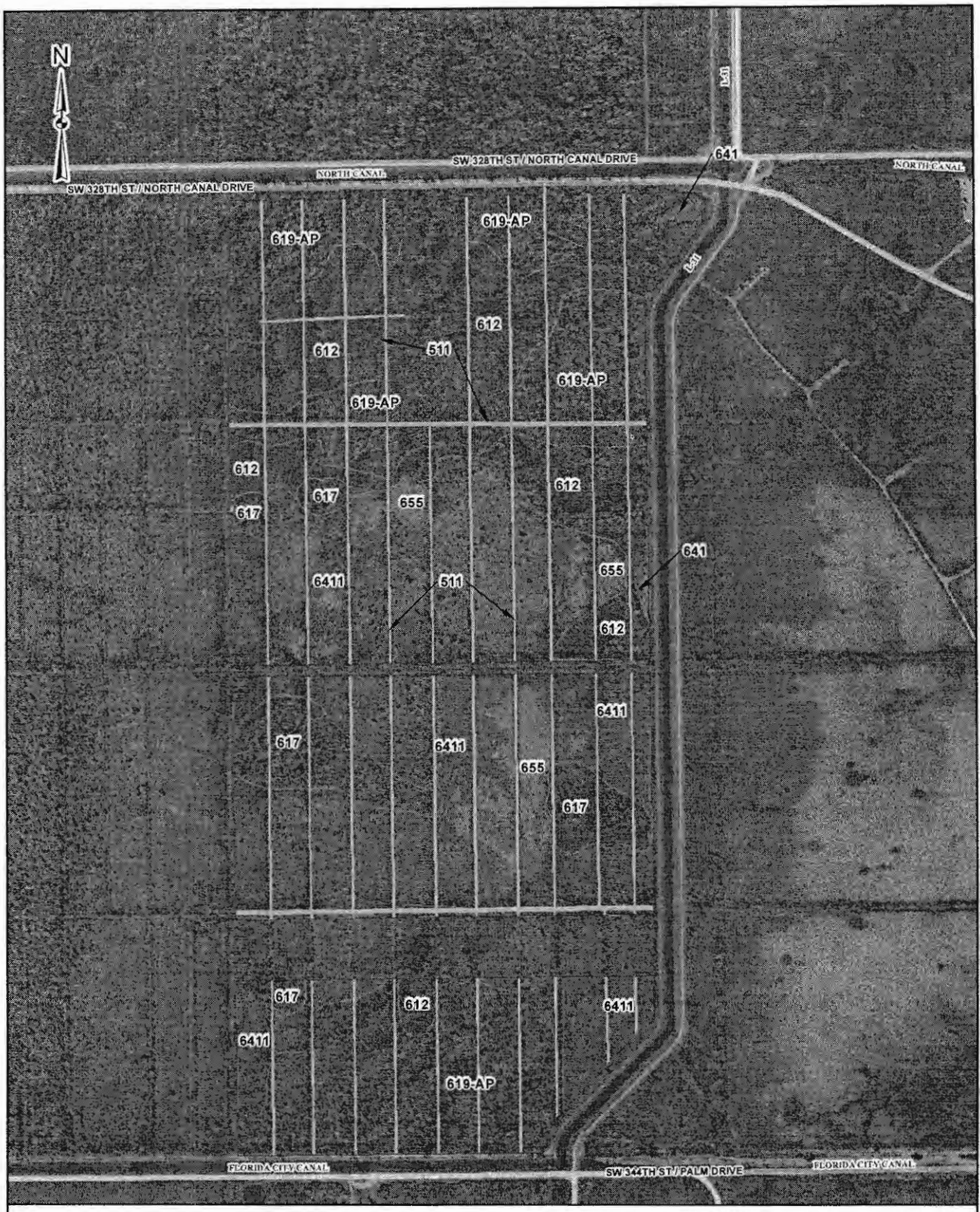
NORTHWEST RESTORATION SITE
AERIAL MAP

PROJECT

TURKEY POINT UNITS 6 & 7
PROJECT

FPL

Path: G:\PROJECTS\FPL\Turkey_Point\083_87584_FPL_TKY_PT_6_and_7\K_Mitigation_Plan\Rev_3_Revised\Submittal_2011\MapDocuments\0838784_K002_Rev3\NWRestSite_Aerial.mxd



LEGEND

- Northwest Restoration Site
- Habitat Classification
- 511 - Ditches
- 612 - Mangrove Swamps
- 617 - Mixed Wetland Hardwoods
- 619-AP - Exotic Wetland Hardwoods-Australian Pine
- 641 - Freshwater Marshes
- 6411 - Sawgrass Marsh
- 655 - Periphyton Mat

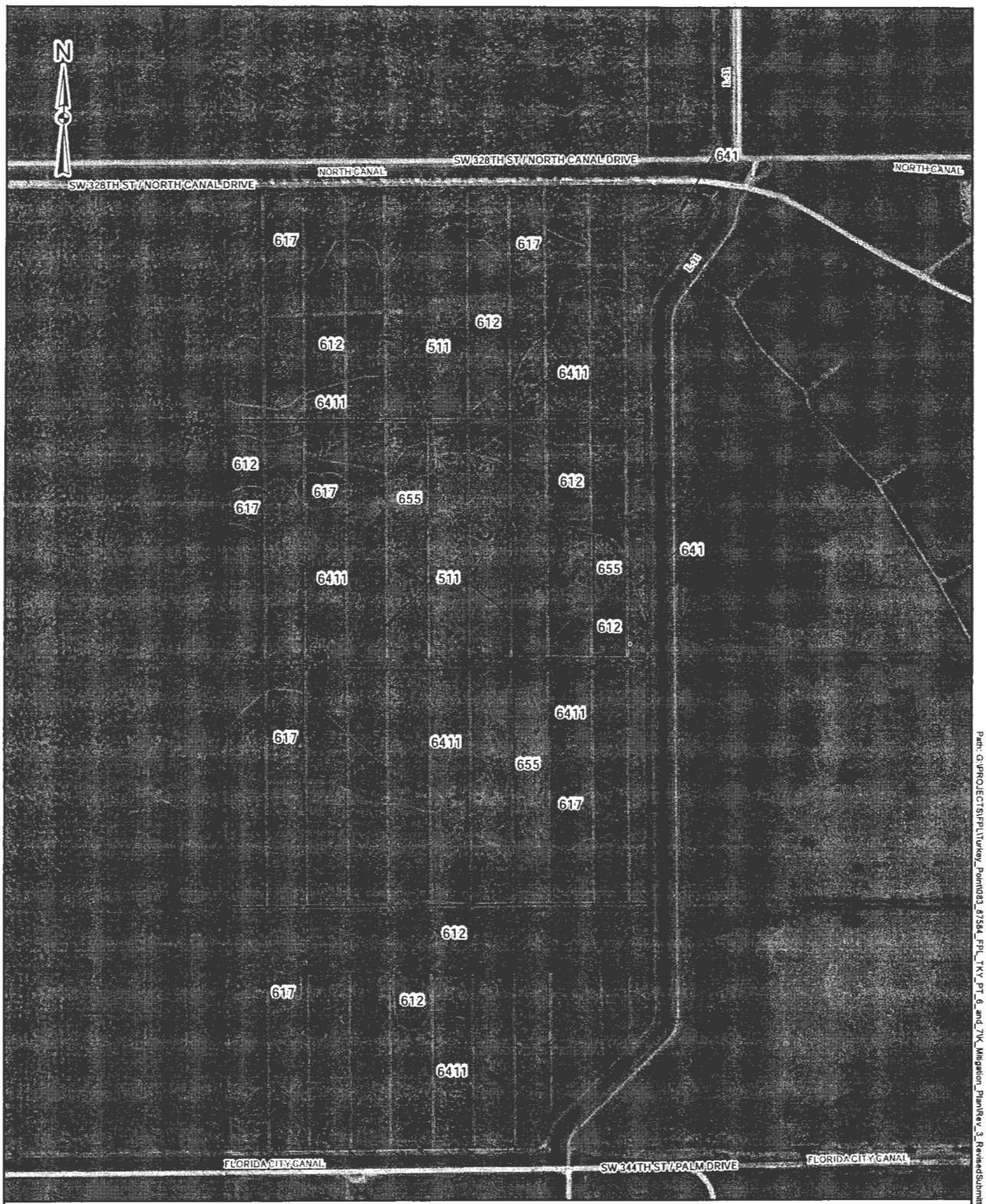
REFERENCES

1. Imagery, Miami-Dade County 2007.
2. Habitat Classification, Golder Associates Inc., 2010

0 250 500 Feet

FIGURE 7	PLOT DATE 6/23/2011	REV. 3	FILE No. 08387584_K003	TITLE: NORTHWEST RESTORATION SITE EXISTING LAND USE / LAND COVER	PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT	FPL.

Path: G:\PROJECTS\FPL\Turkey_Point\083_87584_FPL_TKY_PT_6_and_7\K_Mitigation_Plan\Rev_3_RevisedSubmittal_2011\MapDocuments\08387584_K003_Rev3NWRestSite_LU.mxd



LEGEND

- Northwest Restoration Site
- Habitat Classification
  - 511 - Ditches
  - 612 - Mangrove Swamps
  - 617 - Mixed Wetland Hardwoods
  - 641 - Freshwater Marshes
  - 655 - Periphyton Mat
  - 6411 - Sawgrass Marsh

REFERENCES

1. Imagery, Miami-Dade County 2007.
2. Habitat Classification, Golder Associates Inc., 2010.

0 250 500 Feet

FIGURE 8

PLOT DATE: 6/23/2011
REV.: 3
FILE No.: 0838784_K004

TITLE: NORTHWEST RESTORATION SITE PROPOSED LAND USE / LAND COVER

PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT

FPL

Path: G:\PROJECTS\FPL\Turkey_Point\083_87584_FPL_TKY_PT_6_and_7\K_Mitigation_Plan\Rev_3_RevisedSubmittal_2011\MapDocuments\0838784_K004_Rev3NWRestSite_PostLU.mxd

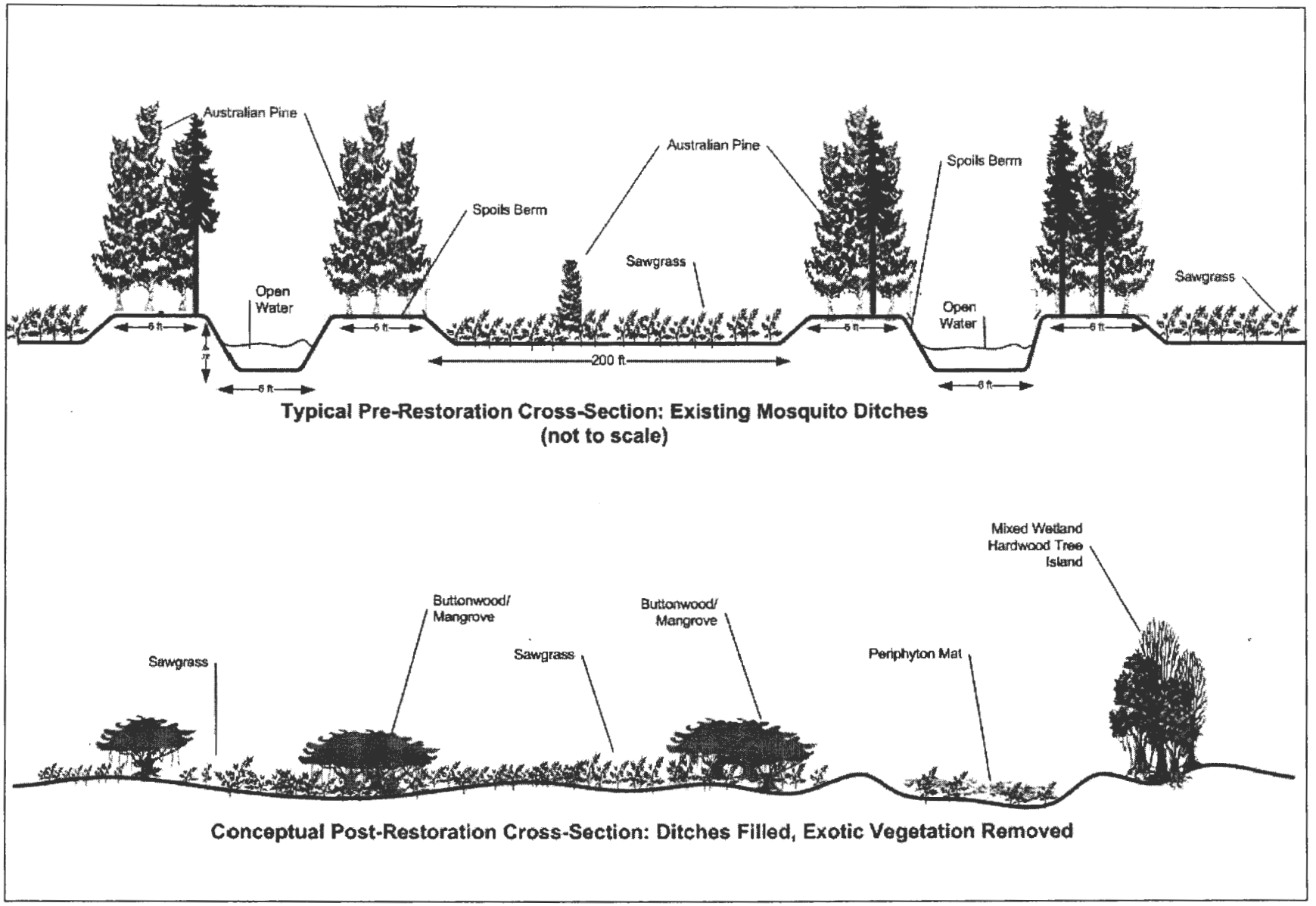


Figure 9.

Northwest restoration Site Conceptual Cross Sections

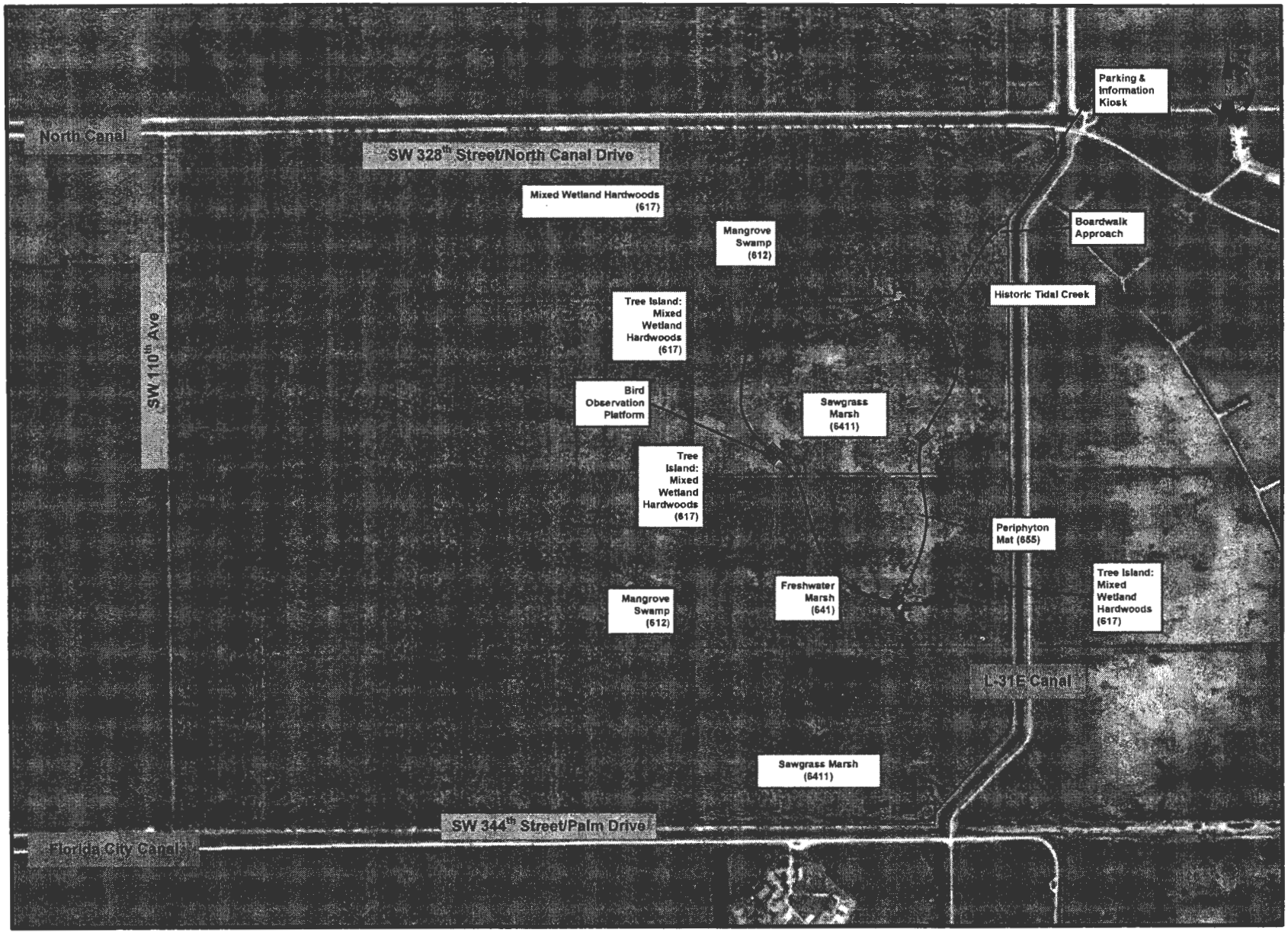
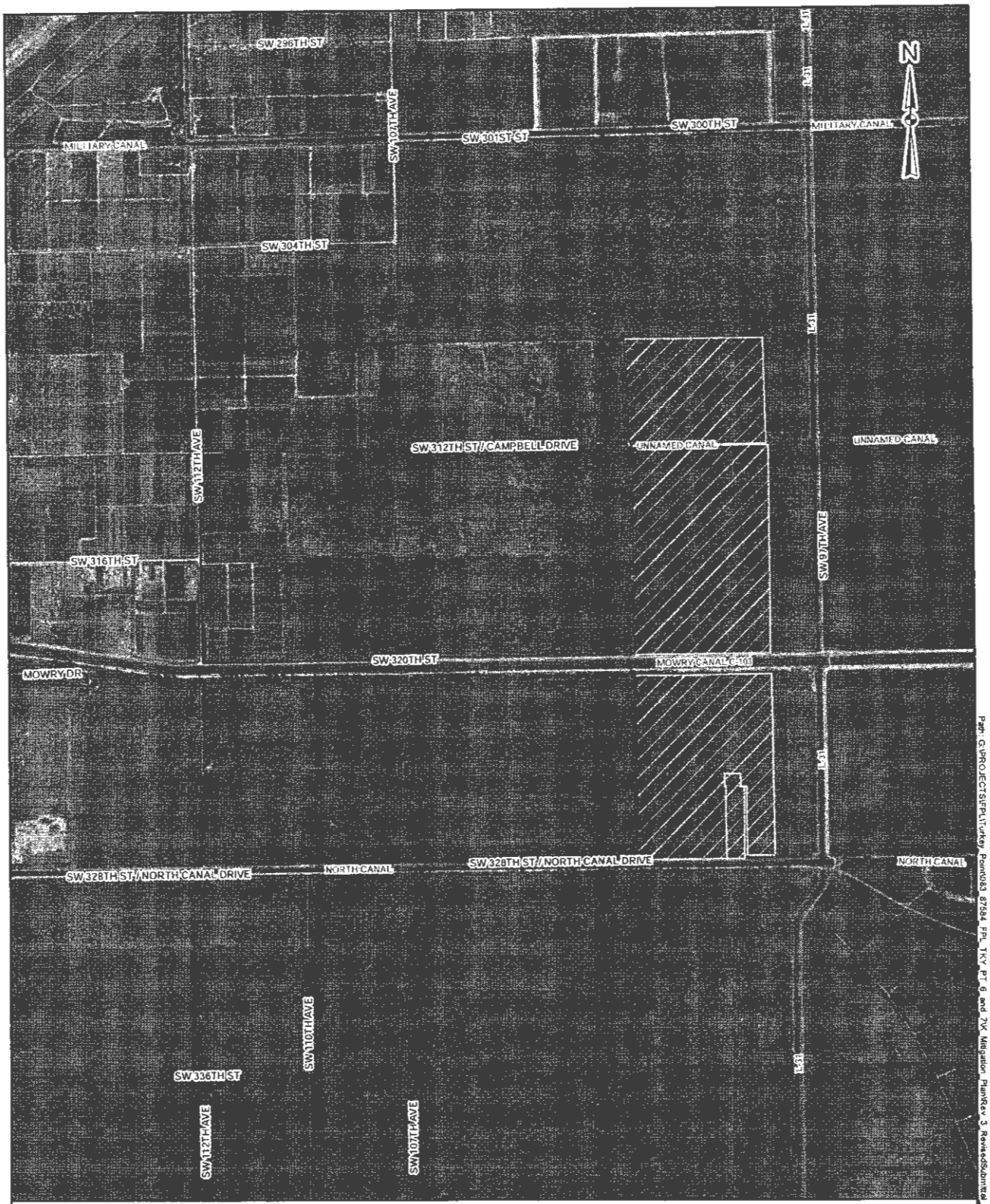


Figure 10. Northwest Restoration Site Conceptual Illustration (not to scale)

Y:\Projects\2009\093-87652 FPL TP 6 & 7\Northwest Mitigation Site\Figure 6 Rev. 2

Site Boundary

FPL



LEGEND

SW 320th Street Restoration Site

Lands Previously Transferred to the State by FPL

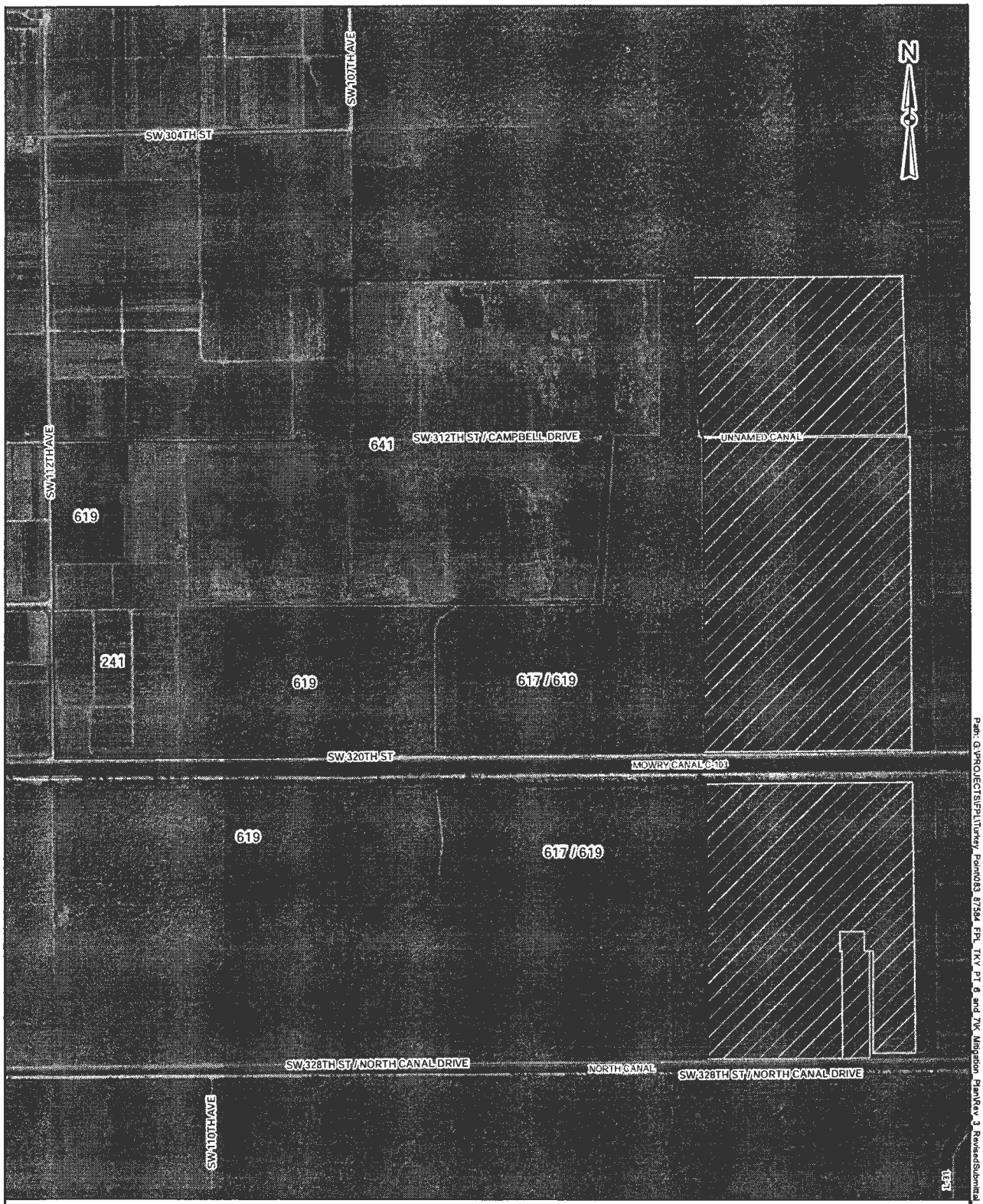
REFERENCES

1. Imagery, Miami-Dade County 2007
2. SW 320th Restoration Site, Golder Associates Inc., 2010.

0 600 1,200 Feet

FIGURE 11	PLOT DATE 6/23/2011	REV. 3	FILE No. 08387584_K005	TITLE: SW 320TH STREET RESTORATION SITE AERIAL MAP	PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT	FPL

Path: G:\PROJECTS\FPL\Turkey_Point\083_87584_FPL_TKY_PT_6_and_7\K_Mitigation_Plan\Rev_3_RevisedSubmittal_2011\MapDocuments\08387584_K005_Rev3320RestSite_Aerial.mxd



LEGEND

- SW 320th Street Restoration Site
- Habitat Classification
  - 241 - Tree Nurseries
  - 617 / 619 - Mixed Wetland Hardwoods / Exotic Wetland Hardwoods
  - 619 - Exotic Wetland Hardwoods
  - 641 - Freshwater Marshes
- Lands Previously Transferred to the State by FPL

REFERENCES

1. Imagery, Miami-Dade County 2007.
2. SW 320th Restoration Site, Habitat Classification, Golder Associates Inc., 2010.

0 400 800 Feet

FIGURE 12

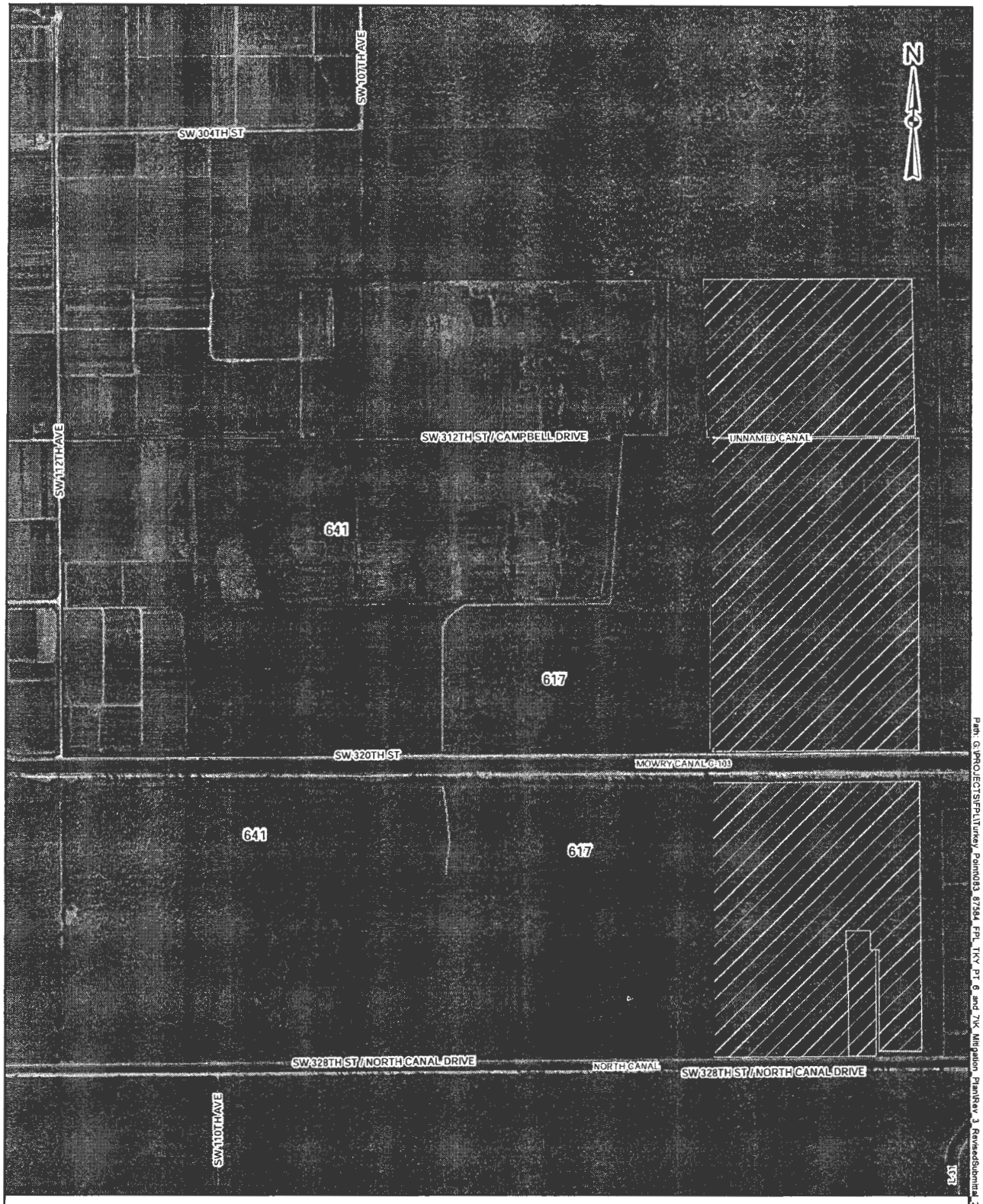
PLOT DATE 6/23/2011 | REV. 3 | FILE No. 083U7584_K006

TITLE: SW 320TH STREET RESTORATION SITE EXISTING LAND USE / LAND COVER

PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT

FPL

Path: G:\PROJECTS\FPL\Turkey_Point\083_87584_FPL_TKY_PT_6_and_7\K_Mitigation_Plan\Rev 3_RevisedSubmittal_2011\MapDocuments\083U7584_K006_Rev2320ResESite_LU.mxd



LEGEND

- SW 320th Street Restoration Site
- Habitat Classification
  - 617 - Mixed Wetland Hardwoods
  - 641 - Freshwater Marshes
- Lands Previously Transferred to the State by FPL

REFERENCES

1. Imagery, Miami-Dade County 2007.
2. SW 320th Restoration Site, Habitat Classification, Golder Associates Inc., 2010.

0 400 800 Feet

FIGURE 13

PLOT DATE 6/23/2011

REV. 3

FILE No. 083-87584-K007

TITLE

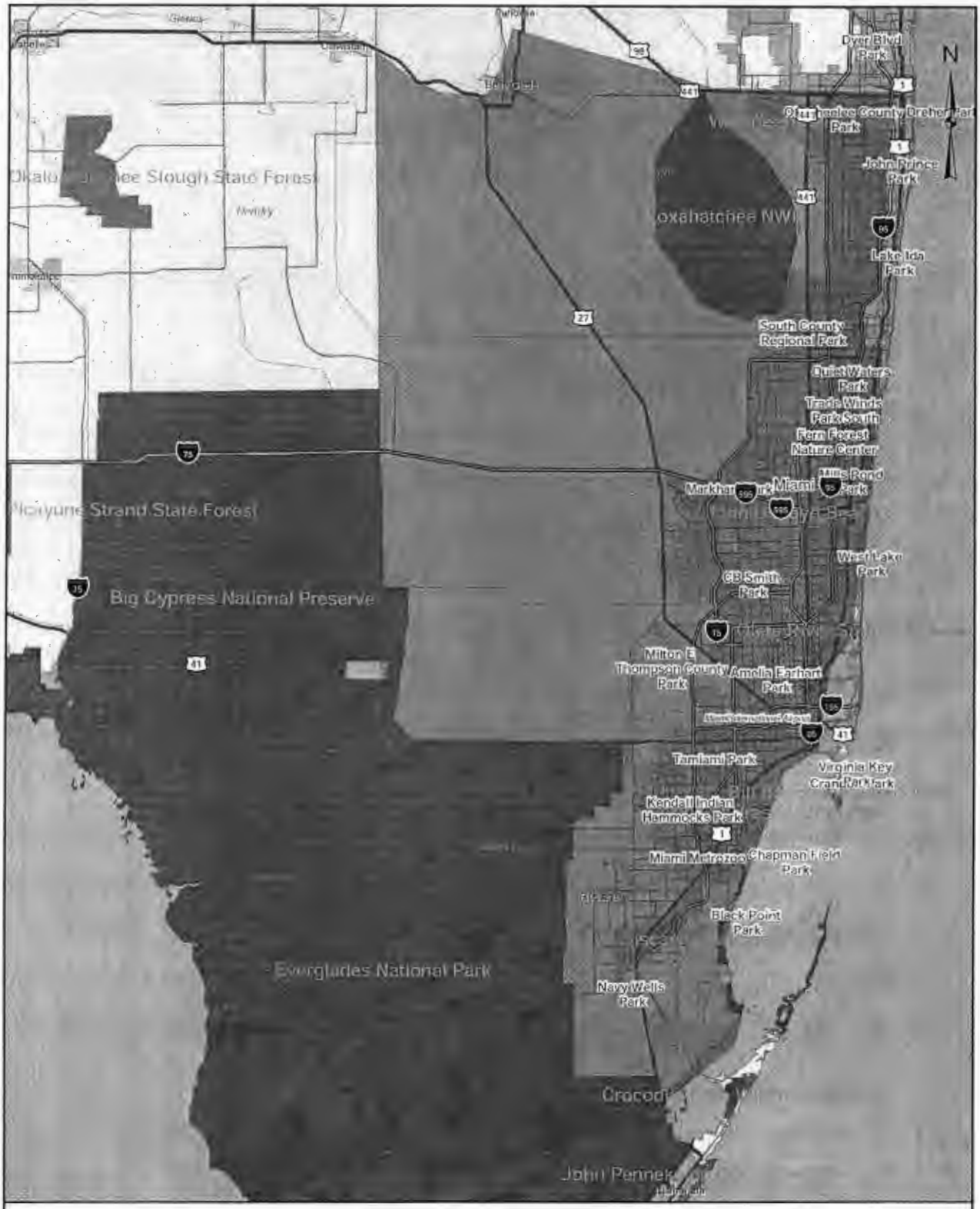
SW 320TH STREET RESTORATION SITE
PROPOSED LAND USE / LAND COVER

PROJECT

TURKEY POINT UNITS 6 & 7
PROJECT

FPL.

Path: G:\PROJECT\SFPL\Turkey_Point\083_87584_FPL_TKY_PT_6_and_7\K_Mitigation_Plan\Rev_3_RevisedSubmittal_2011\MapDocuments\083-87584_K007_Rev3320RestSite_PostLU.mxd



LEGEND

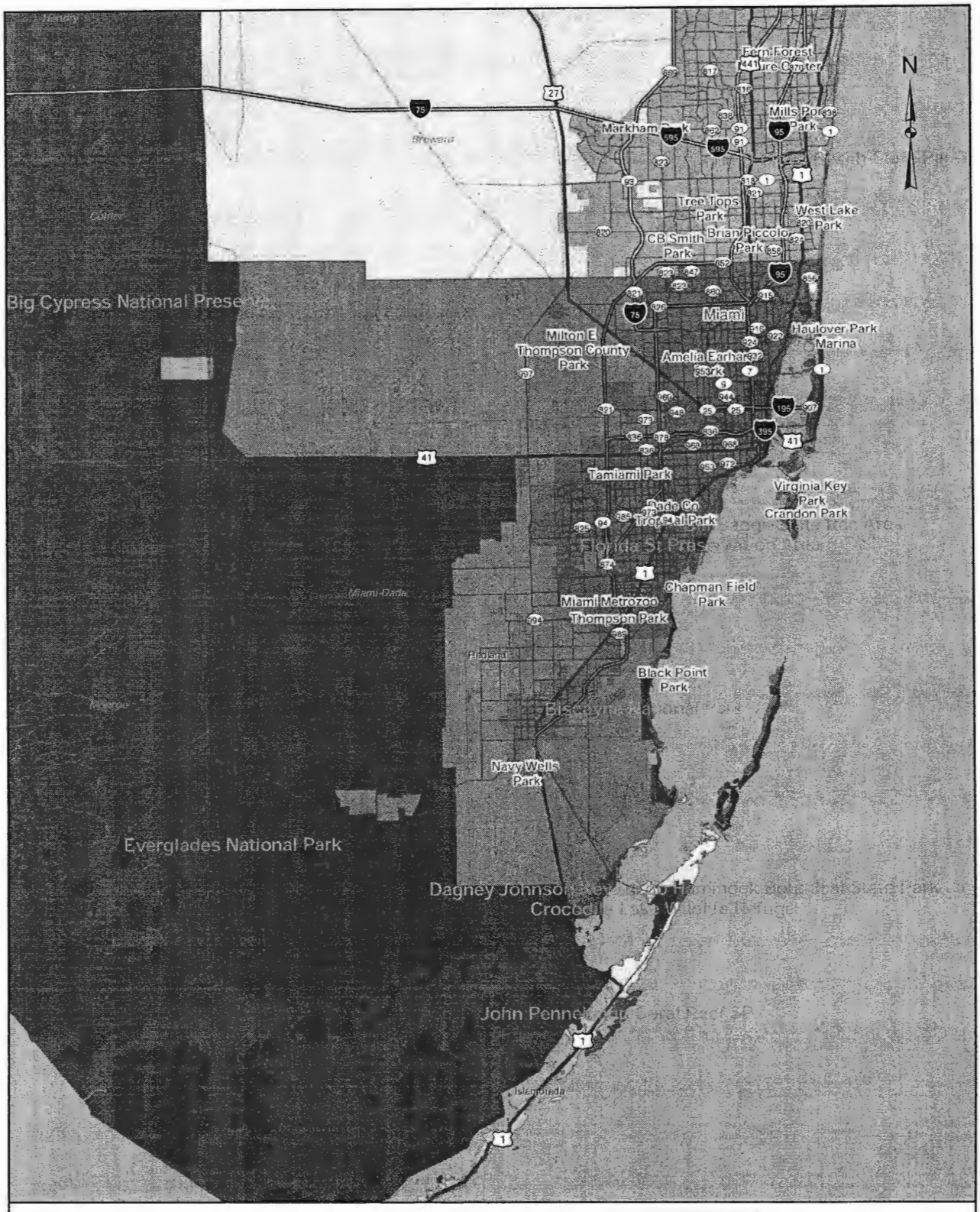
- Turkey Point Units 6 & 7 Site
- Everglades Mitigation Bank
- Everglades Mitigation Bank Service Area

REFERENCES

1. Everglades Mitigation Bank Service Area, FDEP, 2006.
2. Everglades Mitigation Bank, FDEP, 2006.

0 4.5 9 Miles

FIGURE 14	PLOT DATE 8/23/2011	REV. 3	FILE No. 0636758-04014	TITLE: EVERGLADES MITIGATION BANK SERVICE AREA	PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT	FPL



LEGEND

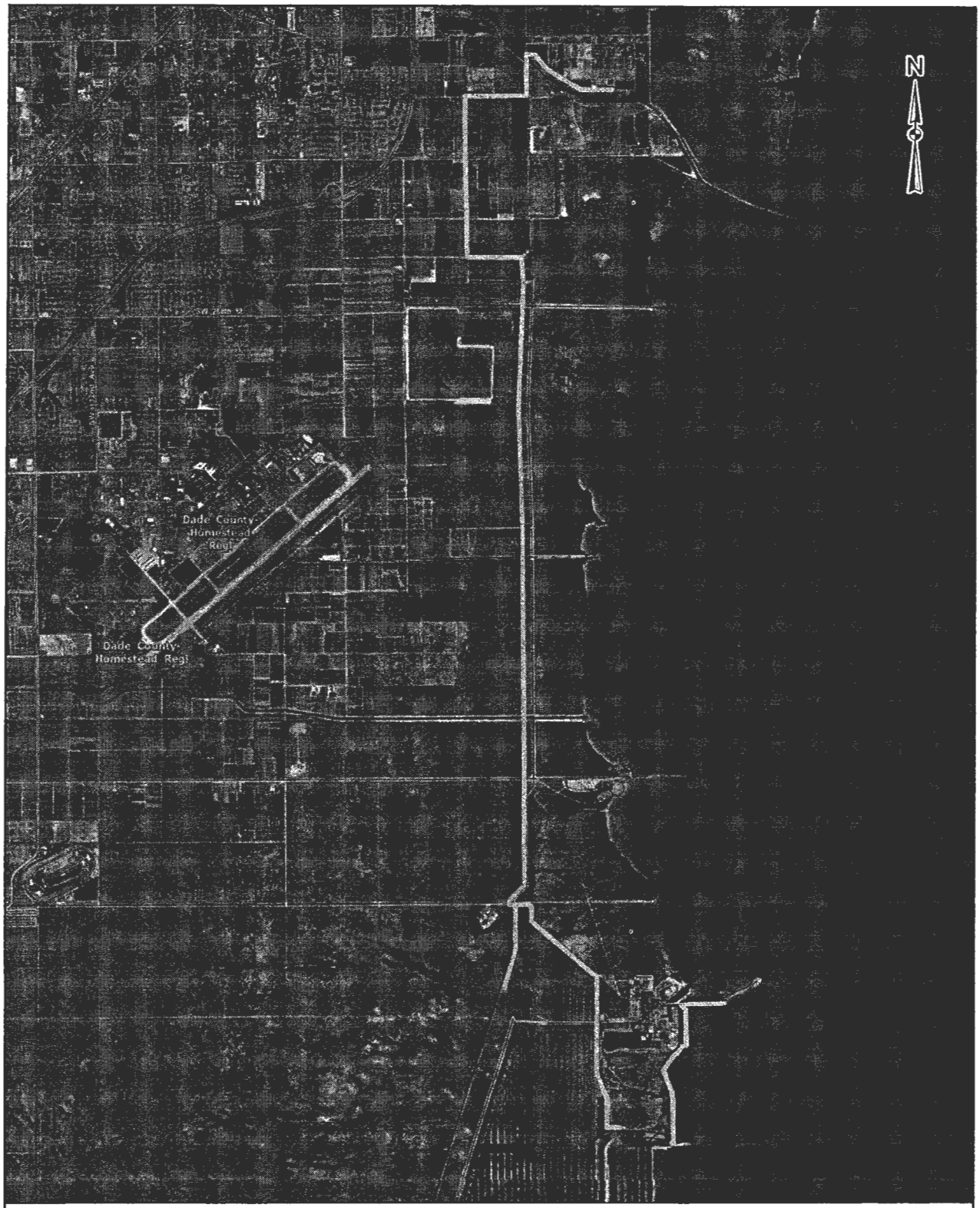
- Turkey Point Units 6 & 7 Site
- Hole in the Donut Mitigation Bank
- Hole in the Donut Mitigation Bank Service Area

REFERENCES

1. Hole in the Donut Mitigation Bank Service Area, Hole in the Donut Mitigation Bank, FDEP, 2006.

0 3.5 7 Miles

FIGURE 15	PLOT DATE 6/23/2011	REV. 3	FILE No. 0838758400015	TITLE: HOLE IN THE DONUT MITIGATION BANK SERVICE AREA	PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT	FPL.



LEGEND

Pipeline Restoration Areas

REFERENCES

1. Imagery, Miami-Dade County, 2007.

0 2,000 4,000
Feet

FIGURE 16

PLOT DATE 6/23/2011

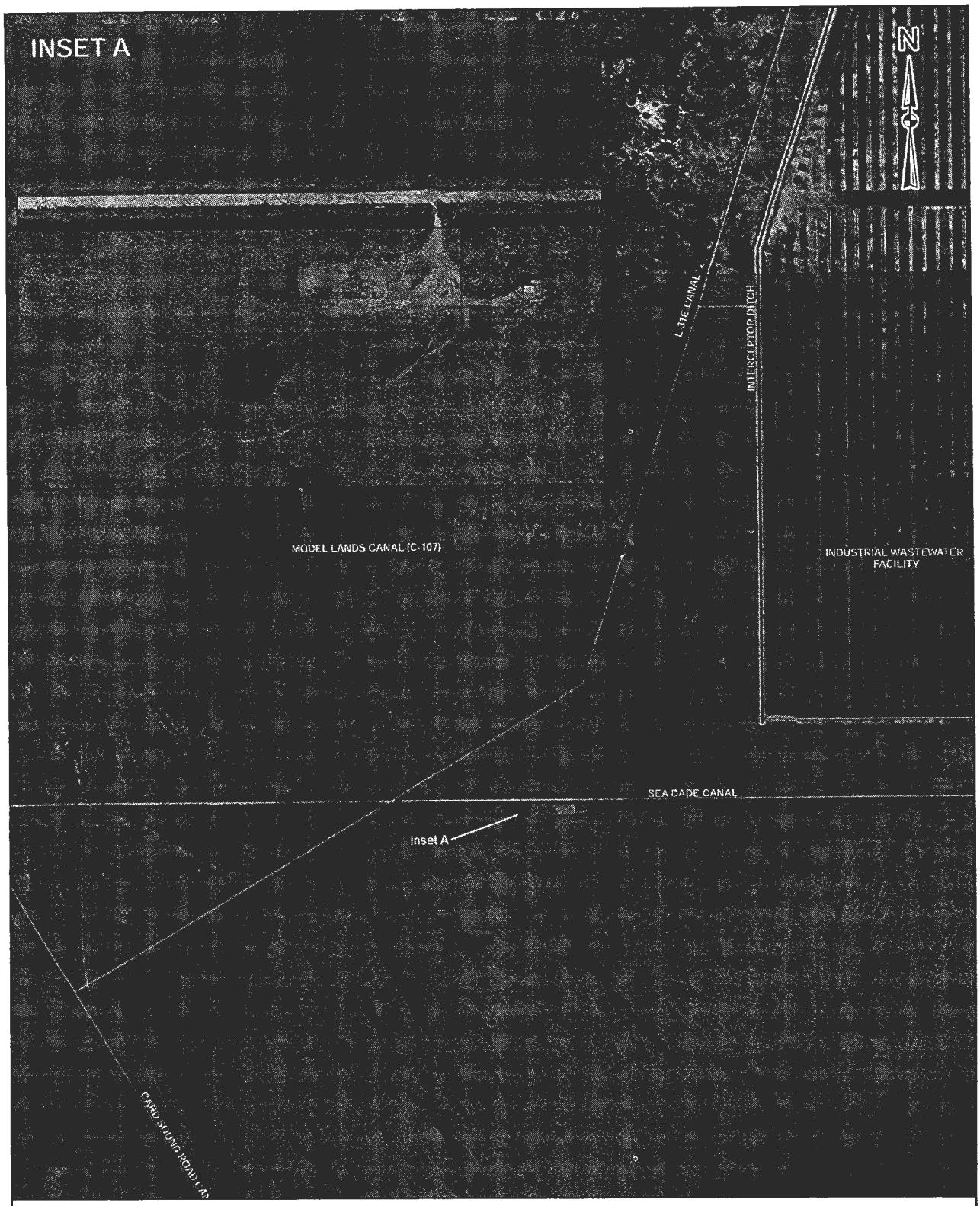
REV. 3

FILE No. 0838754H016

TITLE
PIPELINE RESTORATION
AERIAL MAP

PROJECT
TURKEY POINT UNITS 6 & 7
PROJECT

FPL



LEGEND

Sea Dade Canal Crocodile Sanctuary

REFERENCES

1. Imagery, Miami-Dade County, 2007.

0 1,000 2,000 Feet

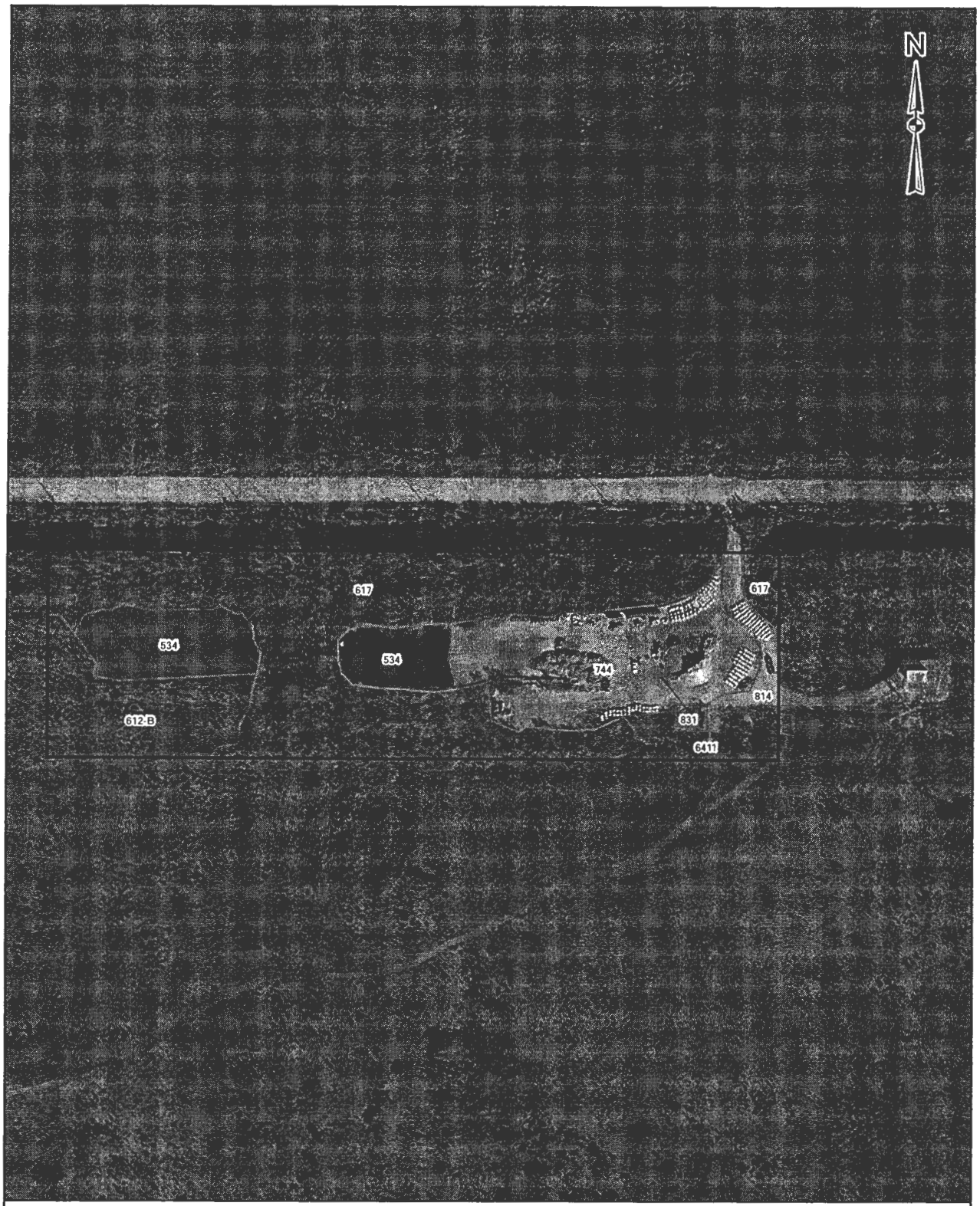
FIGURE 17

PLOT DATE 6/23/2011 | REV. 3 | FILE No. 0838754/4016

TITLE: SEA DADE CANAL CROCODILE SANCTUARY AERIAL MAP

PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT

FPL



LEGEND

- Sea Dade Canal Crocodile Sanctuary
- Habitat Classification
  - 534 - Reservoirs less than 10 acres
  - 612-B - Dwarf Mangroves
  - 617 - Mixed Wetland Hardwoods
  - 6411 - Sawgrass
  - 744 - Fill Areas
  - 814 - Roads and Highways
  - 831 - Electrical Power Facilities

REFERENCES

1. Sea Dade Canal Crocodile Sanctuary, FPL, 2010
2. Land Use / Land Cover, Golder Associates Inc., 2011.
3. Imagery, ESRI Online Imagery Accessed 2011.

0 125 Feet

FIGURE 18

PLOT DATE: 6/23/2011

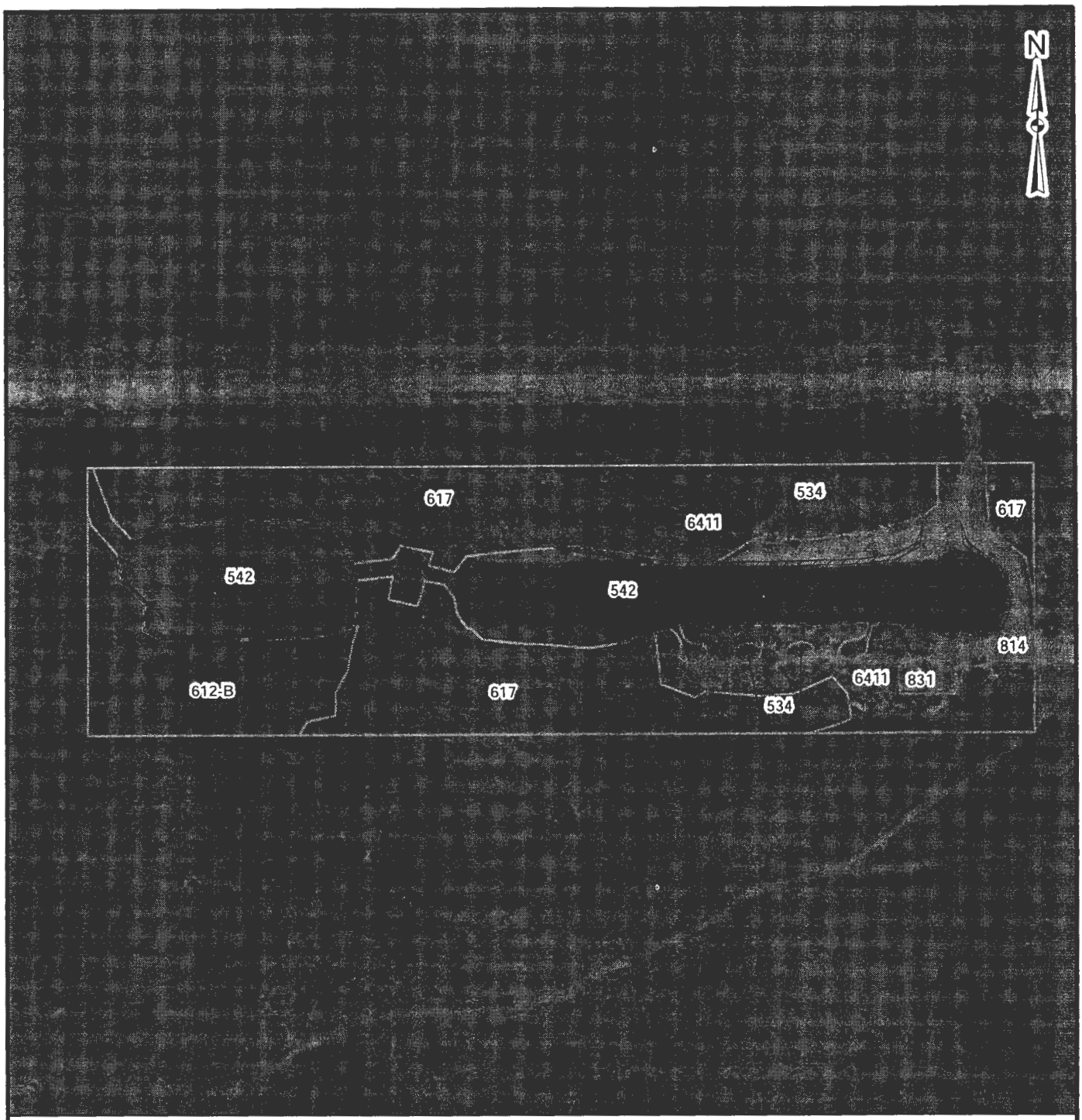
REV.: 3

FILE No.: 053/784/4023

TITLE: SEA DADE CANAL CROCODILE SANCTUARY EXISTING LAND USE / LAND COVER

PROJECT: TURKEY POINT UNITS 6 & 7 PROJECT

FPL



LEGEND

- Nesting Substrate
- Post Restoration Land Use
  - 534 - Low Salinity Ponds
  - 542 - Saline Lagoon
  - 612-B - Dwarf Mangroves
  - 617 - Mixed Wetland Hardwoods
  - 6411 - Sawgrass
  - 814 - Roads and Highways
  - 831 - Electrical Power Facilities

150 0 Feet

REFERENCES

1. Aerial Imagery, FDOT, 2007.
2. Sea Dade Canal Crocodile Sanctuary, Nesting Substrate, Golder Associates Inc., 2011.

PROJECT
TURKEY POINT UNITS 6 & 7 PROJECT

TITLE
SEA DADE CANAL
CROCODILE SANCTUARY CONCEPTUAL DESIGN

FPL.

FILE No. 08387584_K028
REV. 0
PLOT DATE 6/16/2011

FIGURE
19

APPENDIX A

UMAM FUNCTIONAL ASSESSMENT

IMPACT SITES

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Remnant Canals

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
511		Impact	8.4 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Part of a closed loop industrial cooling water system.

Assessment area description

Remnant intake/discharge canals within surrounding mud flats.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point power generation facilities, Biscayne Bay	Artificial system, not unique.

Functions	Mitigation for previous permit/other historic use
Industrial cooling water management	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Reddish egret, snowy egret, tricolored heron, roseate spoonbill, white pelican, white ibis, killdeer, great egret, great horned owl, sandpipers, lesser yellowlegs, greater yellowlegs, least tern, and plovers.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, C. Cunningham	11/29/2007

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Remnant Canals
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	K. Bullock, C. Cunningham	11/29/2007

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 6	with: 0
Location and landscape support variable is reduced due to proximity of existing Turkey Point facility, disturbance of habitat associated with cooling canal system, and isolated hydrology. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8 due to proximity of Biscayne Bay despite artificial nature of surrounding habitat at FPL facility; b) Invasive exotic species = 9, minimal coverage; c) Wildlife access to and from outside = 7, decreased slightly due to limitations imposed by the water level control system; d) functions that benefit fish & wildlife downstream-distance or barriers = 4 because this is a closed system; e) Impacts to wildlife listed in Part 1 by outside land uses = 8, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 2 due to closed system; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 6	with: 0
The water environment score is reduced due to the artificial hydrology of the assessment site and use for industrial cooling water. Individual parameter scores: a) water levels and flows = 4, drastic alterations in water level due to artificial nature of the system; b) water level indicators = 4, not consistent with expected; c) soil moisture = 7, slightly drier than expected; d) soil erosion or depostion = 4, atypical patterns indicative of altered flows; e) evidence of fire history = N/A; f) vegetation community zonation = 8, appropriate for community type; g) hydrologic stress on vegetation = 7, slightly greater mortality; h) use by animal species with specific hydrological requirements = 7, due to lack of tidal connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 8, community not characterized by species tolerant of water degradation; j) direct observation of water quality = 8, very slight discoloration, turbidity, or sheen; k) existing water quality data = 5, due to high temperature and salinity; l) water depth wave, wave energy, currents and light penetration = 5, due to drastic changes in water levels.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 7	with: 0
The community structure variable is reduced due to artificial nature of excavated canals, high salinity, elevated temperature, and hydrologic isolation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 8, dominated by native species; b) invasive exotics or other invasive plant species = 7, minimal coverage; c) regeneration and recruitment = 7, near normal recruitment; d) age & size distribution = 7, slightly atypical; e) density and quality of coarse woody debris, snag, den, and cavity = 5, due to excavated canal banks; f) plant condition = 7, generally good plant condition; g) land management practices = 5, due to alteration of community structure and hydroperiod; h) topographic features = 5, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = 7, minor algal growth		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.63	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.63 x 8.4 = **5.29**

Delta = [with-current]
-0.63

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Open Water and Active Canals

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
531 and 510		Impact	12 acres (FLUCCS 531); 4.1 acres (FLUCCS 510) = 16.1 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands
Part of Turkey Point facility's existing industrial cooling water system.

Assessment area description
Open water area associated with industrial cooling water system.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point power generation facilities, Biscayne Bay	Artificial system, not unique.

Functions	Mitigation for previous permit/other historic use
Industrial cooling water management	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):
Snowy egret, tricolored heron, wood stork, white ibis, killdeer, great egret.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, C. Cunningham	11/29/2007

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Open Water and Active Canals
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	K. Bullock, C. Cunningham	11/29/2007

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Location and landscape support variable is reduced due to proximity of existing Turkey Point facility, disturbance of habitat associated with cooling canal system, and isolated hydrology. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8 due to proximity of Biscayne Bay despite artificial nature of surrounding habitat at FPL facility; b) Invasive exotic species = 9, minimal coverage; c) Wildlife access to and from outside = 7, decreased slightly due to limitations imposed by the water level control system; d) functions that benefit fish & wildlife downstream-distance or barriers = 4 because this is a closed system; e) Impacts to wildlife listed in Part 1 by outside land uses = 8, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 2 due to closed system; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas	6	0
.500(6)(b)Water Environment (n/a for uplands)	The water environment score is reduced due to the artificial hydrology of the assessment site and use for industrial cooling water. Individual parameter scores: a) water levels and flows = 3, drastic alterations in water level due to artificial nature of the system; b) water level indicators = 3, not consistent with expected; c) soil moisture = 7, slightly drier than expected; d) soil erosion or depostion = 3, atypical patterns indicative of altered flows; e) evidence of fire history = N/A; f) vegetation community zonation = 6, due to very sparse cover; g) hydrologic stress on vegetation = 3, due to high mortality; h) use by animal species with specific hydrological requirements = 6, due to lack of tidal connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 7, community consists of species tolerant of high salinities; j) direct observation of water quality = 8, very slight discoloration, turbidity, or sheen; k) existing water quality data = 3, due to high temperature and salinity; l) water depth wave, wave energy, currents and light penetration = 5, due to drastic changes in water levels.	5	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The community structure variable is reduced due to low species diversity resulting from high salinity, elevated temperature, and hydrologic isolation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, expected composition absent; b) invasive exotics or other invasive plant species = 7, minimal coverage; c) regeneration and recruitment = 4, minimal evidence of recruitment; d) age & size distribution = 4, due to high mortality and lack of seedling success; e) density and quality of coarse woody debris, snag, den, and cavity = 3, greater than normal due to poor community health; f) plant condition = 5, generally poor condition and low recruitment; g) land management practices = 4, due to high temperature and altered hydroperiod; h) topographic features = 3, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = 5, minor algal growth	4	0

Score = sum of above scores/30 (if uplands, divide by 20)		
current or w/o pres	with	
0.50	0	

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.50 x 16.1 = **8.05**

Delta = [with-current]
-0.50

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Mangrove Heads

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612-A		Impact	12.2 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Part of Turkey Point facility's existing industrial cooling water system.

Assessment area description

Remnant mangrove heads associated with remnant tidal creeks within an industrial cooling water system.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point power generation facilities, Biscayne Bay	Artificial system, not unique.

Functions	Mitigation for previous permit/other historic use
Industrial cooling water management	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Reddish egret, snowy egret, tricolored heron, roseate spoonbill, white pelican, white ibis, killdeer, great egret, great horned owl, sandpipers, lesser yellowlegs, greater yellowlegs, least tern, and plovers.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, C. Cunningham	11/29/2007

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Mangrove Heads
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	K. Bullock, C. Cunningham	11/29/2007

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 6	with: 0
Location and landscape support variable is reduced due to proximity of existing Turkey Point facility, disturbance of habitat associated with cooling canal system, and isolated hydrology. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8, due to proximity of Biscayne Bay despite artificial nature of surrounding habitat at FPL facility; b) Invasive exotic species = 9, minimal coverage; c) Wildlife access to and from outside = 7, decreased slightly due to limitations imposed by the water level control system; d) functions that benefit fish & wildlife downstream-distance or barriers = 4, because this is a closed system; e) Impacts to wildlife listed in Part 1 by outside land uses = 8, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 2, due to closed system; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 6	with: 0
The water environment score is reduced due to the artificial hydrology of the assessment site and use for industrial cooling water. Individual parameter scores: a) water levels and flows = 4, drastic alterations in water level due to artificial nature of the system; b) water level indicators = 4, not consistent with expected; c) soil moisture = 8, slightly drier than expected; d) soil erosion or depostion = 5, atypical patterns due to altered flows; e) evidence of fire history = N/A; f) vegetation community zonation = 7, due to sparse cover; g) hydrologic stress on vegetation = 4, due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 7, due to lack of tidal connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 7, community consists of species tolerant of high salinities; j) direct observation of water quality = 8, very slight discoloration, turbidity, or sheen; k) existing water quality data = 5, due to high temperature and salinity; l) water depth wave, wave energy, currents and light penetration = 5, due to drastic changes in water levels.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 7	with: 0
The community structure variable is reduced due to low species diversity resulting from high salinity, elevated temperature, and hydrologic isolation. Individual parameter sceres: a) plant community species in the canopy, shrub, or ground stratum = 9, dominated by native species; b) invesive exotics or other invasive plant species = 9, very minimal coverage; c) regeneration and recruitment = 6, less than expected; d) age & size distribution = 6, due to lack of seedling success; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 7, due to dead stems and low productivity; g) land management practices = 5, due to alteration of community structure; h) topographic features = 7, slightly less than optimal; i) siltation or algal growth in submerged aquatic plant communities = 8, minor algal growth		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.63	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.63 x 12.2 = 7.69

Delta = [with-current]
-0.63

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Dwarf Mangroves

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612-B		Impact	16.9 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands
Part of Turkey Point facility's existing industrial cooling water system.

Assessment area description
Hypersaline dwarf mangroves within industrial cooling water system.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point power generation facilities, Biscayne Bay	Artificial system, not unique.

Functions	Mitigation for previous permit/other historic use
Industrial cooling water management	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):
Reddish egret, snowy egret, tricolored heron, roseate spoonbill, white pelican, white ibis, great egret, and wood stork.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, C. Cunningham	11/29/2007

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Dwarf Mangroves
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	K. Bullock, C. Cunningham	11/29/2007

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 6	with: 0
Location and landscape support variable is reduced due to proximity of existing Turkey Point facility, disturbance of habitat associated with cooling canal system, and isolated hydrology. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8 due to proximity of Biscayne Bay despite artificial nature of surrounding habitat at FPL facility; b) Invasive exotic species = 9, minimal coverage; c) Wildlife access to and from outside = 7, decreased slightly due to limitations imposed by the water level control system; d) functions that benefit fish & wildlife downstream-distance or barriers = 4 because this is a closed system; e) impacts to wildlife listed in Part 1 by outside land uses = 8, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 2 due to closed system; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 5	with: 0
The water environment score is reduced due to the artificial hydrology of the assessment site and use for industrial cooling water. Individual parameter scores: a) water levels and flows = 4, drastic alterations in water level due to artificial nature of the system; b) water level indicators = 4, not consistent with expected; c) soil moisture = 7, slightly drier than expected; d) soil erosion or depostion = 4, atypical patterns indicative of altered flows; e) evidence of fire history = N/A; f) vegetation community zonation = 6, due to very sparse cover; g) hydrologic stress on vegetation = 3, due to high mortality; h) use by animal species with specific hydrological requirements = 7, due to lack of tidal connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 7, community consists of species tolerant of high salinities; j) direct observation of water quality = 8, very slight discoloration, turbidity, or sheen; k) existing water quality data = 3, due to high temperature and salinity; l) water depth wave, wave energy, currents and light penetration = 5, due to drastic changes in water levels.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 0
The community structure variable is reduced due to low species diversity resulting from high salinity, elevated temperature, and hydrologic isolation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 8, dominated by native species; b) invasive exotics or other invasive plant species = 8, minimal coverage; c) regeneration and recruitment = 4, minimal evidence of recruitment; d) age & size distribution = 4, due to high mortality and lack of seedling success; e) density and quality of coarse woody debris, snag, den, and cavity = 4, greater than normal due to poor community health; f) plant condition = 4, dead stems and low recruitment; g) land management practices = 5, due to alteration of community structure; h) topographic features = 4, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = 7, minor algal growth		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.53	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.53 x 16.9 = **8.96**

Delta = [with-current]
-0.53

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Mud Flats

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
650		Impact	187.5 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Part of Turkey Point facility's existing industrial cooling water system.

Assessment area description

Hypersaline mud flats within an industrial cooling water system.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point power generation facilities, Biscayne Bay	Artificial system, not unique.

Functions	Mitigation for previous permit/other historic use
Industrial cooling water management	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds	Occasional use for foraging by wading birds such as roseate spoonbill (SSC), little blue heron (SSC), white ibis (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Reddish egret, snowy egret, tricolored heron, roseate spoonbill, white pelican, white ibis, killdeer, great egret, great horned owl, sandpipers, lesser yellowlegs, greater yellowlegs, least tern, and plovers.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, C. Cunningham	11/29/2007

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Mud Flats
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	K. Bullock, C. Cunningham	11/29/2007

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Location and landscape support variable is reduced due to proximity of existing Turkey Point facility, disturbance of habitat associated with cooling canal system, and isolated hydrology. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8 due to proximity of Biscayne Bay despite artificial nature of surrounding habitat at FPL facility; b) invasive exotic species = 9, minimal coverage; c) Wildlife access to and from outside = 7, decreased slightly due to limitations imposed by the water level control system; d) functions that benefit fish & wildlife downstream-distance or barriers = 4 because this is a closed system; e) impacts to wildlife listed in Part 1 by outside land uses = 8, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 2 due to closed system; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas	6	0
.500(6)(b)Water Environment (n/a for uplands)	The water environment score is reduced due to the artificial hydrology of the assessment site and use for industrial cooling water. Individual parameter scores: a) water levels and flows = 2, extreme deviation from natural flows; b) water level indicators = 4, not consistent with expected; c) soil moisture = 7, slightly drier than expected; d) soil erosion or depostion = 4, atypical patterns indicative of altered flows; e) evidence of fire history = N/A; f) vegetation community zonation = 4, zonation inappropriate due to unnatural hydroperiod; g) hydrologic stress on vegetation = 3, due to high mortality; h) use by animal species with specific hydrological requirements = 7, due to lack of tidal connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 5, sparse community consists of species tolerant of high salinities; j) direct observation of water quality = N/A; k) existing water quality data = 5, due to altered temperature and salinity; l) water depth wave, wave energy, currents and light penetration = N/A.	5	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The community structure variable is reduced due to low species diversity resulting from high salinity, elevated temperature, and highly altered hydroperiod. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 5, majority of plant cover is inappropriate for hydrologic conditions, evidenced by lack of coverage and high mortality; b) invasive exotics or other invasive plant species = 7, minimal coverage; c) regeneration and recruitment = 4, minimal evidence of recruitment; d) age & size distribution = 4, due to high mortality and lack of seedling success; e) density and quality of coarse woody debris, snag, den, and cavity = 3, not present; f) plant condition = 3, dead stems and low recruitment; g) land management practices = 4, due to alteration of community structure and hydroperiod; h) topographic features = 4, less than optimal; i) siltation or algal growth in submerged aquatic plants = N/A	4	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.50	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.50 x 187.5 = **93.75**

Delta = [with-current]
-0.50

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Wetland Spoil Piles

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
743-Wet	Mangrove, Australian Pine, Brazilian Pepper	Impact	9.1 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Part of Turkey Point facility's existing industrial cooling water system.

Assessment area description

Historic spoil piles adjacent to remnant intake/discharge canals.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point power generation facilities, Biscayne Bay	Artificial system, not unique.

Functions	Mitigation for previous permit/other historic use
Industrial cooling water management	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) .
Wading birds, raccoon	Occasional use for resting/cover by wading birds such as roseate spoonbill (SSC), white ibis (SSC), wood stork (E), little blue heron (SSC), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Snowy egret, tricolored heron, great egret, great horned owl.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, C. Cunningham	11/29/2007

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Site		Wetland Spoil Piles
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	K. Bullock, C. Cunningham	11/29/2007

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Location and landscape support variable is reduced due to proximity of existing Turkey Point facility, disturbance of habitat associated with cooling canal system, and isolated hydrology. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8 due to proximity of Biscayne Bay despite artificial nature of surrounding habitat at FPL facility; b) Invasive exotic species = 9, minimal coverage; c) Wildlife access to and from outside = 7, decreased slightly due to limitations imposed by the water level control system; d) functions that benefit fish & wildlife downstream-distance or barriers = 4 because this is a closed system; e) Impacts to wildlife listed in Part 1 by outside land uses = 8, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 2 due to closed system; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas	6	0
.500(6)(b)Water Environment (n/a for uplands)	The water environment score is reduced due to the artificial hydrology of the assessment site and use for industrial cooling water. Individual parameter scores: a) water levels and flows = 2, extreme deviation from natural flows; b) water level indicators = 4, not consistent with expected; c) soil moisture = 5, drier than expected; d) soil erosion or depostion = 4, atypical patterns indicative of altered flows; e) evidence of fire history = N/A; f) vegetation community zonation = 4, zonation inappropriate due to unnatural hydroperiod; g) hydrologic stress on vegetation = 5, due to artificial and highly variable hydroperiod; h) use by animal species with specific hydrological requirements = 5, due to lack of tidal connection, exotic vegetation, poor habitat quality; i) vegetative species tolerant of and associated with water quality degradation = 5, sparse community consists of species tolerant of high salinities; j) direct observation of water quality = N/A; k) existing water quality data = 5, due to altered temperature and salinity; l) water depth wave, wave energy, currents and light penetration = N/A.	4	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The community structure variable is reduced due to low species diversity resulting from high salinity, elevated temperature, and highly altered hydroperiod. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 5, majority of plant cover is inappropriate for hydrologic conditions, evidenced by lack of coverage and high mortality; b) invasive exotics or other invasive plant species = 5, moderate coverage - Australian pine and Brazilian pepper; c) regeneration and recruitment = 4, minimal evidence of recruitment; d) age & size distribution = 5, due to lack of seedling success; e) density and quality of coarse woody debris, snag, den, and cavity = 5, less than expected; f) plant condition = 5, some dead stems and low recruitment; g) land management practices = 5, due to alteration of community structure and hydroperiod; h) topographic features = 4, spoil pile topography is less than optimal; i) siltation or algal growth in submerged aquatic plants = N/A	5	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.50	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.50 x 9.1 = **4.55**

Delta = [with-current]
-0.50

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Nuclear Administration Building, Training Building and Parking Area		Mangrove Swamps

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612		Impact	18.5 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Surrounded by paved parking lots and access roads to the north, west, and east, and the Units 6 & 7 Site to the south. Hydrologically connected to adjacent canals and Biscayne Bay through culverts.

Assessment area description

Mangrove swamp area located north of the Units 6 & 7 Site and southwest of the existing plant facility, surrounded by parking lots and roadways. Receives runoff from the surrounding parking lots, and contains areas of open water, which likely flows in through culverts from adjacent canals and Biscayne Bay. Dominant species present include red mangrove, white mangrove, and black mangrove, buttonwood, Brazilian pepper, sea grape, Australian pine, poisonwood, leather fern, cankerberry, rubber vine, and cocoplum.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	6/4/2008

PART II A – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Nuclear Administration Building, Training Building and Parking Area		Mangrove Swamps
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	K. Bullock, S. Rizzo	6/4/2008

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 6	with: 0	Location and landscape support variable is reduced due to proximity of existing Turkey Point facility, and disturbance of habitat associated with initial facility construction. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of Biscayne Bay despite artificial nature of surrounding habitat at FPL facility; b) Invasive exotic species = 6, moderate coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of open water connection; d) functions that benefit fish & wildlife downstream-distance or barriers = 4, area locationally isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 4, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 4, apparently connected through culverts, no natural connection; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 7	with: 0	The water environment score is reduced due to the artificial hydrology of the surrounding area. Individual parameter scores: a) water levels and flows = 4, drastic alterations in water level due to artificial nature of the surrounding areas; b) water level indicators = 4, not consistent with expected; c) soil moisture = 8, slightly drier than expected; d) soil erosion or deposition = 5, atypical patterns due to altered flows; e) evidence of fire history = N/A; f) vegetation community zonation = 7, slightly altered; g) hydrologic stress on vegetation = 4, due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 7, due to lack of open water connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 7, community consists of species tolerant of high salinities; j) direct observation of water quality = 8, very slight discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 7	with: 0	The community structure variable is reduced due to presence of exotics and hydrologic isolation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 8, mostly dominated by native species; b) invasive exotics or other invasive plant species = 7, minimal coverage; c) regeneration and recruitment = 7, slightly less than expected; d) age & size distribution = 7, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 7, due to dead stems and low productivity; g) land management practices = 5, due to alteration of community structure; h) topographic features = 7, slightly less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)		
current or w/o pres: 0.67	with: 0	

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.67 x 18.5 = **12.39**

Delta = [with-current]
-0.67

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Nuclear Administration Building, Training Building and Parking Area		Mangrove/Willow

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612/618		Impact	7.6 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Surrounded by paved parking lots and access roads to the north, west, and east, and the Units 6 & 7 Site to the south. Hydrologically connected to adjacent canals and Biscayne Bay through culverts.

Assessment area description

Mangrove swamp area located north of the Units 6 & 7 Site and southwest of the existing plant facility, surrounded by parking lots and roadways. Receives runoff from the surrounding parking lots, and contains areas of open water, which likely flows in through culverts from adjacent canals and Biscayne Bay. Dominant species present include Carolina willow, red mangrove, white mangrove, and black mangrove, cattail, Brazilian pepper, and Peruvian primrose willow.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	6/4/2008

PART II A – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Nuclear Administration Building, Training Building and Parking Area		Mangrove/Willow
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
impact	K. Bullock, S. Rizzo	6/4/2008

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintein most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 6	with: 0	Location and landscape support variable is reduced due to proximity of existing Turkey Point facility, and disturbance of habitat associated with initial facility construction. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of Biscayne Bay despite artificial nature of surrounding habitat at FPL facility; b) Invasive exotic species = 6, moderate coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of open water connection; d) functions that benefit fish & wildlife downstream-distance or barriers = 4, area locationally isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 4, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 4, apparently connected through culverts, no natural connection; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 7	with: 0	The water environment score is reduced due to the artificial hydrology of the surrounding area. Individual parameter scores: a) water levels and flows = 4, drastic alterations in water level due to artificial nature of the surrounding areas; b) water level indicators = 4, not consistent with expected; c) soil moisture = 8, slightly drier than expected; d) soil erosion or deposition = 5, atypical petterns due to altered flows; e) evidence of fire history = N/A; f) vegetation community zonation = 7, slightly altered; g) hydrologic stress on vegetation = 4, due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 7, due to lack of open water connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 7, community consists of species tolerant of high salinities; j) direct observation of water quality = 8, very slight discoloration, turbidity, or sheen; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 6	with: 0	The community structure variable is reduced due to presence of exotics and hydrologic isolation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 8, mostly dominated by native species; b) invasive exotics or other invasive plant species = 7, minimal coverage; c) regeneration and recruitment = 7, slightly less than expected; d) age & size distribution = 7, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 7, due to dead stems and low productivity; g) land management practices = 5, due to alteration of community structure; h) topographic features = 7, slightly less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.63	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.63 x 7.6 = **4.79**

Delta = [with-current]
-0.63

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Radial Collector Well Delivery Pipelines		Mangrove Swamps

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612		Impact	3 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		OFW (Biscayne Bay)

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Located along shoreline of Biscayne Bay.

Assessment area description

Mangrove shoreline of Turkey Point peninsula. This area is dominated by red and black mangroves, with subdominant species including white mangrove and buttonwood, as well as occasional Brazilian pepper, Australian pine, and sea grape.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, drainage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo	2/1/2009

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Radial Collector Well Delivery Pipelines		Mangrove Swamps
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	S. Rizzo	2/1/2009

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 8	with: 0	Location and landscape support is high due to location within Biscayne Bay. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 9, due to location within Biscayne Bay; b) Invasive exotic species = 7, some present within assessment area; c) Wildlife access to and from outside = 9, open to Biscayne Bay; d) functions that benefit fish & wildlife downstream-distance or barriers = 9, open system; e) Impacts to wildlife listed in Part 1 by outside land uses = 9, surrounding habitats undisturbed with exception of Turkey Point Power Plant; f) Hydrologically connected areas downstream of assessment area = 9, open to Biscayne Bay; g) Dependency of downstream areas on assessment area = 9, benefits downstream areas.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 9	with: 0	The water environment score is high due to location within Biscayne Bay. Individual parameter scores: a) water levels and flows = 9, consistent with expected; b) water level indicators = 9, consistent with expected; c) soil moisture = 9, consistent with expected; d) soil erosion or deposition = 9, typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 9, appropriate for community type; g) hydrologic stress on vegetation = 9, minimal; h) use by animal species with specific hydrological requirements = 9, consistent with expected; i) vegetative species tolerant of and associated with water quality degradation = 9, none present; j) direct observation of water quality = 9, no sheen or discoloration; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 9	with: 0	The community structure variable is slightly reduced due to presence of exotic species. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7, some exotic species; b) invasive exotics or other invasive plant species = 7, some coverage; c) regeneration and recruitment = 9, near normal recruitment; d) age & size distribution = 9, typical; e) density and quality of coarse woody debris, snag, den, and cavity = 9, typical; f) plant condition = 9, generally good plant condition; g) land management practices = N/A; h) topographic features = 9, optimal; i) siltation or algal growth in submerged aquatic plant communities = 9, mostly typical.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres: 0.87	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.87 x 3 = **2.6 (to be restored *in-situ*)**

Delta = [with-current]
-0.87

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Treatment Facility		Dwarf Mangroves/Sawgrass Marsh

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612-B/6411		Impact	31.8 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Hydrologically isolated from Biscayne Bay due to roadways.

Assessment area description

The proposed location for the FPL reclaimed water treatment plant is an area historically dredged in association with the test cooling canal evaluations, and 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. The area is hydrologically isolated due to existing roadways and berms. The dwarf mangrove community contains red mangroves typically less than 24 inches in height, stunted in response to decreased nutrient availability and increased salinity. Other vegetation includes sawgrass, black mangrove, white mangrove, buttonwood, sea grape, Brazilian pepper, wax myrtle, poisonwood, cocoplum, and Australian pine.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay, Model Lands Basin	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, wildlife habitat	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo, K. Bullock	2/24/2011

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Treatment Facility		Dwarf Mangroves/Sawgrass Marsh
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	S. Rizzo/K. Bullock	2/24/2011

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 7 / with: 0	Location and landscape support variable is slightly reduced due to proximity of FPL Turkey Point Plant, roadways, and industrial wastewater treatment facility. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of nearby roadways; b) Invasive exotic species = 7, some exotics species present; c) Wildlife access to and from outside = 7, decreased due to slight isolation from other habitats due to roadways; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, decreased due to slight isolation from other habitats due to roadways; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, surrounding habitats relatively undisturbed with exception of roadways; f) Hydrologically connected areas downstream of assessment area = 7, hydrologically connected but some impacts due to roadways; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 8 / with: 0	The water environment score is somewhat reduced due to hydrological isolation resulting from surrounding roadways, increased salinity due to lack of water flushing, and adjacent spoil piles. Individual parameter scores: a) water levels and flows = 7, slightly less than expected; b) water level indicators = 7, slightly less than expected; c) soil moisture = 9, consistent with expected; d) soil erosion or deposition = 9, typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 6, due to sparse cover; g) hydrologic stress on vegetation = 6, stress from high salinity; h) use by animal species with specific hydrological requirements = 7, slighly less than expected; i) vegetative species tolerant of and associated with water quality degradation = 7, species tolerant of high salinities present; j) direct observation of water quality = 8, no sheen or discoloration; K) existing water quality data = 6, due to high salinity; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 8 / with: 0	The community structure variable is slightly reduced due to elevated salinity. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 9, mostly all desirable species; b) invasive exotics or other invasive plant species = 9, very few present; c) regeneration and recruitment = 7, near normal recruitment; d) age & size distribution = 7, atypical due to high salinity; e) density and quality of coarse woody debris, snag, den, and cavity = N/A; f) plant condition = 7, generally good plant condition; g) land management practices = 8, h) topographic features = 9, slightly less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres: 0.77	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.77 x 31.8 = **24.49**

Delta = [with-current]
-0.77

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Treatment Facility		Canals and Ditches

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
510, 511		Impact	3.37 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Excavated canals/ditches within surrounding sawgrass and dwarf mangrove wetlands; hydrologically isolated from Biscayne Bay by roadways

Assessment area description

The proposed location for the FPL reclaimed water treatment plant is an area historically dredged in association with the test cooling canal evaluations, and 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. The area is hydrologically isolated due to existing roadways and berms. The excavated canals and ditches are relatively steep sloped and sparsely vegetated.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, historical test cooling canal evalution	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T). Reptiles such as American alligator (TSA).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo, K. Bullock	2/24/2011

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Treatment Facility		Canals and Ditches
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	S. Rizzo, K. Bullock	2/24/2011

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 6	with: 0	Location and landscape support variable is reduced due to proximity of industrial wastewater treatment facility, Turkey Point Plant, surrounding roadways, and spoil piles. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 5, due to proximity of nearby roadways; b) Invasive exotic species = 5, common occurrence within assessment area; c) Wildlife access to and from outside = 5, decreased due to roadway barriers; d) functions that benefit fish & wildlife downstream-distance or barriers = 5; e) Impacts to wildlife listed in Part 1 by outside land uses = 5, surrounding habitats disturbed by roadways; f) Hydrologically connected areas downstream of assessment area = 5; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 4	with: 0	The water environment score is somewhat reduced due to the artificial nature of the canal/ditch system. Individual parameter scores: a) water levels and flows = 4, no flow evident; b) water level indicators = 6, consistent with expected; c) soil moisture = 6, consistent with expected; d) soil erosion or deposition = 4, erosion evident; e) evidence of fire history = N/A; f) vegetation community zonation = 6, appropriate for community type; g) hydrologic stress on vegetation = 6, relatively minimal; h) use by animal species with specific hydrological requirements = 6, consistent with expected; i) vegetative species tolerant of and associated with water quality degradation = 6, some pollution tolerant species present; j) direct observation of water quality = 6, no sheen or discoloration; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 5	with: 0	The community structure variable is reduced due to artificial nature of the canal/ditch system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, sparsely vegetated due to steep slopes, presence of exotic species on banks; b) invasive exotics or other invasive plant species = 4, compose majority of coverage; c) regeneration and recruitment = 7, near normal recruitment; d) age & size distribution = 7, slightly atypical; e) density and quality of coarse woody debris, snag, den, and cavity = 5, due to excavated canal banks; f) plant condition = 7, generally good plant condition; g) land management practices = 5, due to alteration of community structure and hydroperiod; h) topographic features = 5, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = 7, minor algal growth.

Score = sum of above scores/30 (if uplands, divide by 20)		
current or w/o pres: 0.50	with: 0	

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.5 x 3.37 = **1.69**

Delta = [with-current]
-0.50

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Treatment Facility		Exotic Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
619		Impact	0.17 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Hydrologically isolated from Biscayne Bay due to roadways; adjacent to sawgrass marsh and dwarf red mangrove wetlands.

Assessment area description

The proposed location for the FPL reclaimed water treatment plant is an area historically dredged in association with the test cooling canal evaluations, and 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. The area is hydrologically isolated due to existing roadways and berms. Areas classified as exotic wetland hardwoods are dominated by the nuisance exotic species Australian pine, with Brazilian pepper also prevalent.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, wildlife habitat	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolor heron (SSC). Also white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	2/24/2011

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Treatment Facility		Exotic Wetland Hardwoods
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	K. Bullock, S. Rizzo	2/24/2011

Scoring Guidance	**Optimal (10)**	**Moderate (7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 6	with: 0	Location and landscape support variable is reduced due to proximity of industrial wastewater treatment facility, Turkey Point Plant, surrounding roadways, and spoil piles. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 5, due to proximity of nearby roadways; b) Invasive exotic species = 5, common occurrence within assessment area; c) Wildlife access to and from outside = 5, decreased due to roadway barriers; d) functions that benefit fish & wildlife downstream-distance or barriers = 5; e) Impacts to wildlife listed in Part 1 by outside land uses = 5, surrounding habitats disturbed by roadways; f) Hydrologically connected areas downstream of assessment area = 5; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 5	with: 0	The water environment score is reduced due to ditching, spoil piles, and hydrologic isolation. Individual parameter scores: a) water levels and flows = 4, no flow evident; b) water level indicators = 6, consistent with expected; c) soil moisture = 5, less than expected; d) soil erosion or deposition = 4, erosion evident; e) evidence of fire history = N/A; f) vegetation community zonation = 5, dominance by exotic species; g) hydrologic stress on vegetation = 6, relatively minimal; h) use by animal species with specific hydrological requirements = 5, less than expected; i) vegetative species tolerant of and associated with water quality degradation = 5, dominance by exotic species; j) direct observation of water quality = 6, no sheen or discoloration; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 3	with: 0	The community structure variable is reduced due to low species diversity and presence of near monoculture of exotic Australian pine. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 3, dominated by exotic species; b) invasive exotics or other invasive plant species = 3, dominant; c) regeneration and recruitment = 4, some evidence of recruitment; d) age & size distribution = 4, lower water levels possibly affecting age distribution; e) density and quality of coarse woody debris, snag, den, and cavity = 4, Australian pine poor quality woody debris; f) plant condition = 3, low recruitment of other species; g) land management practices = N/A; h) topographic features = 3, spoils and canal/ditch system; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.47	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.47 x 0.17 = **0.08**

Delta = [with-current]
-0.47

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/FPL Reclaimed Water Treatment Facility		Mixed Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617		Impact	0.78 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Hydrologically isolated from Biscayne Bay due to roadways. Connected to adjacent sawgrass marsh, mangrove wetlands, and exotic hardwood wetlands.

Assessment area description

A parcel of mixed wetland hardwoods associated with a historic tidal creek occurs within the originally proposed location for the FPL reclaimed water treatment facility. The area is hydrologically isolated from Biscayne Bay due to existing roadways and berms. The area is vegetated with a mixture of red mangroves, black mangrove, white mangrove, buttonwood, sea grape, and cocoplum.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, wildlife habitat	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC). Also white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo	1/9/2009

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/FPL Reclaimed Water Treatment Facility		Mixed Wetland Hardwoods
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	S. Rizzo	1/9/2009

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Location and landscape support variable is slightly reduced due to proximity of existing Turkey Point facility. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of Biscayne Bay; b) Invasive exotic species = 7, minimal coverage; c) Wildlife access to and from outside = 7, some limitations; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, some barriers; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, slightly reduced due to proximity of Turkey Point facility; f) Hydrologically connected areas downstream of assessment area = 7, some hydrological impairments; g) Dependency of downstream areas on assessment area = 7, some benefits to downstream areas.	7	0
.500(6)(b)Water Environment (n/a for uplands)	The water environment score is slightly reduced due to the slight hydrological isolation from surrounding roadways and increased salinity. Individual parameter scores: a) water levels and flows = 8, slightly less than expected; b) water level indicators = 8, slightly less than expected; c) soil moisture = 9, consistent with expected; d) soil erosion or deposition = 9, typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 6, due to sparse cover; g) hydrologic stress on vegetation = 6, stress from increased salinity; h) use by animal species with specific hydrological requirements = 7, slighly less than expected; i) vegetative species tolerant of and associated with water quality degradation = 7, species tolerant of high salinities present; j) direct observation of water quality = 8, no sheen or discoloration; K) existing water quality data = 6, due to high salinity; l) water depth wave, wave energy, currents and light penetration = N/A.	8	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The community structure variable is high due to species diversity and presence of natural, native vegetation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7, mostly dominated by native species; b) invasive exotics or other invasive plant species = 7, some coverage; c) regeneration and recruitment = 7, some evidence of recruitment; d) age & size distribution = 7, lower water levels possibly affecting age distribution; e) density and quality of coarse woody debris, snag, den, and cavity = 7, slightly consistent with expected; f) plant condition = 7, low recruitment; g) land management practices = 7, some alteration evident; h) topographic features = 7, some present; i) siltation or algal growth in submerged aquatic plant communities = N/A.	9	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.80	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.8 x 0.78 = **0.62**

Delta = [with-current]
-0.80

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Treated Reclaimed Water Delivery Pipelines		Dwarf Mangroves

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612-B		Impact	3.1 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

This area currently drains north and east through mangrove swamps toward Biscayne Bay.

Assessment area description

The area consists of dwarf red mangroves and sawgrass. The majority of the mangrove community in this area experiences sheet flow-type flushing of tidal waters, and exhibits increased salinity with decreased nitrogen and phosphorus available for plant uptake. The dwarf mangrove community contains mangroves less than 24 inches in height, stunted in response to decreased nutrient availability and increased salinity. Other vegetation includes black mangrove, white mangrove, buttonwood, sea grape, Brazilian pepper, wax myrtle, poisonwood, cocoplum, and Australian pine.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay, Model Lands Basin	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, drainage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo	9/23/2008

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Treated Reclaimed Water Delivery Pipelines		Dwarf Mangroves
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	S. Rizzo	9/23/2008

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 7	with: 0
Location and landscape support variable is slightly reduced due to proximity of FPL Turkey Point Plant main plant road and slight isolation from surrounding mangrove swamps. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of nearby roadways; b) Invasive exotic species = 7, some exotics species present; c) Wildlife access to and from outside = 7, decreased due to slight isolation from other habitats due to roadways; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, decreased due to slight isolation from other habitats due to roadways; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, surrounding habitats relatively undisturbed with exception of roadways; f) Hydrologically connected areas downstream of assessment area = 7, hydrologically connected but some impacts due to roadways; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 8	with: 0
The water environment score is somewhat reduced due to the slight hydrological isolation from surrounding roadways end increased salinity. Individual parameter scores: a) water levels and flows = 7, slightly less than expected; b) water level indicators = 7, slightly less than expected; c) soil moisture = 9, consistent with expected; d) soil erosion or deposition = 9, typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 6, due to sparse cover; g) hydrologic stress on vegetation = 6, stress from high salinity; h) use by animal species with specific hydrological requirements = 7, slighly less than expected; i) vegetative species tolerant of and associated with water quality degradation = 7, species tolerant of high salinities present; j) direct observation of water quality = 8, no sheen or discoloration; K) existing water quality data = 6, due to high salinity; l) water depth wave, wave energy, currents and light penetration = N/A.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 8	with: 0
The community structure variable is slightly reduced due to high salinity. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 9, mostly all desirable species; b) invasive exotics or other invasive plant species = 9, very few present; c) regeneration and recruitment = 7, near normal recruitment; d) age & size distribution = 7, atypical due to high salinity; e) density and quality of coarse woody debris, snag, den, and cavity = N/A; f) plant condition = 7, generally good plant condition; g) land management practices = 8, h) topographic features = 9, slightly less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.77	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.77 x 3.1 = **2.4 (to be restored *in-situ*)**

Delta = [with-current]
-0.77

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Treated Reclaimed Water Delivery Pipelines		Mixed Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617		Impact	0.3 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Hydrologically connected to surrounding mangrove swamps, exotic wetlands and freshwater marshes.

Assessment area description

Several areas of mixed wetland hardwood/mixed forested wetland communities are present within the pipeline area These areas are comprised of a variety of canopy species, including buttonwood, Australian pine, cocoplum, red mangrove, Brazilian pepper, cabbage palm, and willow.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, wildlife habitat	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC). Also white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo	1/9/2009

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Treated Reclaimed Water Delivery Pipelines		Mixed Wetland Hardwoods
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	S. Rizzo	1/9/2009

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 7	with: 0	Location and landscape support variable is slightly reduced due to proximity of existing Turkey Point facility. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of Biscayne Bay; b) Invasive exotic species = 7, minimal coverage; c) Wildlife access to and from outside = 7, some limitations; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, some barriers; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, slightly reduced due to proximity of Turkey Point facility; f) Hydrologically connected areas downstream of assessment area = 7, some hydrological impairments; g) Dependency of downstream areas on assessment area = 7, some benefits to downstream areas.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 7	with: 0	The water environment score is slightly reduced due to water levels lower than expected. Individual parameter scores: a) water levels and flows = 7, slightly lower than expected; b) water level indicators = 7, slightly lower than expected; c) soil moisture = 7, slightly consistent with expected; d) soil erosion or deposition = 7, some observed; e) evidence of fire history = N/A; f) vegetation community zonation = 7, slightly consistent with expected; g) hydrologic stress on vegetation = 7, due to lower water levels; h) use by animal species with specific hydrological requirements = 7, some evidence observed; i) vegetative species tolerant of and associated with water quality degradation = 7, some observed; j) direct observation of water quality = N/A; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 7	with: 0	The community structure variable is high due to species diversity and presence of natural, native vegetation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7, mostly dominated by native species; b) invasive exotics or other invasive plant species = 7, some coverage; c) regeneration and recruitment = 7, some evidence of recruitment; d) age & size distribution = 7, lower water levels possibly affecting age distribution; e) density and quality of coarse woody debris, snag, den, and cavity = 7, slightly consistent with expected; f) plant condition = 7, low recruitment; g) land management practices = 7, some alteration evident; h) topographic features = 7, some present; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.70	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.7 x 0.3 = **0.21 (to be restored *in-situ*)**

Delta = [with-current]
-0.70

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Canals, Ditches, and Reservoirs

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
510, 511, 530		Impact	5.4 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
C-1, DA-4, C-102, C-103, North Canal, Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Hydrologically connected to surrounding mangrove swamps, mixed wetland hardwoods and freshwater marshes.

Assessment area description

A total of seven crossings of man-made canals are crossed by the proposed reclaimed water pipelines. Drainage ditches typically occur on the borders of roadside rights-of-way, freshwater marshes, mangroves, and mixed hardwood wetlands. In-stream vegetation is minimal within the man made canals along the proposed reclaimed water pipelines corridor, due to the steep slopes and minimal littoral zone. Emergent and floating leaved species typical of the canals include spatterdock, water lettuce, and water hyacinth, while the banks contain beggarticks, primrose willow, Brazilian pepper, willow, and ragweed.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, drainage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T). Reptiles such as American alligator (TSA).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo	1/9/2009

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Canals, Ditches, and Reservoirs
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	S. Rizzo	1/9/2009

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Location and landscape support variable is reduced due to proximity of roadways and transmission line right-of-way. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 5, due to proximity of nearby roadways; b) Invasive exotic species = 5, common occurrence within assessment area; c) Wildlife access to and from outside = 5, decreased due to roadway barriers; d) functions that benefit fish & wildlife downstream-distance or barriers = 5; e) Impacts to wildlife listed in Part 1 by outside land uses = 5, surrounding habitats disturbed by roadways; f) Hydrologically connected areas downstream of assessment area = 5; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas.	5	0
.500(6)(b)Water Environment (n/a for uplands)	The water environment score is somewhat reduced due to the artificial nature of the canal/ditch system. Individual parameter scores: a) water levels and flows = 4, no flow evident; b) water level indicators = 6, consistent with expected; c) soil moisture = 6, consistent with expected; d) soil erosion or deposition = 4, erosion evident; e) evidence of fire history = N/A; f) vegetation community zonation = 6, appropriate for community type; g) hydrologic stress on vegetation = 6, relatively minimal; h) use by animal species with specific hydrological requirements = 6, consistent with expected; i) vegetative species tolerant of and associated with water quality degradation = 6, some pollution tolerant species present; j) direct observation of water quality = 6, no sheen or discoloration; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	5	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The community structure variable is reduced due to artificial nature of the canal/ditch system. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, dominated by exotic species; b) invasive exotics or other invasive plant species = 4, compose majority of coverage; c) regeneration and recruitment = 7, near normal recruitment; d) age & size distribution = 7, slightly atypical; e) density and quality of coarse woody debris, snag, den, and cavity = 5, due to excavated canal banks; f) plant condition = 7, generally good plant condition; g) land management practices = 5, due to alteration of community structure and hydroperiod; h) topographic features = 5, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = 7, minor algal growth.	5	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.50	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.5 x 5.4 = **2.7 (to be restored *in-situ*)**

Delta = [with-current]
-0.50

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Mangrove Swamps

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612		Impact	18.6 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
C-1, DA-4, C-102, C-103, North Canal, Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Hydrologically connected to surrounding mixed wetland hardwoods and freshwater marshes.

Assessment area description

Areas of coastal mangroves occur within the proposed corridor predominantly to the east of the existing transmission line right-of-way. These areas are dominated by a mixture of red mangrove and black mangrove which are present in pure or predominant stands. Subdominant species include white mangrove buttonwood, Brazilian pepper, cocoplum, sea grape, half-flower, salt grass, and occasional Australian pine.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Passerine birds and other wildlife typical to the region	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T). Reptiles such as American alligator (TSA).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo	1/9/2009

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Mangrove Swamps
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	S. Rizzo	1/9/2009

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support w/o pres or current: 7 with: 0	Location and landscape support variable is slightly reduced due to proximity of existing Turkey Point facility and roadways. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of roadways and Turkey Point Plant; b) Invasive exotic species = 7, some coverage; c) Wildlife access to and from outside = 7, mostly unlimited access; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, few impedences to downstream areas; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, slightly reduced due to proximity of Turkey Point facility; f) Hydrologically connected areas downstream of assessment area = 7, few impedence to downstream areas; g) Dependency of downstream areas on assessment area = 7, some benefit to downstream areas.	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current: 8 with: 0	The water environment score is slightly reduced due to the atypical vegetation community zonation due to presence of exotic species. Individual parameter scores: a) water levels and flows = 8, consistent with expected; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 8, consistent with expected; e) evidence of fire history = N/A; f) vegetation community zonation = 8, typical for the habitat; g) hydrologic stress on vegetation = 8, no stress noted; h) use by animal species with specific hydrological requirements = 8, consistent with expected; i) vegetative species tolerant of and associated with water quality degradation = 8, none observed; j) direct observation of water quality = N/A; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current: 8 with: 0	The community structure variable is reduced due to low species diversity resulting from presence of exotics. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 8, few to no exotic species; b) invasive exotics or other invasive plant species = 8, minimal coverage; c) regeneration and recruitment = 8, consistent with expected; d) age & size distribution = 8, consistent with expected; e) density and quality of coarse woody debris, sneg, den, and cavity = 8, adequate for system type; f) plant condition = 8, consistent with expected; g) land management practices = 8, limited alteration of community structure; h) topographic features = 8, mostly optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.77 with: 0	Preservation adjustment factor =	FL = delta x acres = -0.77 x 18.6 = **14.3** (**to be restored *in-situ***)
Delta = [with-current] **-0.77**	Adjusted mitigation delta =	
	If mitigation	For mitigation assessment areas
	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Mangrove/Exotic Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612/619		Impact	5.2 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
C-1, DA-4, C-102, C-103, North Canal, Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Hydrologically connected to surrounding mangrove swamps, mixed wetland hardwoods and freshwater marshes.

Assessment area description

Areas of exotic wetland hardwoods occur within the corridor, intermixed with mangrove swamps. These wetlands are dominated by the nuisance exotic species Brazilian pepper, with subdominant species including Australian pine, willow, groundsel tree, elderberry, primrose willow, cattail, paragrass, and torpedo grass.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, wildlife habitat	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolor heron (SSC). Also white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo	1/9/2009

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Mangrove/Exotic Wetland Hardwoods
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	S. Rizzo	1/9/2009

Scoring Guidance	**Optimal (10)**	**Moderate (7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 6	with: 0
Location and landscape support variable is slightly reduced due to proximity of existing Turkey Point facility, roadways, mining, and transmission line right-of-way. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to adjacent disturbances; b) Invasive exotic species = 6, many present; c) Wildlife access to and from outside = 6, some limitations; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, some barriers; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, reduced due to proximity of Turkey Point facility, roadways, mining, and transmission line right-of-way; f) Hydrologically connected areas downstream of assessment area = 6, several hydrological impairments; g) Dependency of downstream areas on assessment area = 6, some benefits to downstream areas.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 6	with: 0
The water environment score is slightly reduced due to water levels lower than expected and presence of ditches. Individual parameter scores: a) water levels and flows = 6, slightly lower than expected; b) water level indicators = 6, slightly lower than expected; c) soil moisture = 6, drier than expected; d) soil erosion or deposition = 6, some observed; e) evidence of fire history = N/A; f) vegetation community zonation = 6, exotics present; g) hydrologic stress on vegetation = 6, due to lower water levels; h) use by animal species with specific hydrological requirements = 6, few evidence observed; i) vegetative species tolerant of and associated with water quality degradation = 6, few observed; j) direct observation of water quality = N/A; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 6	with: 0
The community structure variable is reduced due to presence of exotic vegetation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 6, dominated by exotic species; b) invasive exotics or other invasive plant species = 6, many present; c) regeneration and recruitment = 6, some evidence of recruitment; d) age & size distribution = 6, lower water levels possibly affecting age distribution; e) density and quality of coarse woody debris, snag, den, and cavity = 6, less than expected; f) plant condition = 6, low recruitment; g) land management practices = 6, alteration evident; h) topographic features = 6, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.60	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.60 x 5.2 = **3.1 (to be restored *in-situ*)**

Delta = [with-current]
-0.60

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Mixed Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617		Impact	8.6 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
C-1, DA-4, C-102, C-103, North Canal, Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Hydrologically connected to surrounding mangrove swamps, exotic wetlands and freshwater marshes.

Assessment area description

Several areas of mixed wetland hardwood/mixed forested wetland communities are present within the corridor. These areas are comprised of a variety of canopy species, including buttonwood, Australian pine, cocoplum, red mangrove, Brazilian pepper, cabbage palm, and willow.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, wildlife habitat	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC). Also white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo	1/9/2009

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Mixed Wetland Hardwoods
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	S. Rizzo	1/9/2009

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Location and landscape support variable is slightly reduced due to proximity of existing Turkey Point facility. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of Biscayne Bay; b) Invasive exotic species = 7, minimal coverage; c) Wildlife access to and from outside = 7, some limitations; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, some barriers; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, slightly reduced due to proximity of Turkey Point facility; f) Hydrologically connected areas downstream of assessment area = 7, some hydrological impairments; g) Dependency of downstream areas on assessment area = 7, some benefits to downstream areas.	7	0
.500(6)(b)Water Environment (n/a for uplands)	The water environment score is slightly reduced due to water levels lower than expected. Individual parameter scores: a) water levels and flows = 7, slightly lower than expected; b) water level indicators = 7, slightly lower than expected; c) soil moisture = 7, slightly consistent with expected; d) soil erosion or deposition = 7, some observed; e) evidence of fire history = N/A; f) vegetation community zonation = 7, slightly consistent with expected; g) hydrologic stress on vegetation = 7, due to lower water levels; h) use by animal species with specific hydrological requirements = 7, some evidence observed; i) vegetative species tolerant of and associated with water quality degradation = 7, some observed; j) direct observation of water quality = N/A; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	7	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The community structure variable is high due to species diversity and presence of natural, native vegetation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7, mostly dominated by native species; b) invasive exotics or other invasive plant species = 7, some coverage; c) regeneration and recruitment = 7, some evidence of recruitment; d) age & size distribution = 7, lower water levels possibly affecting age distribution; e) density and quality of coarse woody debris, snag, den, and cavity = 7, slightly consistent with expected; f) plant condition = 7, low recruitment; g) land management practices = 7, some alteration evident; h) topographic features = 7, some present; i) siltation or algal growth in submerged aquatic plant communities = N/A.	7	0

Score = sum of above scores/30 (if uplands, divide by 20)		If preservation as mitigation,	For impact assessment areas
current or w/o pres	with	Preservation adjustment factor =	FL = delta x acres = -0.70 x 8.6 = **6.0 (to be restored *in-situ*)**
0.70	0	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
-0.70	Time lag (t-factor) =	RFG = delta/(t-factor x risk) =
	Risk factor =	

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Freshwater Marshes

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641		Impact	4.1 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
C-1, DA-4, C-102, C-103, North Canal, Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Hydrologically connected to surrounding mangrove swamps, exotic wetlands and mixed forested wetlands.

Assessment area description

Areas of freshwater marsh occur within the reclaimed water pipeline corridor adjacent to and within the existing transmission line right-of-way. These areas are vegetated with predominantly herbaceous species, including primrose willow, sawgrass, and torpedo grass, as well as occasional shrub and canopy species such as willow, Brazilian pepper, buttonbush, cabbage palm, poisonwood, and Australian pine.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, wildlife habitat	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolor heron (SSC). Also white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
S. Rizzo	1/9/2009

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Reclaimed Water Pipelines		Freshwater Marshes
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	S. Rizzo	Jun-08

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of suppon of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Location and landscape support variable is slightly reduced due to proximity of existing Turkey Point facility. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of Biscayne Bay; b) Invasive exotic species = 7, minimal coverage; c) Wildlife access to and from outside = 7, some limitations; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, some barriers; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, slightly reduced due to proximity of Turkey Point facility; f) Hydrologically connected areas downstream of assessment aree = 7, some hydrological impairments; g) Dependency of downstream areas on assessment area = 7, some benefits to downstream areas.	7	0
.500(6)(b)Water Environment (n/a for uplands)	The water environment score is slightly reduced due to water levels lower than expected. Individual parameter scores: a) water levels and flows = 7, slightly lower than expected; b) water level indicators = 7, slightly lower than expected; c) soil moisture = 7, slightly consistent with expected; d) soil erosion or deposition = 7, some observed; e) evidence of fire history = N/A; f) vegetation community zonation = 7, slightly consistent with expected; g) hydrologic stress on vegetation = 7, due to lower water levels; h) use by animal species with specific hydrological requirements = 7, some evidence observed; i) vegetative species tolerant of and associated with water quality degradation = 7, some observed; j) direct observation of water quality = N/A; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	7	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The community structure variable is high due to species diversity and presence of natural, native vegetation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7, mostly dominated by native species; b) invasive exotics or other invasive plant species = 7, some coverage; c) regeneration and recruitment = 7, some evidence of recruitment; d) age & size distribution = 7, lower water levels possibly affecting age distribution; e) density and quality of coarse woody debris, snag, den, and cavity = 7, slightly consistent with expected; f) plant condition = 7, low recruitment; g) land management practices = 7, some alteration evident; h) topographic features = 7, some present; i) siltation or algal growth in submerged aquatic plant communities = N/A.	7	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.70	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -0.70 x 4.1 = **2.9 (to be restored *in-situ*)**

Delta = [with-current]
-0.70

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Canals/Ditches/Reservoirs

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
510/511/534		Impact	7.3 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/Florida City/North Canal/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to roadways. Hydrologically connected to surrounding mixed wetland hardwoods and freshwater marshes; however, does not appear to connect to a canal system or other surface water features.

Assessment area description

Canals and ditches are relatively free of emergent aquatic vegetation, although submerged aquatic vegetation is common. Most of the canals contain submerged aquatic vegetation, principally wigeongrass, with shoalweed and green algae also present.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, drainage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T). Reptiles such as American alligator (TSA).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

American alligator was observed in the canal.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	6/2/2008

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Canals/Ditches
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	K. Bullock, S. Rizzo	6/2/2008

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Location and landscape support variable is reduced due to proximity of Palm Drive and lack of connectivity of canal to other surface waters. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 5, due to proximity of nearby roadways; b) Invasive exotic species = 5, common ocurrence within assesment area; c) Wildlife access to and from outside = 5, decreased due to lack of connectivity to other surface waters; d) functions that benefit fish & wildlife downstream-distance or barriers = N/A because this is a closed system; e) Impacts to wildlife listed in Part 1 by outside land uses = 5, surrounding habitats relatively undisturbed with exception of Palm Drive; f) Hydrologically connected areas downstream of assessment area = N/A due to closed system; g) Dependency of downstream areas on assessment area = 4, little benefit to downstream areas.	5	0
.500(6)(b)Water Environment (n/a for uplands)	The water environment score is somewhat reduced due to the apparent lack of connectivity to other surface waters or canal system. Individual parameter scores: a) water levels and flows = 5, no flow evident; b) water level indicators = 5, mostly consistent with expected; c) soil moisture = 5, mostly consistent with expected; d) soil erosion or deposition = 5, typical patterns for canal; e) evidence of fire history = N/A; f) vegetation community zonation = 5, appropriate for community type; g) hydrologic stress on vegetation = 5, relatively minimal; h) use by animal species with specific hydrological requirements = 5, due to artificial hydroperiod; i) vegetative species tolerant of and associated with water quality degradation = 5, some pollution tolerant species present; j) direct observation of water quality = 5, no sheen or discoloration; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	5	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	The community structure variable is reduced due to artificial nature of the canal and hydrologic isolation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, few species present; b) invasive exotics or other invasive plant species = 5, present; c) regeneration and recruitment = 6, near normal recruitment; d) age & size distribution = 6, slightly atypical; e) density and quality of coarse woody debris, snag, den, and cavity = 5, due to excavated canal banks; f) plant condition = 7, generally good plant condition; g) land management practices = 4, due to alteration of community structure and hydroperiod; h) topographic features = 5, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = 4, algal growth.	5	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.50	0

Delta = [with-current]
-0.50

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = 0.50 x 7.3 = **3.65**

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Dwarf Mangroves and Mixed Wetland Hardwoods/Freshwater Marshes

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612-B, 617/641		Impact	7.5 acres (612-B) 5.6 acres (617/641)

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/Florida City/North Canal/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to roadways and exotic wetland hardwoods. Hydrologically connected to Biscayne Bay through adjacent wetlands.

Assessment area description

Areas of mangroves occur within the corridors adjacent to SW 359th Street near the L 31E Canal. These areas are dominated by a mixture of red mangrove and black mangrove, along with subdominant species white mangrove, buttonwood, Brazilian pepper, cocoplum, sea grape, half-flower, and occasional Australian pine. Several areas of mixed wetland hardwood communities intermixed with freshwater marshes are present within and adjacent to the roadway improvement corridors. These areas are comprised of a variety of native and exotic canopy species, including buttonwood, Australian pine, cocoplum, red mangrove, Brazilian pepper, cabbage palm, willow, and herbaceous species such as sawgrass.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, drainage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC) as well as white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	6/2/2008

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Dwarf Mangroves and Mixed Wetland Hardwoods/Freshwater Marshes
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	K. Bullock, S. Rizzo	6/2/2008

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 7	with: 0
Location and landscape support variable is slightly reduced due to proximity of FPL Turkey Point Plant main plant road and slight isolation from surrounding mangrove swamps. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to proximity of nearby roadways; b) Invasive exotic species = 7, some exotics species present; c) Wildlife access to and from outside = 7, decreased due to slight isolation from other habitats due to roadways; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, decreased due to slight isolation from other habitats due to roadways; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, surrounding habitats relatively undisturbed with exception of roadways; f) Hydrologically connected areas downstream of assessment area = 7, hydrologically connected but some impacts due to roadways; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 8	with: 0
The water environment score is somewhat reduced due to the slight hydrological isolation from surrounding roadways and increased salinity. Individual parameter scores: a) water levels and flows = 7, slightly less than expected; b) water level indicators = 7, slightly less than expected; c) soil moisture = 9, consistent with expected; d) soil erosion or deposition = 9, typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 6, due to sparse cover; g) hydrologic stress on vegetation = 6, stress from high salinity; h) use by animal species with specific hydrological requirements = 7, slighly less than expected; i) vegetative species tolerant of and associated with water quality degradation = 7, species tolerant of high salinities present; j) direct observation of water quality = 8, no sheen or discoloration; K) existing water quality data = 6, due to high salinity; l) water depth wave, wave energy, currents and light penetration = N/A.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 8	with: 0
The community structure variable is slightly reduced due to high salinity. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 9, mostly all desirable species; b) invasive exotics or other invasive plant species = 9, very few present; c) regeneration and recruitment = 7, near normal recruitment; d) age & size distribution = 7, atypical due to high salinity; e) density and quality of coarse woody debris, snag, den, and cavity = N/A; f) plant condition = 7, generally good plant condition; g) land management practices = 8, h) topographic features = 9, slightly less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.77	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.77 x 7.5 = **5.78 (612-B)**, 0.77 x 5.6 = **4.31 (617/641)**

Delta = [with-current]
-0.77

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Mixed Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617		Impact	9.1 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/Florida City/North Canal/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to roadways. Surrounded by freshwater marshes. Hydrologically connected to Biscayne Bay through adjacent wetlands.

Assessment area description

Several areas of mixed wetland hardwood communities are present within and adjacent to the roadway improvement corridors. Mixed wetland hardwoods are comprised of a variety of native and exotic canopy species, including buttonwood, Australian pine, cocoplum, red mangrove, Brazilian pepper, cabbage palm, and willow.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Passerine birds and other wildlife typical to the region	Occasional use by white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

White-crowned pigeon observed flying overhead.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	6/2/2008

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Mixed Wetland Hardwoods
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	K. Bullock, S. Rizzo	6/2/2008

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 7	with: 0
Location and landscape support variable is slightly reduced due to proximity of existing Turkey Point facility. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8, due to proximity of Biscayne Bay; b) Invasive exotic species = 4, moderate coverage; c) Wildlife access to and from outside = 8, mostly unlimited access; d) functions that benefit fish & wildlife downstream-distance or barriers = 8, no impedence to downstream areas; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, slightly reduced due to proximity of Turkey Point facility; f) Hydrologically connected areas downstream of assessment area = 8, no impedence to downstream areas; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 7	with: 0
The water environment score is slightly reduced due to the atypical vegetation community zonation due to presence of exotic species. Individual parameter scores: a) water levels and flows = 8, consistent with expected; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 8, consistent with expected; e) evidence of fire history = N/A; f) vegetation community zonation = 4, atypical for the habitat due to presence of exotics; g) hydrologic stress on vegetation = 8, no stress noted; h) use by animal species with specific hydrological requirements = 8, consistent with expected; i) vegetative species tolerant of and associated with water quality degradation = 8, none observed; j) direct observation of water quality = N/A; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 7	with: 0
The community structure variable is reduced due to low species diversity resulting from presence of exotics. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 6, dominated by exotic species; b) invasive exotics or other invasive plant species = 4, moderate to high coverage; c) regeneration and recruitment = 7, typical; d) age & size distribution = 7, typical; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 7, due to dead stems and low productivity; g) land management practices = 7, due to alteration of community structure; h) topographic features = 7, slightly less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.70	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.70 x 9.1 = **6.37**

Delta = [with-current]
-0.70

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Exotic Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
619		Impact	4.2 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/Florida City/North Canal/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Adjacent to roadways; intermixed with freshwater marshes and mixed wetland hardwoods.

Assessment area description

Areas of exotic wetland hardwoods dominated by Brazilian pepper occur within the corridors adjacent to the existing roadways. In addition to the nuisance exotic species Brazilian pepper, additional species commonly observed within these areas include Australian pine, willow, groundsel tree, elderberry, primrose willow, cattail, paragrass, and torpedo grass.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, wildlife habitat	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolor heron (SSC). Also white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	6/2/2008

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Exotic Wetland Hardwoods
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	K. Bullock, S. Rizzo	6/2/2008

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 6	with: 0
Location and landscape support variable is slightly reduced due to proximity of existing Turkey Point facility. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of Turkey Point facility b) Invasive exotic species = 6, prevalent coverage; c) Wildlife access to and from outside = 6, some limitations; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, roadway barriers; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to proximity of Turkey Point facility and roadways; f) Hydrologically connected areas downstream of assessment area = 6, some hydrological impairments; g) Dependency of downstream areas on assessment area = 6, some benefits to downstream areas.		
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 6	with: 0
The water environment score is slightly reduced due to water levels lower than expected. Individual parameter scores: a) water levels and flows = 6, slightly lower than expected; b) water level indicators = 6, slightly lower than expected; c) soil moisture = 6, mostly consistent with expected; d) soil erosion or deposition = 6, some observed; e) evidence of fire history = N/A; f) vegetation community zonation = 6, exotics present; g) hydrologic stress on vegetation = 6, due to lower water levels; h) use by animal species with specific hydrological requirements = 6, some evidence observed; i) vegetative species tolerant of and associated with water quality degradation = 6, some observed; j) direct observation of water quality = 6, mostly normal; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 6	with: 0
The community structure variable is high due to species diversity and presence of natural, native vegetation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 6, dominated by exotic species; b) invasive exotics or other invasive plant species = 6, prevalent; c) regeneration and recruitment = 6, some evidence of recruitment; d) age & size distribution = 6, lower water levels possibly affecting age distribution; e) density and quality of coarse woody debris, snag, den, and cavity = 6, mostly consistent with expected; f) plant condition = 6, low recruitment; g) land management practices = N/A; h) topographic features = 6, mostly typical; i) siltation or algal growth in submerged aquatic plant communities = N/A.		

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres: 0.60	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.60 x 4.2 = **2.52**

Delta = [with-current]
-0.60

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Freshwater Marshes

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641		Impact	47.9 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
DA-4/Florida City/North Canal/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

The freshwater marsh wetlands within the assessment area are located within a large freshwater marsh system that is hydrologically connected to Biscayne Bay. The freshwater marshes are adjacent to mixed wetland hardwood communities and roadways.

Assessment area description

Areas of freshwater marsh are prevalent within the corridors adjacent to SW 359th Street. These marshes are dominated by sawgrass, with subdominant species including cattail, willow, primrose willow, buttonwood, wax myrtle, cabbage palm, Brazilian pepper, poisonwood, Australian pine, musky mint, silktree, and nettletree.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage, wildlife habitat	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolor heron (SSC). Also white-crowned pigeon (T).

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

White-crowned pigeon observed flying overhead.

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	6/2/2008

Form 62-345.900(1), F.A.C. [effective date]

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7/Associated Facilities/Roadway Improvements		Freshwater Marshes
Impact or Mitigation	Assessment conducted by:	Assessment date:
Impact	K. Bullock, S. Rizzo	6/2/2008

Scoring Guidance	Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 8	with: 0	Location and landscape support variable is slightly reduced due to proximity of existing Turkey Point facility. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8, due to proximity of Biscayne Bay; b) Invasive exotic species = 8, minimal coverage; c) Wildlife access to and from outside = 8, no limitations; d) functions that benefit fish & wildlife downstream-distance or barriers = 8, no barriers; e) Impacts to wildlife listed in Part 1 by outside land uses = 8, slightly reduced due to proximity of Turkey Point facility; f) Hydrologically connected areas downstream of assessment area = 8, no hydrological impairments; g) Dependency of downstream areas on assessment area = 8, benefits to downstream areas.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 8	with: 0	The water environment score is slightly reduced due to water levels lower than expected. Individual parameter scores: a) water levels and flows = 7, slightly lower than expected; b) water level indicators = 7, slightly lower than expected; c) soil moisture = 9, consistent with expected; d) soil erosion or deposition = 9, none observed; e) evidence of fire history = 9, area was burned 2-3 years ago; f) vegetation community zonation = 9, consistent with expected; g) hydrologic stress on vegetation = 7, due to lower water levels; h) use by animal species with specific hydrological requirements = 9, some evidence observed; i) vegetative species tolerant of and associated with water quality degradation = 9, none observed; j) direct observation of water quality = 9, appears normal; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 8	with: 0	The community structure variable is high due to species diversity and presence of natural, native vegetation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 9, dominated by native species; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 8, some evidence of recruitment; d) age & size distribution = 7, lower water levels possibly affecting age distribution; e) density and quality of coarse woody debris, snag, den, and cavity = 9, consistent with expected; f) plant condition = 7, low recruitment; g) land management practices = 9, no alteration evident; h) topographic features = 9, optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)		
current or w/o pres: 0.80	with: 0	

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.80 x 47.9 = **38.32**

Delta = [with-current]
-0.80

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Form 62-345.900(2), F.A.C. [effective date]

MITIGATION SITES

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Sawgrass Marsh and Periphyton Mat

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
6411 and 655		Mitigation	102.7 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
North Canal/Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Sawgrass marsh, exotic wetland hardwoods, and mosquito ditches lie to the west of the Northwest Restoration Site; connected on east to L-31E Canal; further east lie mangrove wetlands of Biscayne National Park. SW 328th Street/North Canal lies to the north, and SW 344th Street/Florida City Canal lies to the south.

Assessment area description

The Northwest Restoration Site consists of several FPL-owned parcels totaling 240 acres located adjacent to the L-31E canal between 328th Street and 344th Street/Palm Drive, approximately two miles northwest of the Units 6&7 Site and directly west of the Biscayne National Park. The area is impacted due to historic hydrologic alteration in the form of a network of mosquito ditches as well as prevalence of exotic species, resulting in reduced quality of wildlife habitat and vegetative species diversity. The majority of the Site (approximately 95 acres) is sawgrass marsh, with exotic Australian pine scattered throughout. Relatively open, sparsely vegetated areas supporting thick periphyton communities comprise approximatley 7 acres within the Site.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Roadways, L-31E Canal, FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Wildlife habitat, water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

white ibis, great egret, cricket frog, pig frog

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	7/14/2010

PART II A – Quantification of Assessment Area (Impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Sawgrass Marsh and Periphyton Mat
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	K. Bullock, S. Rizzo	7/14/2010

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to meintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support		**Current**: Location and landscape support variable slightly reduced due to prevalence of exotic vegetation, mosquito ditches and spoil piles, and surrounding roadways and canals. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 6, moderate coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of native vegetative communities; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to surrounding habitat degradation; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.
w/o pres or current: 7	with: 8	**With**: Location and landscape support variable slightly increased due to removal of historical disturbances (mosquito ditches and spoil piles), eradication of exotic vegetation, and preservation of parcel. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8, due to increase in native habitat; b) Invasive exotic species = 9, exotic removal within Site; c) Wildlife access to and from outside = 7, somewhat decreased due to limitations imposed by surrounding roadways; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, slight increase due to removal fo exotic vegetation; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, restoration of habitats surrounding sawgrass marsh and periphyton mat communities; f) Hydrologically connected areas downstream of assessment area = 7, connected through culverts to L31E, removal of ditches will improve hydrology; g) Dependency of downstream areas on assessment area = 8, more benefit to downstream areas due to exotic removal and ditch removal.
.500(6)(b)Water Environment (n/a for uplands)		**Current**: The water environment score is reduced due to the prevalence of ditching on the site. Individual parameter scores: a) water levels and flows = 5, altered water level due to ditching; b) water level indicators = 4, less than expected; c) soil moisture = 6, drier than expected; d) soil erosion or deposition = 5, spoil deposits; e) evidence of fire history = 6, less than typical; f) vegetation community zonation = 5, altered due to presence of spoil deposits supporting exotics; g) hydrologic stress on vegetation = 6, some due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 6, less than expected due to ditching and limited open water connections; i) vegetative species tolerant of and associated with water quality degradation = 7, typical of expected; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current: 5	with: 8	**With**: The water environment score is increased due to the removal of ditching throughout the Site. Individual parameter scores: a) water levels and flows = 8, more typical water flows; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 7, typical patterns; e) evidence of fire history = 8, restoration will incorporate prescribed fire; f) vegetation community zonation = 8, due to removal of exotics; g) hydrologic stress on vegetation = 8, due to improved hydrologic regime; h) use by animal species with specific hydrological requirements = 8, due to improved hydrology; i) vegetative species tolerant of and associated with water quality degradation = 7, minimal; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community		**Current**: The community structure variable is reduced due to presence of exotic species and hydrologic isolation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 6, mix of exotic and native species; b) invasive exotics or other invasive plant species = 6, moderate coverage; c) regeneration and recruitment = 7, slightly less than expected; d) age & size distribution = 7, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 7, due to dead stems and low productivity; g) land management practices = 5, due to alteration of community structure; h) topographic features = 6, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.
w/o pres or current: 6	with: 8	**With**: The community structure variable is increased due to removal of exotics and improved hydrology. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 8, native species; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 8, consistent with expected; d) age & size distribution = 7, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 8, improved due to improved hydrology; g) land management practices = 8, due to removal of ditching; h) topographic features = 8, due to removal of ditching; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)		If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.60	with: 0.80	Preservation adjustment factor =	FL = delta x acres =
		Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
0.20	Time lag (t-factor) = 1.07 (3 years)	RFG = delta/(t-factor x risk) = 0.15
	Risk factor = 1.25	

Credits = RFG x acreage = 15.4

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Mangroves

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612		Mitigation	42.2 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
North Canal/Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Sawgrass marsh, exotic wetland hardwoods, and mosquito ditches lie to the west of the Northwest Restoration Site; connected on east to L-31E Canal; further east lie mangrove wetlands of Biscayne National Park. SW 328th Street/North Canal lies to the north, and SW 344th Street/Florida City Canal lies to the south.

Assessment area description

The Northwest Restoration Site consists of several FPL-owned parcels totaling 240 acres located adjacent to the L-31E canal between 328th Street and 344th Street/Palm Drive, approximately two miles northwest of the Units 6&7 Site and directly west of the Biscayne National Park. The area is impacted due to historic hydrologic alteration in the form of a network of mosquito ditches as well as prevalence of exotic species, resulting in reduced quality of wildlife habitat and vegetative species diversity. Areas dominated by red mangroves occur in the northern portion of the Site, with additional species including the exotic Australian pine, white mangroves, buttonwood, dahoon holly, and wax myrtle.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Roadways, L-31E Canal, FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Wildlife habitat, water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	7/14/2010

PART II A – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Mangroves
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	K. Bullock, S. Rizzo	7/14/2010

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	**Current**: Location and landscape support variable slightly reduced due to prevalence of exotic vegetation, mosquito ditches and spoil piles, and surrounding roadways and canals. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 6, moderate coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of native vegetative communities; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to surrounding habitat degradation; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.
w/o pres or current: 7 / with: 8	**With**: Location and landscape support variable slightly increased due to removal of historical disturbances (mosquito ditches and spoil piles), eradication of exotic vegetation, and preservation of parcel. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8, due to increase in native habitat; b) Invasive exotic species = 9, exotic removal within Site; c) Wildlife access to and from outside = 7, somewhat decreased due to limitations imposed by surrounding roadways; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, slight increase due to removal fo exotic vegetation; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, restoration of habitats surrounding sawgrass marsh and periphyton mat communities; f) Hydrologically connected areas downstream of assessment area = 7, connected through culverts to L31E, removal of ditches will improve hydrology; g) Dependency of downstream areas on assessment area = 8, more benefit to downstream areas due to exotic removal and ditch removal.
.500(6)(b)Water Environment (n/a for uplands)	**Current**: The water environment score is reduced due to the prevalence of ditching on the site, although relatively reduced number of mosquito ditches in northeastern portion of Site. Individual parameter scores: a) water levels and flows = 6, somewhat altered water level due to ditching; b) water level indicators = 5, less than expected; c) soil moisture = 6, drier than expected; d) soil erosion or deposition = 6, some spoil deposits; e) evidence of fire history = 6, less than typical; f) vegetation community zonation = 6, altered due to ditching, reduction in hydrologic connections; g) hydrologic stress on vegetation = 6, some due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 6, less than expected due to ditching and limited open water connections; i) vegetative species tolerant of and associated with water quality degradation = 7, typical of expected; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current: 6 / with: 8	**With**: The water environment score is increased due to the removal of ditching throughout the Site. Individual parameter scores: a) water levels and flows = 8, more typical water flows; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 7, typical patterns; e) evidence of fire history = 8, restoration will incorporate prescribed fire; f) vegetation community zonation = 8, due to removal of exotics; g) hydrologic stress on vegetation = 8, due to improved hydrologic regime; h) use by animal species with specific hydrological requirements = 8, due to improved hydrology; i) vegetative species tolerant of and associated with water quality degradation = 7, minimal; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	**Current**: The community structure variable is reduced somewhat due to presence of Australian pine and hydrologic isolation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7, primarily native species, but exotic species present; b) invasive exotics or other invasive plant species = 7, moderate coverage; c) regeneration and recruitment = 7, slightly less than expected; d) age & size distribution = 8, typical with expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 7, due to dead stems and low productivity; g) land management practices = 6, due to historical ditching, surrounding roadways; h) topographic features = 7, less than optimal due to mosquito ditches; i) siltation or algal growth in submerged aquatic plant communities = N/A.
w/o pres or current: 7 / with: 9	**With**: The community structure variable is increased due to removal of exotics and improved hydrology. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 9, native mangrove community; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 8, consistent with expected; d) age & size distribution = 8, typical with expected; e) density and quality of coarse woody debris, snag, den, and cavity = 8, adequate for system type; f) plant condition = 8, improved due to improved hydrology; g) land management practices = 8, due to removal of ditching; h) topographic features = 9, due to removal of ditching; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)

current or w/o pres	with
0.67	0.83

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =

Delta = [with-current]
0.16

If mitigation
Time lag (t-factor) = 1.07 (3 years)
Risk factor = 1.25

For mitigation assessment areas
RFG = delta/(t-factor x risk) = 0.12

Credits = RFG x acreage = 5.1

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Mixed Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617		Mitigation	16.23 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
North Canal/Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Sawgrass marsh, exotic wetland hardwoods, and mosquito ditches lie to the west of the Northwest Restoration Site; connected on east to L-31E Canal; further east lie mangrove wetlands of Biscayne National Park. SW 328th Street/North Canal lies to the north, and SW 344th Street/Florida City Canal lies to the south.

Assessment area description

The Northwest Restoration Site consists of several FPL-owned parcels totaling 240 acres located adjacent to the L-31E canal between 328th Street and 344th Street/Palm Drive, approximately two miles northwest of the Units 6&7 Site and directly west of the Biscayne National Park. The area is impacted due to historic hydrologic alteration in the form of a network of mosquito ditches as well as prevalence of exotic species, resulting in reduced quality of wildlife habitat and vegetative species diversity. Scattered tree islands comprised of mixed wetland hardwoods occur within the sawgrass marsh, vegetated with a mixture of red, black, and white mangroves, buttonwood, cocoplum, pond apple, willow, and the nuisance exotic species Australian pine.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Roadways, L-31E Canal, FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Wildlife habitat, water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	7/14/2010

PART II A – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Mixed Wetland Hardwoods
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	K. Bullock, S. Rizzo	7/14/2010

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	**Current**: Location and landscape support variable slightly reduced due to prevalence of exotic vegetation, mosquito ditches and spoil piles, and surrounding roadways and canals. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 6, moderate coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of native vegetative communities; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to surrounding habitat degradation; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.
w/o pres or current: 7 / with: 8	**With**: Location and landscape support variable slightly increased due to removal of historical disturbances (mosquito ditches and spoil piles), eradication of exotic vegetation, and preservation of parcel. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8, due to increase in native habitat; b) Invasive exotic species = 9, exotic removal within Site; c) Wildlife access to and from outside = 7, somewhat decreased due to limitations imposed by surrounding roadways; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, slight increase due to removal fo exotic vegetation; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, restoration of habitats surrounding sawgrass marsh and periphyton mat communities; f) Hydrologically connected areas downstream of assessment area = 7, connected through culverts to L31E, removal of ditches will improve hydrology; g) Dependency of downstream areas on assessment area = 8, more benefit to downstream areas due to exotic removal and ditch removal.
.500(6)(b)Water Environment (n/a for uplands)	**Current**: The water environment score is reduced due to the prevalence of ditching on the site. Individual parameter scores: a) water levels and flows = 5, altered water level due to ditching; b) water level indicators = 4, less than expected; c) soil moisture = 6, drier than expected; d) soil erosion or deposition = 5, spoil deposits; e) evidence of fire history = 6, less than typical; f) vegetation community zonation = 5, altered due to presence of spoil deposits supporting exotics; g) hydrologic stress on vegetation = 6, some due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 6, less than expected due to ditching and limited open water connections; i) vegetative species tolerant of and associated with water quality degradation = 7, typical of expected; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current: 5 / with: 8	**With**: The water environment score is increased due to the removal of ditching throughout the Site. Individual parameter scores: a) water levels and flows = 8, more typical water flows; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 7, typical patterns; e) evidence of fire history = 8, restoration will incorporate prescribed fire; f) vegetation community zonation = 8, due to removal of exotics; g) hydrologic stress on vegetation = 8, due to improved hydrologic regime; h) use by animal species with specific hydrological requirements = 8, due to improved hydrology; i) vegetative species tolerant of and associated with water quality degradation = 7, minimal; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	**Current**: The community structure variable is reduced due to presence of exotic species and hydrologic isolation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 6, mix of exotic and native species; b) invasive exotics or other invasive plant species = 6, moderate coverage; c) regeneration and recruitment = 7, slightly less than expected; d) age & size distribution = 7, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 7, due to dead stems and low productivity; g) land management practices = 5, due to alteration of community structure; h) topographic features = 6, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.
w/o pres or current: 6 / with: 9	**With**: The community structure variable is increased due to removal of exotics, improved hydrology, and preservation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 9, native species; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 8, consistent with expected; d) age & size distribution = 8; e) density and quality of coarse woody debris, snag, den, and cavity = 8, adequate for system type; f) plant condition = 8, improved due to improved hydrology; g) land management practices = 9, due to removal of ditching and preservation; h) topographic features = 8, due to removal of ditching; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)		If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.60	with: 0.83	Preservation adjustment factor =	FL = delta x acres =
		Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
0.23	Time lag (t-factor) = 1.14 (5 years)	RFG = delta/(t-factor x risk) = 0.16
	Risk factor = 1.25	

Credits = RFG x acreage = 2.6

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Exotic Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
619		Mitigation	66.19 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
North Canal/Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Sawgrass marsh, exotic wetland hardwoods, and mosquito ditches lie to the west of the Northwest Restoration Site; connected on east to L-31E Canal; further east lie mangrove wetlands of Biscayne National Park. SW 328th Street/North Canal lies to the north, and SW 344th Street/Florida City Canal lies to the south.

Assessment area description

The Northwest Restoration Site consists of several FPL-owned parcels totaling 240 acres located adjacent to the L-31E canal between SW 328th Street and SW 344th Street/Palm Drive, approximately two miles northwest of the Units 6&7 Site and directly west of the Biscayne National Park. The area is impacted due to historic hydrologic alteration in the form of a network of mosquito ditches as well as prevalence of exotic species, resulting in reduced quality of wildlife habitat and vegetative species diversity. Approximately 66 acres of exotic wetland hardwoods dominated by Australian pine occur primarily along the northern and southern boundaries of the Site. Subdominant species include Brazilian pepper, melaleuca, poisonwood, myrsine, buttonwood, and dahoon holly.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Roadways, L-31E Canal, FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	7/14/2010

PART II A – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Exotic Wetland Hardwoods
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	K. Bullock, S. Rizzo	7/14/2010

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	**Current**: Location and landscape support variable slightly reduced due to prevalence of exotic vegetation, mosquito ditches and spoil piles, and surrounding roadways and canals. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 6, moderate coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of native vegetative communities; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to surrounding habitat degradation; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.
w/o pres or current: 7 / with: 8	**With**: Location and landscape support variable slightly increased due to removal of historical disturbances (mosquito ditches and spoil piles), eradication of exotic vegetation, and preservation of parcel. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 8, due to increase in native habitat; b) Invasive exotic species = 9, exotic removal within Site; c) Wildlife access to and from outside = 7, somewhat decreased due to limitations imposed by surrounding roadways; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, slight increase due to removal fo exotic vegetation; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, restoration of habitats surrounding sawgrass marsh and periphyton mat communities; f) Hydrologically connected areas downstream of assessment area = 7, connected through culverts to L31E, removal of ditches will improve hydrology; g) Dependency of downstream areas on assessment area = 8, increased benefit to downstream areas due to exotic removal and ditch removal.
.500(6)(b)Water Environment (n/a for uplands)	**Current**: The water environment score is reduced due to the prevelence of ditching on the site. Individual parameter scores: a) water levels and flows = 5, altered water level due to ditching; b) water level indicators = 4, less than expected; c) soil moisture = 6, drier than expected; d) soil erosion or deposition = 5, spoil deposits; e) evidence of fire history = 6, less than typical; f) vegetation community zonation = 5, altered due to presence of spoil deposits supporting exotics; g) hydrologic stress on vegetation = 6, some due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 6, less than expected due to ditching and limited open water connections; i) vegetative species tolerant of and associated with water quality degradation = 7, typical of expected; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current: 5 / with: 8	**With**: The water environment score is increased due to the removal of ditching throughout the Site. Individual parameter scores: a) water levels and flows = 8, more typical water flows; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 7, typical patterns; e) evidence of fire history = 8, restoration will incorporate prescribed fire; f) vegetation community zonation = 8, due to removal of exotics; g) hydrologic stress on vegetation = 8, due to improved hydrologic regime; h) use by animal species with specific hydrological requirements = 8, due to improved hydrology; i) vegetative species tolerant of and associated with water quality degradation = 7, minimal; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	**Current**: The community structure variable is reduced due to extensive coverage of Australian pine. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, dominance of exotic species; b) invasive exotics or other invasive plant species = 4, extensive coverage; c) regeneration and recruitment = 5, less than expected; d) age & size distribution = 5, less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 5, Australian pine poor woody debris, no cavities; f) plant condition = 5, near monoculture of exotics reduces native plant extent and condition; g) land management practices = 5, due to alteration natural topography and hydrology; h) topographic features = 6, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.
w/o pres or current: 4 / with: 7	**With**: The community structure variable is increased due to removal of exotics, restoration of sewgrass community, and improved hydrology. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7, dominance of native species; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 8, consistent with expected; d) age & size distribution = 7, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 8, improved due to improved hydrology; g) land management practices = 8, due to removal of ditching and preservation; h) topographic features = 8, due to removal of ditching; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres: 0.53	with: 0.77

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =

Delta = [with-current]
0.24

If mitigation
Time lag (t-factor) = 1.14 (5 years)
Risk factor = 1.25

For mitigation assessment areas
RFG = delta/(t-factor x risk) = 0.17

Credits = RFG x acreage = 11.25

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Mosquito Ditches

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
511		Mitigation	10.5 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
North Canal/Florida City/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Sawgrass marsh, exotic wetland hardwoods, and mosquito ditches lie to the west of the Northwest Restoration Site; connected on east to L-31E Canal; further east lie mangrove wetlands of Biscayne National Park. SW 328th Street/North Canal lies to the north, and SW 344th Street/Florida City Canal lies to the south.

Assessment area description

The Northwest Restoration Site consists of several FPL-owned parcels totaling 240 acres located adjacent to the L-31E canal between 328th Street and 344th Street/Palm Drive, approximately two miles northwest of the Units 6&7 Site and directly west of the Biscayne National Park. The area is impacted due to historic hydrologic alteration in the form of a network of mosquito ditches as well as prevalence of exotic species, resulting in reduced quality of wildlife habitat and vegetative species diversity.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Roadways, L-31E Canal, FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock, S. Rizzo	7/14/2010

PART II A – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		Northwest Restoration Site - Mosquito Ditches
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	K. Bullock, S. Rizzo	7/14/2010

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	**Current**: Location and landscape support variable slightly reduced due to prevalence of exotic vegetation, mosquito ditches and spoil piles, and surrounding roadways and canals. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 4, extensive coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of native vegetative communities; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to surrounding habitat degradation; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.
w/o pres or current: 6 / with: 7	**With**: Location and landscape support variable slightly increased due to removal of historical disturbances (mosquito ditches and spoil piles), eradication of exotic vegetation, and preservation of parcel. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, due to increase in native habitat; b) Invasive exotic species = 9, exotic removal within Site; c) Wildlife access to and from outside = 7, somewhat decreased due to limitations imposed by surrounding roadways; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, slight increase due to removal fo exotic vegetation; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, restoration of habitats surrounding sawgrass marsh and periphyton mat communities; f) Hydrologically connected areas downstream of assessment area = 7, connected through culverts to L31E, removal of ditches will improve hydrology; g) Dependency of downstream areas on assessment area = 7, increased benefit to downstream areas due to exotic removal and ditch removal.
.500(6)(b)Water Environment (n/a for uplands)	**Current**: The water environment score is reduced due to the prevalence of ditching on the site. Individual parameter scores: a) water levels and flows = 5, altered water level due to ditching; b) water level indicators = 4, less than expected; c) soil moisture = 6, drier than expected; d) soil erosion or deposition = 5, spoil deposits; e) evidence of fire history = 6, less than typical; f) vegetation community zonation = 5, altered due to presence of spoil deposits supporting exotics; g) hydrologic stress on vegetation = 6, some due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 6, less than expected due to ditching and limited open water connections; i) vegetative species tolerant of and associated with water quality degradation = 7, typical of expected; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current: 5 / with: 8	**With**: The water environment score is increased due to the removal of ditching throughout the Site. Individual parameter scores: a) water levels and flows = 8, more typical water flows; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 7, typical patterns; e) evidence of fire history = 8, restoration will incorporate prescribed fire; f) vegetation community zonation = 8, due to removal of exotics; g) hydrologic stress on vegetation = 8, due to improved hydrologic regime; h) use by animal species with specific hydrological requirements = 8, due to improved hydrology; i) vegetative species tolerant of and associated with water quality degradation = 7, minimal; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	**Current**: The community structure variable is reduced due to extensive coverage of Australian pine associated with mosquito ditches. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 4, dominance of exotic species; b) invasive exotics or other invasive plant species = 4, extensive coverage; c) regeneration and recruitment = 5, less than expected; d) age & size distribution = 5, less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 5, Australian pine poor woody debris, no cavities; f) plant condition = 5, near monoculture of exotics reduces native plant extent and condition; g) land management practices = 5, due to alteration natural topography and hydrology; h) topographic features = 6, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.
w/o pres or current: 4 / with: 7	**With**: The community structure variable is increased due to restoration of mosquito ditches to sawgrass marsh and improved hydrology. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 7, dominance of native species; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 7, consistent with expected; d) age & size distribution = 7, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 7, improved due to improved hydrology; g) land management practices = 8, due to removal of ditching and preservation; h) topographic features = 8, due to removal of ditching; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)		If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.50	with: 0.73	Preservation adjustment factor =	FL = delta x acres =
		Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
0.23	Time lag (t-factor) = 1.14 (5 years)	RFG = delta/(t-factor x risk) = 0.13
	Risk factor = 1.5	

Credits = RFG x acreage = 1.37

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		SW 320th Street Restoration Site - Palm Tree Nurseries

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
241		Mitigation	42 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
C-103/North Canal/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Tree nurseries lie to the north and west of the site. Mixed wetland forests and exotic hardwood wetlands lie to the east and south. Further east is the L-31E canal and Biscayne Bay.

Assessment area description

The SW 320th Street Restoration Site encompasses a total of 574 acres, including parcels located on the north and south of the C-103 Canal, extending east towards SFWMD-owned parcels adjacent to the L-31E Canal and the BNP. The parcels include approximatley 144 acres of wetlands dominated by Brazilian pepper and Australian pine, 169 acres of forested wetlands dominated by a mixture of native hardwoods and exotic species, and approximately 42 acres of palm tree nurseries. The northern portion of the SW 320th Street Site includes approximately 219 acres of historical palm tree nurseries currently being restored to freshwater marsh.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Homestead Air Force Base, FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Current: Agricultural production Post-restoration: Wildlife habitat, water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Post-restoration: Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock	6/1/2011

PART II – Quantification of Assessment Area (Impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		SW 320th Street Restoration Site - Tree Nurseries
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	K. Bullock	6/1/2011

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	**Current**: Location and landscape support variable is reduced due to tree nurseries, proximity of roadways, presence of exotic vegetation, and ditching. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to planted palms; b) Invasive exotic species = 6, due to planted palms; c) Wildlife access to and from outside = 6, due to surrounding roadways and tree nurseries; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, provides no functions; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 6, connected through ditches to surrounding tree farms; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.
w/o pres or current: 6 / with: 7	**With**: Location and landscape support variable is higher because area will be preserved. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 8, little coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of open water connection; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, little to no surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 7, more benefit to downstream areas due to exotic removal.
.500(6)(b)Water Environment (n/a for uplands)	**Current**: The water environment score is reduced due to the prevalence of ditching on the site. Individual parameter scores: a) water levels and flows = 1, altered water level due to ditching; b) water level indicators = 1, less than expected; c) soil moisture = 1, drier than expected; d) soil erosion or deposition = 1, due to nursery operations; e) evidence of fire history = N/A; f) vegetation community zonation = 1, not present; g) hydrologic stress on vegetation = 1, due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 1, very few; i) vegetative species tolerant of and associated with water quality degradation = N/A; j) direct observation of water quality = N/A, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current: 1 / with: 5	**With**: The water environment score is increased due to the removal of ditching on the site. Individual parameter scores: a) water levels and flows = 6, more typical water flows; b) water level indicators = 6, mostly consistent with expected; c) soil moisture = 6, mostly consistent with expected; d) soil erosion or deposition = 6, mostly typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 6, due to removal of palms; g) hydrologic stress on vegetation = 6, due to improved hydrologic regime; h) use by animal species with specific hydrological requirements = 6, some due to improved hydrology and resultant increase in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 6, mostly minimal; j) direct observation of water quality = 6, mostly no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	**Current**: The community structure variable is reduced due to presence of planted palms. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 1, planted palms; b) invasive exotics or other invasive plant species = 1, planted palms; c) regeneration and recruitment = 1, planted palms; d) age & size distribution = 1, less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 1, none present; f) plant condition = 1, planted palms; g) land management practices = 1, highly altered; h) topographic features = 1, not present; i) siltation or algal growth in submerged aquatic plant communities = N/A.
w/o pres or current: 1 / with: 6	**With**: The community structure variable is increased due to removal of planted palms and improved hydrology. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 6, mostly native species; b) invasive exotics or other invasive plant species = 6, little to moderate coverage; c) regeneration and recruitment = 6, mostly consistent with expected; d) age & size distribution = 6, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 6, mostly adequate for system type; f) plant condition = 6, improved due to improved hydrology; g) land management practices = 6, due to removal of ditching; h) topographic features = 6, due to removal of ditching; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	with
0.27	0.60

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =

Delta = (with-current)
0.33

If mitigation
Time lag (t-factor) = 1.14 (5 years)
Risk factor = 1.75

For mitigation assessment areas
RFG = delta/(t-factor x risk) = 0.17

Credits = RFG x acreage = 7.14

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		SW 320th Street Restoration Site - Mixed Wetland Hardwoods/Exotic Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
617/619		Mitigation	169 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
C-103/North Canal/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Tree nurseries lie to the north and west of the site. Mixed wetland forests and exotic hardwood wetlands lie to the east and south. Further east is the L-31E canal and Biscayne Bay.

Assessment area description

The SW 320th Street Restoration Site encompasses a total of 574 acres, including parcels located on the north and south of the C-103 Canal, extending east towards SFWMD-owned parcels adjacent to the L-31E Canal and the BNP. The parcels include approximatley 144 acres of wetlands dominated by Brazilian pepper and Australian pine, 169 acres of forested wetlands dominated by a mixture of native hardwoods and exotic species, and approximately 42 acres of palm tree nurseries. The northern portion of the SW 320th Street Site includes approximately 219 acres of historical palm tree nurseries currently being restored to freshwater marsh. Areas of mixed wetland hardwoods/exotic wetland hardwoods are vegetated with a mixture of exotic and native species such as Brazilian pepper, Australian pine, buttonwood, mangroves, cocoplum, and coastal plain willow. Restoration target is mixed wetland hardwoods.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Homestead Air Force Base, FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Current: Water storage Post-restoration: Wildlife habitat, water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Post-restoration: Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock	6/1/2011

PART II – Quantification of Assessment Area (Impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		SW 320th Street Restoration Site - Mixed Wetland Hardwoods/Exotic Wetland Hardwoods
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	K. Bullock	6/1/2011

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	**Current**: Locetion and landscape support varieble is reduced due to proximity of roadways, presence of exotic vegetation, and ditching. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 6, moderate coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of open water connection; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream arees.	
w/o pres or current: 6	**With**: Location and landscape support variable increased slightly due to removal of exotic species, backfilling of drainage ditches, and preservation. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 8,exotics will be eradicated; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadweys and lack of open water connection; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, little to no surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 7, more benefit to downstream areas due to exotic removal.	with: 7
.500(6)(b)Water Environment (n/a for uplands)	**Current**: The water environment score is reduced due to the prevalence of ditching on the site. Individual parameter scores: a) water levels and flows = 5, altered water level due to ditching; b) water level indicators = 4, less than expected; c) soil moisture = 5, drier than expected; d) soil erosion or deposition = 7, typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 5, altered due to presence of exotics; g) hydrologic stress on vegetation = 5, some due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 5, due to lack of open water connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 5, moderate; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.	
w/o pres or current: 5	**With**: The water environment score is increased due to the removal of ditching on the site. Individual parameter scores: a) water levels and flows = 8, more typical water flows; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 7, typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 8, due to removal of exotics; g) hydrologic stress on vegetation = 8, due to improved hydrologic regime; h) use by animal species with specific hydrological requirements = 8, due to improved hydrology and resultant increase in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 7, minimal; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) weter depth wave, wave energy, currents and light penetration = N/A.	with: 7
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	**Current**: The community structure variable is reduced due to prevalence of exotic species of vegetation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 5, mix of exotic and native species; b) invasive exotics or other invasive plant species = 5, moderate coverage; c) regeneration and recruitment = 5, slightly less than expected; d) age & size distribution = 5, less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 5, due to deed stems and low productivity; g) land management practices = 5, due to alteration of community structure; h) topographic features = 5, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.	
w/o pres or current: 6	**With**: The community structure variable is increased due to removal of exotics and improved hydrology. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 8, native species; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 8, consistent with expected; d) age & size distribution = 7, slightly less than expected; e) density and quality of coarse woody debris, sneg, den, and cavity = 7, adequate for system type; f) plant condition = 8, improved due to improved hydrology; g) land management practices = 8, due to removal of ditching; h) topographic features = 8, due to removal of ditching; i) siltation or algal growth in submerged aquatic plant communities = N/A.	with: 8

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres: 0.57	with: 0.73

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =

Delta = [with-current]
0.16

If mitigation
Time lag (t-factor) = 5 years (1.14)
Risk factor = 1.25

For mitigation assessment areas
RFG = delta/(t-factor x risk) = 0.11

Credits = RFG x acreage = 18.59

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		SW 320th Street Restoration Site - Exotic Wetland Hardwoods

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
619		Mitigation	144 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
C-103/North Canal/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Tree nurseries lie to the north and west of the site. Mixed wetland forests and exotic hardwood wetlands lie to the east and south. Further east is the L-31E canal and Biscayne Bay.

Assessment area description

The SW 320th Street Restoration Site encompasses a total of 574 acres, including parcels located on the north and south of the C-103 Canal, extending east towards SFWMD-owned parcels adjacent to the L-31E Canal and the BNP. The parcels include approximatley 144 acres of wetlands dominated by Brazilian pepper and Australian pine, 169 acres of forested wetlands dominated by a mixture of native hardwoods and exotic species, and approximately 42 acres of palm tree nurseries. The northern portion of the SW 320th Street Site includes approximately 219 acres of historical palm tree nurseries currently being restored to freshwater marsh. Areas of exotic wetland hardwoods are dominated by Brazilian pepper and Australian pine. Restoration target is freshwater marsh community.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Homestead Air Force Base, FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Current: Water storage Post-restoration: Wildlife habitat, water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Post-restoration: Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock	6/1/2011

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		SW 320th Street Restoration Site - Exotic Wetland Hardwoods
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	K. Bullock	6/1/2011

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	**Current:** Location and landscape support variable is reduced due to proximity of roadways, presence of exotic vegetation, and ditching. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 6, moderate coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of open water connection; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.
w/o pres or current: 6	**With:** Location and landscape support variable increased slightly due to removal of exotic species, backfilling of drainage ditches, and preservation. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to proximity of roadways; b) Invasive exotic species = 8,exotics will be eradicated; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of open water connection; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, area somewhat isolated from other habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, little to no surrounding habitat loss; f) Hydrologically connected areas downstraam of assessment area = 6, connected through culverts to L31E; g) Dependency of downstream areas on assessment area = 7, more benefit to downstream areas due to exotic removal.
with: 7	
.500(6)(b)Water Environment (n/a for uplands)	**Current:** The water environment score is reduced due to the prevalence of ditching on the site. Individual parameter scores: a) water levels and flows = 5, altered water level due to ditching; b) water level indicators = 4, less than expected; c) soil moisture = 5, drier than expected; d) soil erosion or deposition = 7, typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 5, altered due to presence of exotics; g) hydrologic stress on vegetation = 5, some due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 5, due to lack of open water connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 5, moderate; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave
w/o pres or current: 5	**With:** The water environment score is increased due to the removal of ditching on the site. Individual parameter scores: a) water levels and flows = 8, more typical water flows; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 7, typical patterns; e) evidence of fire history = N/A; f) vegetation community zonation = 8, due to removal of exotics; g) hydrologic stress on vegetation = 8, due to improved hydrologic regime; h) use by animal species with specific hydrological requirements = 8, due to improved hydrology and resultant increase in number of fish species; i) vegetative species tolerant of and
with: 7	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	**Current:** The community structure veriable is reduced due to prevalence of exotic species of vegetation. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 3, dominated by exotic species; b) invasive exotics or other invasive plant species = 3, extensive coverage; c) regeneration and recruitment = 5, slightly less than expected; d) age & size distribution = 5, less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 4, inadequate for system type due to dense coverage of exotics; f) plant condition = 4, little evidence of natives; g) land management practices = 5, due to ditching, alteration of community structure; h) topographic features = 5, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.
w/o pres or current: 4	**With:** The community structure variable is increased due to removal of exotics and improved hydrology. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 8, native species; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 8, consistent with expected; d) age & size distribution = 7, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 7, adequate for system type; f) plant condition = 8, improved due to improved hydrology; g) land management practices = 8, due to removal of ditching; h) topographic features = 8, due to removal
with: 7	

Score = sum of above scores/30 (if uplands, divide by 20)	If preservation as mitigation,	For impact assessment areas
current or w/o pres: 0.50	Preservation adjustment factor =	FL = delta x acres =
with: 0.70	Adjusted mitigation delta =	

Delta = [with-current]	If mitigation	For mitigation assessment areas
0.20	Time lag (t-factor) = 5 years (1.14)	RFG = delta/(t-factor x risk) = 0.14
	Risk factor = 1.25	

Credits = RFG x acreage = 20.16

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		SW 320th Street Restoration Site- Preservation - Freshwater Marshes

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
641		Mitigation	219 acres

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
C-103/North Canal/03090202		None

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Tree nurseries lie to the north and west of the parcels. Mixed wetland forests and exotic species lie to the east and south. Further east is the L-31E canal and Biscayne Bay.

Assessment area description

The SW 320th Street Restoration Site encompasses a total of 574 acres, including parcels located on the north and south of the C-103 Canal, extending east towards SFWMD-owned parcels adjacent to the L-31E Canal and the BNP. The parcels include approximatley 144 acres of wetlands dominated by Brazilian pepper and Australian pine, 169 acres of forested wetlands dominated by a mixture of native hardwoods and exotic species, and approximately 42 acres of palm tree nurseries. The northern portion of the SW 320th Street Site includes approximately 219 acres of historical palm tree nurseries currently being restored to freshwater marsh. This parcel of freshwater marsh is proposed to be placed

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Homestead Air Force Base, FPL Turkey Point Plant, Biscayne Bay	Not unique

Functions	Mitigation for previous permit/other historic use
Wildlife habitat, water storage	N/A

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Wading birds, shorebirds, forage fishes	Occasional use by wading birds such as roseate spoonbill (SSC), white ibis (SSC), little blue heron (SSC), wood stork (E), reddish egret (SSC), snowy egret (SSC) and tricolored heron (SSC)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

None

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
K. Bullock	6/1/2011

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
FPL Turkey Point Units 6 & 7 Project		SW 320th Street Restoration Site - Preservation Freshwater Marshes
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Mitigation	K. Bullock	6/1/2011

Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support		**Current**: Location and landscape support variable is slightly reduced due to presence of invasive vegetation and surrounding tree nurseries. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 6, due to surrounding habitats ; b) Invasive exotic species = 6, moderate coverage; c) Wildlife access to and from outside = 6, decreased due to limitations imposed by surrounding roadways and lack of open water connection; d) functions that benefit fish & wildlife downstream-distance or barriers = 6, some functions; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, slightly reduced due to surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 6, connected through culverts/ditching to L31E; g) Dependency of downstream areas on assessment area = 6, some benefit to downstream areas.
w/o pres or current: 6	with: 7	**With**: Location and landscape support variable is higher because area will be preserved. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside habitats = 7, increased due to improvement of surrounding habitats; b) invasive exotic species = 7, little coverage; c) Wildlife access to and from outside = 7, due to improvement of surrounding habitats; d) functions that benefit fish & wildlife downstream-distance or barriers = 7, due to improvement in surrounding habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 7, little to no surrounding habitat loss; f) Hydrologically connected areas downstream of assessment area = 7, due to improved hydrology in surrounding area; g) Dependency of downstream areas on assessment area = 7, more benefit to downstream areas due to improved hydrology in surrounding area.
.500(6)(b)Water Environment (n/a for uplands)		**Current**: The water environment score is reduced due to lack of natural water flow. Individual parameter scores: a) water levels and flows = 5, altered water level; b) water level indicators = 4, less than expected; c) soil moisture = 5, drier than expected; d) soil erosion or deposition = 4, increased; e) evidence of fire history = N/A; f) vegetation community zonation = 5, altered due to presence of invasives; g) hydrologic stress on vegetation = 5, some due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 5, due to lack of open water connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 5, moderate; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
w/o pres or current: 5	with: 5	**With**: The water environment score is same as current; no improvements proposed. Individual parameter scores: a) water levels and flows = 5, altered water level; b) water level indicators = 4, less than expected; c) soil moisture = 5, drier than expected; d) soil erosion or deposition = 4, increased; e) evidence of fire history = N/A; f) vegetation community zonation = 5, altered due to presence of invasives; g) hydrologic stress on vegetation = 5, some due to altered hydrologic regime; h) use by animal species with specific hydrological requirements = 5, due to lack of open water connection and resultant reduction in number of fish species; i) vegetative species tolerant of and associated with water quality degradation = 5, moderate; j) direct observation of water quality = 8, no discoloration, turbidity, or sheen; k) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community		**Current**: The community structure variable is reduced due to presence of invasive species. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 5, mix of exotic and native species; b) invasive exotics or other invasive plant species = 5, moderate coverage; c) regeneration and recruitment = 5, slightly less than expected; d) age & size distribution = 5, less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 5, not adequate for system type; f) plant condition = 5, due to dead stems and low productivity; g) land management practices = 5, due to alteration of community structure; h) topographic features = 5, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.
w/o pres or current: 6	with: 7	**With**: The community structure variable is slightly increased due to natural regeneration from surrounding properties. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 6, mostly native species; b) invasive exotics or other invasive plant species = 6, some coverage; c) regeneration and recruitment = 6, mostly consistent with expected; d) age & size distribution = 6, slightly less than expected; e) density and quality of coarse woody debris, snag, den, and cavity = 6, mostly adequate for system type; f) plant condition = 6, improved due to improved hydrology in surrounding area; g) land management practices = 6, improved; h) topographic features = 5, less than optimal; i) siltation or algal growth in submerged aquatic plant communities = N/A.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres: 0.57	with: 0.63

If preservation as mitigation,
Preservation adjustment factor = 0.9
Adjusted mitigation delta = 0.05

For impact assessment areas
FL = delta x acres =

Delta = [with-current]
0.06

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

Credits = adjusted mitigation delta x acreage = 10.95

APPENDIX B

W.A.T.E.R. FUNCTIONAL ASSESSMENT

IMPACT SITES

FPL Everglades Mitigation Bank

Mitigation Bank Site Suitability Evaluation (MBSE) Matrix

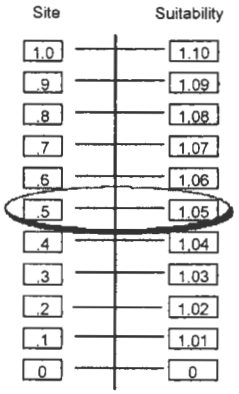
Parameters — **Turkey Point Units 6&7 Site**

(Site Suitability created by: Donaldson Hearing)

Parameter	Scoring Criteria	Ratings	Score
1. Adjacent to lands or waters of regional Importance and results in identifiable ecological benefits to adjacent lands or waters.	State Park, OFW, AP, and including but not limited to Special Waters on at least 1 boundary	1	
	Adjacent lands contain no special designation or undesignated special value	0	0
2. Property is within boundary of an acknowledged state, local or regional acquisition program	Property is within boundary of an acquisition program	1	
	Property is not within boundary of an acquisition program	0	0
3. Property contains ecological or geological features consistently considered by regional Scientist, or federal and state agencies to be unusual, unique or rare in the region and is of sufficient size	Property qualifies	1	
	Property does not qualify	0	0
4. Property designated as being of critical state or federal concern and/or contains special designations,	Property contains at least 1 special designation.	1	1
	Property contains no special designations.	0	
5. Property important to acknowledged restoration efforts	Property is important.	1	0
	Property is not important.	0	
6. Ownership and control of the property.	Property is privately owned.	1	1
	Property is publicly owned.	0	
7. Threatened , Endangered & Species of Special Concern Presence of animal species (faunal) found on site	Documented Presence of Species on site	1	1
	No documented Presence of species on site.	0	
8. Threatened , Endangered & Listed Species Presence of plant species (floral) found on site	Documented Presence of Species on site	1	1
	No documented Presence of species on site.	0	
9. Threat of loss or destruction from development activities. *(Development Pressure)*	High probability of development.	1	
	Low probability of development.	0	0
10. Extent to which lands are subject to Local, State, and Federal dredge and fill/ ERP Regulations	Property is regulated.	1	1
	Property is not regulated.	0	
	Value Cumulative Score (CS)		5

The Mitigation Bank Site Suitability Evaluation Matrix is designed to provide a quantifiable means of determining the number of mitigation credits that should be assigned to a bank for **"value"** related parameters. Value related parameters are human values determined to be important to society; and therefore are not measurable in a purely functional analysis. Functional analysis will only measure the degree of functional ecological improvement (degree of ecological improvement) resulting from mitigation activities. The SS Evaluation measures and provides credit for societal values that separate one mitigation bank from another as required by Ch. 62-342 .470 (a) (b) (e) (f) (g) (h) (i) F.A.C.. The SS evaluation is not to be utilized in conjunction with a functional analysis methodology which also utilizes value related parameters in its analysis.

Evaluation Scale



Site Suitability Matrix		
Maximum Possible Score (MPS)		10
Cumulative Score (CS)		5

0.5

EPA, USACOE, USF & W, FDEP, NMFS, SFWMD, Dade DERM, FPL, CH

3-Apr-96

After Calculating the Site Suitability Score determine the Site Suitability Multiplier by utilizing the Evaluation Scale to the left. The Site Suitability Multiplier is to be multiplied times the number of the Functional Mitigation Credits, resulting from the **(W.A.T.E.R.)** Functional Assessment of the Mitigation Bank, to determine the number of Site Suitability Credits to be assigned to the Mitigation Bank.

Mitigation Bank Wetland Function -- Evaluation Matrix

Units 6&7 Site

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Data Collected on: Nov 28 and 29, 2007; also used data from DERM visit on Aug 29, 2007

Project: FPL Turkey Point Units 6&7

Parameter/Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon		Polygon	
			Mangrove Heads - Pre	Mangrove Heads - Impact	Remnant Canals- Pre	Remnant Canals- Impact	Mudflat/Wet Spoil Piles- Pre	Mudflat/Wet Spoil Piles - Impact	Dwarf Mangrove- Pre	Dwarf Mangrove- Impact	Open Water/Active Canals - Pre	Water/Active Canals - Impact
1. Fish & Wildlife Functions *Apply to freshwater, saltwater, brackish and mitigation systems*												
	7 or more species commonly observed	3										
a. Waterfowl, wading birds, wetland dependent, or aquatic	3-6 species commonly observed	2	3	0	2	0	3	0	3	0	2	0
birds of prey.	1-2 species commonly observed	1										
(Mit. Bank - High specie count w/ low pop. #'s score 1	0 species commonly observed	0										
	7 or more species commonly observed	3										
b. Fish	3-6 species commonly observed	2	2.5	0	2.5	0	1	0	2	0	2	0
(Mit. Bank - High specie count w/ low pop. #'s score 1	1-2 species commonly observed	1										
Restoration that causes 12% pop. Increases-higher score)	0 species commonly observed	0										
	Top predator (carnivore) &/or large mammals	3										
c. Mammals	Medium sized mammals , (adult weight > 6 lbs.)	2	2	0	0	0	2	0	2	0	0	0
(Mit. Bank - High specie count w/ low pop. #'s score 1	Small animals (rodents, etc.) , (adult weight < 6 lbs.)	1										
Restoration that causes 12% pop. Increases-higher score)	0 species present	0										
	7 or more species commonly observed	3										
d. Aquatic macroinvertebrates, amphibians	3-6 species commonly observed	2	3	0	3	0	2	0	3	0	3	0
(Mit. Bank - High specie count w/ low pop. #'s score 1	1-2 species commonly observed	1										
Restoration that causes 12% pop. Increases-higher score)	0 species commonly observed	0										
	Large species observed	3										
e. Aquatic reptiles	Aquatic turtles	2	1.5	0	0	0	1	0	1	0	1	0
(Mit. Bank - High specie count w/ low pop. #'s score 1	Snakes & lizards	1										
Restoration that causes 12% pop. Increases-higher score)	No evidence of species present	0										

Mitigation Bank Wetland Function -- Evaluation Matrix

Units 6&7 Site

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Data Collected on: Nov 28 and 29, 2007; also used data from DERM visit on Aug 29, 2007

Project: FPL Turkey Point Units 6&7

Parameter/ Function	Scoring Criteria	Ratings	Polygon: Mangrove Heads - Pre	Polygon: Mangrove Heads - Impact	Polygon: Remnant Canals- Pre	Polygon: Remnant Canals- Impact	Polygon: Mudflat/Wet Spoil Piles- Pre	Polygon: Mudflat/Wet Spoil Piles - Impact	Polygon: Dwarf Mangrove- Pre	Polygon: Dwarf Mangrove- Impact	Polygon: Open Water/Active Canals - Pre	Polygon: Water/Active Canals - Impact
2. Vegetative Functions *Apply to freshwater, saltwater, brackish and mitigation systems*												
a. Overstory/shrub canopy	Desirable trees/shrub healthy & providing appropriate habitat (seedlings present) & no inappropriate species	3	2.5	0	N/A	0	N/A	0	2	0	N/A	0
	Desirable trees/shrubs exhibit signs of stress (no seedlings) few inappropriate species present	2										
	Inappropriate trees/shrubs shading or overcoming desirable tree/shrubs	1										
	Very little or no desirable tree/shrubs present (evidence suggests there should be)	0										
b. Vegetative ground cover	Assessment area exhibits <2% inappropriate herbaceous ground cover for specific wetland systems and groundcover is present	3	N/A	0	3	0	1	0	N/A	0	1	0
	Assessment area contains >2% but <30% inappropriate herbaceous groundcover, or lack of groundcover >2% but < 30%	2										
	Assessment area contains >30% to <70% inappropriate herbaceous groundcover, or lack of ground cover >30% to <70%	1										
	Assessment area >70% inappropriate herbaceous groundcover or lack of groundcover >70%	0										
c. Periphyton mat coverage	Periphyton (Blue-green algae) present with average mat thickness >1 1/4 in. (measure active & dead layer)	3	2	0	2	0	0	0	1	0	2	0
	Periphyton (Blue-green algae) present with average mat thickness between 3/4 in. to 1 1/4 in. (active & dead layer)	2										
	Periphyton (Blue-green algae) present with average mat thickness between 1/4 in. to 3/4 in. (active & dead layer)	1										
	Periphyton (Blue-green algae) not present or if present with average thickness of 0.0 to 1/4 in. (active & dead layer)	0										
d. Category 1 and Category 2 exotic plants or (non-native) species	< (or = to) 1 % exotic plant cover	3	3	0	3	0	3	0	3	0	2	0
	>1 % to 10 % exotic plant cover	2										
	>10 % to 65 % exotic plant cover	1										
	> 65 % exotic plant cover	0										
e. Habitat diversity (vegetative) *(within assessment area)*	>3 native species communities on site within assessment area	3	2	0	2	0	2	0	2	0	2	0
	2 or 3 native species communities on site within assessment area	2										
	1 native species community with 75 % to 90 % coverage within assessment area	1										
	1 native species community has > 90 % coverage within assessment area	0										
f. Biological diversity within 3000 feet *(approximately 1/2 mile from edge of assessment area)*	> 3 alternative habitats available (including upland)	3	3	0	3	0	3	0	3	0	3	0
	2 to 3 alternative habitats	2										
	1 alternative habitat	1										
	Same habitat type, or inappropriate / impacted	0										

Mitigation Bank Wetland Function -- Evaluation Matrix

Units 6&7 Site

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Data Collected on: Nov 28 and 29, 2007; also used data from DERM visit on Aug 29, 2007

Project: FPL Turkey Point Units 6&7

Parameter/ Function	Scoring Criteria	Ratings	Polygon: Mangrove Heads - Pre	Polygon: Mangrove Heads - Impact	Polygon: Remnant Canals- Pre	Polygon: Remnant Canals- Impact	Polygon: Mudflat/Wet Spoil Piles- Pre	Polygon: Mudflat/Wet Spoil Piles - Impact	Polygon: Dwarf Mangrove- Pre	Polygon: Dwarf Mangrove- Impact	Polygon: Open Water/Active Canals - Pre	Polygon: Water/Active Canals - Impact
3. Hydrologic Functions												
a. Surface water hydrology / sheet flow *Apply to freshwater, saltwater, brackish and mitigation systems*	Major connection *(Flowing water/ river or floodplain/ uniform flow through natural systems)*	3	1	0	1	0	1	0	1	0	1	0
	Moderate connection *(Natural restriction of flow or Flowing water due to hydrologic engineering)*	2										
	Minor connection *(Runoff collection point, or uneven flow due to berms, ditches, roadways etc.)*	1										
	Hydrologically isolated, no net lateral movement	0										
b. Hydroperiod (normal year) fresh systems	> 8 months inundated with no reversals & every year drydown	3										
	>5 months < 8 months or >5 years continuous inundation (look for strong water stains on persistent vegetation)	2										
	>1 month < 5 months, with possible reversals (look for soft or less distinct water stains on persistent vegetation)	1										
	< 4 weeks cumulative annual inundation or < 2 weeks continuous inundation	0										
b-1 Alternate to b. for Short Hydroperiod (normal year) fresh systems:	>10 weeks of continuous inundation including soil saturation	3										
	> 6 weeks but <10 weeks of continuous inundation including soil saturation	2										
	>2 weeks but <6 weeks of inudation, including soil saturation	1										
	<2 weeks of continuos inundation	0										
b-2 Alternate to b. for Saltwater, brackish (tidal) systems	Inundated by >90% high tides		This is a hypersaline closed system used to manage industrial wastewater. There is no tidal inundation.									
	Inundated by "spring" high tides (bi-monthly)	2										
	Inundated by "extreme high" tides only (biannually)	1	0.5	0	0.5	0	0.5	0	0.5	0	0.5	0
	Inundated by storm surges only	0										
b-3 Alternate to b. for High Marsh (Juncus-Distichlis)	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 10 days average	3										
	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 30 days on the average	2										
	Inundated by high "spring" tides (monthly)and exposed to rain only	1										
	Inundated by >50% high tides and exposed to rain only	0										
b-4 Alternate to b. for Riverine systems	Inundated by high tides (daily) and/or recieves and maintains fresh water at least into first half of dry season	3										
	Inundated by high tides (daily) and/or recieves and maintains fresh water during rainy season only	2										
	Inundated by high tides (daily) and/or recieves fresh water but does not maintain (reversal) during rainy season	1										
	Inundated by spring tides (bi-monthly) and/or experiences frequent reversals of fresh water (flashy)	0										

Mitigation Bank Wetland Function -- Evaluation Matrix

Units 6&7 Site

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Data Collected on: Nov 28 and 29, 2007; also used data from DERM visit on Aug 29, 2007

Project: FPL Turkey Point Units 6&7

Parameter/ Function	Scoring Criteria	Ratings	Polygon: Mangrove Heads - Pre	Polygon: Mangrove Heads - Impact	Polygon: Remnant Canals- Pre	Polygon: Remnant Canals- Impact	Polygon: Mudflat/Wet Spoil Piles- Pre	Polygon: Mudflat/Wet Spoil Piles - Impact	Polygon: Dwarf Mangrove- Pre	Polygon: Dwarf Mangrove- Impact	Polygon: Open Water/Active Canals - Pre	Polygon: Water/Active Canals - Impact
3. Hydrologic Functions continued												
c. Hydropattern (fresh system)	>1 ft. water depth for at least 2.5 months and <6 in. for >1 month (measure water mark/ lichen line), or water depth ideal for specific wetland system.	3										
	>6 in to 1 ft. for at least 2.5 months (measure water mark/ lichen line) or water depth borderline over or under for specific wetland system	2										
	<6 in. for at least 2.5 months (measure water mark/ lichen line) or water depth incorrect for specific wetland system	1										
	<6 in. in association with either canals, ditches, swales, culverts, pumps, and/or wellfields, or these factors cause water depth to be too deep for specific system.	0										
c-1 Alternate to c. for Saltwater, brackish (tidal) systems	>1 ft. water depth <2 ft. on 90% high tides	3										
	> 6 in. water depth <1 ft. on >50% high tides	2	This is a hypersaline closed system used to manage industrial wastewaters. There is no tidal inundation.									
	< 6 in. water depth, but > than saturated	1	1.5	0	1.5	0	1.5	0	1.5	0	1.5	0
	Saturated by saline water table only	0										
c-2 Alternate to c. for High Marsh (Juncus-Distichlis)	>10 in. water depth <2 ft. on regular basis during growing season	3										
	>5 in. to 10in. water depth on regular basis during growing season	2										
	>1 in. to 5 in. water depth on regular basis during growing season	1										
	>0.0 in. to 1 in. water depth sporadically during growing season	0										
c-3 Alternate to c. for Riverine systems	>2 ft. water depth (main channel) <6 ft. for 8 months	3										
	>2 ft. water depth (main channel) <4 ft. for 6 months	2										
	>1 ft. water depth (main channel) <2.5 ft. for 4 months	1										
	<1 ft. water depth, but dry for >4 weeks (dry season)	0										

Mitigation Bank Wetland Function -- Evaluation Matrix

Units 6&7 Site

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Data Collected on: Nov 28 and 29, 2007; also used data from DERM visit on Aug 29, 2007

Project: FPL Turkey Point Units 6&7

Parameter/ Function	Scoring Criteria	Ratings	Polygon: Mangrove Heads - Pre	Polygon: Mangrove Heads - Impact	Polygon: Remnant Canals- Pre	Polygon: Remnant Canals- Impact	Polygon: Mudflat/Wet Spoil Piles- Pre	Polygon: Mudflat/Wet Spoil Piles - Impact	Polygon: Dwarf Mangrove- Pre	Polygon: Dwarf Mangrove- Impact	Polygon: Open Water/Active Canals - Pre	Polygon: Water/Active Canals - Impact
3. Hydrologic Functions continued												
d. Water Quality	No indication of poor water quality (lab testing required, all values within acceptable range)	3	1.5	0	1.5	0	1.5	0	1.5	0	1.5	0
	No visual indicators of poor water quality observed (1 value just over or under acceptable range)	2										
	Visual indicators of poor water quality questionable (2 values over or under acceptable range)	1										
	Visual indicators of poor water quality observed or lab verified (values are out of acceptable range)	0										
e. Intactness of historic topography (soil disturbance)	Unaltered	3	1.5	0	1	0	1.5	0	1.5	0	1	0
	Slightly altered soil disturbance, < 10% of assessment area	2										
	Moderately altered soil disturbance, < 25% of assessment area	1										
	Extremely altered soil disturbance, may exceed 50% of assessment area	0										
f. Soils, organic (fresh systems)	Organic soil classified hydric soil >12 in. or any thickness over bedrock/caprock with perched water table and either condition covering >90% of surface area	3										
	Organic soil classified hydric soil >6 in. but <12 in. and covering >90% of surface area	2										
	Organic soil classified hydric soil >1 in. but <6 in. and covering >50% but <90% of surface area	1										
	Organic soil classified non-hydric soil <1 in. for >50% of surface area	0										
f-1 Alternate to f. for ***Freshwater, saltwater systems***	Sandy soil classified hydric soil with distinct mottling and concretions present in greater than 40% of horizon.	3										
	Sandy soil classified hydric soil with mottling and concretions present in > 20% but < 40% of horizon.	2										
	Sandy soil classified hydric soil with light or sparse mottling and concretions < 2 mm diameter or < 20% of horizon.	1										
	Sandy soil exhibits strong evidence of disturbance or mechanical manipulations or is fill material.	0										
f-2 Alternate to f. for ***Freshwater, saltwater, brackish (tidal) systems***	Calcareous loam >12 in. and >90 % of surface area	3	3	0	2	0	2	0	3	0	2	0
	Calcareous loam >6 in. to <12 in. and >90% of surface area	2										
	Calcareous loam >1 in. to <6 in. and covering >50% but <90% of surface area	1										
	Calcareous loam <1 in. for >50% of surface area	0										

Mitigation Bank Wetland Function -- Evaluation Matrix

Units 6&7 Site

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Data Collected on: Nov 28 and 29, 2007; also used data from DERM visit on Aug 29, 2007

Project: FPL Turkey Point Units 6&7

Parameter/ Function	Scoring Criteria	Ratings	Polygon: Mangrove Heads - Pre	Polygon: Mangrove Heads - Impact	Polygon: Remnant Canals- Pre	Polygon: Remnant Canals- Impact	Polygon: Mudflat/Wet Spoil Piles- Pre	Polygon: Mudflat/Wet Spoil Piles - Impact	Polygon: Dwarf Mangrove- Pre	Polygon: Dwarf Mangrove- Impact	Polygon: Open Water/Active Canals - Pre	Polygon: Water/Active Canals - Impact
4. Salinity Parameters *Apply to freshwater, saltwater, brackish, hypersaline and mitigation systems* - ***Choose 1***												
a. Optimum salinity for fresh systems during growing season based on mean high salinity for a normal year. *Apply to freshwater systems within 5 miles of the coast*	<2 parts per thousand (ppt)	3										
	2 to 3 parts per thousand (ppt)	2										
	4 to 5 parts per thousand (ppt)	1										
	>5 parts per thousand (ppt)	0										
a-1. Alternate to a. Optimum salinity for brackish systems during growing season based on mean high salinity for a normal year. *Apply to brackish (tidal) systems only*	6 to 8 parts per thousand (ppt)	3										
	9 to 13 parts per thousand (ppt)	2										
	14 to 16 parts per thousand (ppt)	1										
	>16 parts per thousand (ppt)	0										
a-2. Alternate to a. Optimum salinity for saline systems during growing season based on mean high salinity for a normal year. *Apply to saline marsh (tidal) systems only*	17 to 19 parts per thousand (ppt)	3										
	20 to 22 parts per thousand (ppt)	2										
	23 to 25 parts per thousand (ppt)	1										
	>25 parts per thousand (ppt)	0										
a-3. Alternate to a. Optimum salinity for hypersaline systems during growing season based on mean high salinity for a normal year. *Apply to hypersaline (tidal) systems only*	26 to 41 parts per thousand (ppt)	3										
	42 to 46 parts per thousand (ppt)	2	2	0	2	0	2	0	2	0	2	0
	47 to 51 parts per thousand (ppt)	1										
	>51 parts per thousand (ppt)	0										
a-4 Alternate to a. Optimum salinity for riverine/tidal creek system during growing season based on mean high slainity for a normal year. *Apply to riverine systems only*	bottom (lower) third between 12 to 25 ppt middle third between 5 to 11 ppt. upper (top) third betweem 0 to 4 ppt.	3										
	bottom (lower) third between 25 to 32 ppt middle third between 6 to 24 ppt. upper (top) third betweem 0 to 5 ppt.	2										
	bottom (lower) third between 30 to 40 ppt middle third between 8 to 29 ppt. upper (top) third betweem 0 to 7 ppt.	1										
	bottom (lower) third between 35 to 50 ppt middle third between 10 to 34 ppt. upper (top) third betweem 0 to 9 ppt.	0										
	Cumulative Score (SC)		35.5	0.0	30.0	0.0	28.0	0.0	33.0	0.0	27.5	0.0
	Maximum Possible Score (MPS)		51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00
	W.A.T.E.R. = Cumulative Score/Maximum Possible Score		0.70	0.00	0.59	0.00	0.55	0.00	0.65	0.00	0.54	0.00

W.A.T.E.R. created by: Bill L. Maus

11/1/1995

Mitigation Bank Wetland Function -- Evaluation Matrix

Nuclear Administration Bldg, Training Bldg, and Parking Area

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Project: FPL Turkey Point Units 6&7

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon		Polygon	
			Mangrove / Willow - Pre	Mangrove /Willow - Impact	Mangrove - Pre	Mangrove - Impact						
1. Fish & Wildlife Functions *Apply to freshwater, saltwater, brackish and mitigation systems*												
a. Waterfowl, wading birds, wetland dependent, or aquatic birds of prey. (Mit. Bank - High species count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	2	0	3	0						
	3-6 species commonly observed	2										
	1-2 species commonly observed	1										
	0 species commonly observed	0										
b. Fish (Mit. Bank - High species count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	2.5	0	2.5	0						
	3-6 species commonly observed	2										
	1-2 species commonly observed	1										
	0 species commonly observed	0										
c. Mammals (Mit. Bank - High species count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	Top predator (carnivore) &/or large mammals	3	2	0	2	0						
	Medium sized mammals , (adult weight > 6 lbs.)	2										
	Small animals (rodents, etc.) , (adult weight < 6 lbs.)	1										
	0 species present	0										
d. Aquatic macroinvertebrates, amphibians (Mit. Bank - High species count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	3	0	3	0						
	3-6 species commonly observed	2										
	1-2 species commonly observed	1										
	0 species commonly observed	0										
e. Aquatic reptiles (Mit. Bank - High species count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	Large species observed	3	2	0	2.5	0						
	Aquatic turtles	2										
	Snakes & lizards	1										
	No evidence of species present	0										

Mitigation Bank Wetland Function -- Evaluation Matrix

Nuclear Administration Bldg, Training Bldg, and Parking Area

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Project: FPL Turkey Point Units 6&7

Parameter/Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon		Polygon	
			Mangrove / Willow - Pre	Mangrove /Willow - Impact	Mangrove - Pre	Mangrove - Impact						
2. Vegetative Functions *Apply to freshwater, saltwater, brackish and mitigation systems*												
a. Overstory/shrub canopy	Desirable trees/shrub healthy & providing appropriate habitat (seedlings present) & no inappropriate species	3	2	0	2.5	0						
	Desirable trees/shrubs exhibit signs of stress (no seedlings) few inappropriate species present	2										
	Inappropriate trees/shrubs shading or overcoming desirable tree/shrubs	1										
	Very little or no desirable tree/shrubs present (evidence suggests there should be)	0										
b. Vegetative ground cover	Assessment area exhibits <2% inappropriate herbaceous ground cover for specific wetland systems and groundcover is present	3	2.5	0	2.5	0						
	Assessment area contains >2% but <30% inappropriate herbaceous groundcover, or lack of groundcover >2% but < 30%	2										
	Assessment area contains >30% to <70% inappropriate herbaceous groundcover, or lack of ground cover >30% to <70%	1										
	Assessment area >70% inappropriate herbaceous groundcover or lack of groundcover >70%	0										
c. Periphyton mat coverage	Periphyton (Blue-green algae) present with average mat thickness >1 1/4 in. (measure active & dead layer)	3	2	0	2	0						
	Periphyton (Blue-green algae) present with average mat thickness between 3/4 in. to 1 1/4 in. (active & dead layer)	2										
	Periphyton (Blue-green algae) present with average mat thickness between 1/4 in. to 3/4 in. (active & dead layer)	1										
	Periphyton (Blue-green algae) not present or if present with average thickness of 0.0 to 1/4 in. (active & dead layer)	0										
d. Category 1 and Category 2 exotic plants or (non-native) species	< (or = to) 1 % exotic plant cover	3	2	0	2	0						
	>1 % to 10 % exotic plant cover	2										
	>10 % to 65 % exotic plant cover	1										
	> 65 % exotic plant cover	0										
e. Habitat diversity (vegetative) *(within assessment area)*	>3 native species communities on site within assesssment area	3	2	0	2	0						
	2 or 3 native species communities on site within assessment area	2										
	1 native species community with 75 % to 90 % coverage within assessment area	1										
	1 native species community has > 90 % coverage within assessment area	0										
f. Biological diversity within 3000 feet *(approximately 1/2 mile from edge of assessment area)*	> 3 alternative habitats available (including upland)	3	2	0	2	0						
	2 to 3 alternative habitats	2										
	1 alternative habitat	1										
	Same habitat type, or inappropriate / impacted	0										

Nuclear Administration Bldg, Training Bldg, and Parking Area

Mitigation Bank Wetland Function -- Evaluation Matrix

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon		Polygon	
			Mangrove / Willow - Pre	Mangrove /Willow - Impact	Mangrove - Pre	Mangrove - Impact						
3. Hydrologic Functions												
a. Surface water hydrology / sheet flow *Apply to freshwater, saltwater, brackish and mitigation systems*	Major connection *(Flowing water/ river or floodplain/ uniform flow through natural systems)*	3	1	0	1	0						
	Moderate connection *(Natural restriction of flow or Flowing water due to hydrologic engineering)*	2										
	Minor connection *(Runoff collection point, or uneven flow due to berms, ditches, roadways etc.)*	1										
	Hydrologically isolated, no net lateral movement	0										
b. Hydroperiod (normal year) fresh systems	> 8 months inundated with no reversals & every year drydown	3										
	>5 months < 8 months or >5 years continuous inundation (look for strong water stains on persistent vegetation)	2										
	>1 month < 5 months, with possible reversals (look for soft or less distinct water stains on persistent vegetation)	1										
	< 4 weeks cumulative annual inundation or < 2 weeks continuous inundation	0										
b-1 Alternate to b. for Short Hydroperiod (normal year) fresh systems:	>10 weeks of continuous inundation including soil saturation	3										
	> 6 weeks but <10 weeks of continuous inundation including soil saturation	2										
	>2 weeks but <6 weeks of inudation, including soil saturation	1										
	<2 weeks of continuos inundation	0										
b-2 Alternate to b. for Saltwater, brackish (tidal) systems	Inundated by >90% high tides	3	2.5	0	2.5	0	No tidal connection, continuous inundation					
	Inundated by "spring" high tides (bi-monthly)	2										
	Inundated by "extreme high" tides only (biannually)	1										
	Inundated by storm surges only	0										
b-3 Alternate to b. for High Marsh (Juncus-Distichlis)	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 10 days average	3										
	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 30 days on the average	2										
	Inundated by high "spring" tides (monthly)and exposed to rain only	1										
	Inundated by >50% high tides and exposed to rain only	0										
b-4 Alternate to b. for Riverine systems	Inundated by high tides (daily) and/or recieves and maintains fresh water at least into first half of dry season	3										
	Inundated by high tides (daily) and/or recieves and maintains fresh water during rainy season only	2										
	Inundated by high tides (daily) and/or recieves fresh water but does not maintain (reversal) during rainy season	1										
	Inundated by spring tides (bi-monthly) and/or experiences frequent reversals of fresh water (flashy)	0										

Mitigation Bank Wetland Function -- Evaluation Matrix

Nuclear Administration Bldg, Training Bldg, and Parking Area

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon		Polygon	
			Mangrove / Willow - Pre	Mangrove /Willow - Impact	Mangrove - Pre	Mangrove - Impact						
3. Hydrologic Functions continued												
c. Hydropattern (fresh system)	>1 ft. water depth for at least 2.5 months and <6 in. for >1 month (measure water mark/ lichen line), or water depth ideal for specific wetland system.	3										
	>6 in to 1 ft. for at least 2.5 months (measure water mark/ lichen line) or water depth borderline over or under for specific wetland system	2										
	<6 in. for at least 2.5 months (measure water mark/ lichen line) or water depth incorrect for specific wetland system	1										
	<6 in. in association with either canals, ditches, swales, culverts, pumps, and/or wellfields, or these factors cause water depth to be too deep for specific system.	0										
c-1 Alternate to c. for Saltwater, brackish (tidal) systems	>1 ft. water depth <2 ft. on 90% high tides	3	2	0	2	0						
	> 6 in. water depth <1 ft. on >50% high tides	2										
	< 6 in. water depth , but > than saturated	1										
	Saturated by saline water table only	0										
c-2 Alternate to c. for High Marsh (Juncus-Distichlis)	>10 in. water depth <2 ft. on regular basis during growing season	3										
	>5 in. to 10in. water depth on regular basis during growing season	2										
	>1 in. to 5 in. water depth on regular basis during growing season	1										
	>0.0 in. to 1 in. water depth sporadically during growing season	0										
c-3 Alternate to c. for Riverine systems	>2 ft. water depth (main channel) <6 ft. for 8 months	3										
	>2 ft. water depth (main channel) <4 ft. for 6 months	2										
	>1 ft. water depth (main channel) <2.5 ft. for 4 months	1										
	<1 ft. water depth, but dry for >4 weeks (dry season)	0										

Mitigation Bank Wetland Function -- Evaluation Matrix

Nuclear Administration Bldg, Training Bldg, and Parking Area

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Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon		Polygon	
			Mangrove / Willow - Pre	Mangrove /Willow - Impact	Mangrove - Pre	Mangrove - Impact						
3. Hydrologic Functions continued												
d. Water Quality	No indication of poor water quality (lab testing required, all values within acceptable range)	3	2	0	2.5	0						
	No visual indicators of poor water quality observed (1 value just over or under acceptable range)	2										
	Visual indicators of poor water quality questionable (2 values over or under acceptable range)	1										
	Visual indicators of poor water quality observed or lab verified (values are out of acceptable range)	0										
e. Intactness of historic topography (soil disturbance)	Unaltered	3	1.5	0	1.5	0						
	Slightly altered soil disturbance, < 10% of assessment area	2										
	Moderately altered soil disturbance, < 25% of assessment area	1										
	Extremely altered soil disturbance, may exceed 50% of assessment area	0										
f. Soils, organic (fresh systems)	Organic soil classified hydric soil >12 in. or any thickness over bedrock/caprock with perched water table and either condition covering >90% of surface area	3										
	Organic soil classified hydric soil >6 in. but <12 in. and covering >90% of surface area	2										
	Organic soil classified hydric soil >1 in. but <6 in. and covering >50% but <90% of surface area	1										
	Organic soil classified non-hydric soil <1 in. for >50% of surface area	0										
f-1 Alternate to f. for *Freshwater, saltwater systems*	Sandy soil classified hydric soil with distinct mottling and concretions present in greater than 40% of horizon.	3										
	Sandy soil classified hydric soil with mottling and concretions present in > 20% but < 40% of horizon.	2										
	Sandy soil classified hydric soil with light or sparse mottling and concretions < 2 mm diameter or < 20% of horizon.	1										
	Sandy soil exhibits strong evidence of disturbance or mechanical manipulations or is fill material.	0										
f-2 Alternate to f. for *Freshwater, saltwater, brackish (tidal) systems*	Calcareous loam >12 in. and >90 % of surface area	3	2.5	0	2.5	0						
	Calcareous loam >6 in. to <12 in. and >90% of surface area	2										
	Calcareous loam >1 in. to <6 in. and covering >50% but <90% of surface area	1										
	Calcareous loam <1 in. for >50% of surface area	0										

Nuclear Administration Bldg, Training Bldg, and Parking Area

Mitigation Bank Wetland Function -- Evaluation Matrix

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon		Polygon	
			Mangrove / Willow - Pre	Mangrove /Willow - Impact	Mangrove - Pre	Mangrove - Impact						
4. Salinity Parameters *Apply to freshwater, saltwater, brackish, hypersaline and mitigation systems* - ***Choose 1***												
a. Optimum salinity for fresh systems during growing season based on mean high salinity for a normal year. *Apply to freshwater systems within 5 miles of the coast*	<2 parts per thousand (ppt)	3										
	2 to 3 parts per thousand (ppt)	2										
	4 to 5 parts per thousand (ppt)	1										
	>5 parts per thousand (ppt)	0										
a-1. Alternate to a. Optimum salinity for brackish systems during growing season based on mean high salinity for a normal year. *Apply to brackish (tidal) systems only*	6 to 8 parts per thousand (ppt)	3										
	9 to 13 parts per thousand (ppt)	2	2	0	2	0						
	14 to 16 parts per thousand (ppt)	1										
	>16 parts per thousand (ppt)	0										
a-2. Alternate to a. Optimum salinity for saline systems during growing season based on mean high salinity for a normal year. *Apply to saline marsh (tidal) systems only*	17 to 19 parts per thousand (ppt)	3										
	20 to 22 parts per thousand (ppt)	2										
	23 to 25 parts per thousand (ppt)	1										
	>25 parts per thousand (ppt)	0										
a-3. Alternate to a. Optimum salinity for hypersaline systems during growing season based on mean high salinity for a normal year. *Apply to hypersaline (tidal) systems only*	26 to 41 parts per thousand (ppt)	3										
	42 to 46 parts per thousand (ppt)	2										
	47 to 51 parts per thousand (ppt)	1										
	>51 parts per thousand (ppt)	0										
a-4 Alternate to a. Optimum salinity for riverine/tidal creek system during growing season based on mean high slainity for a normal year. *Apply to riverine systems only*	bottom (lower) third between 12 to 25 ppt middle third between 5 to 11 ppt. upper (top) third between 0 to 4 ppt.	3										
	bottom (lower) third between 25 to 32 ppt middle third between 8 to 24 ppt. upper (top) third between 0 to 5 ppt.	2										
	bottom (lower) third between 30 to 40 ppt middle third between 8 to 29 ppt. upper (top) third between 0 to 7 ppt.	1										
	bottom (lower) third between 35 to 50 ppt middle third between 10 to 34 ppt. upper (top) third between 0 to 9 ppt.	0										
	Cumulative Score (SC)		37.5	0.0	40.0	0.0						
	Maximum Possible Score (MPS)		54.00	54.00	54.00	51.00						
	W.A.T.E.R. = Cumulative Score/Maximum Possible Score		0.69	0.00	0.74	0.00						

W.A.T.E.R. created by: Bill L. Maus
11/1/1995

Mitigation Bank Wetland Function -- Evaluation Matrix

FPL Reclaimed Water Treatment Facility

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/Function	Scoring Criteria	Ratings	Polygon: Sawgrass Marsh/Dwarf Mangrove - Pre	Polygon: Sawgrass Marsh/Dwarf Mangrove - Impact	Polygon: Exotic Wetland Hardwoods - Pre	Polygon: Exotic Wetland Hardwoods - Impact	Polygon: Canals/Ditches - Pre	Polygon: Canals/Ditches - Impact	Polygon: Mixed Wetland Hardwoods - Pre	Polygon: Mixed Wetland Hardwoods - Impact	Polygon	Polygon
1. Fish & Wildlife Functions *Apply to freshwater, saltwater, brackish and mitigation systems*												
a. Waterfowl, wading birds, wetland dependent, or aquatic birds of prey. (Mit. Bank - High species count w/ low pop. #'s score 1	7 or more species commonly observed	3	3	0	1	0	2	0	3	0		
	3-6 species commonly observed	2										
	1-2 species commonly observed	1										
	0 species commonly observed	0										
b. Fish (Mit. Bank - High species count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	2.5	0	1	0	2.5	0	2.5	0		
	3-6 species commonly observed	2										
	1-2 species commonly observed	1										
	0 species commonly observed	0										
c. Mammals (Mit. Bank - High species count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	Top predator (carnivore) &/or large mammals	3	2	0	2	0	2	0	2	0		
	Medium sized mammals , (adult weight > 6 lbs.)	2										
	Small animals (rodents, etc.) , (adult weight < 6 lbs.)	1										
	0 species present	0										
d. Aquatic macroinvertebrates, amphibians (Mit. Bank - High species count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	3	0	2	0	2.5	0	3	0		
	3-6 species commonly observed	2										
	1-2 species commonly observed	1										
	0 species commonly observed	0										
e. Aquatic reptiles (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	Large species observed	3	2.5	0	1	0	2.5	0	2.5	0		
	Aquatic turtles	2										
	Snakes & lizards	1										
	No evidence of species present	0										
2. Vegetative Functions *Apply to freshwater, saltwater, brackish and mitigation systems*												
a. Overstory/shrub canopy	Desirable trees/shrub healthy & providing appropriate habitat (seedlings present) & no inappropriate species	3	2.5	0	1	0	2	0	2.5	0		
	Desirable trees/shrubs exhibit signs of stress (no seedlings) few inappropriate species present	2										
	Inappropriate trees/shrubs shading or overcoming desirable tree/shrubs	1										
	Very little or no desirable tree/shrubs present (evidence suggests there should be)	0										
b. Vegetative ground cover	Assessment area exhibits <2% inappropriate herbaceous ground cover for specific wetland systems and groundcover is present	3	3	0	1	0	2	0	3	0		
	Assessment area contains >2% but <30% inappropriate herbaceous groundcover, or lack of groundcover >2% but < 30%	2										
	Assessment area contains >30% to <70% inappropriate herbaceous groundcover, or lack of ground cover >30% to <70%	1										
	Assessment area >70% inappropriate herbaceous groundcover or lack of groundcover >70%	0										
c. Periphyton mat coverage	Periphyton (Blue-green algae) present with average mat thickness >1 1/4 in. (measure active & dead layer)	3	2.5	0	0.5	0	1.5	0	2.5	0		
	Periphyton (Blue-green algae) present with average mat thickness between 3/4 in. to 1 1/4 in. (active & dead layer)	2										
	Periphyton (Blue-green algae) present with average mat thickness between 1/4 in. to 3/4 in. (active & dead layer)	1										
	Periphyton (Blue-green algae) not present or if present with average thickness of 0.0 to 1/4 in. (active & dead layer)	0										
d. Category 1 and Category 2 exotic plants or (non-native) species	< (or = to) 1 % exotic plant cover	3	2.5	0	0	0	1	0	2.5	0		
	>1 % to 10 % exotic plant cover	2										
	>10 % to 65 % exotic plant cover	1										
	> 65 % exotic plant cover	0										
e. Habitat diversity (vegetative) *(within assessment area)*	>3 native species communities on site within assessment area	3	2	0	2	0	2	0	3	0		
	2 or 3 native species communities on site within assessment area	2										
	1 native species community with 75 % to 90 % coverage within assessment area	1										

Mitigation Bank Wetland Function -- Evaluation Matrix

FPL Reclaimed Water Treatment Facility

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/Function	Scoring Criteria	Ratings	Polygon: Sawgrass Marsh/Dwarf Mangrove - Pre	Polygon: Sawgrass Marsh/Dwarf Mangrove - Impact	Polygon: Exotic Wetland Hardwoods - Pre	Polygon: Exotic Wetland Hardwoods - Impact	Polygon: Canals/Ditches - Pre	Polygon: Canals/Ditches - Impact	Polygon: Mixed Wetland Hardwoods - Pre	Polygon: Mixed Wetland Hardwoods - Impact	Polygon	Polygon
	1 native species community has > 90 % coverage within assessment area	0										
f. Biological diversity within 3000 feet *(approximately 1/2 mile from edge of assessment area)*	> 3 alternative habitats available (including upland)	3	2	0	2	0	2	0	3	0		
	2 to 3 alternative habitats	2										
	1 alternative habitat	1										
	Same habitat type, or inappropriate / impacted	0										
3. Hydrologic Functions												
a. Surface water hydrology / sheet flow *Apply to freshwater, saltwater, brackish and mitigation systems*	Major connection *(Flowing water/ river or floodplain/ uniform flow through natural systems)*	3	1.5	0	1.5	0	1.5	0	1.5	0		
	Moderate connection *(Natural restriction of flow or Flowing water due to hydrologic engineering)*	2										
	Minor connection *(Runoff collection point, or uneven flow due to berms, ditches, roadways etc,)*	1										
	Hydrologically isolated, no net lateral movement	0										
b. Hydroperiod (normal year) fresh systems	> 8 months inundated with no reversals & every year drydown	3	2	0	2	0	1.5	0	2	0		
	>5 months < 8 months or >5 years continuous inundation (look for strong water stains on persistent vegetation)	2										
	>1 month < 5 months, with possible reversals (look for soft or less distinct water stains on persistent vegetation)	1										
	< 4 weeks cumulative annual inundation or < 2 weeks continuous inundation	0										
b-1 Alternate to b. for Short Hydroperiod (normal year) fresh systems:	>10 weeks of continuous inundation including soil saturation	3										
	> 6 weeks but <10 weeks of continuous inundation including soil saturation	2										
	>2 weeks but <6 weeks of inudation, including soil saturation	1										
	<2 weeks of continuos inundation	0										
b-2 Alternate to b. for Saltwater, brackish (tidal) systems	Inundated by >90% high tides											
	Inundated by "spring" high tides (bi-monthly)	2										
	Inundated by "extreme high" tides only (biannually)	1										
	Inundated by storm surges only	0										
b-3 Alternate to b. for High Marsh (Juncus-Distichlis)	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 10 days average	3										
	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 30 days on the average	2										
	Inundated by high "spring" tides (monthly)and exposed to rain only	1										
	Inundated by >50% high tides and exposed to rain only	0										
b-4 Alternate to b. for Riverine systems	Inundated by high tides (daily) and/or recieves and maintains fresh water at least into first half of dry season	3										
	Inundated by high tides (daily) and/or recieves and maintains fresh water during rainy season only	2										
	Inundated by high tides (daily) and/or recieves fresh water but does not maintain (reversal) during rainy season	1										
	Inundated by spring tides (bi-monthly) and/or experiences frequent reversals of fresh water (flashy)	0										
3. Hydrologic Functions continued												
c. Hydropattern (fresh system)	>1 ft. water depth for at least 2.5 months and <6 in. for >1 month (measure water mark/ lichen line), or water depth ideal for specific wetland system.	3	2.5	0	1.5	0	0.5	0	2.5	0		
	>6 in to 1 ft. for at least 2.5 months (measure water mark/ lichen line) or water depth borderline over or under for specific wetland system	2										
	<6 in. for at least 2.5 months (measure water mark/ lichen line) or water depth incorrect for specific wetland system	1										

Mitigation Bank Wetland Function -- Evaluation Matrix

FPL Reclaimed Water Treatment Facility

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W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon: Sawgrass Marsh/Dwarf Mangrove - Pre	Polygon: Sawgrass Marsh/Dwarf Mangrove - Impact	Polygon: Exotic Wetland Hardwoods - Pre	Polygon: Exotic Wetland Hardwoods - Impact	Polygon: Canals/Ditches - Pre	Polygon: Canals/Ditches - Impact	Polygon: Mixed Wetland Hardwoods - Pre	Polygon: Mixed Wetland Hardwoods - Impact	Polygon	Polygon
	<6 in. in association with either canals, ditches, swales, culverts, pumps, and/or wellfields, or these factors cause water depth to be too deep for specific system.	0										
c-1 Alternate to c. for Saltwater, brackish (tidal) systems	>1 ft. water depth <2 ft. on 90% high tides	3										
	> 6 in. water depth <1 ft. on >50% high tides	2										
	< 6 in. water depth , but > than saturated	1										
	Saturated by saline water table only	0										
c-2 Alternate to c. for High Marsh (Juncus-Distichlis)	>10 in. water depth <2 ft. on regular basis during growing season	3										
	>5 in. to 10in. water depth on regular basis during growing season	2										
	>1 in. to 5 in. water depth on regular basis during growing season	1										
	>0.0 in. to 1 in. water depth sporadically during growing season	0										
c-3 Alternate to c. for Riverine systems	>2 ft. water depth (main channel) <6 ft. for 8 months	3										
	>2 ft. water depth (main channel) <4 ft. for 6 months	2										
	>1 ft. water depth (main channel) <2.5 ft. for 4 months	1										
	<1 ft. water depth, but dry for >4 weeks (dry season)	0										
3. Hydrologic Functions continued												
d. Water Quality	No indication of poor water quality (lab testing required, all values within acceptable range)	3	2.5	0	2.5	0	2	0	2.5	0		
	No visual indicators of poor water quality observed (1 value just over or under acceptable range)	2										
	Visual indicators of poor water quality questionable (2 values over or under acceptable range)	1										
	Visual indicators of poor water quality observed or lab verified (values are out of acceptable range)	0										
e. Intactness of historic topography (soil disturbance)	Unaltered	3	2.5	0	1	0	0.5	0	2.5	0		
	Slighty altered soil disturbance, < 10% of assessment area	2										
	Moderately altered soil disturbance, < 25% of assessment area	1										
	Extremely altered soil disturbance, may exceed 50% of assessment area	0										
f. Soils, organic (fresh systems)	Organic soil classified hydric soil >12 in. or any thickness over bedrock/caprock with perched water table and either condition covering >90% of surface area	3										
	Organic soil classified hydric soil >6 in. but <12 in. and covering >90% of surface area	2										
	Organic soil classified hydric soil >1 in. but <6 in. and covering >50% but <90% of surface area	1										
	Organic soil classified non-hydric soil <1 in. for >50% of surface area	0										
f-1 Alternate to f. for *Freshwater, saltwater systems*	Sandy soil classified hydric soil with distinct mottling and concretions present in greater than 40% of horizon.	3										
	Sandy soil classified hydric soil with mottling and concretions present in > 20% but < 40% of horizon.	2										
	Sandy soil classified hydric soil with light or sparse mottling and concretions < 2 mm diameter or < 20% of horizon.	1										
	Sandy soil exhibits strong evidence of disturbance or mechanical manipulations or is fill material.	0										
f-2 Alternate to f. for *Freshwater, saltwater, brackish (tidal) systems*	Calcareous loam >12 in. and >90 % of surface area	3	3	0	2	0	2	0	3	0		
	Calcareous loam >6 in. to <12 in. and >90% of surface area	2										
	Calcareous loam >1 in. to <6 in. and covering >50% but <90% of surface area	1										
	Calcareous loam <1 in. for >50% of surface area	0										
4. Salinity Parameters *Apply to freshwater, saltwater, brackish, hypersaline and mitigation systems* - ***Choose 1***												
a. Optimum salinity for fresh systems during growing season based on mean high salinity for a normal year.	<2 parts per thousand (ppt)	3	2	0	2	0	2	0	2	0		
	2 to 3 parts per thousand (ppt)	2										
	4 to 5 parts per thousand (ppt)	1										

Mitigation Bank Wetland Function -- Evaluation Matrix

FPL Reclaimed Water Treatment Facility

Scoring conducted by: Karl Bullock & Colleen Cunningham

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon	Polygon	Polygon	Polygon	Polygon	Polygon	Polygon	Polygon		
			Sawgrass Marsh/Dwarf Mangrove - Pre	Sawgrass Marsh/Dwarf Mangrove - Impact	Exotic Wetland Hardwoods - Pre	Exotic Wetland Hardwoods - Impact	Canals/Ditches - Pre	Canals/Ditches - Impact	Mixed Wetland Hardwoods - Pre	Mixed Wetland Hardwoods - Impact		
Apply to freshwater systems within 5 miles of the coast	>5 parts per thousand (ppt)	0										
a-1. Alternate to a.	6 to 8 parts per thousand (ppt)	3										
Optimum salinity for brackish systems during growing	9 to 13 parts per thousand (ppt)	2										
season based on mean high salinity for a normal year.	14 to 16 parts per thousand (ppt)	1										
Apply to brackish (tidal) systems only	>16 parts per thousand (ppt)	0										
a-2. Alternate to a.	17 to 19 parts per thousand (ppt)	3										
Optimum salinity for saline systems during growing	20 to 22 parts per thousand (ppt)	2										
season based on mean high salinity for a normal year.	23 to 25 parts per thousand (ppt)	1										
Apply to saline marsh (tidal) systems only	>25 parts per thousand (ppt)	0										
a-3. Alternate to a.	26 to 41 parts per thousand (ppt)	3										
Optimum salinity for hypersaline systems during growing	42 to 46 parts per thousand (ppt)	2										
season based on mean high salinity for a normal year.	47 to 51 parts per thousand (ppt)	1										
Apply to hypersaline (tidal) systems only	>51 parts per thousand (ppt)	0										
a-4 Alternate to a.	bottom (lower) third between 12 to 25 ppt	3										
Optimum salinity for riverine/tidal creek system during	middle third between 5 to 11 ppt.											
growing season based on mean high slainity for a normal	upper (top) third between 0 to 4 ppt.											
year.	bottom (lower) third between 25 to 32 ppt	2										
Apply to riverine systems only	middle third between 6 to 24 ppt.											
	upper (top) third between 0 to 5 ppt.											
	bottom (lower) third between 30 to 40 ppt	1										
	middle third between 8 to 29 ppt.											
	upper (top) third between 0 to 7 ppt.											
	bottom (lower) third between 35 to 50 ppt	0										
	middle third between 10 to 34 ppt.											
	upper (top) third between 0 to 9 ppt.											
	Cumulative Score (SC)		43.5	0.0	26.0	0.0	32.0	0.0	45.5	0.0		
	Maximum Possible Score (MPS)											
	W.A.T.E.R. = Cumulative Score/Maximum Possible Score		0.81	0.00	0.48	0.00	0.59	0.00	0.83	0.00		

W.A.T.E.R. created by: Bill L. Maus
11/1/1995

MITIGATION SITES

FPL Everglades Mitigation Bank

Mitigation Bank Site Suitability Evaluation (MBSE) Matrix

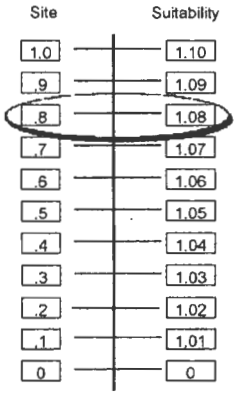
Parameters — **Sea Dade Crocodile Sanctuary**

(Site Suitability created by: Donaldson Hearing)

Parameter	Scoring Criteria	Ratings	Score
1. Adjacent to lands or waters of regional Importance and results in identifiable ecological benefits to adjacent lands or waters.	State Park, OFW, AP, and including but not limited to Special Waters on at least 1 boundary	1	
	Adjacent lands contain no special designation or undesignated special value	0	1
2. Property is within boundary of an acknowledged state, local or regional acquisition program	Property is within boundary of an acquisition program	1	
	Property is not within boundary of an acquisition program	0	1
3. Property contains ecological or geological features consistently considered by regional Scientist, or federal and state agencies to be unusual, unique or rare in the region and is of sufficient size	Property qualifies	1	
	Property does not qualify	0	1
4. Property designated as being of critical state or federal concern and/or contains special designations,	Property contains at least 1 special designation.	1	1
	Property contains no special designations.	0	
5. Property important to acknowledged restoration efforts	Property is important.	1	1
	Property is not important.	0	
6. Ownership and control of the property.	Property is privately owned.	1	1
	Property is publicly owned.	0	
7. Threatened , Endangered & Species of Special Concern Presence of animal species (faunal) found on site	Documented Presence of Species on site	1	1
	No documented Presence of species on site.	0	
8. Threatened , Endangered & Listed Species Presence of plant species (floral) found on site	Documented Presence of Species on site	1	1
	No documented Presence of species on site.	0	
9. Threat of loss or destruction from development activities. *(Development Pressure)*	High probability of development.	1	
	Low probability of development.	0	0
10. Extent to which lands are subject to Local, State, and Federal dredge and fill/ ERP Regulations	Property is regulated.	1	0
	Property is not regulated.	0	
	Value Cumulative Score (CS)		8

The Mitigation Bank Site Suitability Evaluation Matrix is designed to provide a quantifiable means of determining the number of mitigation credits that should be assigned to a bank for **"value"** related parameters. Value related parameters are human values determined to be important to society; and therefore are not measurable in a purely functional analysis. Functional analysis will only measure the degree of functional ecological improvement (degree of ecological improvement) resulting from mitigation activities. The SS Evaluation measures and provides credit for societal values that separate one mitigation bank from another as required by Ch. 62-342 .470 (a) (b) (e) (f) (g) (h) (i) F.A.C.. The SS evaluation is not to be utilized in conjunction with a functional analysis methodology which also utilizes value related parameters in its analysis.

Evaluation Scale



Site Suitability Matrix		
Maximum Possible Score (MPS)		10
Cumulative Score (CS)		8

0.8

EPA, USACOE, USF & W, FDEP, NMFS, SFWMD, Dade DERM, FPL, CH

3-Apr-96

After Calculating the Site Suitability Score determine the Site Suitability Multiplier by utilizing the Evaluation Scale to the left. The Site Suitability Multiplier is to be multiplied times the number of the Functional Mitigation Credits, resulting from the **(W.A.T.E.R.)** Functional Assessment of the Mitigation Bank, to determine the number of Site Suitability Credits to be assigned to the Mitigation Bank.

Mitigation Bank Wetland Function – Evaluation Matrix

Sea Dade Canal Crocodile Sanctuary

Scoring conducted by: Karl Bullock

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from
EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon	
			Disturbed Open Land (FLUCFCS 744) pre	Disturbed Open Land (FLUCFCS 744) post	Mixed Wetland Hardwoods (FLUCFCS 617) pre	Mixed Wetland Hardwoods (FLUCFCS 617) post	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) pre	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) post	Borrow Pond (FLUCFCS 534) pre	Borrow Pond (FLUCFCS 534) post
1. Fish & Wildlife Functions *Apply to freshwater, saltwater, brackish and mitigation systems*										
	7 or more species commonly observed	3								
a. Waterfowl, wading birds, wetland dependent, or aquatic	3-6 species commonly observed	2	0	2.5	2	2	2	2.5	1.5	2.5
birds of prey,	1-2 species commonly observed	1								
(Mit. Bank - High species count w/ low pop. #'s score 1	0 species commonly observed	0								
	7 or more species commonly observed	3								
b. Fish	3-6 species commonly observed	2	0	2	2	2	2	2	1.5	2
(Mit. Bank - High species count w/ low pop. #'s score 1	1-2 species commonly observed	1								
Restoration that causes 12% pop. Increases-higher score)	0 species commonly observed	0								
	Top predator (carnivore) &/or large mammals	3								
c. Mammals	Medium sized mammals , (adult weight > 6 lbs.)	2	0	2	2	2	2	2	2	2
(Mit. Bank - High species count w/ low pop. #'s score 1	Small animals (rodents, etc.) , (adult weight < 6 lbs.)	1								
Restoration that causes 12% pop. Increases-higher score)	0 species present	0								
	7 or more species commonly observed	3								
d. Aquatic macroinvertebrates, amphibians	3-6 species commonly observed	2	0	3	2	2.5	2	2.5	2	3
(Mit. Bank - High species count w/ low pop. #'s score 1	1-2 species commonly observed	1								
Restoration that causes 12% pop. Increases-higher score)	0 species commonly observed	0								
	Large species observed	3								
e. Aquatic reptiles	Aquatic turtles	2	0	3	2	3	2	3	2	3
(Mit. Bank - High species count w/ low pop. #'s score 1	Snakes & lizards	1								
Restoration that causes 12% pop. Increases-higher score)	No evidence of species present	0								

Mitigation Bank Wetland Function -- Evaluation Matrix

Sea Dade Canal Crocodile Sanctuary

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Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from
EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon	
			Disturbed Open Land (FLUCFCS 744) pre	Disturbed Open Land (FLUCFCS 744) post	Mixed Wetland Hardwoods (FLUCFCS 617) pre	Mixed Wetland Hardwoods (FLUCFCS 617) post	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) pre	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) post	Borrow Pond (FLUCFCS 534) pre	Borrow Pond (FLUCFCS 534) post
2. Vegetative Functions *Apply to freshwater, saltwater, brackish and mitigation systems*										
a. Overstory/shrub canopy	Desirable trees/shrub healthy & providing appropriate habitat (seedlings present) & no inappropriate species	3	0	2	2.5	2.5	3	3	0	2
	Desirable trees/shrubs exhibit signs of stress (no seedlings) few inappropriate species present	2								
	Inappropriate trees/shrubs shading or overcoming desirable tree/shrubs	1								
	Very little or no desirable tree/shrubs present (evidence suggests there should be)	0								
b. Vegetative ground cover	Assessment area exhibits <2% inappropriate herbaceous ground cover for specific wetland systems and groundcover is present	3	0	2	2.5	2.5	3	3	0	2
	Assessment area contains >2% but <30% inappropriate herbaceous groundcover, or lack of groundcover >2% but < 30%	2								
	Assessment area contains >30% to <70% inappropriate herbaceous groundcover, or lack of ground cover >30% to <70%	1								
	Assessment area >70% inappropriate herbaceous groundcover or lack of groundcover >70%	0								
c. Periphyton mat coverage	Periphyton (Blue-green algae) present with average mat thickness >1 1/4 in. (measure active & dead layer)	3	0	2	2	2	2.5	2.5	2	2
	Periphyton (Blue-green algae) present with average mat thickness between 3/4 in. to 1 1/4 in. (active & dead layer)	2								
	Periphyton (Blue-green algae) present with average mat thickness between 1/4 in. to 3/4 in. (active & dead layer)	1								
	Periphyton (Blue-green algae) not present or if present with average thickness of 0.0 to 1/4 in. (active & dead layer)	0								
d. Category 1 and Category 2 exotic plants or (non-native) species	< (or = to) 1 % exotic plant cover	3	2	2.5	2	2.5	2	2.5	2	2.5
	>1 % to 10 % exotic plant cover	2								
	>10 % to 65 % exotic plant cover	1								
	> 65 % exotic plant cover	0								
e. Habitat diversity (vegetative) *(within assessment area)*	>3 native species communities on site within assessment area	3	2	3	2	3	2	3	2	3
	2 or 3 native species communities on site within assessment area	2								
	1 native species community with 75 % to 90 % coverage within assessment area	1								
	1 native species community has > 90 % coverage within assessment area	0								
f. Biological diversity within 3000 feet *(approximately 1/2 mile from edge of assessment area)*	> 3 alternative habitats available (including upland)	3	3	3	3	3	3	3	3	3
	2 to 3 alternative habitats	2								
	1 alternative habitat	1								
	Same habitat type, or inappropriate / impacted	0								

Mitigation Bank Wetland Function -- Evaluation Matrix

Sea Dade Canal Crocodile Sanctuary

Scoring conducted by: Karl Bullock

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from
EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon	
			Disturbed Open Land (FLUCFCS 744) pre	Disturbed Open Land (FLUCFCS 744) post	Mixed Wetland Hardwoods (FLUCFCS 617) pre	Mixed Wetland Hardwoods (FLUCFCS 617) post	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) pre	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) post	Borrow Pond (FLUCFCS 534) pre	Borrow Pond (FLUCFCS 534) post
3. Hydrologic Functions										
a. Surface water hydrology / sheet flow *Apply to freshwater, saltwater, brackish and mitigation systems*	Major connection *(Flowing water/ river or floodplain/ uniform flow through natural systems)*	3	0	2.5	2	2.5	2	2.5	1	2.5
	Moderate connection *(Natural restriction of flow or Flowing water due to hydrologic engineering)*	2								
	Minor connection *(Runoff collection point, or uneven flow due to berms, ditches, roadways etc.)*	1								
	Hydrologically isolated, no net lateral movement	0								
b. Hydroperiod (normal year) fresh systems	> 8 months inundated with no reversals & every year drydown	3								
	>5 months < 8 months or >5 years continuous inundation (look for strong water stains on persistent vegetation)	2								
	>1 month < 5 months, with possible reversals (look for soft or less distinct water stains on persistent vegetation)	1								
	< 4 weeks cumulative annual inundation or < 2 weeks continuous inundation	0								
b-1 Alternate to b. for Short Hydroperiod (normal year) fresh systems:	>10 weeks of continuous inundation including soil saturation	3								
	> 6 weeks but <10 weeks of continuous inundation including soil saturation	2								
	>2 weeks but <6 weeks of inudation, including soil saturation	1								
	<2 weeks of continuos inundation	0								
b-2 Alternate to b. for Saltwater, brackish (tidal) systems	Inundated by >90% high tides	3	0	2	2	2	2	2	1	2
	Inundated by "spring" high tides (bi-monthly)	2								
	Inundated by "extreme high" tides only (biannually)	1								
	Inundated by storm surges only	0								
b-3 Alternate to b. for High Marsh (Juncus-Distichlis)	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 10 days average	3								
	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 30 days on the average	2								
	Inundated by high "spring" tides (monthly)and exposed to rain only	1								
	Inundated by >50% high tides and exposed to rain only	0								
b-4 Alternate to b. for Riverine systems	Inundated by high tides (daily) and/or recieves and maintains fresh water at least into first half of dry season	3								
	Inundated by high tides (daily) and/or recieves and maintains fresh water during rainy season only	2								
	Inundated by high tides (daily) and/or recieves fresh water but does not maintain (reversal) during rainy season	1								
	Inundated by spring tides (bi-monthly) and/or experiences frequent reversals of fresh water (flashy)	0								

Mitigation Bank Wetland Function -- Evaluation Matrix

Sea Dade Canal Crocodile Sanctuary

Scoring conducted by: Karl Bullock

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from
EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon	
			Disturbed Open Land (FLUCFCS 744) pre	Disturbed Open Land (FLUCFCS 744) post	Mixed Wetland Hardwoods (FLUCFCS 617) pre	Mixed Wetland Hardwoods (FLUCFCS 617) post	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) pre	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) post	Borrow Pond (FLUCFCS 534) pre	Borrow Pond (FLUCFCS 534) post
3. Hydrologic Functions continued										
c. Hydropattern (fresh system)	>1 ft. water depth for at least 2.5 months and <6 in. for >1 month (measure water mark/ lichen line), or water depth ideal for specific wetland system.	3								
	>6 in to 1 ft. for at least 2.5 months (measure water mark/ lichen line) or water depth borderline over or under for specific wetland system	2								
	<6 in. for at least 2.5 months (measure water mark/ lichen line) or water depth incorrect for specific wetland system	1								
	<6 in. in association with either canals, ditches, swales, culverts, pumps, and/or wellfields, or these factors cause water depth to be too deep for specific system.	0								
c-1 Alternate to c. for Saltwater, brackish (tidal) systems	>1 ft. water depth <2 ft. on 90% high tides	3	0	2	2	2	2	2	1	2
	> 6 in. water depth <1 ft. on >50% high tides	2								
	< 6 in. water depth , but > than saturated	1								
	Saturated by saline water table only	0								
c-2 Alternate to c. for High Marsh (Juncus-Distichlis)	>10 in. water depth <2 ft. on regular basis during growing season	3								
	>5 in. to 10in. water depth on regular basis during growing season	2								
	>1 in. to 5 in. water depth on regular basis during growing season	1								
	>0.0 in. to 1 in. water depth sporadically during growing season	0								
c-3 Alternate to c. for Riverine systems	>2 ft. water depth (main channel) <6 ft. for 8 months	3								
	>2 ft. water depth (main channel) <4 ft. for 6 months	2								
	>1 ft. water depth (main channel) <2.5 ft. for 4 months	1								
	<1 ft. water depth, but dry for >4 weeks (dry season)	0								

Mitigation Bank Wetland Function -- Evaluation Matrix

Sea Dade Canal Crocodile Sanctuary

Scoring conducted by: Karl Bullock

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from
EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon	
			Disturbed Open Land (FLUCFCS 744) pre	Disturbed Open Land (FLUCFCS 744) post	Mixed Wetland Hardwoods (FLUCFCS 617) pre	Mixed Wetland Hardwoods (FLUCFCS 617) post	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) pre	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) post	Borrow Pond (FLUCFCS 534) pre	Borrow Pond (FLUCFCS 534) post
3. Hydrologic Functions continued										
d. Water Quality	No indication of poor water quality (lab testing required, all values within acceptable range)	3	0	2	2	2	2	2	2	2
	No visual indicators of poor water quality observed (1 value just over or under acceptable range)	2								
	Visual indicators of poor water quality questionable (2 values over or under acceptable range)	1								
	Visual indicators of poor water quality observed or lab verified (values are out of acceptable range)	0								
e. Intactness of historic topography (soil disturbance)	Unaltered	3	0	2	1.5	2	2.5	2.5	0	2
	Slightly altered soil disturbance, < 10% of assessment area	2								
	Moderately altered soil disturbance, < 25% of assessment area	1								
	Extremely altered soil disturbance, may exceed 50% of assessment area	0								
f. Soils, organic (fresh systems)	Organic soil classified hydric soil >12 in. or any thickness over bedrock/caprock with perched water table and either condition covering >90% of surface area	3								
	Organic soil classified hydric soil >6 in. but <12 in. and covering >90% of surface area	2								
	Organic soil classified hydric soil >1 in. but <6 in. and covering >50% but <90% of surface area	1								
	Organic soil classified non-hydric soil <1 in. for >50% of surface area	0								
f-1 Alternate to f. for *Freshwater, saltwater systems*	Sandy soil classified hydric soil with distinct mottling and concretions present in greater than 40% of horizon.	3								
	Sandy soil classified hydric soil with mottling and concretions present in > 20% but < 40% of horizon.	2								
	Sandy soil classified hydric soil with light or sparse mottling and concretions < 2 mm diameter or < 20% of horizon.	1								
	Sandy soil exhibits strong evidence of disturbance or mechanical manipulations or is fill material.	0								
f-2 Alternate to f. for *Freshwater, saltwater, brackish (tidal) systems*	Calcareous loam >12 in. and >90 % of surface area	3	0	2	2	2	2.5	2.5	1.5	2
	Calcareous loam >6 in. to <12 in. and >90% of surface area	2								
	Calcareous loam >1 in. to <6 in. and covering >50% but <90% of surface area	1								
	Calcareous loam <1 in. for >50% of surface area	0								

Mitigation Bank Wetland Function -- Evaluation Matrix

Sea Dade Canal Crocodile Sanctuary

Scoring conducted by: Karl Bullock

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews

Project: FPL Turkey Point Units 6&7

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from
EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County (W.A.T.E.R. created by: Bill L. Maus)

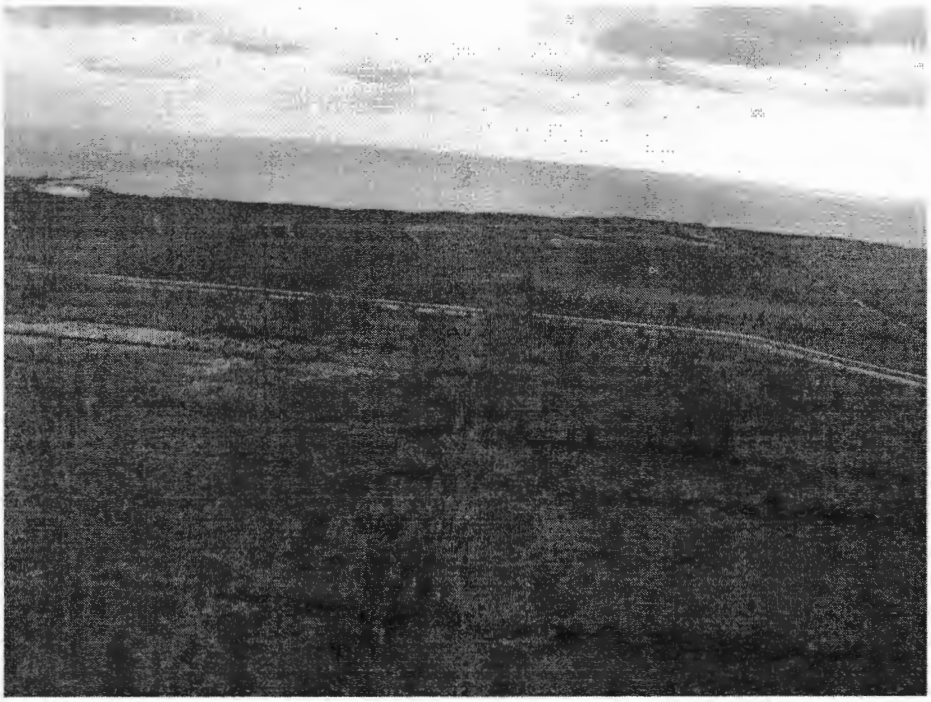
Parameter/ Function	Scoring Criteria	Ratings	Polygon	Polygon	Polygon	Polygon	Polygon	Polygon	Polygon	Polygon
			Disturbed Open Land (FLUCFCS 744) pre	Disturbed Open Land (FLUCFCS 744) post	Mixed Wetland Hardwoods (FLUCFCS 617) pre	Mixed Wetland Hardwoods (FLUCFCS 617) post	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) pre	Sawgrass/Dwarf Mangrove (FLUCFCS 6411/612-B) post	Borrow Pond (FLUCFCS 534) pre	Borrow Pond (FLUCFCS 534) post
4. Salinity Parameters *Apply to freshwater, saltwater, brackish, hypersaline and mitigation systems* -***Choose 1***										
a. Optimum salinity for fresh systems during growing season based on mean high salinity for a normal year. *Apply to freshwater systems within 5 miles of the coast*	<2 parts per thousand (ppt)	3								
	2 to 3 parts per thousand (ppt)	2								
	4 to 5 parts per thousand (ppt)	1								
	>5 parts per thousand (ppt)	0								
a-1. Alternate to a. Optimum salinity for brackish systems during growing season based on mean high salinity for a normal year. *Apply to brackish (tidal) systems only*	6 to 8 parts per thousand (ppt)	3								
	9 to 13 parts per thousand (ppt)	2								
	14 to 16 parts per thousand (ppt)	1	0	2	2	2	2	2	2	2
	>16 parts per thousand (ppt)	0								
a-2. Alternate to a. Optimum salinity for saline systems during growing season based on mean high salinity for a normal year. *Apply to saline marsh (tidal) systems only*	17 to 19 parts per thousand (ppt)	3								
	20 to 22 parts per thousand (ppt)	2								
	23 to 25 parts per thousand (ppt)	1								
	>25 parts per thousand (ppt)	0								
a-3. Alternate to a. Optimum salinity for hypersaline systems during growing season based on mean high salinity for a normal year. *Apply to hypersaline (tidal) systems only*	26 to 41 parts per thousand (ppt)	3								
	42 to 46 parts per thousand (ppt)	2								
	47 to 51 parts per thousand (ppt)	1								
	>51 parts per thousand (ppt)	0								
a-4 Alternate to a. Optimum salinity for riverine/tidal creek system during growing season based on mean high salinity for a normal year. *Apply to riverine systems only*	bottom (lower) third between 12 to 25 ppt middle third between 5 to 11 ppt. upper (top) third between 0 to 4 ppt.	3								
	bottom (lower) third between 25 to 32 ppt middle third between 6 to 24 ppt. upper (top) third between 0 to 5 ppt.	2								
	bottom (lower) third between 30 to 40 ppt middle third between 8 to 29 ppt. upper (top) third between 0 to 7 ppt.	1								
	bottom (lower) third between 35 to 50 ppt middle third between 10 to 34 ppt. upper (top) third between 0 to 9 ppt.	0								
	Cumulative Score (SC)		7.0	41.5	37.5	41.5	40.5	44.5	26.5	41.5
	Maximum Possible Score (MPS)		100	100	100	100	100	100	100	100
	W.A.T.E.R. = Cumulative Score/Maximum Possible Score		0.13	0.77	0.69	0.77	0.75	0.82	0.49	0.77

W.A.T.E.R. created by: Bill L. Maus
11/1/1995

APPENDIX C

MITIGATION AREA PHOTOGRAPHS

Photograph 1. Aerial view of Northwest Restoration Site, facing north. Sawgrass marsh historically impacted by network of mosquito ditches dominated by exotic Australian pine. Transmission corridor, L-31E Canal, and Biscayne Bay visible to east. Areas of exotic vegetation control on SFWMD parcels visible to the north, adjacent to C-103 Canal.



Photograph 2. Aerial view of Northwest Restoration Site, facing east. L-31E Canal and Biscayne Bay in background.

Appendix C – Mitigation Area Photographs

Photograph 3. Northwest Restoration Site – sawgrass marsh, mangroves, and Australian pine.

Photograph 4. Northwest Restoration Site – sparsely vegetated open water area supporting thick periphyton mat. Red mangrove in foreground, Australian pine in background.

Appendix C – Mitigation Area Photographs

Photograph 5. Aerial view of SW 320th Street Restoration Site, facing west. 219 acre marsh restoration area and adjacent exotic wetland hardwoods dominated by Australian pine and Brazilian pepper.

Photograph 6. Aerial view of SW 320th Street Restoration Site, facing north. Exotic wetland hardwoods to north and south of C-103 Canal. Areas of exotic vegetation control on SFWMD owned parcels visible to the northeast.

Photograph 7. SW 320th Street Restoration Site – former palm tree nursery restored to freshwater marsh. Knotted spikerush (*Eleocharis interstincta*) and bushy broomsedge (*Andropogon glomeratus*) in foreground; exotic wetland hardwoods in background.

Photograph 8. SW 320th Street Restoration Site – sparsely vegetated mudflats within freshwater marsh restoration area.

Appendix C – Mitigation Area Photographs

Photograph 9. SW 320th Street Restoration Site – wading bird utilization of freshwater marsh restoration area.

Photograph 10. SW 320th Street Restoration Site – mixed wetland hardwoods/exotic wetland hardwoods on eastern edge of Site adjacent to C-103 Canal, facing north. SFWMD parcel with treated Australian pine to east, untreated Australian pine to west.

Appendix C – Mitigation Area Photographs

Photograph 11. Aerial photograph of Everglades Mitigation Bank crocodile sanctuary area prior to enhancement. Area dominated by the exotic species Australian pine. Industrial wastewater treatment facility in background.

Photograph 12. Aerial view of Everglades Mitigation Bank crocodile sanctuary area following creation of crocodile habitat. Exotic species of vegetation replaced with natives, freshwater ponds excavated and perimeter of peat/marl/sand nesting substrate installed.

Appendix C – Mitigation Area Photographs

Attachment D

Radial Collector Well System Monitoring Plan

To be attached subsequent to certification, pursuant to

Section B, Specific Conditions – Power Plant and Associated Facilities (Excluding Transmission Lines), I.A.1.a.

Attachment E

FWC BMPs for Operating Vehicles on the Beach

Best management practices for operating vehicles *on the beach*

Operating vehicles, including ATVs, on the beach can destroy wildlife habitat and be harmful or fatal to wildlife. This is one reason that, in many areas, beach-driving is strictly prohibited year-round to all but authorized personnel. The eggs and flightless young of beach-nesting birds can be virtually invisible, especially from a vehicle. Sea turtles coming ashore to nest may be scared away by vehicles and hatchlings are vulnerable to being run over. Both adult and hatchling sea turtles can be disoriented by any form of artificial light, including headlights. Ruts made by vehicles can trap and disorient turtle hatchlings and baby birds. May through October is considered sea turtle nesting season. However, some species of sea turtles have been known to nest as early as February, and hatchlings can emerge from their nests as late as the mid-winter months. Beach-nesting birds may be active from mid-February through the end of August. Therefore it is best to avoid beach-driving whenever feasible and critical that everyone authorized to operate a vehicle on the beach during these periods of the year take the following precautions:

- Enter the beach only at designated access points and proceed directly to the hard-packed sand near or below the high tide line. Avoid driving on the upper beach whenever possible, and never drive over any dunes or over beach vegetation. If beach conditions require driving above the high tide line, avoid those areas with known sea turtle nests or shorebird breeding areas.
- Avoid the wrack line or areas of dense seaweed, which may contain sea turtle hatchlings or baby birds.
- Minimize ruts on the dry sandy beach by lowering tire pressure and using 4WD, particularly in front of sea turtle or bird nests.
- Drive slowly. Movement should be slow enough to observe any bird eggs, chicks, or sea turtle hatchlings in the vehicle's line of travel. Please be aware that recently hatched chicks often feed along the water's edge. They may freeze in place rather than run away when ATVs or other vehicles approach.
- Whenever possible, avoid driving on the beach at night.
- Do not park vehicles adjacent to nests or posted areas, and, if you must drive on the beach at night, turn headlights off when parking.
- If you observe a sea turtle crawling out of the surf, stop the vehicle and turn off all lights. No additional movement should occur until the turtle moves across the beach and begins digging her nest or moves into deeper water.

Florida Fish and Wildlife Conservation Commission

MyFWC.com

Attachment F

FWC Standard Manatee & Marine Turtle Construction Conditions for In-Water Work (revised March 2012)

STANDARD MANATEE AND MARINE TURTLE CONSTRUCTION CONDITIONS FOR IN-WATER WORK

March 2012

The permittee shall comply with the following conditions intended to protect manatees and marine turtles from direct project effects:

a. All personnel associated with the project shall be instructed about the presence of marine turtles, manatees and manatee speed zones, and the need to avoid collisions with (and injury to) these protected marine species. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.

b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

c. Siltation or turbidity barriers shall be made of material in which manatees and marine turtles cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee or marine turtle movement.

d. All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles and manatee(s). All in-water operations, including vessels, must be shutdown if a marine turtle or manatee comes within 50 feet of the operation. Activities will not resume until the animal(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the animal(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.

e. Any collision with or injury to a marine turtle or manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922, and to FWC at ImperiledSpecies@myFWC.com. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service (for north Florida, Jacksonville 1-904-731-3336 or for south Florida Vero Beach 1-772-562-3909).

f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

g. Lighting on offshore or onshore equipment including dredge, crew boats, and all ancillary vessels shall be minimized through reduction, shielding, lowering, and appropriate placement to avoid excessive illumination of the water's surface and visibility from adjacent marine turtle nesting beaches while meeting all Coast Guard, EM 385-1-1, and OSHA requirements. Light intensity of all fixtures on the vessels shall be reduced to the minimum standard required by OSHA for General Construction areas, in order not to misdirect marine turtles. Lights used to survey nearshore or inlet waters for manatees and sea turtles shall be mounted as low as possible and aimed to minimize visibility from adjacent nesting beaches. Shields shall be affixed to the light housing and be large enough to block light from all lamps from being transmitted outside the construction area.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:

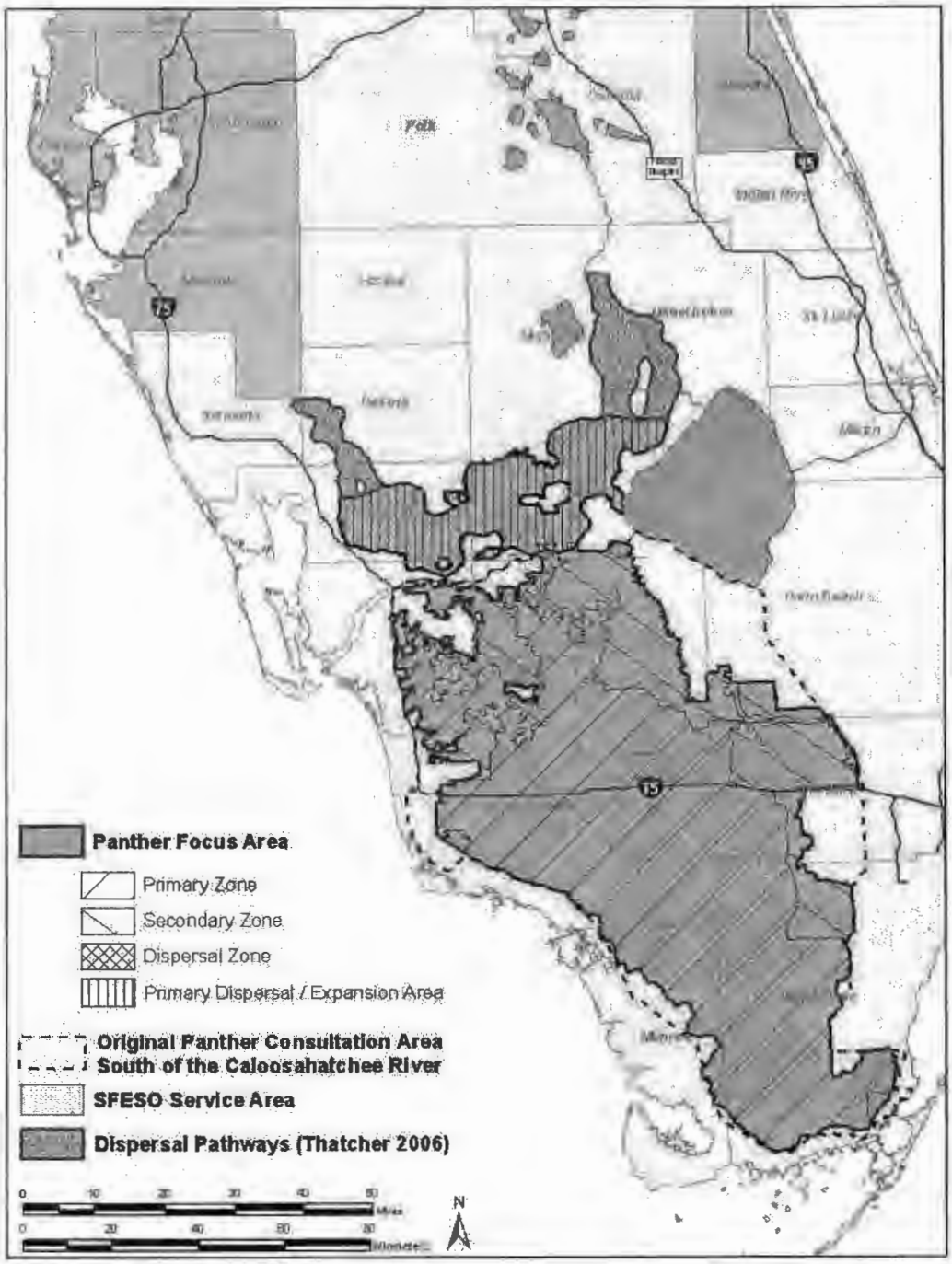
Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC

Attachment G

FWC Panther Focus Area Map


Panther Focus Area
Primary Zone
Secondary Zone
Dispersal Zone
Primary Dispersal / Expansion Area
Original Panther Consultation Area South of the Caloosahatchee River
SFESO Service Area
Dispersal Pathways (Thatcher 2006)
N

Attachment H

Sovereign Submerged Lands (SSL) Easements

To be attached upon execution.

Attachment I

SFWMD Existing and Planned Projects (Plant and Associated Facilities)

I-a: Table of SFWMD Existing and Planned Projects

I-b: Map of SFWMD Existing and Planned Projects and FPL Proposed Linear Facilities Corridors

I-c: Definition of Codes for Consistency with SFWMD Projects

I-d: TP6&7 Project Features-Intersecting C&SF System and Works of the District

Attachment I-a

EXHIBIT 1. Table of SFWMD Existing and Planned Projects.

Project	Type[1]
Biscayne Bay Coastal Wetlands Phase I	CERP (FFF, OPE)

The list of projects in this Exhibit will be updated by SFWMD and relevant information about each project will be provided to FPL in accordance with the conditions of certification. This is Revision 1 of this Exhibit.

[1]The information in parentheses refers to the Comprehensive Everglades Restoration Plan (CERP) component as described in the *Final Feasibility Report and Preliminary Environmental Impact Statement* (April 1999), also known as the "Yellow Book".

Attachment I-b

Exhibit 2. Map of SFWMD Existing and Planned Projects and FPL Proposed Linear Facilities Corridors

SFWMD PROJECTS IN MIAMI-DADE COUNTY & FPL PROPOSED LINEAR FACILITIES CORRIDOR

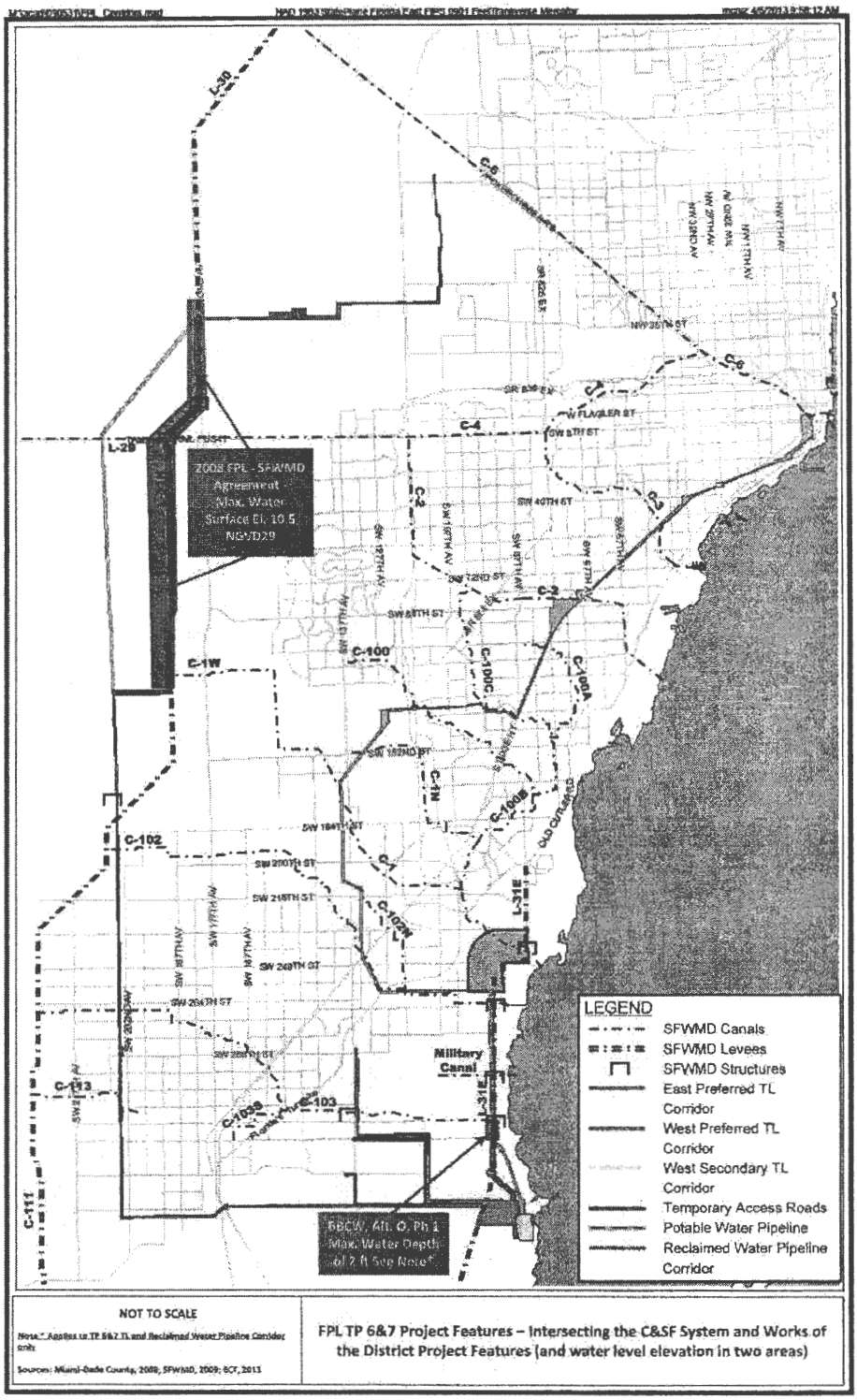
Attachment I-c

Exhibit 3. Definition of Codes for Consistency with SFWMD Projects

Code	Proposed Location	Consistency Requirement	Project(s)
1	Everglades Protection Area (ENP and WCAs)	Not Applicable	No Non-TL Linear Facilities in Everglades Protection Area
2	District Conveyance Facility (canals)	Within District real property interests, FPL facilities will be constructed to avoid any impact on flow or routine maintenance within canal rights of way, and all facilities will be designed to comply with the non-procedural requirements of the Criteria Manual for Use and Occupancy of District ROW for subaqueous utilities.	**BBCW Phase 1** – Both potable water and reclaimed water pipelines will be buried below ground and will not affect conveyance of water or maintenance of district facilities. Pipelines will utilize subaqueous crossings of all District canals and will be located below the canal bottom in all such crossings. The proposed location of the FPL potable and reclaimed water pipelines between the North Canal and SFWMD C-103 Canal (in the vicinity of the BBCW Phase I freshwater rehydrated wetlands component) will not interfere with conveyance of water from the wetlands to the L-31E borrow canal or from the L-31E borrow canal to the salt water wetlands through the BBCW culverts in the L-31E levee.
3	Areas potentially affected by SFWMD Projects but not within an STA, restored wetland or other design feature.	For these areas there are no significant changes to existing conditions expected and the facility designs shown in the application will be adequate.	**BBCW Phase 1** – Portions of the Non-TL Linear facilities that are located in areas within the freshwater rehydrated wetlands may be affected by the BBCW Project, but not in a manner that would require any changes to the proposed design of the FPL or BBCW facilities.
4	Public Natural Area	Not Applicable	No Non-TL Linear Facilities in Public Natural Areas.
5	Areas with no contact with SFWMD facilities	No SFWMD consistency requirements	Not Applicable to any Projects. Used only to show portions of the corridors away from all District facilities.

Attachment I-d

Exhibit 4. TP6&7 Project Features – Intersecting C&SF System and Works of the District Project Features



Attachment J

MDC Flowage Easement

Attachment J

This instrument prepared by/return to:
Carlos A. Gimenez, Mayor
Miami-Dade County
111 N.W. First Street
Suite 2810
Miami, Florida 33128

Sec_____, Twp._____, Rge_____
Parcel ID #_____

PERPETUAL FLOWAGE EASEMENT

THIS PERPETUAL FLOWAGE EASEMENT is made this ____ day of _____, 2013, by **FLORIDA POWER & LIGHT COMPANY,** a Florida corporation ("***Grantor***"), with a mailing address of P.O. Box 14000, Juno Beach, Florida 33408-0420, Attn: Corporate Real Estate Department, in favor of **MIAMI-DADE COUNTY**, a political subdivision of the State of Florida, and its successors, 111 N.W. First Street, Attn: Carlos Gimenez, Mayor, Miami, Florida 33128; the **SOUTH FLORIDA WATER MANAGEMENT DISTRICT**, a public corporation of the State of Florida, and its successors, 3301 Gun Club Road, West Palm Beach, Florida 33406 (collectively, "***Grantees***").

WITNESSETH that Grantor, for and in consideration of the sum of $10.00 and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, does hereby grant and convey to Grantees a flowage easement over the lands more particularly described on the attached Exhibit "A," which exhibit is made a part hereof (the "***Easement Area***") for the purpose of flowing surface water on, over and across the Easement Areas in order to maintain the existing sheet flow of water, and to allow for future improvements to, sheet flow across those portions of the Easement Area within the Biscayne Bay Coastal Wetlands Comprehensive Everglades Restoration Plan ("CERP") Project Study boundaries and to allow for the installation of culverts and similar features by Grantees to improve sheet flow of surface water across the Easement Area, consistent with planned local, state, or federal restoration projects that will affect the Easement Area (the "***Easement***").

By accepting this Easement, Grantees agree that Grantees' use, operations and maintenance of the Easement Area shall be consistent with Grantor's requirements for, and not interfere with, the construction, maintenance, operation of and access to, Grantor's electrical system and facilities within the Easement Area. Grantees agree to provide Grantor with a minimum of ninety (90) days prior written notice of any modifications or improvements of any water conveyance features located within the Easement Area. Grantees' access to the Easement Area shall not be unreasonably denied. Nothing herein obligates any of the Grantees to maintain water conveyance features installed by Grantor or Grantor's contractors. Nothing herein obligates Grantor to maintain water conveyance features installed by Grantee or Grantee's contractors. This Easement does not relieve Grantor from any obligations to operate or maintain Grantor's infrastructure within the Easement Area.

Attachment J

This Easement is taken subject to Grantor's continued use of the Easement Area for the construction, operation, expansion, reconstruction and maintenance of Grantor's electrical facilities and appurtenances, and subject to all existing easements, conditions, restrictions, reservations and other matters of record, as well as the terms and conditions of this Easement. By accepting this Easement, Grantees acknowledge their express understanding that Grantor, for itself, its successors and assigns, expressly reserves all rights, now and in the future, to continue to use the Easement Area for access to and from, and the construction, operation, replacement, re-construction and maintenance of, electrical facilities and appurtenances, and for all other purposes not inconsistent with the Easement granted herein. By accepting this Easement, Grantees further agree that no Grantee shall obstruct the Easement Area so as to interfere with Grantor's facilities and operations within the Easement Area, or the purposes for which this Easement was granted, absent the prior written consent of the affected party.

Grantor acknowledges that the Biscayne Bay Coastal Wetlands CERP Project planning is at a preliminary stage and that after actual design is commenced, it may be necessary for South Florida Water Management District ("District") to acquire additional rights within the easement area or acquire additional land interests outside the easement area for purposes of construction and operation of the Project.

Other than to a successor, this Easement may not be assigned or otherwise transferred, in whole or in part, by the Grantees without the prior, express, written consent of the Grantor, which consent may be granted or withheld by Grantor in its sole and absolute discretion. All covenants, terms, and agreements herein contained run with the land, and shall inure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.

The Grantor hereby confirms that it has the power and authority to convey this Easement.

IN WITNESS WHEREOF, Grantor has caused this Easement to be executed on the date set forth below.

Signed, sealed and delivered
in the presence of:

FLORIDA POWER & LIGHT COMPANY,
a Florida corporation

_____
Signature:
Print Name:_____

By:_____
Print Name: Dean Girard
Its Director, Corporate Real Estate

_____
Signature:
Print Name:_____

Attachment J

ACKNOWLEDGMENT

STATE OF FLORIDA)
) ss:
COUNTY OF _____)

On this ____ day of _____, 201___, before me, the undersigned notary public, personally appeared Dean Girard, DIRECTOR of CORPORATE REAL ESTATE, FLORIDA POWER & LIGHT COMPANY, a Florida corporation, personally known to me to be the person who subscribed to the foregoing instrument or who produced _____ as identification, and acknowledged that he executed the same on behalf of said corporation and that he was duly authorized so to do.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
NOTARY PUBLIC, STATE OF FLORIDA

_____
Name (PRINT):

Attachment J

FLOWAGE EASEMENT from **FLORIDA POWER & LIGHT COMPANY,** a Florida corporation (**"*Grantor*"**) to **MIAMI-DADE COUNTY,** and the **SOUTH FLORIDA WATER MANAGEMENT DISTRICT.**

EXHIBIT "A"

Legal Description of Easement Area

Attachment K

MDC Controlled Species of Exotic Vegetation

Attachment K
MDC Controlled Species of Exotic Vegetation

Attachment A

The following exotic plant species may not be planted within 500 feet of native plant communities. These plant species have been documented by the Florida Exotic Pest Plant Council, the Miami-Dade County Parks, Recreation and Open Space Department's Natural Area's Management Program, and the Miami-Dade County Department of Regulatory and Economic Resources- Division of Environmental Resources Management to be invasive pests in natural areas of Miami-Dade County.

Species Latin Name	Species Common Name
Bauhinia variegata	orchid tree
Bauhinia purperata	orchid tree
Calophyllum calaba	Mastwood
Catharanthus roseus	Madagascar periwinkle
Derris Indica	pongam
Eugenia uniflora	Surinam cherry
Epipremnum pinnatum cv. Aureum	pothos
Kalanchoe pinnata	life plant
Lantana camera	Lantana
Murraya paniculata (orange jessamine)	orange jessamine
Pittosporum tobira (pittosporum)	Japanese pittosporum
Pouteria campechiana	canistel
Psidium guyava	Guava
Psidium littorale	Cattley guava
Rhoeo spathacea	oyster plant
Sansevieria hyacinthoides (= S. trifasciata)	bowstring hemp
Syngonium podophyllum	arrowhead
Syzygium cumini	jambolan; Java plum
Syzyguim jambos	rose apple
Terminalia catappa	tropical almond
Washingtonia spp.	Washington Palm
Wedelia trilobata	wedelia
Zebrina pendula	wandering zebrine

Attachment L

MDC Prohibited Species of Exotic Vegetation

Attachment L
MDC Prohibited Species of Exotic Vegetation

Attachment B

The following exotic pest plants and nuisance species, shall not be sold, propagated, or planted within Miami-Dade County. If existing on a development site, they shall be removed prior to development or redevelopment.

Species – Latin Name	**Species Common Name**
Abrus precatorius	Rosary pea
Acacia auriculiformis	Earleaf acacia
Adenanthera pavonina	Red beadtree, red sandalwood, coralwood, redwood, circassian bean tree, peacock flower-fence, coral pea, Barbados pride
Albizia lebbeck	Woman's tongue, lebbeck tree, siris tree
Antigonon leptopus	Coral vine, queen's jewels
Ardisia crenata	Scratchthroat, coral ardisia
Ardisia elliptica	Shoebutton, shoebutton ardisia
Bischofia javanica	Javanese bishopwood, bishopwood, bischofia, toog
Casuarina spp.	Australian pine, sheoak, beefwood
Cestrum diurnum	Dayflowering jessamine, day blooming jasmine, day blooming jasmine, day jessamine
Cinnamomum camphora	Camphortree, camphor tree
Colubrina asiatica	Asian nakedwood, leatherleaf, latherleaf
Cupaniopsis anacardioides	Carrotwood
Dalbergia sissoo	Indian Rosewood, sissoo
Dioscorea alata	White yam, winged yam
Dioscorea bulbifera	Air potato, bitter yam, potato vine
Eichhornia crassipes	Common water-hyacinth, water-hyacinth
Ficus altissima	Council tree, lofty fig, banyan tree, false banyan
Ficus benghalensis	Banyan tree, banyan fig, Indian banyan, East Indian fig tree, bengal fig
Species – Latin Name	Species Common Name
Ficus microcarpa1	Indian laurel, laurel fig, Malay banyan, Chinese banyan, glossy leaf banyan
Flacourtia indica	Governor's plum, Madagascar plum, batoko plum, ramonchi
Hydrilla verticillata	Waterthyme, hydrilla
Hygrophila polysperma	Indian swampweed, green hygro
Hymenachne amplexicaulis	Trompetilla, West Indian marsh grass
Imperata cylindrica	Cogongrass
Ipomea aquatica	Water-spinach
Jasminum dichotomum	Gold Coast jasmine
Jasminum fluminense	Brazilian jasmine, jazmin de trapo
Leucaena leucocephala	White leadtree, lead tree, jumbie bean,

Attachment L
MDC Prohibited Species of Exotic Vegetation

	tan-tan
Ludwigia peruviana	Peruvian primrosewillow
Lygodium spp. except L. palmatum	Climbing fern, e.g. Old World climbing fern, Japanese climbing fern
Macfadyena unguis-cati	Catclawvine
Melaleuca quinquenervia	Punk tree, melaleuca, cajeput, paperbark tree, tea tree, swamp tea tree
Melia azedarach	Chinaberrytree, Chinaberry
Merremia tuberosa	Spanish arborvine, yellow morning-glory, woodrose, Hawaiian woodrose, ceylon morning glory, Spanish wood vine
Mimosa pigra	Black mimosa, Catclaw mimosa
Neyraudia reynaudiana	Burmareed, silkreed
Paederia spp.	Sewervine, skunkvine, onion vine
Panicum repens	Torpedograss
Pennisetum purpureum	Elephantgrass, Napiergrass
Pistia stratiotes	Water lettuce
Pueraria montana var. lobata	Kudzu
Rhodomyrtus tomentosa	Rose myrtle, Downy rose-myrtle
Rhynchelytrum repens	Rose natalgrass, Natal grass
Ricinus communis	Castorbean, castor oil plant, palma christi, wonder tree
Sapium sebiferum	Popcorntree, Chinese tallowtree
Scaevola taccada	Beach naupaka, scaevola, half-flower
Schefflera actinophylla	Australian umbrella tree, octopus tree, Queensland umbrella tree, umbrella tree, rubber tree, starleaf
Schinus terebinthifolius	Brazilian pepper, Christmas berry tree, Florida holly
Senna pendula var. glabrata	Valamuerto, Climbing cassia, Christmas cassia, Christmas senna
Solanum tampicense	Aquatic soda apple, wetland nightshade
Solanum viarum	Tropical soda apple
Taliparitti tiliaceum	Mahoe, sea hibiscus, yellow mahoe
Tectaria incisa	Incised halberd fern
Thespesia populnea	Portia tree, seaside mahoe, cork tree, false rosewood
Tribulus cistoides	Puncture vine, burrnut, Jamaican feverplant, billy-goat weed, large yellow caltrop
Urochloa mutica	Paragrass

Attachment M

FPL Exotic Vegetation Management Plan (May 3, 2013)

Attachment M

ATTACHMENT C

Turkey Point Units 6 & 7

Exotic Vegetation Management Plan
Temporary Construction Access Roads

I. INTRODUCTION

This Exotic Vegetation Management Plan has been prepared by Florida Power & Light Company (FPL) for the Turkey Point Units 6 & 7 Project (Project). The Project involves adding two new nuclear generating units and supporting facilities at a Site within the existing Turkey Point plant property boundaries. The Project also involves several associated linear and non-linear facilities including construction access roads and bridges. FPL's Turkey Point plant property comprises approximately 9,400 acres in unincorporated southeast Miami-Dade County (MDC), Florida, east of Florida City and the City of Homestead, and bordered by Biscayne Bay to the east.

This Exotic Vegetation Management Plan (Plan) is prepared pursuant to MDC Code Section 24-49.9 and the Miami-Dade County CDMP which requires the removal of exotic vegetation. In addition, the plan is submitted in fulfillment of Criterion 6 of the CDMP Amendment dated April 28, 2010 for the roadway improvements shown in Figure 3.1, Temporary Roadways and Roadway Improvements in Connection with the Construction of Turkey Point Units 6 & 7 (CDMP Transportation Element, P. II-17-18) and Condition 12 of MDC Resolution Z-56-07 for the portions of the access roads to be located within the FPL Turkey Point Plant property subject to Zoning Resolution Z-56-07 and FPL's commitment to provide such a plan for temporary construction access roads.

II. STATEMENT OF OBJECTIVES

The purpose of this Plan is to provide a program description for the removal of exotic vegetation and maintenance of the areas adjacent to the temporary construction access roads for the Project to fulfill the aforementioned requirements including Condition 12 of MDC Resolution Z-56-07.

III. DESCRIPTION OF AREAS TO BE MANAGED

The Project includes temporary improvements to the following roads and associated intersections:

- SW 137th Avenue (public ROW between SW 344th Street and SW 359th Street)
- SW 328th Street (public ROW between SW 137th Avenue and SW 117th Avenue)
- SW 117th Avenue (public ROW between SW 328th Street and SW 359th Street)
- SW 344th Street (public ROW between 137th Avenue West and 137th Avenue East)
- SW 359th Street (widening of an existing transmission patrol road on FPL property from 137th Avenue to Turkey Point)

Attachment M

IV. EXOTIC SPECIES REMOVAL

"Exotic Vegetation", defined as those species listed as Category I and II exotics on the Florida Exotic Pest Plant Council's (FLEPPC) List of Invasive Plants and those specified in MDC Code Section 24-49.9 as of the date of commencement of construction of new access roads or modification of existing roads for Turkey Point Units 6 & 7, will be targeted for removal and eradication within an area extending 50 feet from the edge of the temporary construction access road improvements located on FPL property adjacent to SW 359th Street and within the public property and public rights-of-way adjacent to public roadways listed above. For the purposes of this plan, road improvements means any clearing of land, excavation or other action which would alter the physical environment or ecology of the site, but does not include those activities essential for surveying, preliminary site evaluation or environmental studies. Exotic vegetation will be limited to two percent or less within the maintenance areas. Initial treatment within 50ft from the edge of the temporary access road improvements shall commence within 60 days following clearing of the temporary access road improvement ROW and laying of road bed. In the event that the road bed is not completed within 1 year following clearing of the temporary access road improvement ROW, FPL will work with the County to reach an agreeable date for initiation of exotic vegetation treatment.

FPL will maintain any portion of the 50 foot maintenance buffer located on its lands or within MDC Environmentally Endangered Lands (EEL) or other public lands adjacent to roadway improvements, including public rights of way, that are being actively managed for exotic vegetation. FPL will not be responsible for exotic vegetation management on public lands that are not actively managed for exotic vegetation.

Exotic vegetation in wetlands will be removed with minimum environmental disturbance using methods such as low-ground-pressure equipment, hand pulling, hand spading, cutting, and treatment with USEPA-approved herbicides that are appropriate for the habitat. Transport of vegetative debris within and from the site will be conducted in a manner that minimizes the distribution and dispersal of seeds. FPL will require contractors managing exotic vegetation to follow specific requirements for cleaning equipment and vehicles prior to beginning work, and prior to departing the FPL site after work completion. Proper cleaning procedures to prevent cross contamination of exotics across sites will be employed. All herbicide applications within the 50 foot maintenance buffer will be performed under the supervision of a Florida Department of Agriculture licensed applicator. The herbicide applicator shall adhere to all herbicide label applications, precautionary and safety statements. All herbicides will be properly labeled for such use and include a visible tracer dye in the mix to facilitate observation of the application to the vegetation.

V. MAINTENANCE

Herbicide re-treatments will be conducted as necessary within the 50 foot maintenance buffers to discourage regeneration of exotic vegetation. Following the initial treatment for removal of exotic vegetation, vegetation management activities will be conducted on a quarterly basis during the first year following the completion of temporary roadway improvements and semi-annually until the construction of Units 6 & 7 is complete and the access road improvements are removed and impacted areas restored.

VI. MONITORING & REPORTING

Attachment M

The areas subject to this Plan will be monitored on a semi-annual basis beginning with the completion of the temporary roadway improvements and continuing until the completion of the construction of Units 6 & 7 and the removal of access road improvements and restoration of impacted areas. Annual reports will be submitted to Miami-Dade County's Department of Regulatory and Economic Resources. These reports will document maintenance activities undertaken, including:

- Herbicides used and areas treated
- Effectiveness of treatment, including changes in vegetation and photographic documentation
- Encroachment and/or overgrowth of exotic vegetation
- Visual estimate of exotic vegetation coverage
- Treatment evaluation in achieving the success criteria (less than two percent exotic coverage)

This Plan may be modified every five years to incorporate revisions to the FLEPPC list of invasive plants as well as those specified in MDC Code Section 24-49.9 or on more frequent intervals if proposed and agreed to by MDC and FPL.

VII. CONCLUSION

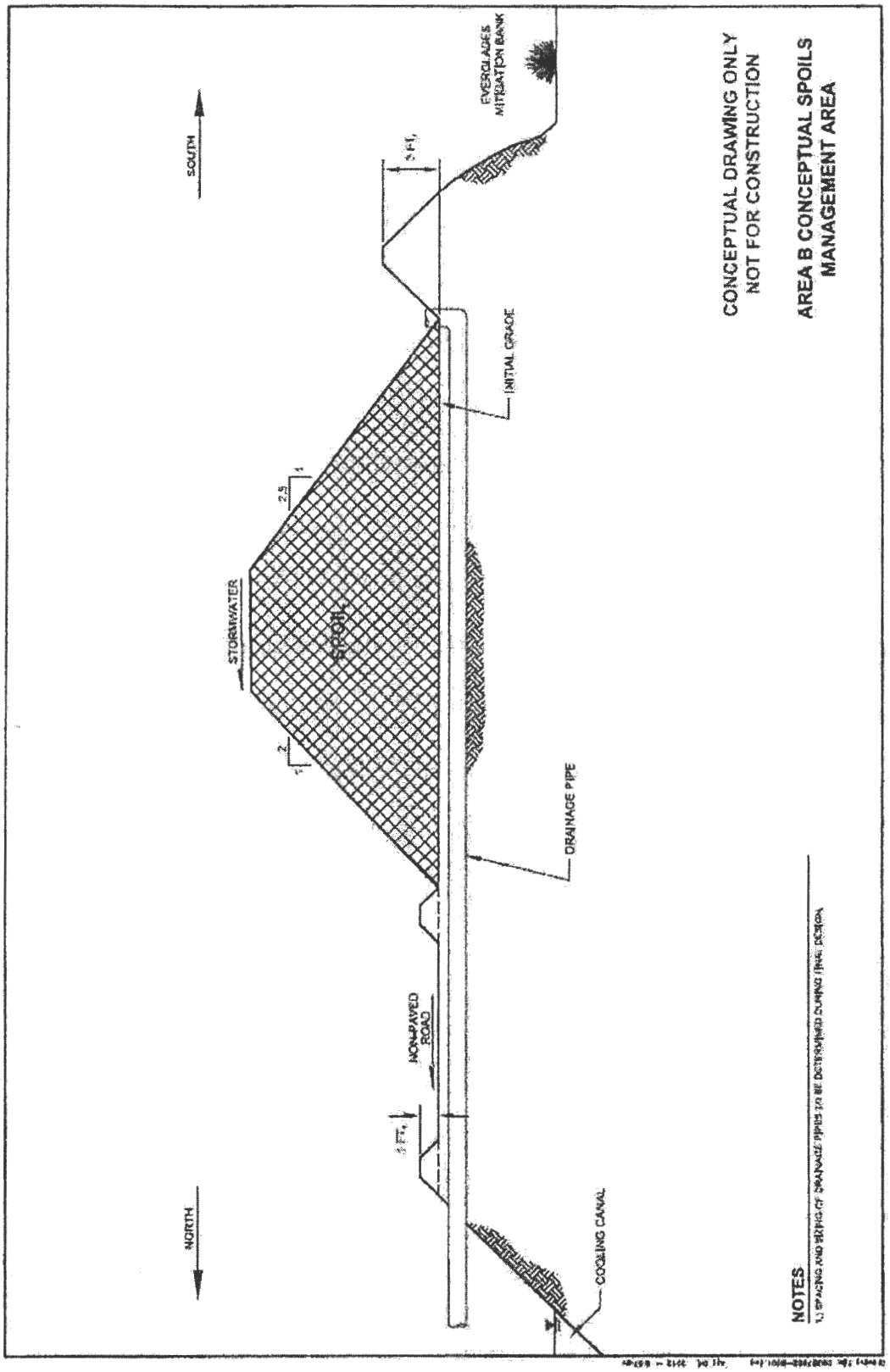
The purpose of this Plan is to provide a program description for the removal of exotic vegetation and maintenance of the areas adjacent to the temporary construction access roads for the Project.
This Plan fulfills that purpose through removal of exotic vegetation from specified areas adjacent to temporary construction access roadways with minimum environmental disturbance. Necessary re-treatments to prevent regeneration of exotic vegetation will be performed. The areas of exotic vegetation management will be monitored and controlled until the construction of Units 6 & 7 is complete and the temporary construction access roads have been removed and impacted areas restored.

Prepared by: Florida Power & Light Company
Date: Final 5-3-13

Attachment N

FPL Area B Conceptual System Spoils Management Area

Attachment N



Attachment O

MDC Environmentally Endangered Lands (EEL) Parcels Map

Attachment O

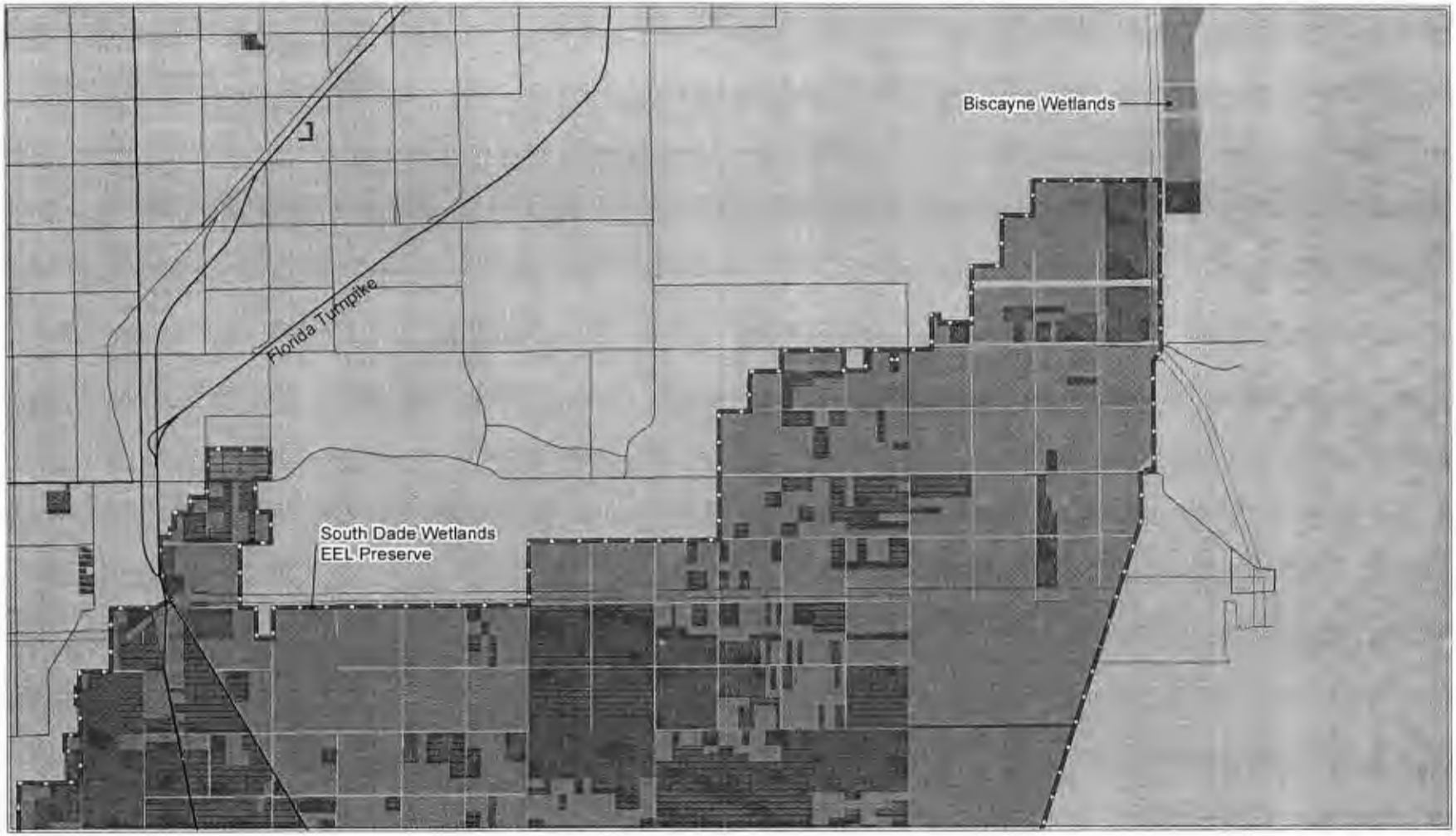


FIGURE 1 OF 6
FPL CORRIDORS, ALTERNATE CORRIDORS AND DIRECTLY ADJACENT EEL PARCELS

0 4,000 8,000 Feet

P:\Environmentally Endangered Lands\EEL GIS PROJECTS\FPL\FPLeelparcels&corridors053013_1

LEGEND

- EEL Projects State Owned Parcels
- EEL Projects Miami-Dade Owned Parcels
- EEL Projects SFWMD Owned Parcels
- EEL Acquisition Parcels (Unacquired)
- East Preferred Corridor
- FPL West Preferred Corridor

Attachment O

FIGURE 2 OF 6
FPL CORRIDORS, ALTERNATE CORRIDORS AND DIRECTLY ADJACENT EEL PARCELS

0 4,000 8,000
Feet

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LEGEND

- EEL Projects State Owned Parcels
- EEL Projects Miami-Dade Owned Parcels
- EEL Projects SFWMD Owned Parcels
- EEL Acquisition Parcels (Unacquired)
- East Preferred Corridor

Attachment O

FIGURE 3 OF 6
FPL CORRIDORS, ALTERNATE CORRIDORS AND DIRECTLY ADJACENT EEL PARCELS

0 4,000 8,000 Feet

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LEGEND

- EEL Projects State Owned Parcels
- EEL Projects Miami-Dade Owned Parcels
- EEL Projects SFWMD Owned Parcels
- EEL Acquisition Parcels (Unacquired)
- East Preferred Corridor
- Village of Pinecrest Alternative

Attachment O

FIGURE 4 OF 6
FPL CORRIDORS, ALTERNATE CORRIDORS AND DIRECTLY ADJACENT EEL PARCELS

0 4,000 8,000 Feet

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LEGEND

- EEL Projects State Owned Parcels
- EEL Projects Miami-Dade Owned Parcels
- EEL Projects SFWMD Owned Parcels
- EEL Acquisition Parcels (Unacquired)
- FPL West Preferred Corridor

Attachment O

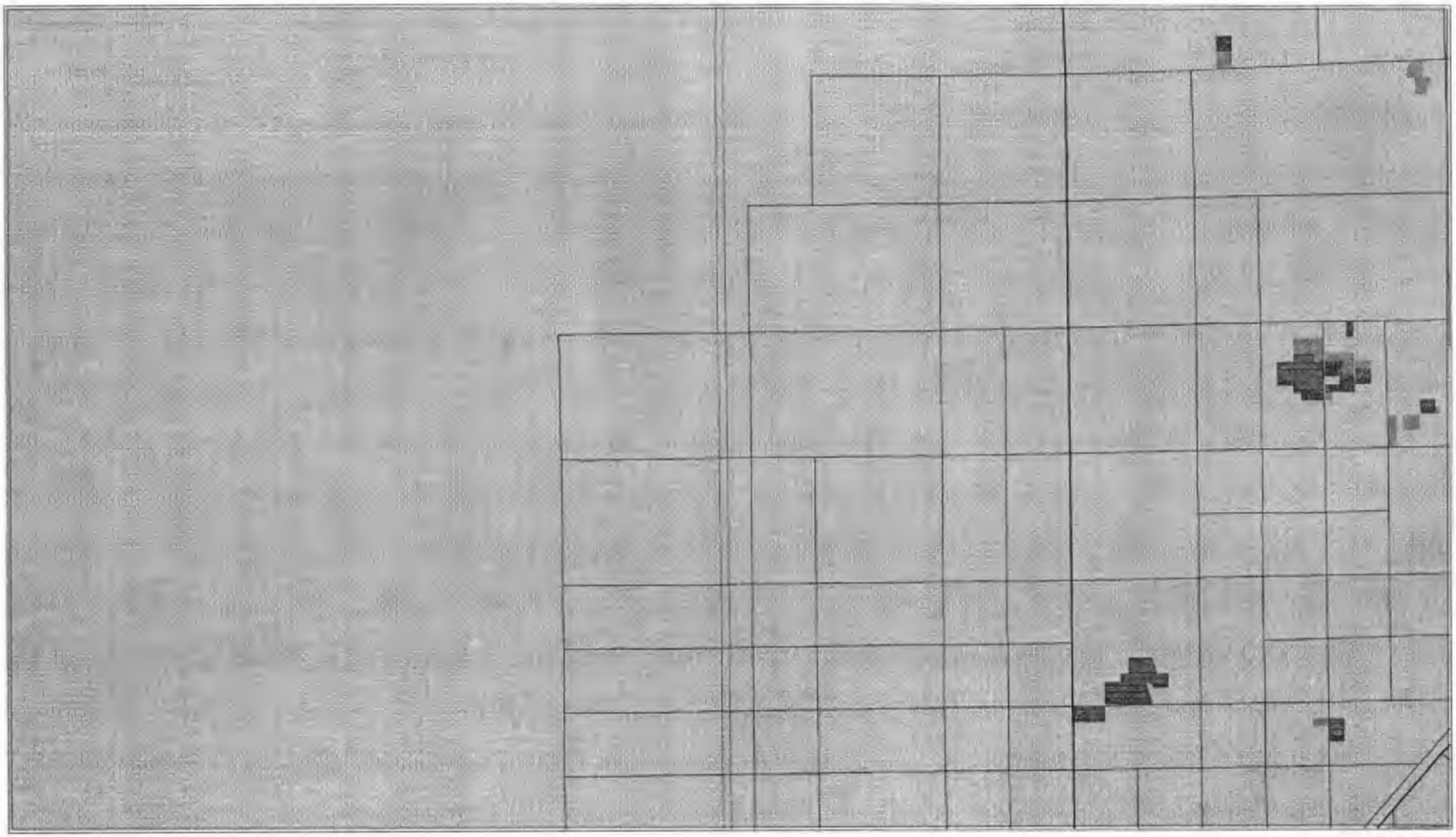

FIGURE 5 OF 6
FPL CORRIDORS, ALTERNATE CORRIDORS AND DIRECTLY ADJACENT EEL PARCELS

0 4,000 8,000 Feet

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LEGEND

- EEL Projects State Owned Parcels
- EEL Projects Miami-Dade Owned Parcels
- EEL Projects SFWMD Owned Parcels
- EEL Acquisition Parcels (Unacquired)
- FPL West Preferred Corridor

Attachment O

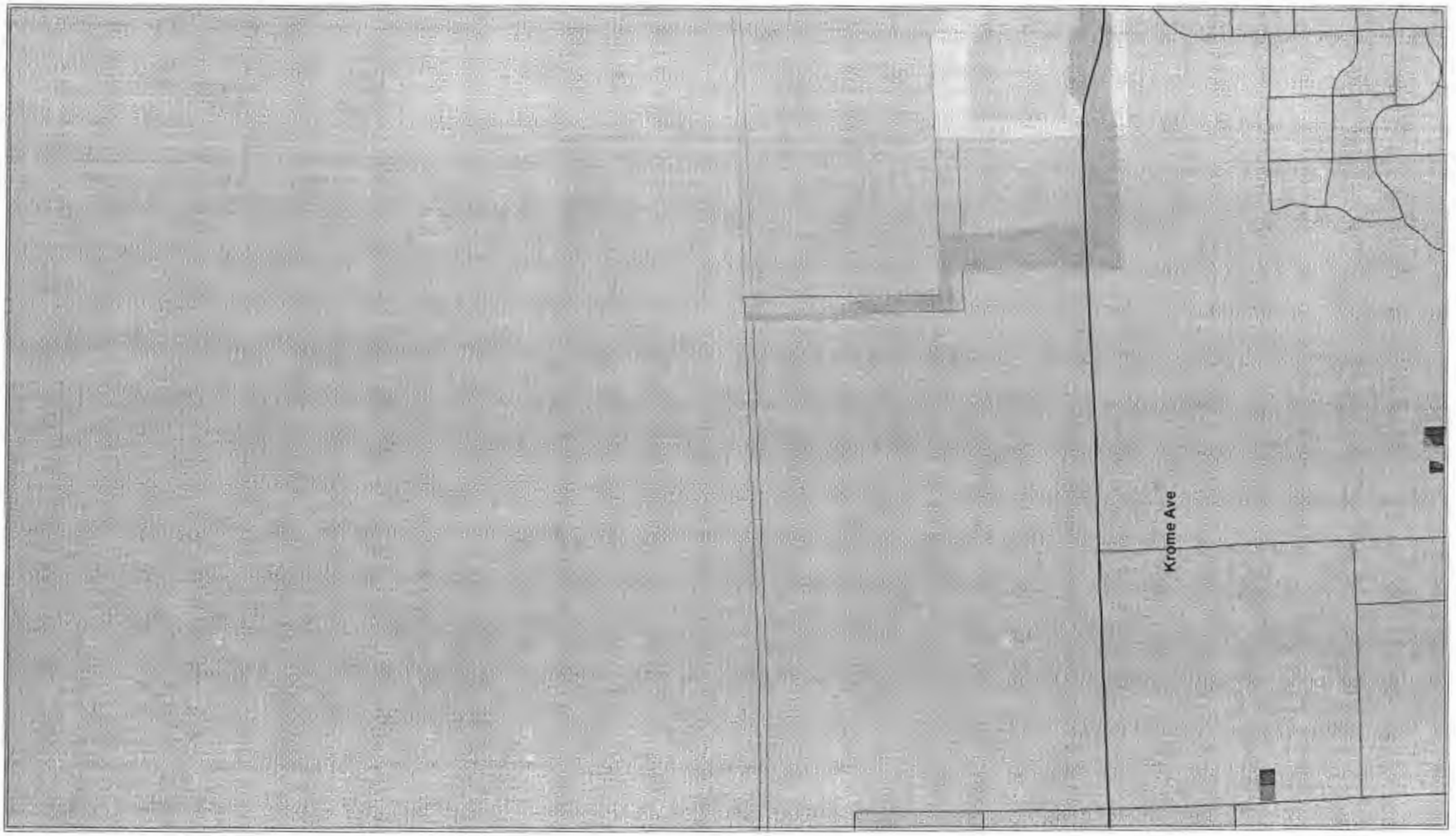

FIGURE 6 OF 6
FPL CORRIDORS, ALTERNATE CORRIDORS AND DIRECTLY ADJACENT EEL PARCELS

0 4,000 8,000 Feet

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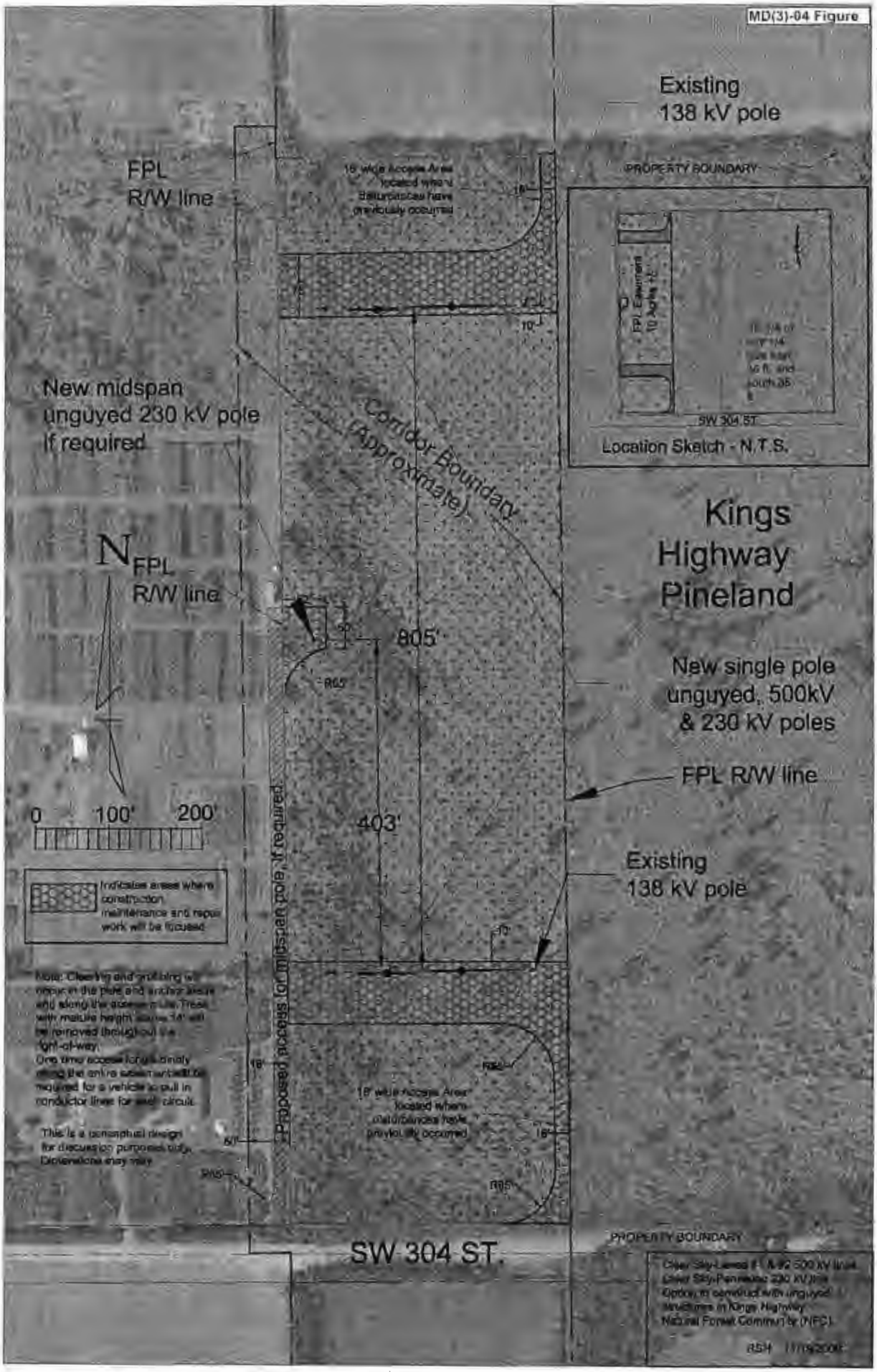
LEGEND

- EEL Projects State Owned Parcels
- EEL Projects Miami-Dade Owned Parcels
- EEL Projects SFWMD Owned Parcels
- EEL Acquisition Parcels (Unacquired)
- FPL West Secondary Corridor
- FPL West Preferred Corridor
- NPCA
- MDLPA 2
- MDLPA 3

Attachment P

Figure 2 from FPL Completeness Response No. MD(3)-04

Attachment P



Attachment Q

MDC Height Zoning District for HARB

Attachment Q

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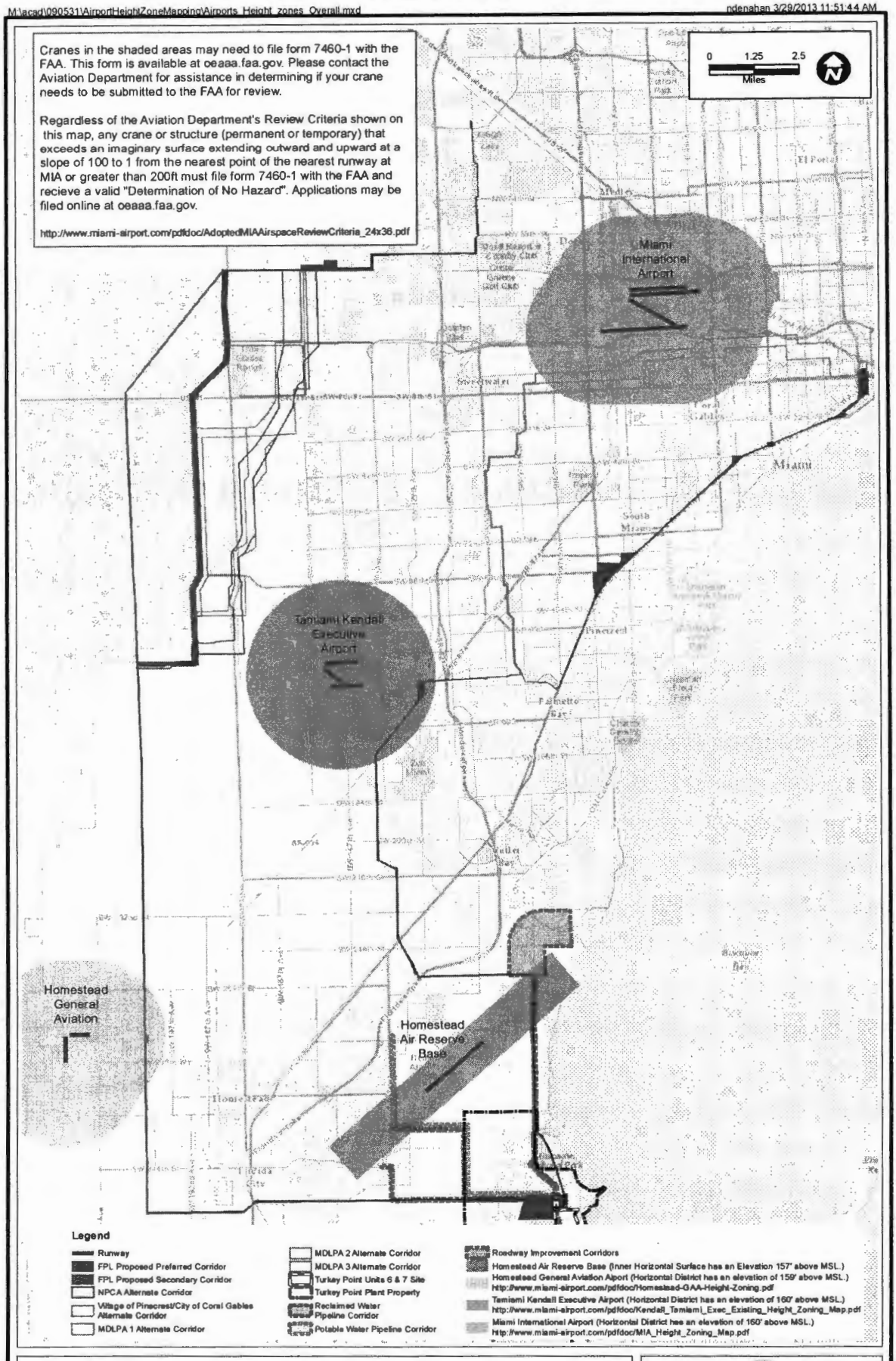


ATTACHMENT 1.
AIRPORT HEIGHT ZONING AREA MAP

Sources: Miami-Dade, 2002, 2006, 2007; ECT, 2013.

FPL

Attachment R

SFWMD Existing and Planned Projects (Transmission Lines)

R-a: Table of SFWMD Existing and Planned Projects

R-b: Map of SFWMD Existing and Planned Projects and FPL Proposed Linear Facilities Corridors

R-c: Definition of Codes for Consistency with SFWMD Projects – Transmission Facilities

R-d: TP6&7 Project Features-Intersecting C&SF System and Works of the District

Attachment R-a

EXHIBIT 8. Table of SFWMD Existing and Planned Projects.

Project	Type[1]
Biscayne Bay Coastal Wetlands Phase I	CERP (FFF, OPE)
	CERP
CEPP[2]: L-31N Improvements for Seepage Management / S-356 Enlargement	CERP (V, FF)
CEPP[2]: WCA 3 Decompartmentalization and Sheetflow Enhancement	CERP (AA, QQ, SS)

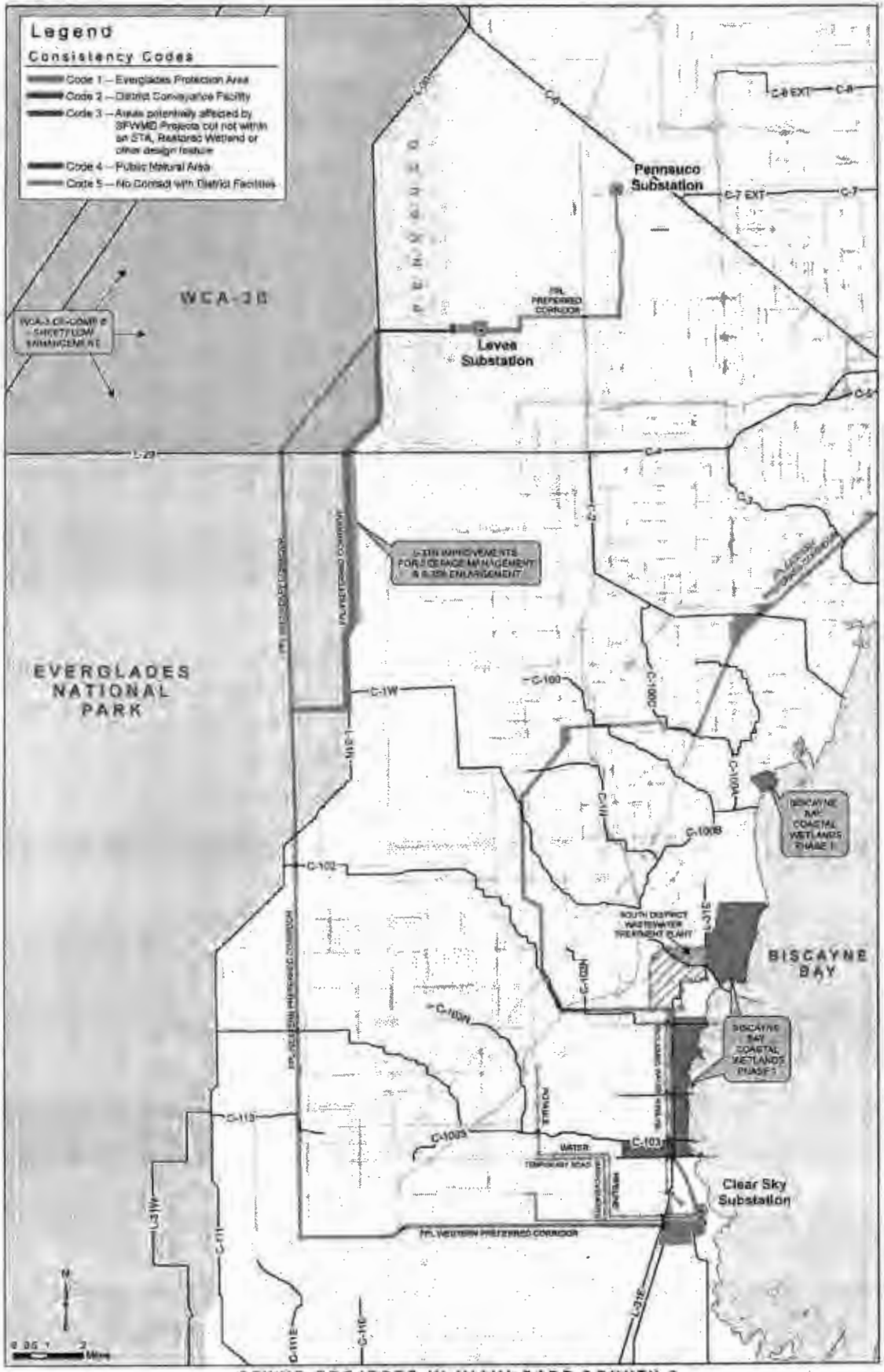
The list of projects in this Exhibit will be updated by SFWMD and relevant information about each project will be provided to FPL in accordance with the conditions of certification.

[1]The information in parentheses refers to the Comprehensive Everglades Restoration Plan (CERP) component as described in the *Final Feasibility Report and Preliminary Environmental Impact Statement* (April 1999), also known as the "Yellow Book".

[2]The Central Everglades Planning Project (CEPP) consists of a suite of restoration projects in the central Everglades that is part of CERP. A finalized plan, known as a Project Implementation Report (PIR), will be prepared and submitted by October 2013 for congressional authorization.

Attachment R-b

Exhibit 9. Map of SFWMD Existing and Planned Projects and FPL Proposed Linear Facility Corridors



SFWMD PROJECTS IN MIAMI-DADE COUNTY &
FPL PROPOSED LINEAR FACILITIES CORRIDOR

Attachment R-c

Exhibit 10. Definition of Codes for Consistency with SFWMD Projects – Transmission Facilities (Refers to Exhibits **8 and 9**).

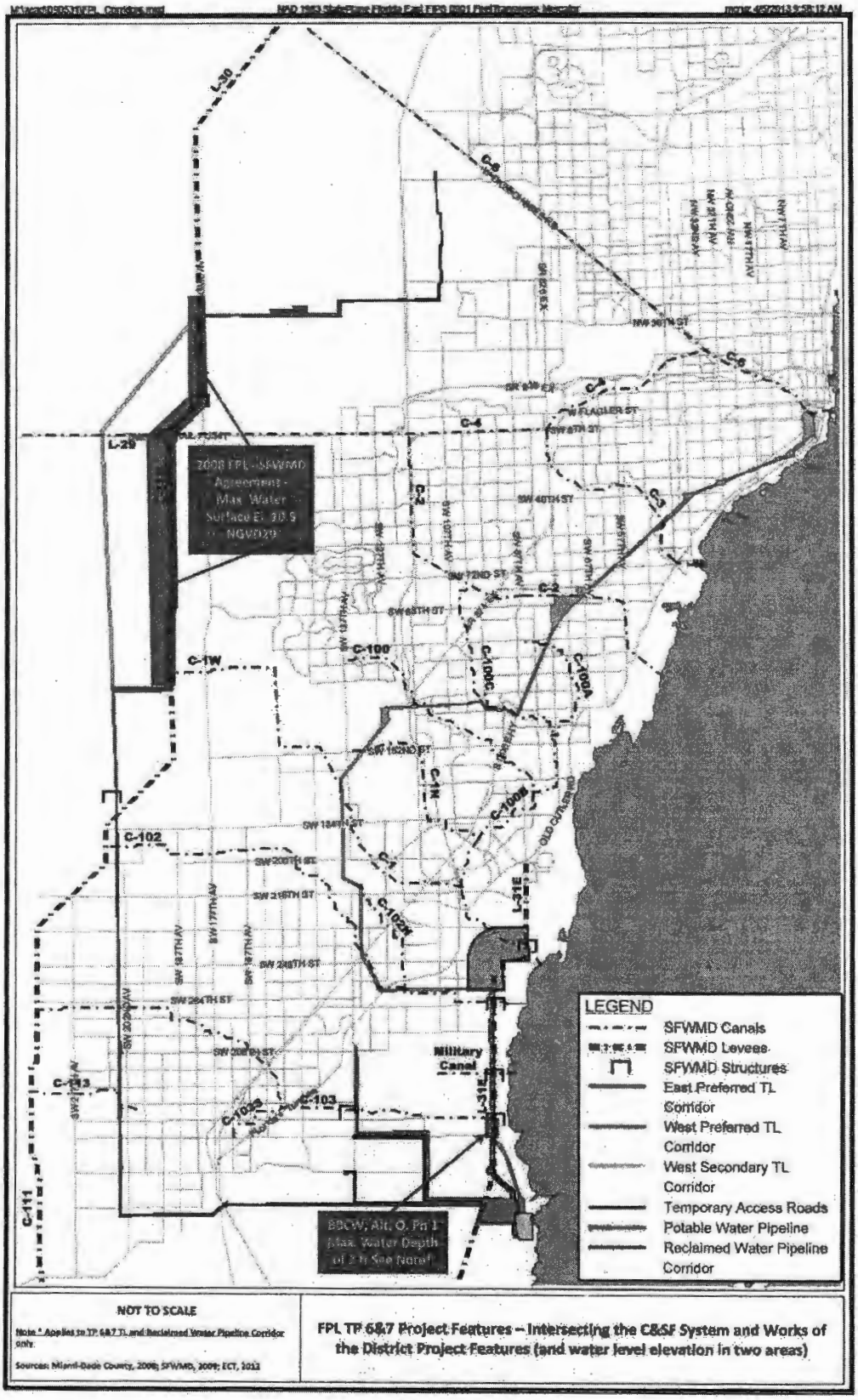
Code	Proposed Location	Consistency Requirement	Project(s)
1	Everglades Protection Area (ENP and WCAs)	(i) **Depth**. FPL facilities will be designed to accommodate the greater of: (a) the maximum surface water depth projected for planned projects, or, (b) for areas that do not have a current plan, the surface water depth indicated as the target depth in the Central Everglades Planning Process, or (c) existing surface water depth conditions. (ii) **Flow**: To the extent practicable, FPL facilities will be designed to avoid or minimize impact on sheet-flow, either existing or projected, under the depth conditions indicated above.	**L-31N Improvements for Seepage Management and S-356 Relocation** – This Central Everglades Planning Project (CEPP) component consists of the two named CERP components. This effort has evolved from the original CERP "ENP Seepage Management" that consisted of these two components and the Bird Drive Recharge Area and Dade / Broward Levee Pennsuco Wetlands components. A Project Implementation Report (PIR) for CEPP will be prepared by October 2013 and submitted for Congressional authorization. The restoration target for ENP in this area results in a water depth about 1.1 feet above the present condition. This would result in an average water depth at the TL location of about 2.0 feet and a 5% exceedance depth of 3.0 feet. The TL (Preferred Corridor) will not affect sheet flow in this project area. The TL (Secondary Corridor) will be designed to minimize sheet flow impacts in this project area to the extent practicable. **WCA 3 Decompartmentalization and Sheetflow Enhancement** – The purpose of this CEPP component is to reestablish the ecological and hydrologic connection between WCA 3A and 3B, ENP and Big Cypress National Preserve. The segment of the TL within WCA-3B could be affected by this project, more so if the TL is placed within the FPL West Secondary Corridor than within the FPL West Preferred Corridor. The first increment of Everglades restoration for the southeast corner of WCA-3B would result in a water level that on average is similar to the present condition, but with extended recessions to reduce periods of marsh dry down. This would result in an average water depth within the FPL West Secondary TL corridor location of about 1.7 feet and a 5% exceedance depth of 2.7 feet. The TL (Preferred Corridor) will not affect sheet flow in this project area. The TL (Secondary Corridor) will be designed to minimize sheet flow impacts in this project area to the extent practicable.
2	District Conveyance Facility (canals)	Within District real property interests, FPL facilities will be constructed to avoid any impact on flow or routine maintenance within canal rights of way, and all facilities will be designed to comply with the non-procedural requirements of the Criteria Manual for Use and Occupancy of District ROW for overhead facilities, i.e., App. E-1.	L-31N Improvements for Seepage Management – for canal and levee crossings WCA 3 Decompartmentalization and Sheetflow Enhancement - for canal and levee crossings BBCW Phase 1 – for potable water and reclaimed water pipelines Water Preserve Area Conveyance – for Western TL corridors' crossing of Dade/Broward levee and borrow canal

Attachment R-c

Code	Proposed Location	Consistency Requirement	Project(s)
3	Areas potentially affected by SFWMD Projects but not within an STA, restored wetland or other design feature.	For these areas there are no significant changes to existing conditions expected and the tower designs shown in the application will be adequate.	BBCW Phase 1 – for Eastern TL Corridor facilities outside proposed flow-way and within BBCW Phase 1 project boundaries
4	Public Natural Area	FPL facilities will be designed to reflect the management objectives of the affected public parcel such as limitations on unauthorized access and minimizing opportunity for invasive exotic species or the need to accommodate standing water or overland flow.	**Pennsuco Wetlands.** The Pennsuco is a large publicly owned, functioning wetland area with a management goal of habitat preservation and removal of exotic vegetation. There are no plans to change the hydrology of the area. The existing condition is an impounded wetland with persistent flooding every year, but no significant sheet flow. The average depth is less than 1.0 feet and the maximum depth is approximately 2.0 feet. The TL (whether West Preferred or Secondary Corridor) will not affect the wetland function in this project area.
5	No Contact with District Facilities	No SFWMD consistency requirements	Not Applicable to any Projects. Used only to show portions of the corridors away from all District facilities.

Attachment R-d

Exhibit 11. TP6&7 Project Features – Intersecting C&SF System and Works of the District Project Features



Attachment S

FPL Conceptual Earthwork and Materials Disposal Plan (June 3, 2011)

Attachment S

Florida Power & Light Company, P.O. Box 14000, Juno Beach, FL 33408-0420
700 Universe Boulevard

FPL

VIA OVERNIGHT MAIL

June 3, 2011 **FPLMDC-11-0232**

Mr. Lee Hefty
Department of Environmental Resources Management
Miami-Dade County
Overtown Transit Village North
701 NW 1st Court, 4th Floor
Miami, FL 33136

Subject: FPL Turkey Point Plant
Condition 7 of Miami-Dade County Resolution Z-56-07

Dear Mr. Hefty:

Florida Power & Light Company (FPL) is providing the attached Conceptual Earthwork and Materials Disposal Plan in response to requests for information during our June 18, 2010 meeting and subsequent discussions with your Department regarding Condition 7 of Miami-Dade County Resolution Z-56-07.

If you have any questions regarding this submittal, please contact Jena Mier at (561) 691-2209 or me at (561) 691-2808.

Sincerely,

Matthew J. Raffenberg
Licensing Manager

Attachments:

Cc: Marc LaFerrier
Steve Scroggs
Barbara Linkiewicz

Attachment S

Florida Power & Light Company

Turkey Point Units 6 & 7 Project

CONCEPTUAL EARTHWORK AND MATERIALS DISPOSAL PLAN

Date: June 3, 2011

Attachment S

TABLE OF CONTENTS

1.0 Introduction and Definitions 3

2.0 Project Description 5

3.0 Plant Area 7

4.0 Deep Excavation Area 12

5.0 Nuclear Administration Building, Training Building and Parking Area 15

6.0 Laydown Area 17

7.0 FPL Reclaimed Water Treatment Facility and Pipeline 19

8.0 Radial Collector Wells and Pipeline 21

9.0 Equipment Barge Unloading Area 24

10.0 Temporary Access Roads Improvements and Transmission Structure Pads Along SW 359th Street 26

11.0 Transmission Work Within the Cooling Canal System 28

12.0 Vegetation Management 29

13.0 Wildlife Protection 30

14.0 Spill Protection and Emergency Response Procedures 31

15.0 Petroleum, Oil, Lubricant and Chemical Handling, Storage and Management 31

16.0 Waste Management 31

17.0 Dust Control 31

18.0 Noise 32

19.0 Cultural and Historical Artifacts 32

20.0 General Housekeeping 32

21.0 Safety Briefings and Traffic Control 32

Attachment S

TABLE OF FIGURES AND TABLES

Figure 1 – 1: Miami-Dade County Resolution Z-56-07 Subject Property Boundary 3

Figure 2 – 1: Turkey Point Units 6 & 7 Plant Area, Laydown and Associated Facilities . 5

Figure 2 – 2: Turkey Point Units 6 & 7 West Preferred Transmission Corridor 6

Figure 3 – 1: Turkey Point Units 6 & 7 Plant Area 7

Figure 3 – 2: Spoils Storage Area 9

Figure 3 – 3: Conceptual Spoils Storage Area Design 10

Figure 4 – 1: Turkey Point Units 6 & 7 Deep Excavation Areas 12

Figure 4 – 2: Plant Area Fill Material 13

Figure 5 – 1: Turkey Point Units 6 & 7 Nuclear Administration Building, Training Building and Parking Area 15

Figure 6 – 1: Turkey Point Units 6 & 7 Laydown Area 17

Figure 7 – 1: Turkey Point Units 6 & 7 FPL Reclaimed Water Treatment Facility and Water Pipeline 19

Figure 8 – 1: Turkey Point Units 6 & 7 Radial Collector Wells Area and Water Delivery Pipeline 21

Figure 9 – 1: Turkey Point Units 6 & 7 Equipment Barge Unloading Area 24

Figure 9 – 2: Turkey Point Units 6 & 7 Equipment Barge Unloading Area - Excavation and Regrading Areas 25

Figure 10 – 1: Turkey Point Units 6 & 7 Temporary Access Roads Improvements and Transmission Structure Pads Along SW 359th Street 26

Figure 11 – 1: West Preferred Transmission Corridor 28

Table 2 – 1: Turkey Point Units 6 & 7 Earthwork and Materials Management Activities by Work Area 33

Attachment S

Turkey Point Units 6 & 7 Project

CONCEPTUAL EARTHWORK AND MATERIALS DISPOSAL PLAN

1.0 Introduction and Definitions

As required by Conditions 7 and 14 of Miami-Dade County (MDC) Resolution Z-56-07 and pursuant to discussions with Miami-Dade County's Department of Environmental Resources Management (DERM), Florida Power & Light Company (FPL) has developed this Conceptual Earthwork and Materials Disposal Plan for the Turkey Point Units 6 & 7 Project work areas within the subject property boundary (see Figure 1 – 1). The purpose of this plan is to outline the general earthwork and materials management activities, precautions and Best Management Practices (BMPs) that FPL will employ to meet the substantive requirements of MDC Resolution Z-56-07 while constructing the Turkey Point Units 6 & 7 Project. Aspects of proposed earthwork activities such as, excavation and backfilling, spoils disposal, erosion control, etc., are included to provide a conceptual understanding of the earthwork to be accomplished. This conceptual plan may be modified, as necessary, prior to construction. However, the general principles for environmental protection, materials disposal and BMPs will be followed. A final plan will be submitted prior to initiation of construction.

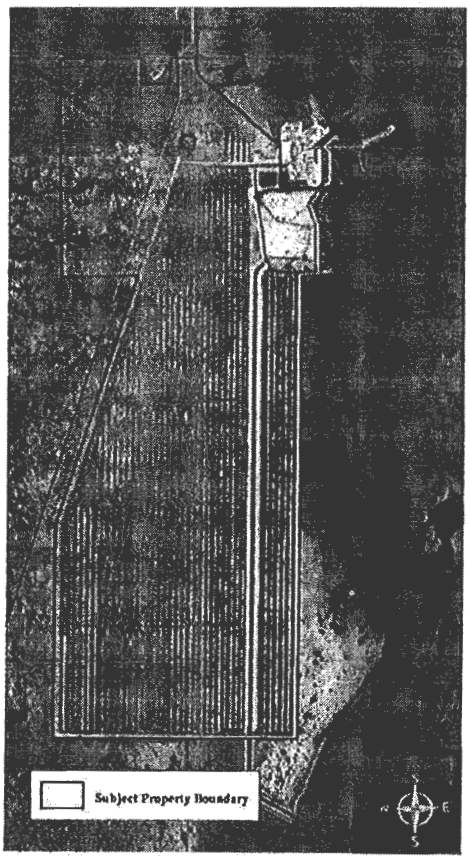


Figure 1 – 1: Miami-Dade County Resolution Z-56-07 Subject Property Boundary

Attachment S

For the purposes of the Conceptual Earthwork and Materials Disposal Plan for the Turkey Point Units 6 & 7 Project, the following terms are defined.

Turkey Point Units 6 & 7 Project or the Project – refers to the entire Project for which FPL seeks certification, including the Turkey Point Units 6 & 7 plant area, laydown areas to the west of the plant area and associated facilities.

Turkey Point Units 6 & 7 plant area or plant area – refers to where the new generating facilities and associated infrastructure such as the Clear Sky substation, and makeup water reservoir will be located (see Figure 3 – 1).

subject property boundary - the area identified as the "Public Hearing Subject Property Boundary " in the "Amended Letter of Intent for FPL Public Hearing Application No. 07-207 " submitted by FPL on November 5, 2007 for approval of the Turkey Point Units 6 & 7 Project and approved by MDC Resolution Z-56-07.

nuclear island - refers to the portion of the Turkey Point 6 & 7 plant area that includes the containment building, the shield building, and the auxiliary building, all constructed on a common foundation.

spoils – generic term used for the combination of excavated soil, mud, and/or dirt material which is structurally unusable as base material for building or roadway structures.

muck – approximately 4-6' layer of soil, mud, and/or dirt material resting on the Miami Limestone. Geologically, muck refers to the overlying organic soil near the plant area that can be described as either light gray–dark gray to pale brown unconsolidated calcareous silts with trace amounts of shell fragments and little to no reaction to hydrochloric acid and/or black to brown unconsolidated material with organic fibers and strong reaction to hydrochloric acid.

clean fill – material that meets the "Clean Fill" requirements described in Section 24-5 of MDC Code Chapter 24 listed below.

"Clean fill shall mean material consisting of soil, rock, sand, earth, marl, clay stone and/or concrete rubble."

2.0 Project Description

Construction of the Turkey Point Units 6 & 7 Project will be a multi-year project requiring the removal and relocation of approximately 2 million cubic yards of muck and the placement of approximately 11 million cubic yards of clean limestone (clean fill).

Affected areas within the subject property boundary include the plant and laydown areas which are located within the cooling canal system of the industrial wastewater facility. Areas for the FPL reclaimed water treatment facility and pipeline, nuclear administration and training buildings and parking areas, radial collect wells and pipeline, and access roads will also need to be modified (see Figure 2 – 1).

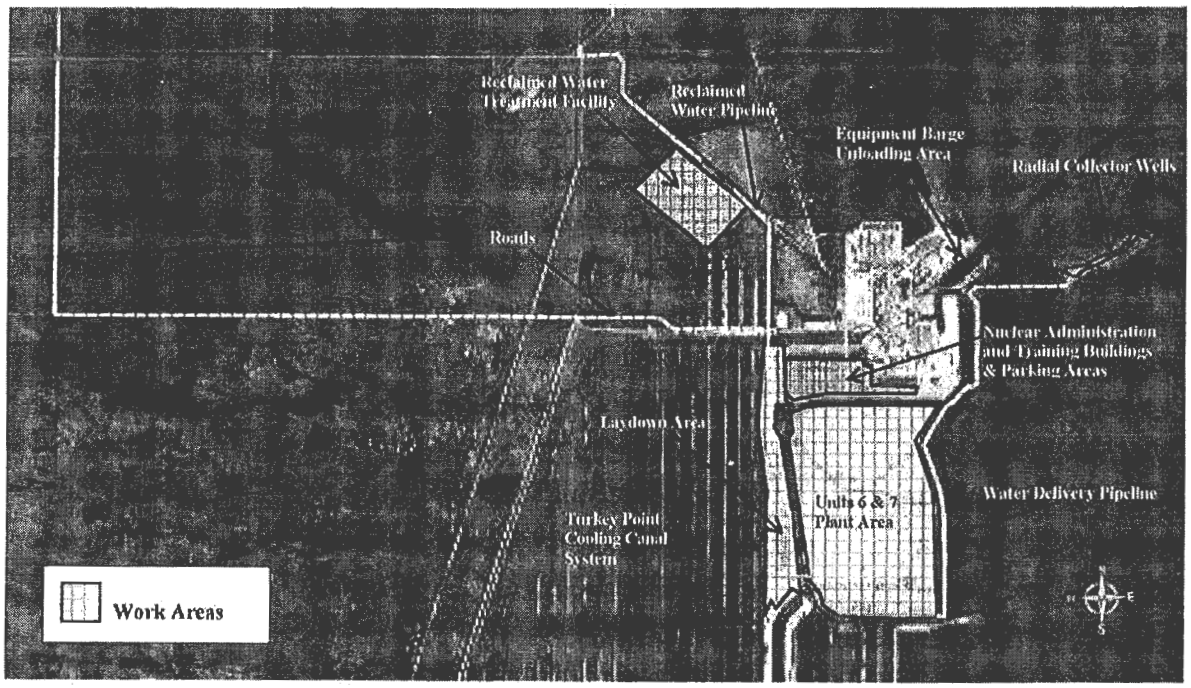


Figure 2 – 1: Turkey Point Units 6 & 7 Plant Area, Laydown and Associated Facilities

A portion of the West Preferred transmission corridor is also located within the subject property boundary of MDC Resolution Z-56-07 as shown in Figure 2 – 2 below.

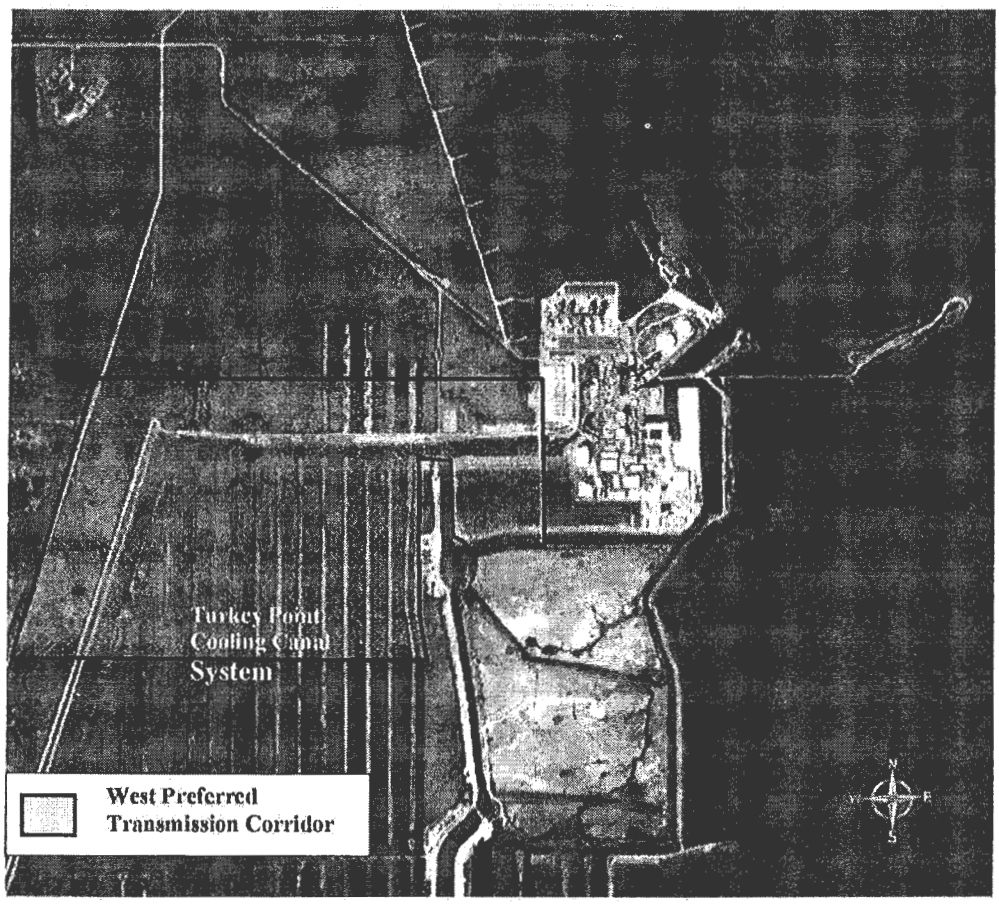


Figure 2 – 2: Turkey Point Units 6 & 7 West Preferred Transmission Corridor

Below is a description of the excavation, backfilling, spoils disposal, erosion control and dewatering activities that will be undertaken in each of these work areas as part of the construction of the Turkey Point Units 6 & 7 Project.

A description of activities common to all work areas such as; vegetation management, wildlife protection, spill protection and emergency response procedures, etc. is included in the sections of this plan.

Table 2 – 1 summarizes the earthwork and materials management activities by work area.

3.0 Plant Area

The approximately 218 acre plant area is located within the cooling canal system of the industrial wastewater facility (see Figure 3 – 1). The power blocks, makeup water reservoir, circulating water cooling towers, Clear Sky substation, and other support facilities will be constructed within the plant area.

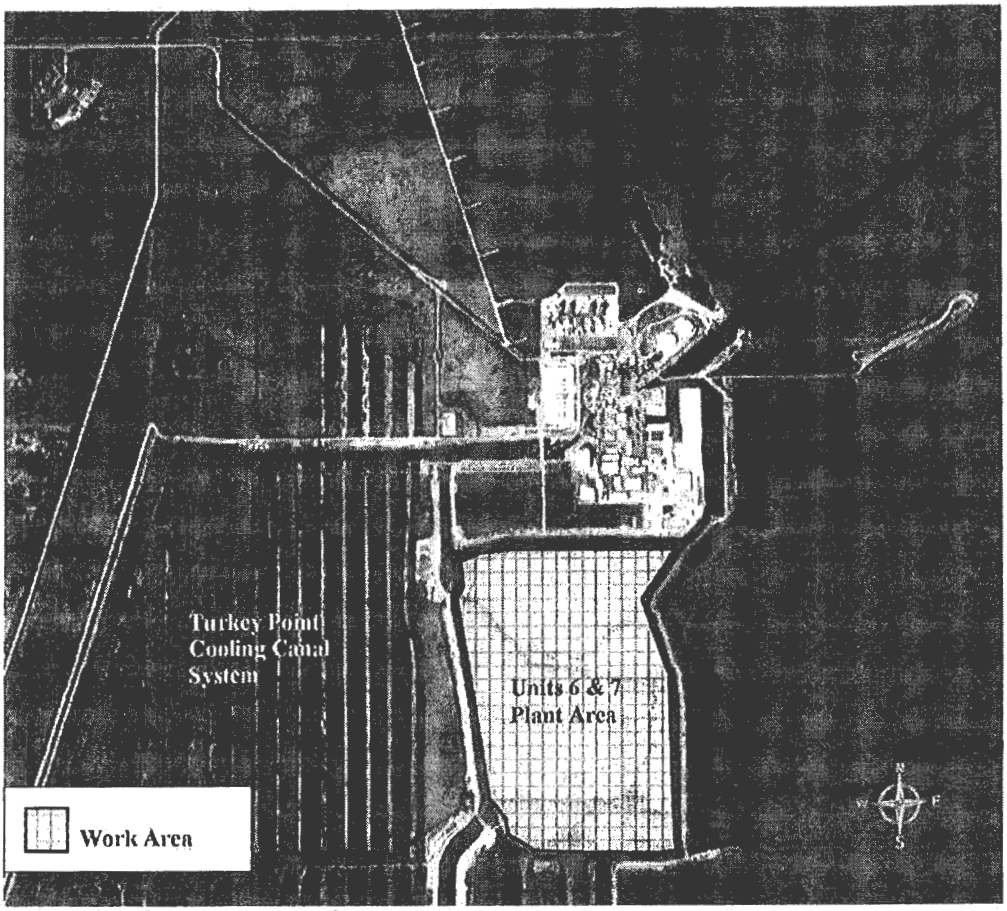


Figure 3 – 1: Turkey Point Units 6 & 7 Plant Area

3.1 Excavation

The excavation of muck from the plant area, if required, will entail removal of approximately 4 feet (ft) – 6 ft of the top layer of soil, mud, or dirt resting on the Miami Limestone. Deep excavation (excavation of the Miami Limestone layer and below) will be required for the foundations of the nuclear island which includes the containment, shield and auxiliary buildings. Excavation, backfilling, and erosion control practices, for the deep excavation areas are described in Section 4 of this plan.

3.2 Backfilling

After the plant area is excavated, clean fill will be placed in the excavated area. A total of approximately 7.8 million cubic yards of fill material is estimated for the plant area. The majority of the fill material will be supplied by off-site sources and delivered in trucks. Fill from permitted commercial sources will not be tested by FPL. If the material is from other off-site sources, FPL will meet with MDC DERM to determine the appropriate testing requirements in accordance with MDC Code Chapter 24. A portion of the fill material will be available as a result of the excavation of the areas shown in Figure 4 – 2. The excavated material will be used as fill for areas around the shield and auxiliary buildings without further chemical testing.

3.3 Spoils Disposal

Spoils from the plant area will be deposited on the berms along the east and west sides of the main return canal and along the southern canal berm of the cooling canal system within the industrial wastewater facility as shown in Figure 3 – 2. The designated spoils storage area is of sufficient capacity to accommodate the amount of spoils anticipated to be excavated from the plant area and other areas as described in this plan. Muck removed from the plant area will not be tested.

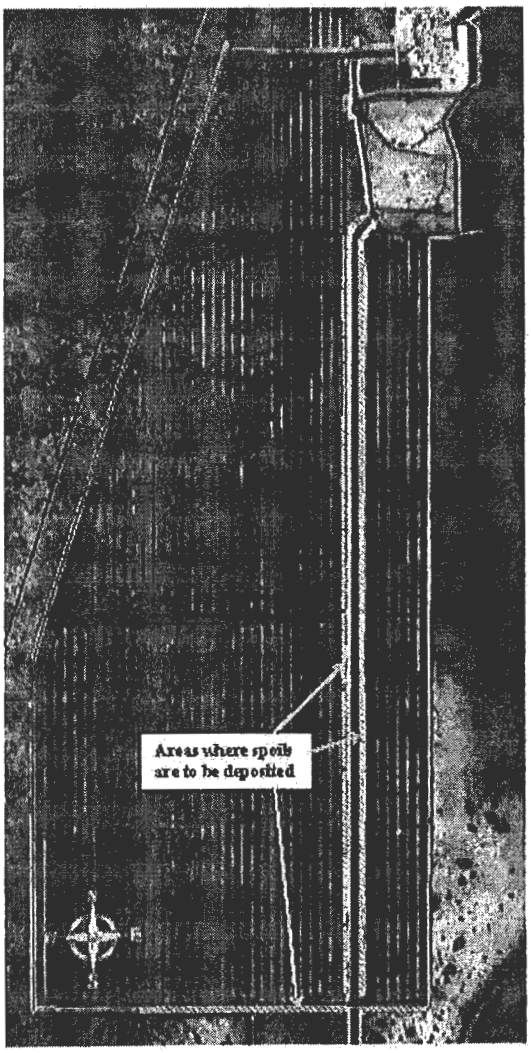


Figure 3 – 2: Spoils Storage Area

FPL will employ the Best Management Practices (BMPs) described below to minimize erosion/sedimentation impacts to the cooling canal system of the industrial wastewater facility.

During the preparation of the spoils storage area, the center of the area will be excavated to construct berms around the spoils storage area. The berm will be constructed with a height and slope sufficient to provide erosion control to prevent spoils and sediment runoff from entering the cooling canal system. The conceptual spoils storage area design is shown in Figure 3 – 3. The estimated height of the spoils pile will be determined after the spoils storage area has been surveyed and a final dirt road width for the berms has been established. It is anticipated that the final spoils elevation will be approximately 16 ft – 20 ft NAVD88.

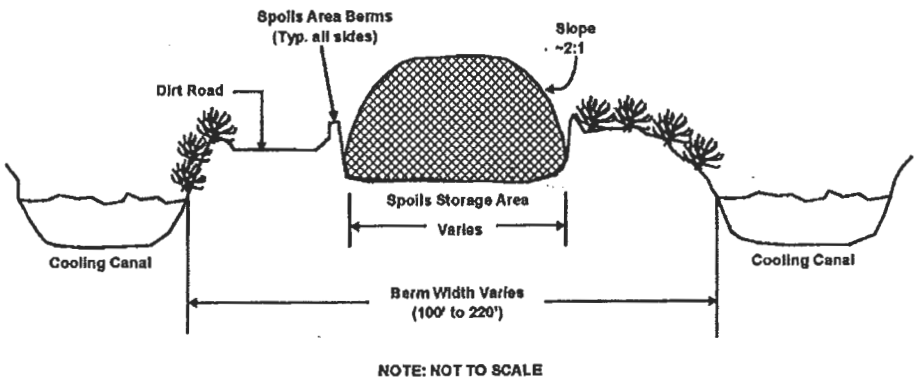


Figure 3 – 3: Conceptual Spoils Storage Area Design

Additional control measures such as gravel filters and/or silt fences may be installed to prevent sediment and spoils runoff from entering the cooling canal system.

No adverse impacts to the American crocodile, other protected species in the area, or wetlands are anticipated as a result of the spoils storage area. The spoils storage area was selected to avoid historical crocodile nesting areas or existing migration routes in and out of the cooling canal system The spoils storage area does not contain areas of freshwater refugia created by FPL, necessary for juvenile crocodile development. Ingress/egress points utilized by crocodiles have been documented by FPL biologists during crocodile monitoring efforts over the past 3 decades. The area selected for spoils storage is not an area of crocodile migration to/from the cooling canal system. The spoils storage area along the southern boundary of the cooling canal system has been used for spoils disposal since the 1970s and is an area with an existing high berm located between the cooling canal system and the C-107 Canal to the south. Spoils deposited on the southern area will be separated from the C-107 Canal by the existing berm.

3.4 Erosion Control

The construction method to be employed for the plant area will prevent material from entering the cooling canal system. The area between the cooling canal system and the area to be protected may include riprap or another BMP to prevent erosion of the bank. During the detail design phase a number of different options and technologies will be evaluated to determine the optimum construction methodology. Temporary measures,

such as, small retaining berms and/or silt fences may be installed to prevent sediment from entering the cooling canal system.

3.5 Dewatering

No general area dewatering is anticipated for the plant area. General area dewatering means dewatering of the entire area of interest (e.g., plant area), or most of the area of interest, all at one time, such that significant declines in water level would be expected well away from the area of interest.

If local or small scale dewatering is necessary, dewatering plans including proposed dewatering methods, anticipated length of dewatering activities, discharge methods, etc, associated with construction of the Project will be available during the post-certification review process authorized by Section 403.5113(2), F.S., and Rule 62-17.191, F.A.C.

4.0 Deep Excavation Area

Within the plant area, deep excavations of approximately 2.4 acres for the nuclear island for each unit will extend to an approximate elevation of -35.0 ft NAVD88 or to the top of competent rock in the Key Largo Formation. These deep excavation areas are shown in Figure 4 – 1.

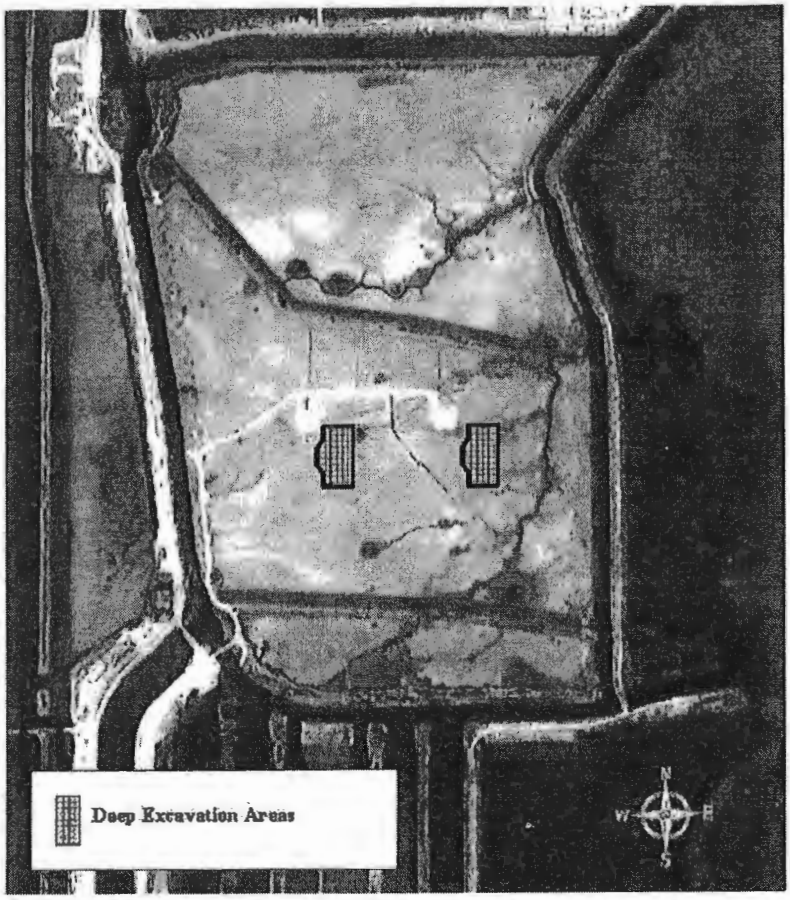


Figure 4 – 1: Turkey Point Units 6 & 7 Deep Excavation Areas

4.1 Excavation

The current plan for the deep excavation (-35.0 ft NAVD88 or to the top of competent rock in the Key Largo Formation) uses a diaphragm wall around the foundation perimeter of the nuclear island. The purpose of the diaphragm wall is to provide a continuous vertical barrier to reduce the amount of water seepage into the deep excavation, thereby minimizing dewatering quantities and duration. There are various methods available for constructing the diaphragm wall and detailed design information will be available post certification. One construction design concept for the diaphragm wall consists of successive vertical panels excavated from ground surface, constructed edge to edge forming a continuous wall. The diaphragm wall is a permanent structure and will remain in place during the plant life.

4.2 Backfilling

The material resulting from excavation shown in Figure 4 – 2 will be used as fill in the area of the nuclear island. The fill will be used without further chemical testing. If additional fill material is necessary, it will be supplied by off-site sources. Fill from permitted commercial sources will not be tested by FPL. If the material is from other off-site sources, FPL will meet with MDC DERM to determine the appropriate testing requirements in accordance with MDC Code Chapter 24.

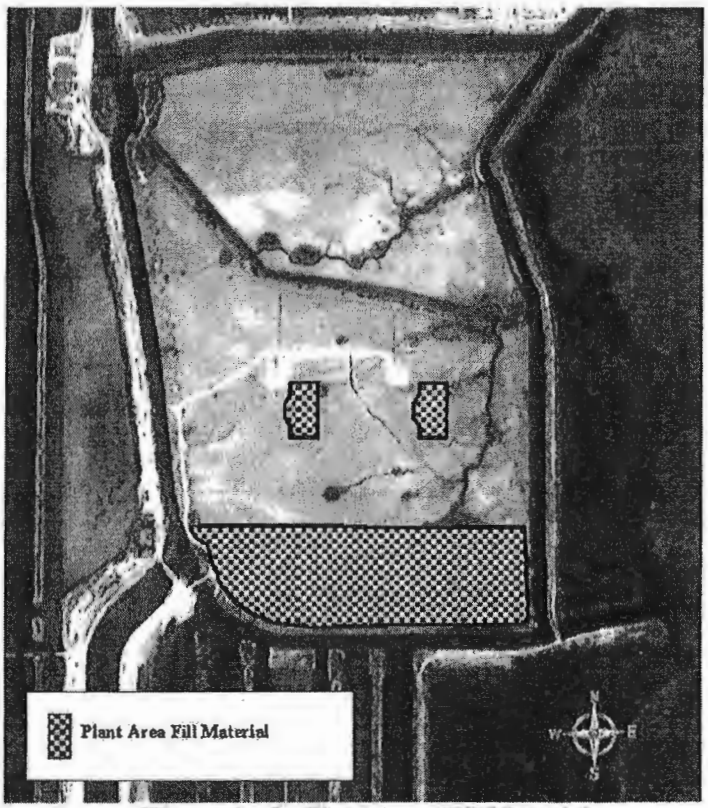


Figure 4 – 2: Plant Area Fill Material

4.3 Spoils Disposal

No muck is expected to be removed from the deep excavation area.

4.4 Erosion Control

No erosion control is necessary because the deep excavation goes from grade to -60ft NAVD88.

4.5 Dewatering

Details of the dewatering plans including proposed dewatering methods, anticipated length of dewatering activities, discharge methods, etc, associated with construction of the Project will be available during the post-certification review process authorized by Section 403.5113(2), F.S., and Rule 62-17.191, F.A.C.

FPL evaluated alternative engineering solutions for the plant area deep excavation foundation construction to reduce dewatering requirements. A diaphragm wall will be constructed around each nuclear island foundation excavation to minimize horizontal flow. In addition, a horizontal grouted barrier will be constructed below the bottom of each excavation to the bottom of the diaphragm walls to minimize vertical flow. It is anticipated that the foundations in the plant area will be constructed in essentially dry conditions, resulting in no exchange of water or materials with Biscayne Bay.

5.0 Nuclear Administration Building, Training Building and Parking Area

The nuclear administration building, training building and parking area are located north of the plant area inside the perimeter canals of the industrial wastewater facility, as shown in Figure 5 – 1. The nuclear administration building and training building will occupy approximately 32 acres.

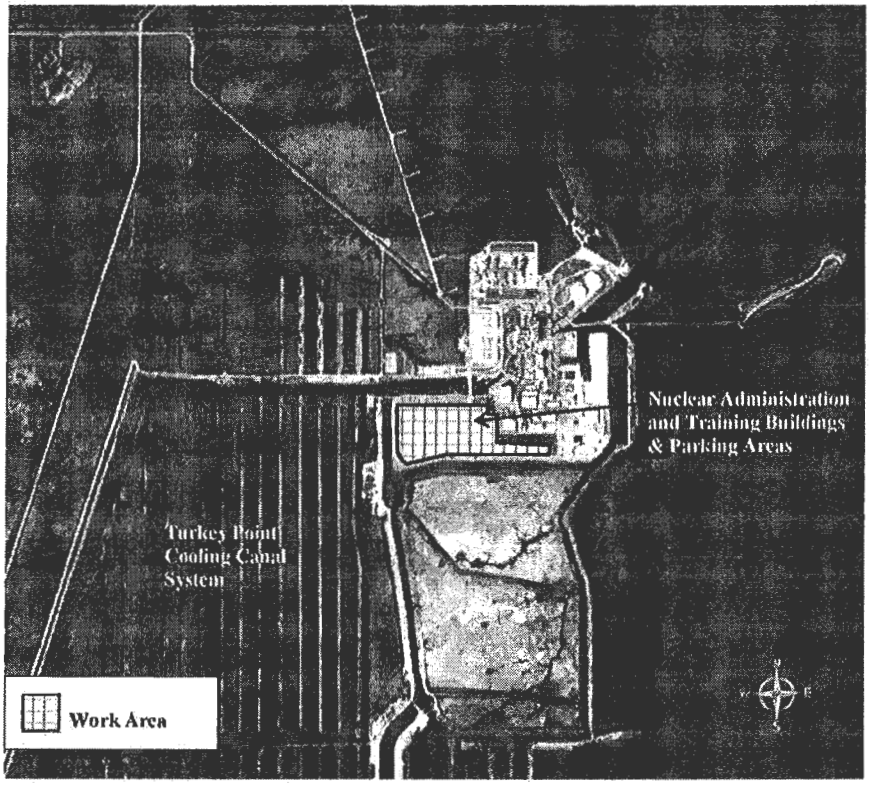


Figure 5 – 1: Turkey Point Units 6 & 7 Nuclear Administration Building, Training Building and Parking Area

5.1 Excavation

The area for the nuclear administration building and training building will be cleared of vegetation and demucked if necessary. The excavation of muck, if required, will be the removal of approximately 4 ft – 6 ft of the top layer of soil, mud, or dirt resting on the Miami Limestone. Parts of the parking area will be cleared of vegetation and demucked.

5.2 Backfilling

A total of approximately 0.6 million cubic yards of fill material is required for the area of the nuclear administration and training buildings and parking area. The majority of the fill material will be supplied by off-site sources. Fill from permitted commercial sources will not be tested by FPL. If the material is from other off-site sources, FPL will meet

with MDC DERM to determine the appropriate testing requirements in accordance with MDC Code Chapter 24.

5.3 Spoils Disposal

Spoils from the construction of the nuclear administration building and training building will be deposited on the berms along the east and west sides of the main return canal and along the southern canal berm of the cooling canal system as described in Section 3.3. Muck removed from the nuclear administration building, training building, and parking area will not be tested.

5.4 Erosion Control

Prior to filling the parking area, various temporary BMP erosion and sedimentation control measures will be used. BMPs utilized during construction may include turbidity curtains, silt fences, or other control measures. After the parking area is filled, a retention or detention pond will be installed to capture runoff during construction of the Project. Temporary sediment basins will be installed to detain sediment-laden runoff from the disturbed areas. Surface runoff will be directed to an oil/water separator, as necessary, before release to the industrial wastewater facility.

5.5 Dewatering

Details of the dewatering plans including proposed dewatering methods, anticipated length of dewatering activities, discharge methods, etc, associated with construction of the Project will be available during the post-certification review process authorized by Section 403.5113(2), F.S., and Rule 62-17.191, F.A.C.

There will be no pumping for general area dewatering activities associated with the nuclear administration building, training building, and parking area. General area dewatering means dewatering of the entire area of interest (e.g., the nuclear administration building, training building, and parking area), or most of the area of interest, all at one time, such that significant declines in water level would be expected well away from the area of interest.

6.0 Laydown Area

The laydown areas will occupy approximately 52 acres, all of which will be impacted by construction activities. The laydown area is located to the west of the plant area within the cooling canals of the industrial wastewater facility as shown in Figure 6 – 1.

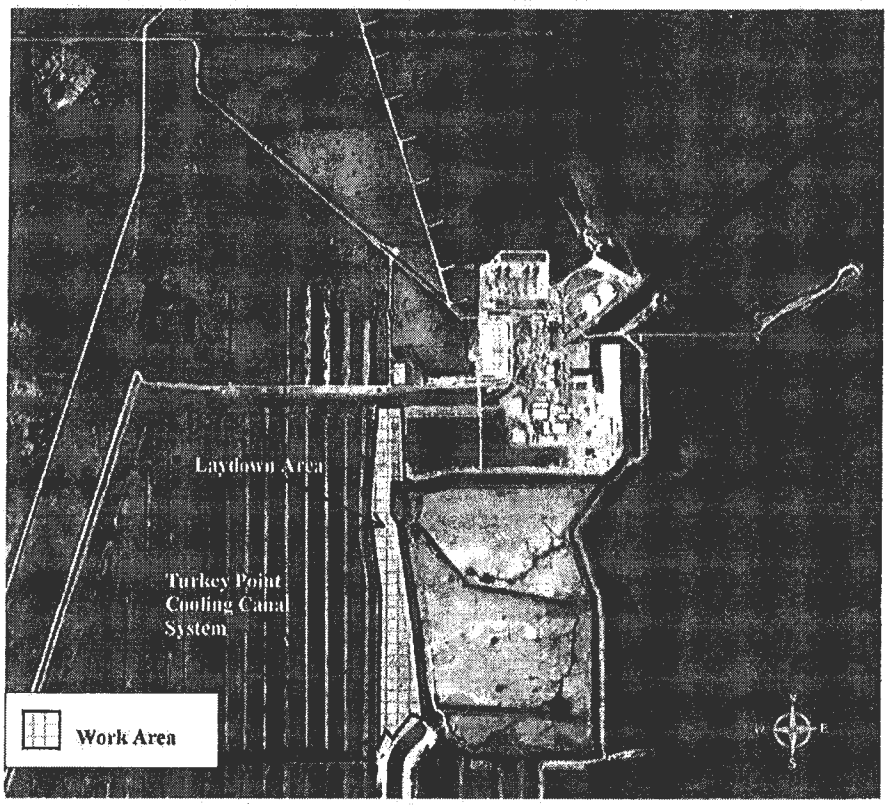


Figure 6 – 1: Turkey Point Units 6 & 7 Laydown Area

6.1 Excavation

Limited excavation is planned within the laydown area. If excavation occurs it will be managed as described in Section 5.1.

6.2 Backfilling

A total of approximately 0.7 million cubic yards of fill material is required for the laydown area. The fill quantity includes a 4.1-acre dead-end portion of the canal near the northwestern edge of the plant area. The majority of the fill material will be supplied by off-site sources. Fill from permitted commercial sources will not be tested by FPL. If the material is from other off-site sources, FPL will meet with MDC DERM to determine the appropriate testing requirements in accordance with MDC Code Chapter 24.

6.3 Spoils Disposal

Limited muck removal may be necessary within the laydown area. If muck is removed, it will be managed as described in Section 3.3.

6.4 Erosion Control

Prior to filling the laydown area, various temporary BMP erosion and sedimentation control measures, such as turbidity curtains, silt fences, or other control measures, will be used. After filling the laydown area, a retention or detention pond will be installed to capture runoff during construction of the Project. Temporary sediment basins will be installed to detain sediment-laden runoff from the disturbed areas. Surface runoff will be directed to an oil/water separator, as necessary, before release to the industrial wastewater facility.

6.5 Dewatering

No dewatering is anticipated for the laydown area.

7.0 FPL Reclaimed Water Treatment Facility and Pipeline

The FPL reclaimed water treatment facility will be located northwest of the plant area on SW 344th Street as shown in Figure 7 – 1. Considering the additional area required for laydown, parking, and other supporting facilities, the total disturbed area is estimated to be approximately 44 acres. The reclaimed water pipeline from Miami-Dade County Water and Sewer Department will enter the subject property boundary and will be located primarily within and/or adjacent to SW 344th Street. The treated reclaimed water delivery pipelines will be routed from the FPL reclaimed water treatment facility to the west side of the makeup water reservoir, as shown below. Excavation for the pipeline installation will be required between the FPL reclaimed water treatment facility and the plant area. Approximately two acres will be disturbed during construction of the delivery pipeline from the FPL reclaimed water treatment facility to the plant area.

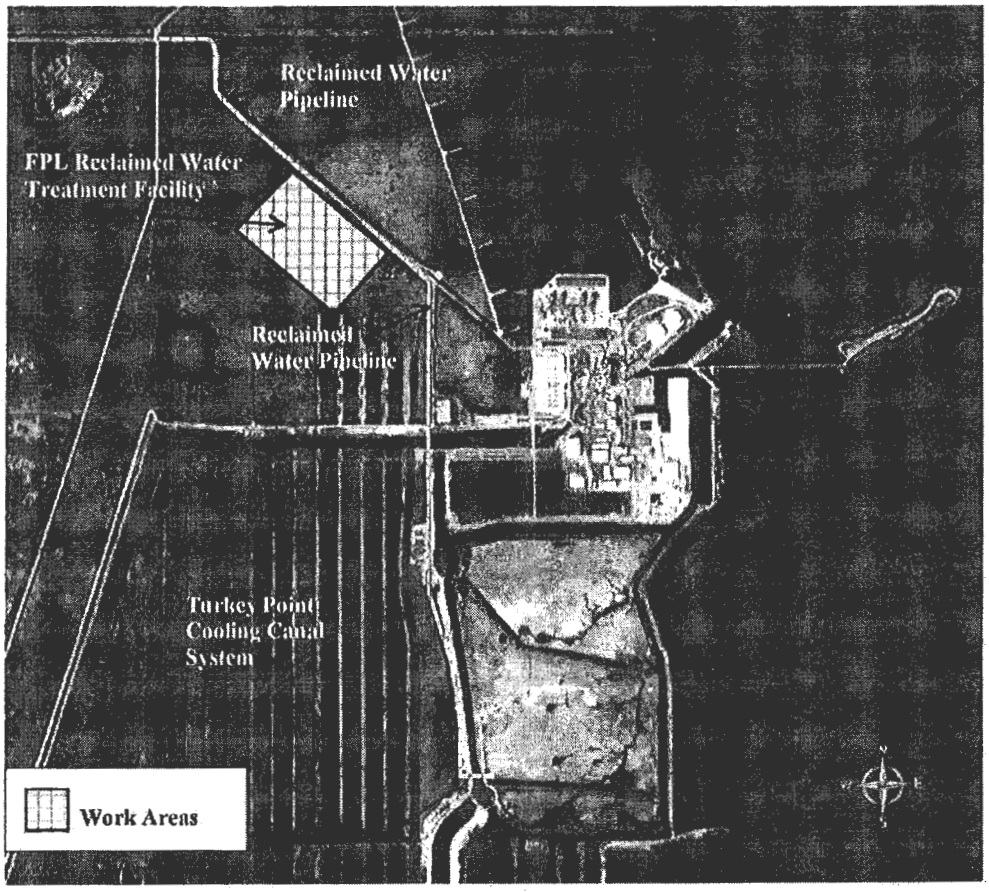


Figure 7 – 1: Turkey Point Units 6 & 7 FPL Reclaimed Water Treatment Facility and Water Pipeline

FPL is investigating another potential site located within the subject property boundary. The excavation, backfilling, soils disposal and erosion control activities described herein

are typical of those that would be implemented at locations for the FPL reclaimed water treatment facility with similar topographical and vegetative characteristics.

7.1 Excavation

The area for the FPL reclaimed water treatment facility will be demucked. The excavation of muck will entail removal of approximately 4 ft – 6 ft of the top layer of soil, mud, or dirt resting on the Miami Limestone. The treated reclaimed water delivery pipeline will be routed from the FPL reclaimed water treatment facility to the west side of the makeup water reservoir on the plant area. Excavation to approximately 11 ft deep will be required between the FPL reclaimed water treatment facility and the plant area.

7.2 Backfilling

A total of approximately 1.6 million cubic yards of fill material is required for the reclaimed water treatment facility and associated laydown and pipelines. The majority of the fill material for the FPL reclaimed water treatment facility will be supplied by off-site sources. Fill from permitted commercial sources will not be tested by FPL. If the material is from other off-site sources, FPL will meet with MDC DERM to determine the appropriate testing requirements in accordance with MDC Code Chapter 24. Following installation of the reclaimed water treatment pipeline the pipeline trench will be backfilled with native soil or clean fill from commercial sources to original topographic grade and the area will be allowed to naturally re-vegetate.

7.3 Spoils Disposal

If the muck removed from the FPL reclaimed water treatment facility is to be reused off-site, FPL will meet with MDC DERM to determine the appropriate testing requirements in accordance with MDC Code Chapter 24. If the muck removed from the FPL reclaimed water treatment facility is not reused off-site, the material will be deposited on the berms along the east and west sides of the main return canal and along the southern canal berm of the cooling canal system as described in Section 3.3.

7.4 Erosion Control

Prior to filling the FPL reclaimed water treatment facility and associated laydown and pipelines areas, various temporary BMP erosion and sedimentation control measures, such as turbidity curtains, silt fences, or other control measures, will be used. After filling, a retention or detention pond will be installed to capture runoff during construction of the Project. Temporary sediment basins will be installed to detain sediment-laden runoff from the disturbed areas. Surface runoff will be directed to an oil/water separator, as necessary, before release to adjacent wetlands.

7.5 Dewatering

Details of the dewatering plans including proposed dewatering methods, anticipated length of dewatering activities, discharge methods, etc, associated with construction of

the Project will be available during the post-certification review process authorized by Section 403.5113(2), F.S., and Rule 62-17.191, F.A.C.

There will be no pumping for general area dewatering activities associated with the FPL reclaimed water treatment facility. General area dewatering means dewatering of the entire area of interest (e.g., FPL reclaimed water treatment facility), or most of the area of interest, all at one time, such that significant declines in water level would be expected well away from the area of interest.

8.0 Radial Collector Wells and Pipeline

Radial collector wells will be constructed to supply back up cooling water to the plant. The wells will be located on the Turkey Point peninsula, east of the existing units as shown in Figure 8 – 1. The delivery pipelines from the radial collector wells will require excavation on the Turkey Point peninsula and the existing berm east of the plant area. Approximately 14 acres will be temporarily disturbed during the construction of the wells and the delivery pipelines, including an area for laydown.

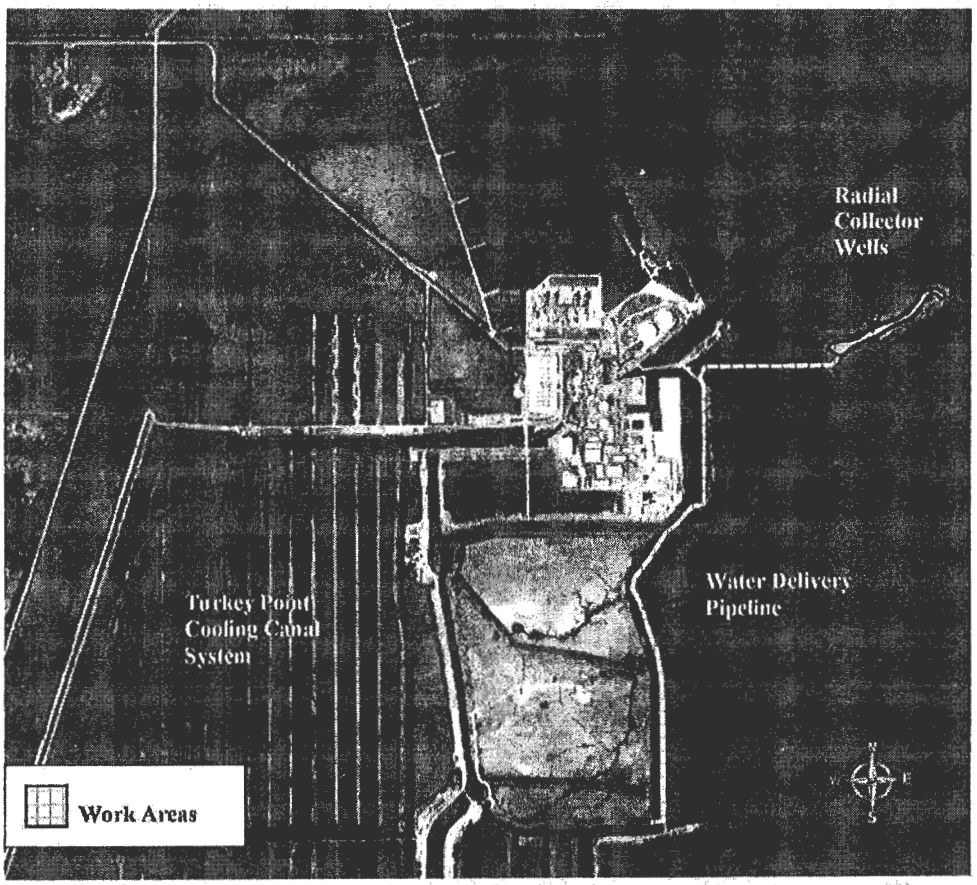


Figure 8 – 1: Turkey Point Units 6 & 7 Radial Collector Wells Area and Water Delivery Pipeline

8.1 Excavation

The excavation of the radial collector wells, the laydown work area and associated water delivery pipelines are limited to uplands previously filled with limerock aggregate.

The construction of the radial collector well caissons will require excavation of previously filled upland areas of the peninsula to approximately 40 ft deep. It is expected that minimal amounts of muck may need to be excavated. The caissons are generally constructed with poured in place concrete or precast concrete segments.
The radial collector well laterals excavation will be directionally drilled at a depth approximately between 25 and 40 ft below Biscayne Bay, thereby avoiding adverse impacts to benthic resources. The drilling technology envisioned for the radial collector well laterals is a conventional rotary-type horizontal drilling method utilizing formation water as the drilling fluid. This drilling method will maintain control of the drilling fluid within the drill bore and within the caisson precluding "frac-outs".

The delivery pipelines from the radial collector wells to the plant area will require excavation on the Turkey Point peninsula and the existing berm east of the plant area.

8.2 Backfilling

There will be minimal, if any, fill required for the construction of the radial collector wells, associated water delivery pipelines, and the construction laydown area. If any fill is required, the fill will be provided by commercial sources or from the native soil removed during the excavation of the radial collector well caissons. Following installation of the water delivery pipeline, the pipeline trench will be backfilled with native soil or clean fill from commercial sources to original topographic grade and the area will be allowed to naturally re-vegetate.

8.3 Spoils Disposal

Spoils from the construction of the radial collector wells, associated water delivery pipelines, and the construction laydown area will be deposited on the berms along the east and west sides of the main return canal and along the southern canal berm of the cooling canal system as described in Section 3.3. Muck removed from the construction of the radial collector wells, associated water delivery pipelines, and the construction laydown area will not be tested.

8.4 Erosion Control

The radial collector well caissons will be installed within upland areas of the Turkey Point peninsula, surrounded by silt fence prior to construction to avoid erosion and turbidity impacts to nearby surface waters. FPL will utilize BMPs during construction of the radial collector wells to isolate the construction area with such methods as turbidity curtains, silt fences, or other erosion and turbidity control measures. FPL has committed to take appropriate and necessary steps to protect nearby waters from turbidity and nutrient runoff during construction of the radial collector wells and associated pipelines.

8.5 Dewatering

Details of the dewatering plans including proposed dewatering methods, anticipated length of dewatering activities, discharge methods, etc, associated with construction of the Project will be available during the post-certification review process authorized by Section 403.5113(2), F.S., and Rule 62-17.191, F.A.C.

Some local small-scale dewatering will be required for the construction of the radial collection well caissons and the removal of water generated while drilling the laterals. In the case of local small-scale dewatering, significant drawdown would be confined to the area of interest. The areas involving dewatering may by isolated using sheet piling technology or equivalent.

Dewatering effluent from the construction of the laterals for the radial collector wells will be routed to the existing industrial wastewater facility to avoid discharge to surrounding surface waters or wetlands.

9.0 Equipment Barge Unloading Area

The existing equipment barge unloading area, located on the north side of the turning basin, will be extended landward to approximately 130 ft by 250 ft to facilitate heavy component unloading for construction of Units 6 & 7 as shown in Figure 9 – 1. The area impacted by construction of the equipment barge unloading area is estimated to be approximately 0.75 acres.

Figure 9 – 1: Turkey Point Units 6 & 7 Equipment Barge Unloading Area

9.1 Excavation

The existing equipment barge unloading area, located on the north side of the turning basin, will be enlarged by excavation of uplands landward to approximately 90 ft by 150 ft and 9 ft deep (approximately 0.21 acres) as shown in Figure 9 – 2. Adjacent to the turning basin and within the area to be excavated, there is an approximate 0.1 acre area of proposed dredging to approximately 9 ft deep.

9.2 Regrading

Approximately 0.44 acres of a previously disturbed area surrounding the equipment barge unloading area will be regraded and a concrete foundation installed to create an unloading area to facilitate component deliveries (see Figure 9 – 2) .

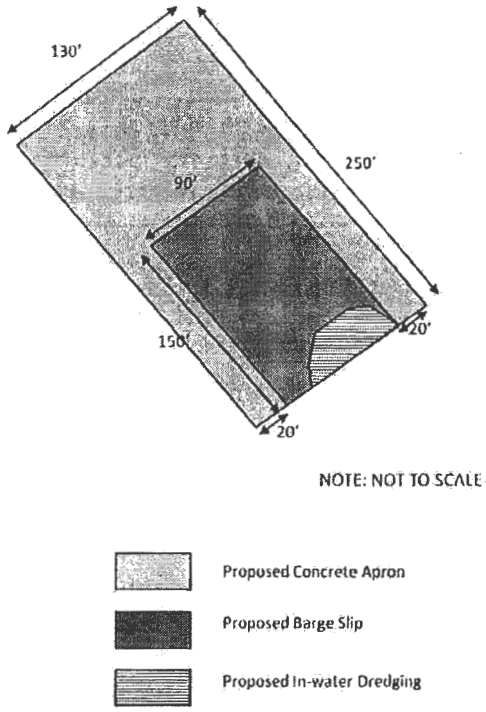


Figure 9 – 2: Turkey Point Units 6 & 7 Equipment Barge Unloading Area - Excavation and Regrading Areas

9.3 Spoils Disposal

Spoils from the construction of the equipment barge unloading area will be deposited on the berms along the east and west sides of the main return canal and along the southern canal berm of the cooling canal system as described in Section 3.3.

9.4 Erosion Control

The equipment barge unloading area will be isolated from the existing turning basin using appropriate BMPs that may include sheet piles to isolate any construction activities from surface waters. The detailed erosion and sediment control BMPs to be implemented for construction within the turning basin for the barge equipment unloading area will be incorporated into a Stormwater Management Plan and Construction Pollution Prevention Plan, which will be available during the post-certification review process authorized by Section 403.5113(2), F.S., and Rule 62-17.191, F.A.C.

9.5 Dewatering

No dewatering is anticipated for the equipment barge unloading area.

10.0 Temporary Access Roads Improvements and Transmission Structure Pads Along SW 359th Street

Roadway improvements on SW 359th Street and SW 117th Avenue are necessary to accommodate the workforce and truck traffic during the construction period. Figure 10 – 1 shows the required work areas within the temporary access area included in MDC Resolution Z-56-07. The areas for improvement comprise approximately 38 acres.

Figure 10 – 1: Turkey Point Units 6 & 7 Temporary Access Roads Improvements and Transmission Structure Pads Along SW 359th Street

10.1 Excavation

Excavation of the area for the temporary access roadway improvements and transmission structure pads east and west of the L-31E along SW 359th Street may be required. If necessary, muck may be removed from these areas.

10.2 Backfilling

Required fill quantities and final design for the temporary roadway improvements and transmission structure pads east and west of the L-31E along SW 359th Street will be provided post certification and prior to construction. It is estimated that approximately 0.28 – 0.32 million cubic yards of fill material will be required. The majority of the fill material will be supplied by off-site sources. Fill from permitted commercial sources will

not be tested by FPL. If the material is from other off-site sources, FPL will meet with MDC DERM to determine the appropriate testing requirements in accordance with MDC Code Chapter 24.

10.3 Spoils Disposal

WEST OF THE L-31E: Any muck that may be removed for the temporary roadway improvements and transmission structure pads west of the L-31E along SW 359th Street will be visually inspected prior to any disturbance for evidence of contamination, i.e. discolored or darker areas. Any areas that indicate the potential for contamination will be sampled in accordance with the Miami Dade County (MDC) Soil Reuse Guidance. Any material that fails the reuse guidance will be tested for Toxicity Characteristic Leaching Procedure (TCLP) prior to disposal at an approved off-site facility. Material that meets the MDC Soils Reuse Guidance limits may be stockpiled for future use, reused, or managed within the cooling canal system as described in Section 3.3

EAST OF THE L-31E: Muck that may be removed for the roadway improvements and transmission structure pads along SW 359th Street east of the L-31E will be deposited on the berms along the east and west sides of the main return canal and along the southern canal berm of the cooling canal system as described in Section 3.3. Muck removed from this area will not be tested.

10.4 Erosion Control

Erosion and sedimentation associated with construction of the roadway improvements (temporary and permanent) and transmission structure pads along SW 359th Street will be controlled through isolation of the construction area from adjacent lands through installation of silt fences, turbidity curtains, and/or other erosion control measures as applicable for the specific construction area conditions.

10.5 Dewatering

No dewatering is anticipated for the temporary access road improvements.

11.0 Transmission Work Within the Cooling Canal System

Transmission structures will be installed on or adjacent to berms within the cooling canal system in the portion of the West Preferred Corridor within the subject property boundary shown in Figure 11 – 1. Exact locations of the structures will be determined post-certification.

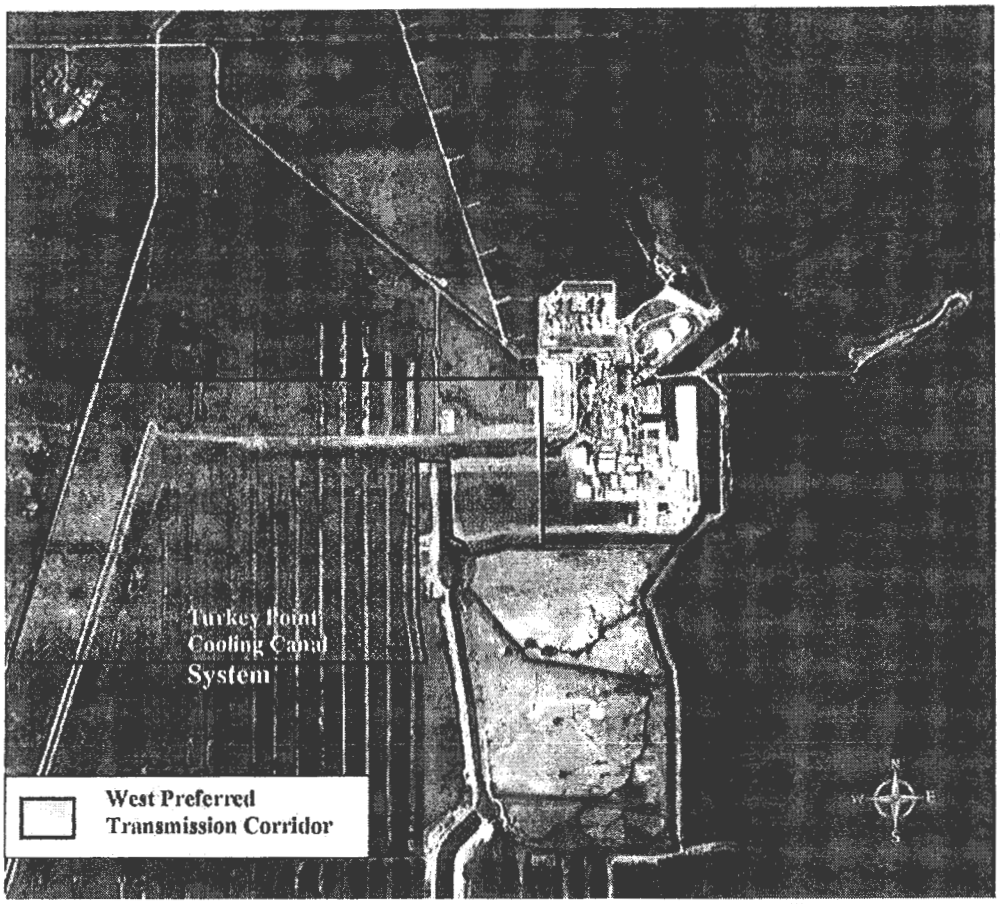


Figure 11 – 1: West Preferred Transmission Corridor

11.1 Excavation

Excavation of the area for the installation of transmission structures on or adjacent to berms within the cooling canal system may be required. If necessary, muck may be removed from those areas.

11.2 Backfilling

Required fill quantities and final design for the installation of transmission structures on or adjacent to berms within the cooling canal system will be provided prior to construction. The majority of the fill material will be supplied by off-site sources. Fill

from permitted commercial sources will not be tested by FPL. If the material is from other off-site sources, FPL will meet with MDC DERM to determine the appropriate testing requirements in accordance with MDC Code Chapter 24.

11.3 Spoils Disposal

Muck that may be removed for the transmission structures on or adjacent to berms within the cooling canal system will be deposited on the berms along the east and west sides of the main return canal and along the southern canal berm of the cooling canal system as described in Section 3.3. Muck removed from this area will not be tested.

11.4 Erosion Control

FPL will deploy necessary erosion controls to prevent secondary impacts to the cooling canal system. This includes but will not be limited to silt fences and floating turbidity curtain/barriers. Erosion controls will be monitored and maintained throughout construction period. All disturbed areas will be fully restored to pre-existing elevations and stabilized.

11.5 Dewatering

Details of the dewatering plans including proposed dewatering methods, anticipated length of dewatering activities, discharge methods, etc, associated with construction of the Project will be available during the post-certification review process authorized by Section 403.5113(2), F.S., and Rule 62-17.191, F.A.C.

Dewatering during the construction of the transmission structure pads along SW 359th Street, in the unlikely event that it is required, may discharge water to catch basins, temporary settling basins, or water bodies if the water is sufficiently free of sediments. For the construction of the transmission structure pads within the cooling canal system, water may be released to the industrial waste water facility.

12.0 Vegetation Management

Prior to the excavation or filling of any area, the vegetation in that area will be evaluated for type, quantity, and impact to habitat. Vegetation to be protected will be identified and tagged appropriately. Disturbance to existing vegetation to remain will be minimized to the greatest extent possible. Vegetative debris associated with site preparation activities will be disposed of or burned on-site. Open burning will only be conducted after notification of MDC DERM, MDC Fire Rescue Department (Fire Protection Division) and the Florida Division of Forestry. All open burning will be conducted in accordance with the requirements of Rule 62-256.700(3), F.A.C.

Vegetative debris from construction of the temporary access roads will be taken to an approved off-site disposal area, burned, or brought on-site to be left as spoils.

Exotic vegetation will be managed in accordance with the *Turkey Point Units 6 & 7*

Exotic Vegetation Management Plan submitted to MDC on March 25, 2011.

13.0 Wildlife Protection

Pursuant to Condition 11 of MDC Zoning Resolution Z-56-07, FPL has submitted a Threatened and Endangered Species Evaluation and Management Plan for the Project that is included in Appendix 10.7.1.3 of the SCA. The management plan addresses potential impacts from the Project to several listed species, including the American crocodile, Eastern Indigo snake, wood stork and other listed bird species, Florida manatee, and the Florida panther. The plan preserves, to the maximum extent possible, all habitats identified as critical to these species, specifically the American crocodile. The management plan addresses short-term measures to be taken during construction and permanent measures necessary to protect critical habitat of the American crocodile. This includes strategies to improve crocodile habitat within cooling canal system berms away from the construction area through enhancement of nesting substrate and creation of freshwater refugia, as well as design features, such as physical barriers, wildlife corridors, and traffic constraints to minimize the potential for impacts to threatened and endangered species. The plan has been developed based on FPL's successful 30-year history in managing threatened and endangered species at the Turkey Point Plant.

As part of the Threatened and Endangered Species Evaluation and Management Plan, construction personnel will receive mandatory wildlife training. This training will include identification of protected species potentially occurring within the construction areas/access roads and to stop work and notify FPL environmental managers if protected species are observed within the work area.

No areas of crocodile nesting habitat will be directly impacted during construction and operation of the Units 6 & 7 Project. Although berms located near the plant area and laydown have historically been utilized by crocodiles for nesting, no nests have occurred within these areas. The majority of nesting activity occurs in the southern portion of the industrial wastewater treatment facility. Section 3.3, describes how the spoils storage area within the cooling canal system of the industrial wastewater facility was selected to avoid crocodiles.

As described in SCA Appendix 10.7.1.2, the FPL Turkey Point Units 6 & 7 Project Manatee Protection Plan includes standard manatee construction conditions for in-water work within the barge turning basin and entrance channel, consistent with Florida Fish and Wildlife Conservation Commission guidelines. These conditions include the requirement of dedicated manatee observers upon all vessels used in the dredging operation or in association with in-water work. Work will cease in the event of a manatee observed within 50 ft of any in-water construction activity. No in-water work or movement of associated vessels will occur after sunset or before sunrise and "no wake/idle" speeds will be enforced within the barge turning basin and entrance channel at all times.

14.0 Spill Protection and Emergency Response Procedures

Environmental control practices (e.g., designating specific areas for fueling and maintenance) will be implemented to minimize spills. These designated areas will be positioned so that spills, if they do occur, will not be adjacent to surface waters.

Should spills occur, immediate cleanup will be performed, with ultimate disposal of the material in an approved facility. When appropriate, such materials will be handled as described in FPL's existing Turkey Point Spill Prevention, Countermeasure and Control Plan (SPCC) and the Turkey Point plant hazardous waste management plan.

In addition, construction specific procedures will be developed and implemented by individual contractors based on FPL directions/criteria.

15.0 Petroleum, Oil, Lubricant and Chemical Handling, Storage and Management

Individual contractors will be responsible for handling hazardous materials used or hazardous waste generated as part of their work. This responsibility includes the proper recordkeeping, transportation, storage, handling, and off-site disposal of such wastes. Contractors will be required to coordinate with FPL and provide documentation of all activities related to hazardous material and/or wastes.

Used oil from construction vehicles and equipment will be collected in appropriate containers and transported off-site for recycling or disposal at an approved facility. The approved disposal facility will be an existing facility that has been previously permitted for commercial recycling or disposal of used oils.

16.0 Waste Management

Waste minimization and recycling will be implemented to the greatest extent practicable. Solid waste materials generated during construction will be managed and disposed of in accordance with all applicable federal, state (Chapter 62-730, F.A.C.), and local rules and regulations. Construction wastes, such as scrap wood and metal, will be transferred to a special storage area within the construction area where they will be separated and stockpiled for salvage and recycling (see Chapter 62-701, F.A.C.). General waste (i.e., typical of municipal solid waste) will be collected in appropriate waste collection containers for disposal at an approved off-site location.

17.0 Dust Control

A number of control measures will be implemented during construction to minimize air emissions and potential impacts. After filling and grading, the untraveled or lightly traveled areas will be vegetated to minimize particulate matter emissions and wind erosion. Heavily traveled unpaved laydown areas and unpaved roads will be stabilized

with material such as limerock. Watering on an as-needed basis will control dust from highly traveled areas, including paved roads. The temporary access roadway improvements will be paved, which will minimize dust emissions from vehicles entering the onsite work areas. Care will be taken to prevent tracking dust and/or dirt on to public roads.

18.0 Noise

All equipment will have the proper housings and mufflers to reduce noise. Regular maintenance will be performed on the equipment to keep it operating efficiently with a minimum of noise. Proper equipment and maintenance will ensure minimal noise for both humans and wildlife.

19.0 Cultural and Historical Artifacts

If any cultural or historical artifacts are encountered during earthwork activities, all work in the general area will cease immediately. As required by the State Division of Historical Resources, FPL will notify the DEP Southeast District Office and the Bureau of Historic Preservation of the find. No work will resume in the area until FPL provides further notification to the contractor.

20.0 General Housekeeping

Trash and domestic waste from construction activities shall be gathered for disposal at a designated location. No foreign material such as trash or debris will be allowed to go into the cooling canal system of the industrial wastewater facility.

Portable toilets will be placed in various locations within the work areas as construction progresses. Proper access will be provided at all times. The portable toilets will be maintained as often as necessary by a firm specializing in such activity.

21.0 Safety Briefings and Traffic Control

Safety Briefings

Safety and environmental protection issues will be topics of discussion at the start of each work shift and emphasis will be placed on the wildlife training taken by every person working on-site.

Traffic Control

Construction and delivery personnel will be informed of the need to follow traffic signage posted for this project. Speed limit signs will be posted on the routes construction traffic will use. The speed limit of interior roads will be strictly enforced. Awareness of the potential for crocodiles and other wildlife to cross the road will be emphasized.

Attachment S

Table 2 – 1
Turkey Point Units 6 & 7 - Earthwork and Materials Management Activities by Work Area [1] [2]

		Plant Area (General Area)	Plant Area (Deep Excavation Area)	Nuclear Administration Bldg, Training Bldg, Parking Area	Laydown Area	FPL Reclaimed Water Treatment Facility and Pipeline	Radial Collector Wells and Pipeline	Equipment Barge Unloading Area	Temporary Access Roads and Transmission Structure Pads Along SW 359th St.	Transmission Work Within the Subject Property Boundary
Location		Within the cooling canals of the industrial wastewater facility	In the plant area and located within the cooling canals of the industrial wastewater facility	North of the plant area and located within the perimeter of the cooling canals of the industrial wastewater facility	West of the plant area and located within the cooling canals of the industrial wastewater facility	Northwest of the plant area, on SW 344th St	On the Turkey Point peninsula, east of the existing units	On the north side of the turning basin	Sections of SW 359th Street and SW 117th Avenue	On or adjacent to berms within the cooling canals of the industrial wastewater facility
Excavation	**Acreage (acres)**	~ 218	~ 2.4	~ 32	~ 52	Facility ~ 44 Pipeline ~ 2	~ 14	Upland excavation ~ 0.21 Dredging ~ 0.1 Upland regarding ~ 0.44	~ 38	To be determined post Certification
	Substrate	Remove ~ 4 ft – 6 ft top layer of muck	To ~ elevation of -35.0 ft NAVD88 or to the top of competent rock in the Key Largo Formation	Remove ~ 4 ft – 6 ft top layer of muck	May require limited excavation	Facility- Remove ~ 4 ft – 6 ft top layer of muck Pipeline- ~ 11 ft	Caissons- muck may be removed if necessary. To depth of ~ 40 ft Laterals- conventional rotary-type horizontal drilling method at depth of ~ 20 – 40 ft below Biscayne Bay. Pipeline- To be determined	Upland excavation ~ 9 ft Dredging ~ 9 ft	Muck may be removed if necessary	Muck may be removed if necessary
Backfilling	**Fill Amount (million cubic yards)**	~ 7.8		~ 0.6	~ 0.7	~ 1.6	Minimal if any fill required	NA	~ 0.28 – 0.32	To be determined prior to construction
	Fill Source	Clean fill from off-site sources	Material from deep excavation areas or clean fill from off-site sources	Clean fill from off-site sources	Clean fill from off-site sources	Facility- Clean fill from off-site sources Pipeline- native soil or clean fill from off-site sources	Caissons and laterals-minimal if any, native soils or clean fill from off-site sources. Pipeline- native soil or clean fill from off-site sources	NA	Clean fill from off-site sources	Clean fill from off-site sources
Spoils Disposal		Deposited on designated berms of the cooling canal system	Will not generate spoils	Deposited on designated berms of the cooling canal system	Deposited on designated berms of the cooling canal system	Muck may be reused off-site. If not reused material will be deposited on designated berms of the cooling canal system	Deposited on designated berms of the cooling canal system	Deposited on designated berms of the cooling canal system	From areas west of L-31 E-material may be stockpiled for future use, deposited on designated berms of the cooling canal system or disposed of at an approved off-site facility From areas east of L-31 E-deposited on designated berms of the cooling canal system	Deposited on designated berms of the cooling canal system
Erosion Control		BMPs such as riprap, small retaining berm, and/or silt fences	NA	BMPs such as turbidity curtains, silt fences or other control measures and temporary sedimentation basins	BMPs such as turbidity curtains, silt fences or other control measures and temporary sedimentation basins	BMPs such as turbidity curtains, silt fences or other control measures and temporary sedimentation basins	BMPs such as such as turbidity curtains, silt fences, or other erosion and turbidity control measures	BMPs such as sheet piles	Installation of silt fences, turbidity curtains, and/or other erosion control measures	Includes but will not be limited to silt fences and floating turbidity curtain/barriers
Dewatering		Details available post-certification. No general area dewatering anticipated	Details available post-certification. Diaphragm wall and horizontal grouted barrier.	Details available post-certification. No general area dewatering anticipated	No dewatering anticipated	Details available post-certification. No general area dewatering anticipated	Details available post certification. Local small-scale dewatering anticipated. Dewatering from lateral construction will be routed to the industrial wastewater facility.	No dewatering anticipated	No dewatering anticipated	Details available post-certification. Along SW 359th St-water to catch basins, temporary settling basins, or water bodies if free of sediments. Within the cooling canal system- water released to the industrial wastewater facility.

NA = Not Applicable
(1) Limited to work areas within the subject property boundary
(2) Other management activities are described in Sections 12 – 21 of this plan

Attachment T

Certificate of FPL Self-Insurance

Attachment T

EXHIBIT 7. Example Certificate of FPL Self-Insurance.

Certificate of FPL Self-Insurance

November 3, 2011

South Florida Water Management District
3301 Gun Club Road,
West Palm Beach, FL, 33416-4680

RE: Florida Power & Light ("FPL") Self-Insured Retention / Self-Insurance
Turkey Point 6&7 Project and associated transmission line Power Plant Siting Act application

To Whom it May Concern:

This letter confirms FPL's self-insured retention / self-insurance (together, the "self-insurance") as required in the Right of Way Consent Agreement between FPL and the South Florida Water Management District ("District"), in regards to the transmission portion of the Turkey Point 6&7 Project (the "Project"). Specific to, and for the duration of, the Project, FPL will maintain self-insurance for the following insurance coverages:

Workers' Compensation: Workers' compensation statutory limits as required by law.

General Liability: Commercial General Liability Insurance on an "Occurrence Basis," with limits of liability not less than $ 3,000,000 per occurrence and/or aggregate combined single limit, bodily injury, death, or property damage with coverages as set forth in the Right of Way Consent Agreement.

For the duration of the FPL's use of the District's right-of-way, Works of the District or real property interests recorded in the public records, FPL will be self-insured to the limits above for injury and/or damage to persons and property caused by any act or omission of FPL, its agents, employees, and/or its contractor's relating to the FPL's use of the District's right-of-way, Works of the District or real property interests recorded in the public records.

For a copy of NextEra Energy, Inc.'s latest audited annual report as evidence of FPL financial ability to self-insure, please copy and paste the following link into your web browser: http://www.nexteraenergy.com/investors/index.shtml

If you would like to contact me to discuss this letter or other matters, my direct phone number is (561) 691-3032. Thank you.

Sincerely,

Grace Costantino
Risk Management Analyst

Attachment U

Kendall Area Potential Exclusion Zone

Attachment U

M:\acad\090531\ExclusionAreaA.mxd NAD 1983 StatePlane Florida East FIPS 0901 FeetTransverse Mercator ndenahan 7/8/2013 5:14:00 PM

FIGURE 1.1.
KENDALL AREA POTENTIAL EXCLUSION ZONE

Sources: Miami-Dade County, 1979; FPL, 2009; FDOT, 2012; ECT,2013.

FPL.

Attachment V

Confidentiality Agreement

Attachment V

CONFIDENTIALITY AGREEMENT

This Confidentiality Agreement is entered into on this 27th day of May, 2011, between the South Florida Water Management District ("DISTRICT"), a political sub-division of the state of Florida and Florida Power and Light ("FPL"), a Florida Corporation

WHEREAS, FPL desires that the DISTRICT provide data and documents for the Turkey Point Power Plant Expansion Project and associated transmission lines, as well as to assess and demonstrate avoidance or minimization of adverse impacts to District projects facilities and operations (WORK); and

WHEREAS, some of the documents requested by FPL are confidential security documents belonging to the DISTRICT which are exempt from public disclosure under Section 119.071(3), F.S.; and

WHEREAS, the documents that are confidential security documents are the subject of this agreement and will be identified in Exhibit "A" which is hereby incorporated as an integral part of this Agreement; and

WHEREAS, the parties are desirous to work together under the parameters of this Agreement,

NOW, THEREFORE, the DISTRICT will provide the confidential, exempt security records listed on Exhibit "A", (hereinafter referred to as the DOCUMENTS) to FPL subject to the following terms:

1. **LIMITATIONS:**

1.1 FPL's right to use the DOCUMENTS in any form other than as delivered or specified herein is not granted unless the DISTRICT expressly allows such use in writing.

2. **TERM:**

2.1 FPL will use the DOCUMENTS for the sole purpose of performing the WORK as described in the Agreement above. The term of the Agreement is for five (5) years from the date of execution or until completion of the WORK, whichever occurs first, unless otherwise extended in writing by both parties. However, the DISTRICT may terminate this Agreement for cause ten (10) days after notifying FPL of its intent to

terminate, if in the DISTRICT'S reasonable discretion FPL has failed to take corrective action to comply in all respects with the Agreement.

3. **SECURITY AND CONFIDENTIALITY:**

3.1 FPL does hereby acknowledge that the DOCUMENTS are confidential, and are exempt from disclosure pursuant to Section 119.071(3), Florida Statutes. FPL shall not disclose, directly or indirectly, or take any other action, or fail to take action, which would result in the unauthorized disclosure or duplication of any confidential DOCUMENTS whatsoever, which are the subject matter of this Agreement.

3.2 FPL may copy the DOCUMENTS, or parts thereof, as may be necessary to facilitate its WORK and for temporary archival and backup purposes. No third-parties will be permitted by the DISTRICT to have access to, or make copies of, the DOCUMENTS without written permission from the DISTRICT. OTHER THAN CONSULTANTS AND ATTORNEYS RETAINED BY FPL

3.3 FPL agrees to make all employees, who have access to the DOCUMENTS or any portion thereof, aware of this Agreement, the confidential nature of the DOCUMENTS, and the limitations on use contained herein. FPL represents and warrants that all such employees are obligated not to use or disclose confidential information (including the DISTRICT'S) obtained in the course of their employment. CONSULTANTS AND ATTORNEYS

4. **NO WARRANTY:**

4.1 FPL accepts the DOCUMENTS and this Agreement, "as is" with no express or implied warranties including, but not limited to the implied warranties of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. FPL shall rely solely on its own inspection, sampling, and verification to determine if the DOCUMENTS are sufficiently accurate, fit and suitable for its purposes pursuant to the Agreement, and shall not rely on any alleged DISTRICT warranties or representations. The DISTRICT does not warrant that the DOCUMENTS will satisfy FPL's requirements.

5. **TERMINATION:**

5.1 Upon termination of this Agreement, FPL will immediately return or destroy the DOCUMENTS and all copies thereof which are or have been in its possession to the DISTRICT, and certify that all copies have been returned or destroyed.

Attachment V

For South Florida Water Management District

Title: Executive Director

South Florida Water Management District
3301 Gun Club Road
West Palm Beach, FL 33406
(561) 682-6109

Dated: 2/14/2011

Office of Counsel
Legal Form Approved

For Florida Power and Light

Title: Transmission Engineering Manager

Florida Power and Light Corporation
700 Universe Boulevard
Juno Beach, FL 33408-0420
(561) 694-4150

Dated: 5/27/2011

Attachment W

Alternate Corridor Conditions Exhibit

Attachment W

M:\acad\090531\Consensus_Corridor_w_Segments_8x11.mxd NAD 1983 StatePlane Florida East FIPS 0901 FeetTransverse Mercator mcruz 10/9/2013 8:52:49 AM

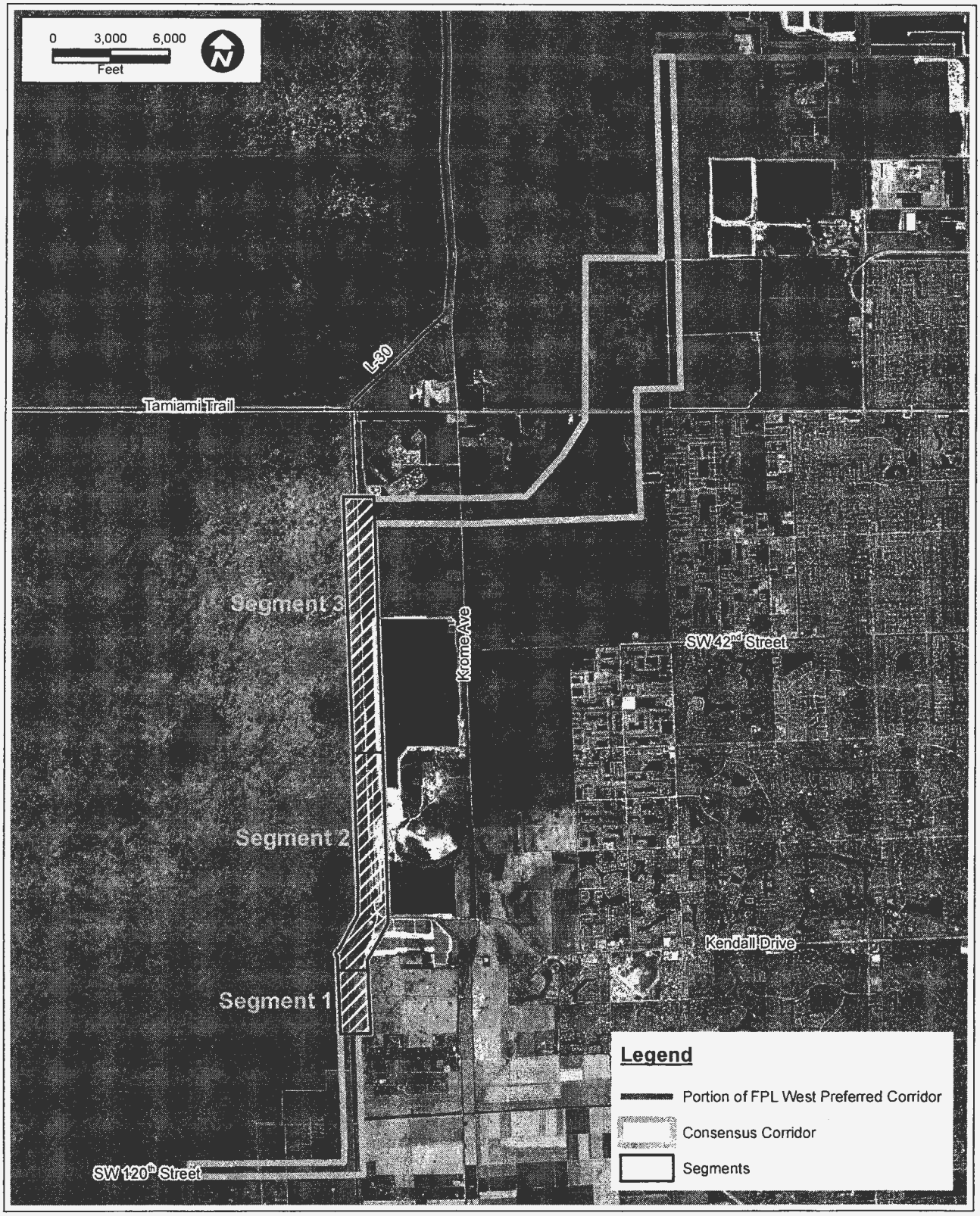


FIGURE
SFWMD M-DLPA AC-2 ALTERNATE CORRIDOR CONDITIONS:
DISTRICT EAST RIGHT-OF-WAY SEGMENTS

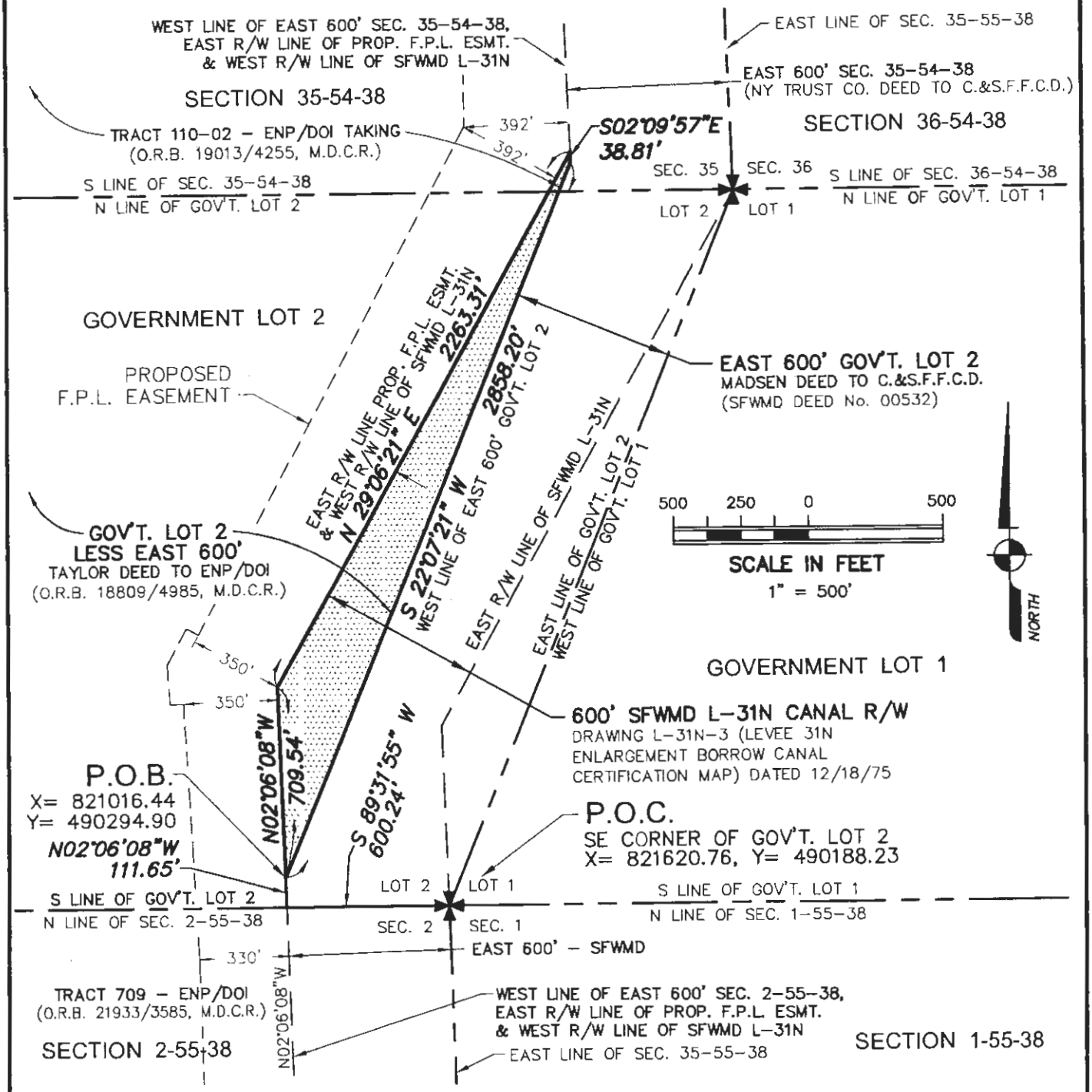
Sources: ECT, 2013.

FPL

Attachment W

SKETCH AND DESCRIPTION

Portions of Section 35, Township 54 South, Range 38 East and
Government Lot 2 of the Hiatus between Township 54 South and Township 55 South, Range 38 East



NOT VALID WITHOUT SHEETS 1 - 4 OF 4.

REVISIONS
Revise ENP Labeling - S.A.M. - 6/18/09

AVIROM & ASSOCIATES, INC.
SURVEYING & MAPPING
50 S.W. 2ND AVENUE, SUITE 102
BOCA RATON, FLORIDA 33432
TEL. (561) 392-2594, FAX (561) 394-7125
www.AVIROM-SURVEY.com

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JOB NO.	8475 - 6R
SCALE	1" = 500'
DATE	10/31/08
BY	S.A.M.
CK'D.	K.M.C.
F.B.	N/A PG.
SHEET	4 OF 4

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
SOUTHEAST DISTRICT OFFICE
400 NORTH CONGRESS AVENUE, 3RD FLOOR
WEST PALM BEACH, FL 33401
561-681-6600

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

July 29, 2013

NOTICE OF PERMIT

Mr. Randall LaBauve
Vice President
Florida Power & Light Company
700 Universe Blvd.
Juno Beach, FL 33408

Miami-Dade County
Permit Number 293962-002-UC
UIC – FPL Turkey Point
Class I Injection Well

Enclosed is Permit Number 293962-002-UC to convert the Class V exploratory well constructed under permit 293962-001-UC to a Class I injection well and begin operational testing under this permit.

This permit serves to convert this Class V exploratory well, EW-1, to a Class I injection well, identified as DIW-1, and to operationally test the system. Exploratory well EW-1 and the associated dual zone monitoring well were constructed under the previous permit (see above). The injection well has a telescopic design with a nominal 18-inch outside diameter (O.D.) tubing extending to a depth of 2975 feet below pad level (bpl) and a final casing landed at 2985 feet bpl. The tubing is fiberglass reinforced pipe (FRP) with a fluid filled annulus. The well's open hole interval is from 2985 to 3230 feet bpl. The dual zone monitoring well, DMZW-1, has an upper monitoring interval of 1450–1490 feet bpl and a lower monitoring interval of 1860–1905 feet bpl. The base of the Underground Source of Drinking Water (USDW) was determined to be at or near 1450 feet bpl.

Although the ultimate purpose of the well is primarily the intended disposal of cooling tower blowdown produced by the proposed nuclear powered Unit 6 and Unit 7, as part of an overall injection well system envisioned in the future, the operational testing which may be authorized under this permit will be undertaken only with various dewatering, well development water and industrial wastewaters associated with the construction of FPL's Turkey Point Units 6 & 7. These units, Units 6 & 7, are not anticipated to become operational for several years. The operational testing period of DIW-1 will not exceed two years and, in order to continue injecting, an operation permit will be required once operational testing has been completed.

Operational testing wastewaters are expected to consist of the following sources at the indicated maximum rates:

- Dewatering water produced from the site preparation for Unit 6 and Unit 7 — 5000 gallons per minute (gpm)
- Hydrostatic tank testing waters — 5000 gpm
- Radial collector well development water — 5000 gpm
- Concrete Batch Plant wash down waters, miscellaneous equipment facilities wash down, and miscellaneous non-hazardous industrial wastewaters — 550 gpm

Any party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in West Palm Beach, Florida.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

07-29-13

Jill S. Creech, P.E. Date
Southeast District Director

JSC/LAB/jmn

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on July 29, 2013, to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section.120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Vanessa Dykstra
Clerk

7/29/13
Date

Copies Furnished To:

Copies furnished to:

Brad Akers, FDEP/WPB
Cathy McCarty, FDEP/TLH
Lee Hefty, PERA/DERM
Bill Maher, FPL
David McNabb, MHC
Joe Haberfeld, FDEP/TLH
Nancy Marsh, USEPA/ATL
Emily Richardson, SFWMD
Marister Ruiz, FPL
David Holtz, HCE

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
SOUTHEAST DISTRICT OFFICE
400 NORTH CONGRESS AVENUE, 3RD FLOOR
WEST PALM BEACH, FL 33401
561-681-6600

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

Underground Injection Control
Class I Injection Well System
Construction and Testing Permit

Permittee:
Mr. Randall LaBauve
Vice President
Florida Power & Light Company
700 Universe Blvd.
Juno Beach, FL 33408

Permit/Certification

Permit Number:	293962-002-UC
Facility ID Number:	293962
WACS ID:	56427
Date of Issuance:	July 29, 2013
Date of Expiration:	July 28, 2018
Permit Processor:	Joseph May

Facility
FPL Turkey Point Power Plant
9760 SW 344th Street
Florida City, FL 33035

Location

County:	Miami-Dade
Latitude:	25° 25' 03" N
Longitude:	80° 20' 20" W

Project: Class I Injection Well System: Injection Well IW-1 and monitoring well DZMW-1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.), Chapters 62-4, 62-520, 62-528, 62-550, 62-610 and 62-660. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows.

The permittee is reminded of the necessity to comply with the pertinent regulations of any other regulatory agency, as well as any county, municipal, and federal regulations applicable to the project. These regulations may include, but are not limited to, those of the Federal Emergency Management Agency in implementing flood control measures. This permit should not be construed to imply compliance with the rules and regulations of other regulatory agencies.

TO CONSTRUCT AND OPERATIONALLY TEST: This permit serves to convert the Class V exploratory well, EW-1, to a Class I injection well, identified as DIW-1, and to operationally test the system. Exploratory well EW-1 and the associated dual zone monitoring well were constructed under the previous permit (293962-001-UC). The well has a telescopic design with a nominal 18-inch outside diameter (O.D.) tubing extending to a depth of 2975 feet below pad level (bpl) and a final casing landed at 2985 feet bpl. The tubing is fiberglass reinforced pipe (FRP) with a fluid filled annulus. The well's open hole interval is from 2985 to 3230 feet bpl. The dual zone monitoring well, DMZW-1, has an upper monitoring interval of 1450–1490 feet bpl and a lower monitoring interval of 1860–1905 feet bpl. The base of the Underground Source of Drinking Water (USDW) was determined to be at or near 1450 feet bpl.

Although the ultimate purpose of the well is primarily the intended disposal of cooling tower blowdown produced by the proposed nuclear powered Unit 6 and Unit 7, as part of an overall injection well system envisioned in the future, the operational testing which may be authorized under this permit will be undertaken only with various dewatering, well development water and industrial wastewaters associated with the construction of FPL's Turkey Point Units 6 & 7. These units, Units 6 & 7, are not anticipated to become operational for several years. Operational testing shall not include wastewaters produced from the operation of Units 6 & 7. The operational testing period of DIW-1 will not exceed two years and, in order to continue injecting, an operation permit will be required once operational testing has been completed.

IN ACCORDANCE WITH: The Application to Construct DEP Form No. 62-528.900(1) received on 28 January 2013 and technical specifications, drawings, plan of study and addenda submitted to this agency.

LOCATION: Within the FPL Turkey Point Power Plant property and south of the intended plant island for the proposed Units 6 & 7

Issue Date: July 29, 2013
Expiration Date : July 28, 2018

The injection and monitoring wells at this facility are constructed as follows:

Injection Well:

Well Name	*WACS Effluent Testsite ID*	*Total Well Depth*	*Outside Diameter (inches)*	*Interval Type*	*Interval (feet bpl)*
DIW-1		3230 feet bpl	64	Pit Casing	0–33
			54	Surface Casing	0–255
			44	Intermediate	0–1090
			34	USDW Casing	0–1535
			24	Final Casing	0–2985
			18.11	FRP tubing	0–2975

Monitoring Well

Well Name	*WACS Monitoring Well Testsite ID*	*Outside Diameter (inches)*	*Interval Type*	*Depth Cased (ft bpl)/Total (ft bp)*
DZMW-1		16	Upper	1450–1490
DZMW-1		5.97	Lower	1860–1905

SUBJECT TO: Specific Conditions I–IX and General Conditions 1–24

Specific Conditions

I. GENERAL REQUIREMENTS

1. This permit is the authorization to convert Class V Exploratory Well EW-1 authorized by permit number 293962-001-UC to the Class I injection well identified as DIW-1 as well as to commence operational testing. This permit does not authorize the construction or operational testing of any other well or wells. [62-528.440(2)(a)]

2. No underground injection is allowed that causes or allows movement of fluid into a USDW if such fluid movement may cause a violation of any Primary Drinking Water Standard or may otherwise affect the health of persons. [62-528.440(2)(c)]

3. In the event a well must be plugged or abandoned, the permittee shall obtain a permit from the Department as required by Chapter 62-528, Florida Administrative Code. When no longer used for their intended purpose, these wells shall be properly plugged and abandoned. Within 180 days of well abandonment, the permittee shall submit to the Department the proposed plugging method, pursuant to Rule 62-528.460, F.A.C. [62-528.460(1) and 62-528.435(6)]

4. If injection is intended to continue beyond the expiration date of this permit the permittee shall apply for, and obtain an operation permit. If necessary to complete the two-year operational testing period, the permittee shall apply for renewal of the construction permit at least 60 days prior to the expiration date of this permit. [62-528.307(2)(a)]

II. SITE REQUIREMENTS

This section has been simplified. Usually the permit conditions in this section pertain to well construction activities, however, the well proposed for Class I injection and the well proposed for the monitoring well have been constructed.

1. Hurricane Preparedness – Upon the issuance of a "Hurricane Watch" by the National Weather Service, the preparations to be made include but are not necessarily limited to the following:

    a. Secure all on-site salt and stockpiled additive materials to prevent surface and/or groundwater contamination.

III. CONSTRUCTION AND TESTING REQUIREMENTS

This section has been reduced since the permit conditions in this section pertain to well construction and associated testing, however, the well proposed for Class I injection and the well proposed for the monitoring well have been constructed.

A. Mechanical Integrity

1. Mechanical Integrity.
    a. Injection is prohibited until the permittee affirmatively demonstrates that the well has mechanical integrity. A pressure test was previously and successfully demonstrated on June 21, 2012, therefore only a radioactive tracer survey (RTS) shall be required to complete this mechanical integrity test (MIT). Prior to operational testing the permittee shall establish, and thereafter maintain the mechanical integrity of the well at all times.
    b. If the Department determines that the injection well lacks mechanical integrity, written notice shall be given to the permittee. The pressure test was performed and passed on 21 June 2012.
    c. Within 48 hours of receiving written notice that the well lacks mechanical integrity the permittee shall cease injection into the well unless the Department allows continued injection pursuant to subparagraph d below.
    d. The Department shall allow the permittee to continue operation of a well that lacks mechanical integrity if the permittee has made a satisfactory demonstration that fluid movement into or between underground sources of drinking water is not occurring.

    [62-528.307(2)(f)]

2. Mechanical integrity of each injection well shall be determined pursuant to Rule 62-528.300(6)(b) and (c), F.A.C. For wells with a fluid-filled casing/tubing annulus, this includes both annular monitoring and a pressure test of the casing/tubing annulus initially and every 5 years thereafter.

3. Verification of pressure gauge calibration must be provided to the Department representative at the time of the test and in the certified test report. [62-528.300(6)(f)]

4. The Department must be notified seventy-two (72) hours prior to all testing for mechanical integrity on the injection wells. The testing procedure must be approved by the Department before testing begins. All testing must be initiated during daylight hours, Monday through Friday. An evaluation of all test results must be submitted with all test data. [62-528.300(6)(f)]

B. Surface Equipment

1. The integrity of the monitoring zone sampling systems shall be maintained at all times. Sampling lines for each monitoring zone shall be clearly and unambiguously identified at the point at which samples are drawn. All reasonable and prudent precautions shall be taken to ensure that samples are properly identified by monitoring zone and that samples obtained are representative of those zones. Sampling lines and equipment shall be kept free of contamination with independent discharges with no interconnections with any other lines. [62-528.307(1)(f) and 62-528.307(3)(b)]

2. Prior to beginning operational testing the surface equipment for the injection well shall maintain compliance with Chapter 62-528.450(2)(j), F.A.C. for water hammer control, screening, access for logging and testing, and reliability and flexibility in the event of damage to the well and effluent piping. A regular program of exercising the valves integral to the well head shall be instituted. A record shall be maintained at the facility that documents the exercising of the valves. [62-528.307(1)(f) and 62-528.307(3)(b)]

3. The surface equipment and piping for the injection and monitoring wells shall be kept free of corrosion at all times. [62-528.307(1)(f) and 62-528.307(3)(b)]

4. Spillage onto the injection well pad(s) during construction activities, and any waters spilled during mechanical integrity testing, other maintenance, testing or repairs to the system(s) shall be contained on the pad(s) and directed to a sump which in turn discharges to the pumping station wet well or via other approved means to the injection well system(s). [62-528.307(1)(f) and 62-528.307(3)(b)]

5. The injection well pad shall be maintained and retained in service for the life of the injection well. The injection and monitoring well pads are not, unless specific approval is obtained from the Department, to be used for storage of any material or equipment at any time. [62-528.307(1)(f) and 62-528.307(3)(b)]

IV. QUALITY ASSURANCE/QUALITY CONTROL

1. The permittee shall ensure that the construction and operational testing of this injection well system shall be as described in the application and supporting documents. Any proposed modifications to the permit shall be submitted in writing to the Underground Injection Control Program for review and clearance prior to implementation. Changes constituting a minor modification, or less, under Chapter 62-528.355(5), F.A.C. will be reviewed by the Department, approved when appropriate and incorporated into this permit. Changes or modifications other than those described above will require submission of a completed application and appropriate processing fee as per Rule 62-4.050, F.A.C. [62-528.100, 62-4.050]

2. Proper operation and maintenance include effective performance and appropriate quality assurance procedures; adequate operator staffing and training; and adequate laboratory and process controls. [62-528.307(2)(b)]

3. All water quality samples required by this permit shall be collected in accordance with the appropriate Department Standard Operation Procedures (SOP), pursuant to Chapter 62-160, Quality Assurance, Part II, Field Procedures, F.A.C. A certified laboratory shall conduct the analytical work, as provided by Chapter 62-160, Quality Assurance, Part III, Laboratory Certification and Procedures, F.A.C. Department approved test methods shall be utilized, unless otherwise stated in this permit. All calibration procedures for field testing and laboratory equipment shall follow manufacturer's instrumentation manuals and satisfy the requirements of the Department SOPs. A listing of the SOPs pertaining to field and laboratory activities is available at the FDEP website at: http://www.dep.state.fl.us/water/sas/sop/sops.htm. [62-4.246, 62-160]

4. All indicating, recording, SCADA and totalizing devices associated with the injection well system shall be maintained in good operating condition and calibrated annually at a minimum. Laboratory Agency (USEPA) guidelines as expressed in Standard Methods for the Examination of Water and Wastewater shall be used. The pressure gauges, flow meter, and chart records shall be calibrated using standard engineering methods. [62-528.307(2)(b)]

5. All reports submitted to satisfy the requirements of this permit shall be signed by a person authorized under Rule 62-528.340(1), F.A.C., or a duly authorized representative of that person under Rule 62-528.340(2), F.A.C. All reports required by this permit which are submitted to the Department shall contain the following certification as required by Rule 62-528.340(4), F.A.C.:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
   [62-528.340(1), (2), and (4)]

6. Analyses shall be conducted on unfiltered samples, unless filtered samples have been approved by the UIC Compliance Assurance (CA) section of the Southeast District office of the Department as being more representative of ground water conditions. [62-520.310(5)]

7. Continuous on-site supervision by qualified personnel (engineer and/or geologist, as applicable) is required during all testing and geophysical logging operations. [62-528.440(5)(b)]

V. REPORTING REQUIREMENTS

1. The permittee shall provide copies of all correspondence relative to this permit to the Department's Tallahassee and Southeast District offices. Such correspondence includes but is not limited to reports, schedules, analyses and geophysical logs required by the Department under the terms of this permit. In addition, a copy of the cover letters for final engineering/construction reports and mechanical integrity reports shall be sent to the U. S. Environmental Protection Agency, Region 4, UIC program, 61 Forsyth St. SW, Atlanta, GA 30303-8909. [62-528.430]

2. The permittee shall conduct operational testing of the injection well system to demonstrate that the well can absorb the design and peak daily flows that are expected, prior to granting approval for operational testing. [62-528.450(3)(a)]

3. The short-term injection test request shall contain the following justifications:
    a. Cement bond logs and interpretation
    b. Final downhole television survey with interpretation
    c. Radioactive tracer test results
    d. Demonstration of mechanical integrity, which shall include Items 1) through 3) above, and the pressure testing and temperature logging results (if the test is to be run using non-potable water)
    e. Reasonable assurance that adequate confinement exists

[intentionally blank]

f. Proposed source water to be used. Per Rule 62-528.405(3)(b), F.A.C., if an adequate water supply for the injection test does not exist, and the data collected during drilling provide assurance of the presence of confining bed(s), the applicant shall, after demonstrating mechanical integrity pursuant to Rules 62-528.300(6)(b)2. and (c), F.A.C., be allowed to use an alternate source for testing only with specific prior written authorization from the Department as described in Rule 62-528.100(2), F.A.C. An analysis of the alternate water source according to the table below is required prior to Department approval:

Water Source	**Required Analyses**
Potable Water	No analysis needed
Domestic Wastewater	A copy of the latest comprehensive analysis submitted to the Department's domestic wastewater program
Desalination Concentrate or Other Industrial Wastewater	A copy of the latest comprehensive analysis submitted to the Department's industrial wastewater program. If more than one year old, sample the water for the parameters required for monthly monitoring of the wastewater in Specific Condition VII.
Ground Water	Sample the water for: • total dissolved solids (mg/L) • chloride (mg/L) • specific conductance (temperature compensated, µmho/cm or µS/cm) • total suspended solids (TSS) (mg/L) • nitrogen, ammonia, total as N (mg/L) • nitrogen, total Kjeldahl as N (TKN, mg/L) • nitrogen, nitrate, total as N (mg/L) • sodium (mg/L) • potassium (mg/L) • calcium (mg/L) • magnesium (mg/L) • total iron (mg/L) • bicarbonate (mg/L) • phosphorous, total as P (mg/L) • pH (standard units, s.u.) • sulfate, total as SO_4 (mg/L) • field temperature (°C) • gross alpha (pCi/L) • combined radium-226 and radium-228 (pCi/L)
Surface Water	The water as above for ground water, with the additional constituents: • total and fecal coliform (cts/100ml), • *E. coli* (cts/100ml), *Enterococci spp.* (cts/100ml), and • Turbidity (NTU).

g. Planned injection testing procedures.
[62-528.405(3)(b)]

VI OPERATIONAL TESTING AND MONITORING REQUIREMENTS

A. Operational Testing

1. Prior to operational testing, the permittee shall comply with the requirements of rule 62-528.450(3)(a),(b), and (c), F.A.C. [62-528.307(2)(e)]

2. The operational testing of the Class I injection well system under this permit shall not commence without written authorization from the Department. [62-528.450(3)(b)]

3. Prior to operational testing approval, the following items must be submitted (with the request for operational testing approval) for Department review and approval:

   a. Lithologic and geophysical logs with interpretations.
   b. A copy of the borehole television survey(s) or borehole televiewer log(s) of the injection well with interpretation.
   c. Certification of mechanical integrity and interpreted test data.
   d. Results of the short-term injection test with interpretation of the data.

   e. A description of the actual injection procedure including the anticipated maximum pressure and flow rate at which the well will be operated under normal and emergency conditions.
   f. Information concerning the compatibility of the injected wastewater with fluids in the injection zone and formation in both the injection zone and the confining zone.
   g. Certification of completion of well construction from water well contractor and certification by the Engineer of Record that permit conditions are met.
   h. Surface equipment (including piping, pressure gauges and flow meters, and all appurtenances) installation certified by the Engineer of Record.
   i. A survey indicating the exact location in metes and bounds of all wells authorized by this permit shall be provided prior to issuance of an operating permit. Draft operation and maintenance manual, including a description of surge and water hammer control and emergency discharge management plan procedures. The emergency discharge system must be fully constructed and operational (ready to operate) prior to approval of operational testing.
   j. Calibration certificates for pressure gauges and flow meters.
   k. Signed and sealed record "as-built" engineering drawings of the injection well system including all well construction, subsurface and surface piping and equipment, and appurtenances.
   l. Demonstration of confinement and definition of the injection and confining sequences shall utilize data collected during the drilling, logging and testing of the injection and monitoring wells. This submittal shall be prepared, signed, and sealed by a Florida Registered Professional Geologist or appropriately qualified Professional Engineer.
   m. Background water quality data from the monitoring and injection zones, analyzed for primary and secondary drinking water standards (62-550, F.A.C.) and minimum criteria parameters (62-520, F.A.C.) as attached. (The results submitted as part of the Facility's request for Department authorization to conduct injection testing may be referenced.)

n. Other data obtained during well construction needed by the Department to evaluate whether the well will operate in compliance with Department Rules.
[62-528.450 (3)(a)3.i. and 62-528.455(1)(c)6]

4. Prior to operational testing, the permittee shall comply with the requirements of Rule 62-528.450(3)(a),(b), and (c), F.A.C.

5. Pressure gauges and flow meters shall be installed on the injection well prior to initiating injection activities at the site. [62-528.450(3)(a)]

6. Prior to the authorization of operational testing by the Department, the permittee shall contact the UIC CA Section of the Department, Southeast District, to arrange a site inspection. The inspection will determine if the conditions of the permit have been met and to verify that the injection well system is operational. During the inspection, emergency procedures and reporting requirements shall be reviewed. [62-528.450(3)(c)]

7. The Engineer of Record or designated qualified representative must be present for the start-up operations and the Department must be notified in writing of the date operational testing commenced for the subject well. [62-528.440(5)(b)]

B. Monitoring

1. To assist the permittee in the submission of monitoring data required by this permit, a standardized data form has been developed and is attached to this permit. Use of these forms is encouraged.
   a. If the permittee chooses to use the standardized forms provided, the monthly submittal will include the standardized reporting forms, laboratory pages and any supporting documents. The report may be sent via electronic mail as an Adobe™ PDF to the following UIC Program e-mail addresses:
      i. District e-mail
      ii. Tallahassee e-mail
   b. If the permittee prefers to use a data reporting format other than the attached forms, the following identifying information must be included on each data sheet:
      i. Facility Name
      ii. Well Name
      iii. UIC Permit Number
      iv. WACS Facility ID
      v. WACS Testsite ID
      vi. WACS Testsite Name

The monthly submittal shall include the permittee's reporting forms, signatory pages, laboratory pages and supporting documents. A paper copy of the monthly submittal should be sent to Department staff at the following addresses:

UIC CA
Southeast District Office FDEP
400 N. Congress Ave – 3rd Floor
West Palm Beach FL 33401
33401-2912

FDEP
MS 3530
UIC Program
2600 Blairstone Rd
Tallahassee FL 32399-2400

[62-528.307(3)(d)]

c. Submission of the monthly operating report (MOR) submittal shall begin with the commencement of operational testing.

[intentionally blank]

2. Upon commencing operational testing the injection well system shall be monitored in accordance with Rules 62-528.425(l)(g) and 62-528.430(2), F.A.C. The following injection well performance data and monitor zone data shall be recorded and reported in the Monthly Operating Report (MOR) as indicated below. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. [62-528.307(2)(d),528.430(2) and 62-528.450(3)(b)5.]

PARAMETER	UNIT	RECORDING FREQUENCY	FREQUENCY OF ANALYSES		
			DIW-1	MW-1A upper zone	MW-1B lower zone
Flow Rate, max.	gpm	continuous	[a]		
Flow Rate, min.	gpm	continuous	[a]		
Flow Rate, avg.	gpm	continuous	[a]		
Total Volume Water Injected	MG	daily			
Injection Pressure, max.	psi	continuous	[a]		
Injection Pressure, min.	psi	continuous	[a]		
Injection Pressure, avg.	psi	continuous	[a]		
Annular Pressure, max	psi	continuous	[a]		
Annular Pressure, min	psi	continuous	[a]		
Annular Pressure, avg.	psi	continuous	[a]		
Water Level, max.	feet (NAVD 88) or psi	continuous		[a]	[a]
Water Level, min.	feet (NAVD 88) or psi	continuous		[a]	[a]
Water Level, avg.	feet (NAVD 88) or psi	continuous		[a]	[a]
Chloride	mg/L	Grab	W	W	W
pH [b]	std. units	Grab	W	W	W
Specific Conductance [b]	µmhos/cm or µS/cm	Grab	W	W	W
Sulfate	mg/L	Grab	W	W	W
Temperature [b]	°C	Grab	W	W	W
Total Dissolved Solids	mg/L	Grab	W	W	W
Additional parameters as applicable [c]					

M - Monthly; Q- Quarterly; W - Weekly
[a] - Operational data reporting for flows, pressures and water levels: daily max, min and average from continuous reporting; monthly max, min and average (calculated from daily averages).
[b] - Field samples
Weekly monitoring well parameters may be requested to be reduced to monthly after a 6-month testing period and written Department approval.
[c] – Prior to the injection of any wastewater stream the permittee shall provide anticipated water quality data for that wastewater stream for the Department to review and approve. Upon review of this data the Department may amend the monitoring program requirements.

3. A record shall be included in each MOR that documents the monthly exercising of valves. For each valve, this record shall include the valve identification number (tag), type of valve, date and time when exercised, and the initials of operator(s) performing the work. The record shall be maintained at the facility and shall be available for review by FDEP personnel at all times. [62-528.430(2)(b)2.b.]

4. The well shall be shut-in for a period of time necessary to conduct a valid observation of pressure fall-off on an annual basis. [62-528.430(2) (b) and (d); 62-528.450(3)(b)6.]

5. Pertaining to the evacuation (purging) of the monitoring well(s), which is required prior to the collection of samples for the Monthly Operating Reports (MORs), the facility may elect to follow either one of the following two purging protocols:

   a. <u>The protocol stated below</u>:
   A minimum of three well volumes of fluid shall be evacuated from the monitoring systems prior to sampling for the chemical parameters listed above. Sufficient purging shall have occurred when either of the following has occurred:

      1) pH, specific conductance <u>and</u> temperature when sampled, upon purging the third or subsequent well volume, each vary less than 5% from that sampled upon purging the previous well volume; or
      2) Upon purging the fifth well volume.

[intentionally blank]

b. The following protocol taken from DEP-SOP-001/01(Field Procedures):
   1) Purge until the water level has stabilized (well recovery rate equals the purge rate), then purge a minimum of one well volume, and then collect the first set of stabilization parameters, namely pH, specific conductance and temperature;
   2) Thereafter, collect stabilization parameters ≥ every ¼ well volume;
   3) Purging shall be complete when either of the following have occurred:
      a) 3 consecutive readings of the parameters listed below are within the following ranges[1]:
         - pH ± 0.2 Standard Units
         - Specific Conductance ± 5.0% of reading
         - Temperature ± 0.2°C
      b) Upon purging the fifth well volume.

[62-160.210(1) and 62-528.430(2)]

6. The flow from the monitoring zones during well evacuation and sampling shall not be discharged to aquifers containing an Underground Sour
7. ce of Drinking Water (USDW). Disposal authorization requests shall be submitted for review and approval prior to, or with, the operational testing request . Operational testing wastewaters are expected to consist of the following sources at the indicated maximum rates:

   - Dewatering water produced from the site preparation for Unit 6 and Unit 7 — 5000 gallons per minute (gpm)
   - Hydrostatic tank testing waters — 5000 gpm
   - Radial collector well development water — 5000 gpm
   - Concrete Batch Plant wash down, miscellaneous equipment facilities wash down, and miscellaneous non-hazardous industrial wastewaters — 550 gpm

   [62-4.030, 62-620.320]

8. The permittee shall submit monthly to the Department the results of all injection well and monitoring well data required by this permit no later than the last day of the month immediately following the month of record. The results shall be sent to the Department of Environmental Protection, [Name] District Office, [Address]. A copy of this report shall also be sent to the Department of Environmental Protection, Underground Injection Control Program, MS 3530, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. [62-528.307(2)(d)]

[1] Provided dissolved oxygen in the groundwater of the zone being monitored is ≤ 20% of saturation for the measured temperature and turbidity is ≤ 20 NTUs. This assumption holds true for groundwater in most zones of the Floridan aquifer.

VII. ABNORMAL EVENTS

1. In the event the permittee is temporarily unable to comply with any of the conditions of a permit due to breakdown of equipment, power outages or destruction by hazard of fire, wind, or by other cause, the permittee's representative of the facility shall notify the Department. [62-528.415(4)(a)]

    a. Notification shall be made in person, by telephone, or by electronic mail (e-mail) within 24 hours of breakdown or malfunction to the UIC Compliance Assurance (CA) section of the Southeast District office of the Department. [62-528.307(1)(x)]

    b. A written report of any noncompliance referenced in Specific Condition (1) above shall be submitted to the UIC CA section of the Southeast District office of the Department and the Tallahassee office within five days after its occurrence. The report shall describe the nature and cause of the breakdown or malfunction, the steps being taken or planned to be taken to correct the problem and prevent its reoccurrence, emergency procedures in use pending correction of the problem, and the time when the facility will again be operating in accordance with permit conditions. [62-528.415(4)(b)]

2. The Department shall be notified immediately of any problems that may seriously hinder compliance with this permit, construction progress or good construction practice. The Department may require a detailed written report describing the problem, remedial measures taken to assure compliance and measures taken to prevent recurrence of the problem. [62-528.415(4)(b)]

VIII. EMERGENCY DISPOSAL

1. All applicable federal, state and local permits must be in place to allow for any alternate discharges due to emergency or planned outage conditions. [62-528.415(4)(c)1]

2. Any proposed changes in emergency disposal methods shall be submitted for Departmental review for approval prior to implementation. [62-528.415(4)(c)]

3. The emergency disposal method must be fully operational in the event of planned or emergency outages of the injection well system prior to the initiation of operational testing. [62-528.415(4)(c)2]

IX. FINANCIAL RESPONSIBILITY

1. The permittee shall maintain at all times the financial resources necessary to close, plug, and abandon the injection and associated monitoring wells. [62-528.435(9)]

2. The permittee shall update the costs for plugging and abandonment every 2½ years. Upon the occurrence of the annual plugging and abandonment cost estimate exceeding, by 10 percent or more, the cost estimate upon which the current financial responsibility is based; the permittee shall submit to the Department certified financial documentation necessary to amend, renew, or otherwise replace the existing financial responsibility pursuant to Rule 62-528.435(9)(b), F.A.C. and the conditions of this permit. [62-528.435(9)(b)]

3. In the event that the mechanism used to demonstrate financial responsibility should become insufficient or invalid for any reason, the permittee shall notify the Department of Environmental Protection in writing within 14 days of such insufficiency or invalidation. The permittee shall within 90 days of said notification submit to the Department for approval new financial documentation certifying either the remedy of current financial insufficiency or resolution of the financial instrument invalidation in order to comply with Rule 62-528.435(9)(b), F.A.C, and the conditions of this permit. [62-528.435(9)(b)]

General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are "permit conditions" and are binding and enforceable pursuant to section 403.141, F.S. [62-528.307(1)(a)]

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action. [62-528.307(1)(b)]

3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit. [62-528.307(1)(c)]

4. This permit conveys no title to land, water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-528.307(1)(d)]

5. This permit does not relieve the permittee from liability for harm to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties there from; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. [62-528.307(1)(e)]

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, or are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [62-528.307(1)(f)]

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
    a. Have access to and copy any records that must be kept under conditions of this permit;
    b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
    c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
    d. Reasonable time will depend on the nature of the concern being investigated.

    [62-528.307(1)(g)]

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
    a. A description of and cause of noncompliance; and
    b. The period of noncompliance, including dates and times; or, if not corrected the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent the recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

    [62-528.307(1)(h)]

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules. [62-528.307(1)(i)]

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. [62-528.307(1)(j)]

11. This permit is transferable only upon Department approval in accordance with rules 62-4.120 and 62-528.350, F.A.C. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. [62-528.307(1)(k)]

12. This permit or a copy thereof shall be kept at the work site of the permitted activity. [62-528.307(1)(l)]

13. The permittee shall comply with the following:
    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records shall be extended automatically unless the Department determines that the records are no longer required.
    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
    c. Records of monitoring information shall include:
        i. the date, exact place, and time of sampling or measurements;
        ii. the person responsible for performing the sampling or measurements;
        iii. the dates analyses were performed;
        iv. the person responsible for performing the analyses;
        v. the analytical techniques or methods used;
        vi. the results of such analyses.
    d. The permittee shall furnish to the Department, within the time requested in writing, any information which the Department requests to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
    e. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

    [62-528.307(1)(m)]

14. All applications, reports, or information required by the Department shall be certified as being true, accurate, and complete. [62-528.307(1)(n)]

15. Reports of compliance or noncompliance with, or any progress reports on, requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each scheduled date. [62-528.307(1)(o)]

16. Any permit noncompliance constitutes a violation of the Safe Drinking Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [62-528.307(1)(p)]

17. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-528.307(1)(q)]

18. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit. [62-528.307(1)(r)]

19. This permit may be modified, revoked and reissued, or terminated for cause, as provided in 40 C.F.R. sections 144.39(a), 144.40(a), and 144.41 (1998). The filing of a request by the permittee for a permit modification, revocation or reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. [62-528.307(1)(s)]

20. The permittee shall retain all records of all monitoring information concerning the nature and composition of injected fluid until five years after completion of any plugging and abandonment procedures specified under rule 62-528.435, F.A.C. The permittee shall deliver the records to the Department office that issued the permit at the conclusion of the retention period unless the permittee elects to continue retention of the records. [62-528.307(1)(t)]

21. All reports and other submittals required to comply with this permit shall be signed by a person authorized under rules 62-528.340(1) or (2), F.A.C. All reports shall contain the certification required in rule 62-528.340(4), F.A.C. [62-528.307(1)(u)]

22. The permittee shall notify the Department as soon as possible of any planned physical alterations or additions to the permitted facility. In addition, prior approval is required for activities described in rule 62-528.410(1)(h). [62-528.307(1)(v)]

23. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or injection activity which may result in noncompliance with permit requirements. [62-528.307(1)(w)]

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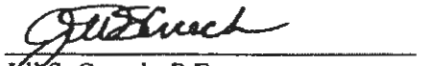
Issue Date: July 29, 2013
Expiration Date : July 28, 2018

24. The permittee shall report any noncompliance which may endanger health or the environment including:
    a. Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water; or
    b. Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.
    c. Any information shall be provided verbally or by electronic mail within 24 hours, including weekends, from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 calendar days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
    [62-528.307(1)(x)]

Issued this 29th day of July, 2013

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Jeff S. Creech, P.E.
Southeast District Director

ATTACHMENT 2
FPL- AND DEP- PROPOSED CONDITIONS OF CERTIFICATION

II. CITY OF MIAMI

A. Tree Preservation: Within the City of Miami:

1. FPL shall comply with the applicable non-procedural requirements of Article I, Chapter 17, Code of the City of Miami, with respect to tree protection, removal, relocation and replacement.
2. If any replacement planting is proposed by FPL, FPL shall provide a post-certification submittal to the City demonstrating compliance with Article I, Chapter 17, Code of the City of Miami.
3. Transmission poles shall be installed so as to avoid the removal of any large or existing specimen trees, defined as trees having a minimum 18-inch diameter trunk at breast height measured 4.5 feet above grade, to the extent practicable.
4. FPL shall provide an inventory of specimen trees prior to any work on the certified Davis-Miami transmission line within the City of Miami.
5. In the final design of the Davis-Miami transmission line, FPL shall preserve significant existing canopy vegetation within the City of Miami to the extent practicable.

Citation: Article I, Chapter 17, Code of the City of Miami.

B. Historic Resource Preservation:

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).

Citation: Chapter 23, Code of the City of Miami.

III. VILLAGE OF PINECREST

A. Solid Waste:

1. FPL will collect, remove, and dispose of debris and solid wastes in compliance with state, county, and local regulations.

2. During construction, FPL shall not place, scatter, throw, dump, or cause to be placed, scattered, thrown or dumped, any refuse, rubbish or trash in or upon any road or sidewalk or other person's property within Pinecrest, and shall properly dispose of any waste.

Citation: VOP Code, Chapter 15, Article 1.

B. Noise: FPL shall comply with the Village's noise ordinance in the construction, operation, and maintenance of the proposed transmission line. During construction of the proposed transmission line, FPL proposes to mitigate and minimize the potential noise impacts of construction by scheduling activities to be completed as much as practicable during daylight hours (7am to 6:30pm) in accordance with Chapter 15 of the Village Code of Ordinances. To the extent that nighttime construction is required, FPL will notify the Village in advance of such nighttime construction.

Citation: VOP Code, Chapter 15.

C. Location of Transmission Line:

1. To the extent practicable, it is FPL's intent to locate the proposed new transmission line in the same alignment and, if possible, same pole locations as the distribution line.
2. To the extent practicable, it is FPL's intent to be on the west side of the U.S. 1 right-of-way and the east side of the Busway, and thus outside the Village of Pinecrest.

Citation: FPL Agreement, Completeness Response, No. VOP-04 (August 2009).

D. Tree Relocation and Replacement

1. To the extent practicable, it is FPL's intent to locate the proposed new transmission line in the same alignment and, if possible, pole locations as the distribution line.
2. Prior to construction, FPL will inventory the transmission line route to identify vegetation to be trimmed or removed to provide required electrical clearances to the transmission line in accordance with the North American Electric Reliability Corporation (NERC) reliability standards.
3. FPL will provide replacements for any significant trees within the Village of Pinecrest that are removed as a result of the transmission line construction, including provisions for mitigation with approved replacement trees and/or tree fund contributions.
4. FPL shall be responsible for any damage to trees caused by FPL during construction, and will restore or replace any damaged trees.
   During operation of the transmission line, FPL shall use best management practices to retain existing native vegetation where it does not interfere with the safe, reliable operation of the electrical facilities, in compliance with section 163.3209, Florida Statutes (2009), which incorporates by reference National Electrical Reliability Corporation (NERC) standard FAC-003-1, American National Standards Institute (ANSI) standards A300 (Part I)-2001 and Z133.1-2000, and National Electrical Safety Code (NESC) standards adopted by the Florida Public Service Commission.

Citation: VOP Code, Chapter 30, Article 6, Divisions 6.1 and 6.2.

E. Obstructions of Visibility: In the placement of structures in right-of-way located within the Village, FPL shall comply with all applicable Village regulations concerning obstructions of visibility at intersections.

Citation: VOP Code, Chapter 30, Article 5, *Division* 5.16.

F. ROW Management and Restoration of ROW: FPL shall comply with all applicable state laws and rules and all applicable Village ordinances and regulations concerning repair of damaged public roads and rights-of-way caused by its construction, maintenance, and operation of the proposed transmission facilities. FPL shall comply with all applicable state laws and rules and all Village ordinances and regulations concerning restoration of public rights-of-way.

Citation: VOP Code, Chapter 30, Article 6, *Division* 6.12.

IV. INCORPORATED AREAS OF MIAMI DADE COUNTY

A. Upon request by FPL, the local government shall identify for FPL the location of approved but not-yet constructed development within the local government's jurisdiction, so FPL can plan to avoid or minimize conflicts with any approved but not-yet built development within the transmission line alignment; if no information is provided within 60 days of request by FPL, FPL shall proceed with preliminary design of the transmission line.