

EXHIBIT 5



Florida Department of Environmental Protection

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TO: Toni Sturtevant, OGC
FROM: Mike Halpin, Siting Coordination

Pursuant to § 403.5252, Florida Statutes, the Department of Environmental Protection (DEP) after consulting with the affected agencies has determined that the portion of the Florida Power & Light (FPL) Turkey Point Units 6 & 7 Nuclear Plant application concerning the plant and associated facilities other than the transmission lines is not complete.

The following represent requests for additional or clarifying information from the DEP Siting Coordination (SCO) and Southeast District (SED) Offices, and the Office of Coastal and Aquatic Managed Areas (CAMA). The items immediately below represent the DEP Southeast District Office's request for additional or clarifying information. The Department received both transmission line and power plant / associated facility questions from DEP-SED within a single submittal, thus the numbering is not in sequence. However, when responding to completeness items, the Department requests that where possible, the applicant maintain the below numbering system.

I. DEP SED WATERSHED MANAGEMENT AND PLANNING

A. Zoning and Land Use Plans

FPL has filed an application to amend Miami-Dade County's Comprehensive Development Master Plan (CDMP) to allow the creation of a mining operation to provide fill needed for the power plant expansion at Turkey Point. The proposed site is not contiguous to the plant site. The mining operation would be located on land currently owned by FPL and zoned as Agriculture land use. The County's CDMP Future Land Use Element designates the proposed location for the Site and associated non-linear facilities as Environmental Protection Subarea F (Coastal Wetland and Hammocks). The proposed fill site is located further from the plant than at least one operational and permitted mine. FPL is pursuing the new site in order to avoid the permitting constraints associated with the rate at which material can be excavated and cost savings of avoiding a contract with commercial mines in the region.

The proposed project area, including the fill mine are within one mile of the ecological sensitive Biscayne National Park (BNP) and Biscayne Bay Aquatic Preserve (BBAP). The proposed work includes road and transmission lines that will affect the South Florida Water Management District (SFWMD) Model Lands Basin conservation area, proposed Comprehensive Everglades Restoration Projects (CERP) including the C-111 Spreader Canal and the Biscayne Bay Coastal Wetlands and FPL's Everglades

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Mitigation Bank (EMB) which are located within five miles of the site. The EMB is a 13,000-acre natural wildlife and wetlands area southwest of the Turkey Point nuclear power plant property. The Biscayne Bay Aquatic Preserve is approximately 69,000 acres of submerged State land that has been designated as an Outstanding Florida Water.

B. FPL-owned Fill Source

FPL plans to use a 300-acre site they own as a fill source for the 10.75 million cubic yards of fill needed for the plant expansion. Although much of the site is disturbed from agricultural use, 52 acres of wetlands will be lost due to the proposed excavation. The “water management project” proposed by FPL is to create surface water reservoir in the pit created from the fill removal. FPL has not provided details regarding the water management feature and therefore the Department will need additional information and require a pilot project to provide reasonable assurances that the proposal is feasible. Because of the close proximity to the BNP and BBAP, there may be future environmental impacts to these areas. The Biscayne Bay Coastal Wetlands and the Model Lands Basin are within one mile of the fill source location. The proposed work could exacerbate salt water intrusion in the region.

FPL notes in Chapter 5, that the aggregate extraction process will be done in the freshwater portion of the aquifer and that it will not induce saltwater intrusion.

The Department will need detailed geotechnical and engineering information from FPL to verify this claim. The Department will require that all constructed features be protective of the environment during such times as storm surge created by hurricanes.

C. Radial Collector Wells

Reclaimed water will be provided from the Miami-Dade County Water and Sewer Department South District Wastewater Treatment Plant for makeup water to the circulating water system (CWS). When reclaimed water is not available in sufficient quantity or quality, makeup water will be obtained from radial collector wells. The radial collector wells will withdraw saltwater through laterals installed approximately 40 ft below the bottom of Biscayne Bay. FPL plans to operate the wells in a fashion to allow recharge to occur over a large area by operating at low velocities. How does FPL plan to ensure that the wells do not cause or contribute to environmental degradation? At the depth of 40 ft., this process may actually extract fresh water from the aquifer thus counter acting CERP projects intended to deliver fresh water to the Bay’s littoral zone. The use of this type of well is uncommon which increases the uncertainty and associated risk because the laterals may need to be above the 40 ft depth to work effectively. In pre-application meetings with FPL, concerns have been expressed about the use of this technology and possible impacts to the seabed and the salinity of the bay.

Four radial well caissons will be located on the Turkey Point peninsula in previously-disturbed areas of upland fill material. The caissons will house the pumps and equipment needed to operate the laterals.

D. Associated Linear Facilities

The linear facilities proposed by FPL include electrical transmission lines (230 and 500 kilovolt (kV) and associated transmission access, reclaimed water pipelines, roadway improvements and expansions and a potable water pipeline. The proposed linear facilities will result in significant wetland impacts that will require mitigation.

The reclaimed water pipelines will be approximately nine miles in length. The Application notes that the corridor for the reclaimed water pipeline was selected to utilize existing infrastructure in order to minimize environmental impacts. The majority of the corridor is within an existing FPL-owned transmission right-of-way and other FPL-owned property. No Alternate Corridors are proposed for reclaimed water pipelines.

FPL is seeking certification for approximately ten miles of roadway improvements to accommodate peak construction traffic and to provide access to Units 6 and 7. The roadway improvements will involve upgrades to existing paved roads and improvement of existing unpaved roads to paved roads. Additionally, intersection improvements at six locations will be made to accommodate peak construction traffic. The roadway improvements are required to support the safe and efficient construction of the facility. The road expansions and intersection improvements will result in wetland impacts and interference to sheetflow. The Department will require minimization of impacts and mitigation for the lost wetlands. The proposed roads and roadway improvements could potentially impact ongoing environmental restoration projects in the area.

During peak construction activities associated with Units 6 and 7, about 3,650 workers will need access to the Site. The existing plant access cannot accommodate the construction traffic. FPL should consider installing wildlife corridors to protect wildlife from the increased traffic in the area.

A portion of the lands designated as Model Lands Basin are located adjacent to the roadway improvement corridors. The Model Lands Basin was SOR land acquired by the SFWMD. The Model Lands Basin is comprised largely of freshwater and saltwater wetlands that form a contiguous habitat passageway between the ENP, the Southern Glades SOR project located further to the southwest, BNP and other designated protected lands in Miami-Dade County.

The widening of existing paved roads, paving of existing unpaved roads, bridge over L-31E Canal and intersection improvements will result in impacts to wetlands. The information typically provided in an ERP application will be provided to reviewing

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agencies for postcertification monitoring of compliance with the Conditions of Certification (COC's).

Potable water pipeline corridor is approximately nine miles in length. The entire length of the pipeline will be installed within established rights-of-way and thus will not impact wetlands.

The Application notes unavoidable wetland impacts resulting from construction of roadway improvements and the potable water pipelines will be mitigated in consultation with FDEP, USACE and DERM. Best Management Practices (BMP's), such as silt fencing and floating turbidity curtains at construction sites, will be required by the Department to prevent secondary impacts to surface waters or wetlands.

II. DEP SED ENVIRONMENTAL RESOURCE PERMITTING

DRAINAGE/ENGINEERING

1. Due to the close proximity of the cooling canal system to the Biscayne Aquatic Preserve and strong tidal and ground water hydraulic connection, Units 6 and 7 project areas shall be designed and operated to meet State water quality standards, as set forth in Chapter 62-302, Florida Administrative Code and in accordance with Section 5.2, Retention/Detention Criteria (SFWMD Basis of Review). Please demonstrate that there will be no adverse impact to adjacent surface water and wetland from stormwater runoff for the project area.

Please note that the applicant is required to comply with State-water quality standards set forth in Rule 62-302, FAC unless approval is obtained for a variance.

Additionally, the stormwater design treatment standard for the proposed project shall achieve at least 95 percent reduction of the average annual load of pollutants that would cause or contribute to violations of state water quality standards in Outstanding Florida Waters. Additionally, the 150 % treatment (or 95% removal) should be based on the greater of the 1-inch over the developed project or 2½ -inches times percent impervious (62-40.432).

2. For the proposed reclaimed water facility, proposed water quality computation was based on 1-inch over the contributing area (26.16 acres). However, Per Basis Of Review wet detention volume shall be provided for the first inch of runoff from the developed (vs. contributing) project (This area is interpreted as 44.1 acres vs. 26.16), or the total runoff of 2.5 inches times the percentage of imperviousness, whichever is greater noting water surface and roofed areas can be deducted from site areas only for water quality pervious/impervious calculations.

3. Please demonstrate that dewatering activities during construction will not induce salt water intrusion and adversely impact adjacent surface water and wetlands. Provide a dredged material disposal plan, including; design details of all disposal sites, including the heights, widths, and composition of material used to construct confining

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berms; details of all interior cells and baffles within the disposal site; details of outfall structures, including control weirs (fixed or removable); design capacity (volume); and data used to size the disposal cell(s); proposed dredging equipment (including maximum pumping rates if a hydraulic dredge is to be used); and proposed turbidity controls. If a barge is to be used to receive dredged material prior to final upland disposal, please provide details of the barge, including fully loaded draft, capacity, and details for containing material on the barge.

4. Condition 4 of the Miami Dade County Board of County Commissioners Resolution No. Z-56-07 states "That FPL shall not apply for any water withdrawals from the Biscayne Aquifer as a source of cooling water for the proposed facility." Do the proposed radial collector wells comply with this condition?

5. For the proposed "FPL owned fill source" please demonstrate compliance with Section 5.6 as follows: (a) Entrapped salt water, resulting from inland migration of salt water or penetration of the freshwater/salt water interface, will not adversely impact existing legal water users; (b) Excavation of the water body shall not penetrate a water-bearing formation exhibiting poorer water quality for example., in terms of chloride concentrations (BOR, SFWMD).

6 Please provide details on existing and proposed surface water flows and hydrology. Specifically, provide an in-depth study of the existing and proposed hydroperiod for the wetland areas affected. What will be done to avoid or offset impacts to wetland dependent species affected by the proposed changes in hydrology?

7. Please submit paving, grading and drainage plans for all of the proposed elements of the project including the plant facilities, roadways, transmission lines, reclaimed water facility and excavation sites. The plans must be signed and sealed by a registered professional engineer licensed in the state of Florida. Also, please submit stormwater calculations for all of the different project areas. Such calculations should include 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.

8. Please provide stormwater management calculations and construction quality plans that show all the best management practice being used as part of the drainage design for the proposed construction (oil water separators, swales etc.). Please provide stormwater management and details of how the runoff from the potentially oil contaminated areas will be routed to the oil/water separators prior to discharge into the industrial waste water site or the cooling water reservoir (Appendix 10.8). For Units 6 and 7, please identify and explain how stormwater runoff is handled from areas such as chemical storage, waste storage, backwash basin sludge processing and demonstrate that runoff from these areas will not adversely impact ground water or surface water.

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A similar table to Table A-2, Attachment A of Appendix 10.8 should be prepared and submitted for Unit 6&7.

9. Please provide a turbidity management and monitoring plan for all facilities (i.e. plant, roadways, transmission lines, fill generation areas, spoil disposal areas, etc.) to ensure compliance with State water quality standards during project construction.

10. Culvert placement under certain, unidentified roadways is contemplated. However, culverts typically reduce the water delivery system to a point source, rather than the historic sheet flow. Please indicate where the culverts are proposed and provide an analysis of peak velocity discharge and demonstrate how erosion will be prevented. Please be aware that following the receipt of additional information, it may be necessary to construct a bridge (s) to maintain adequate hydrologic conditions on either side of the linear disturbance proposed.

11. Based on the submitted information in Section 1.4, the proposed site for the proposed Turkey Points Units 6 and 7 appears to be an existing low area that is proposed to be filled. As required by Section 6.7 of the Basis of Review, please demonstrate that filling of the low lying areas will not adversely impact the existing power plant site and the industrial waste water facility. Also, please indicate how the proposed site preparation (i.e. construction techniques, de-mucking, dewatering and flow pattern changes, etc.) impact the existing plant to the north.

12. Section 3.1.3 indicates a proposed lake excavation on the eastside of the Homestead Air Force Base. Please indicate if any known soil or groundwater contamination areas have been identified within the project boundary. If contamination has been identified, please address any potential conflicts with the proposed surface water management system and construction methodologies.

13. Please provide more detailed information on the temporary and future locations of the storage areas for the excavated material. How will the natural drainage be maintained so that existing flow patterns on the natural areas will not be disturbed? How long will the excavated material be stored on site?

14. The proposed project is located inside the salt intruded area, as established by the U.S. Geological Survey. Please address the proposed lake depth and potential water quality impacts as a result of the project location (i.e. saltwater intrusion).

15. For the proposed "FPL owned fill source", please demonstrate that the fill material is free from contaminants (nutrients, metals, pesticides herbicides etc.) that could adversely impact adjacent surface water and wetlands.

16. The proposed FPL-owned fill source material project area is located on the south side of the canal generally referred to as Military Canal. On the north side of this canal, there is a Miami-Dade DERM stormwater treatment area. Please address and provide documentation that the proposed lake excavation will not adversely impact this project.

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17. For the proposed FPL-owned fill source material project, please provide a complete acreage breakdown including total owned area, preserved/pervious area, lake/mining area and other impervious area.
18. Please provide paving, grading and drainage plans for the proposed FPL-owned fill source material project including all the required cross-sections.
19. Please provide a sequencing plan for the works proposed on the lake excavation site. Please provide calculations to demonstrate that during each sequence of excavation, there will be no discharge of water from the pit during storms up to the 25-year, 3-day design event. To accomplish this, it may be necessary to provide a temporary berm around each phase of excavation which could be removed after all excavation is completed and turbidity levels meet State standards. Also, an interceptor swale may be required to convey offsite runoff around the pit during excavation. Please provide plans and cross-sections.
20. In the submittal it is indicated that "The proposed FPL-owned fill source material would result in a water management feature that will be designed to complement and enhance regional wetland rehydration projects". Please indicate how this will be accomplished and provide supporting documentation.
21. There is an existing SFWMD Surface Water Management permit (Permit Number 13-00026-S) within the area proposed as FPL-owned fill source material. This permit has been transferred to FPL as the new owner. Please indicate how this permit will be addressed as part of the power plant certification process.
54. Regarding the proposed FPL-owned fill source:
 - a. How does the design of this system enhance regional wetland communities? Please provide typical plan- and cross-section views through the proposed site.
 - b. What is the maximum proposed depth of this proposed borrow area?
 - c. Please provide proposed depth contours of the pit and indicate how salt water intrusion will be prevented.
 - d. Please provide information related to roadway improvements necessary to transport materials from the borrow site to the project site.
 - e. Please include a direct and secondary wetland impact analysis and indicate how wetland impacts associated with this proposal will be offset.
22. Please provide calculations for the 100-year, 3-day design event with zero discharge to demonstrate that the proposed finish floor elevations within the Turkey Point Unit 6 and 7 project will be at or above the calculated stage. Section 10.8.1.3. For the plant area, please demonstrate through analysis compliance with Section 6.4, Flood Protection of Building Floors of the Basis of review (B.O.R.) for Environmental Resource

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Permit (ERP) Application within the South Florida Water Management (SFWMD) August 1995, which in part states: Building floors shall be at or above the 100 year flood elevations, as determined from the most appropriate information, including Federal Flood Insurance Rate Maps. Both the 100 year, 3 day storm event and wave run-up storm surge associated with the Probable Maximum Hurricane should be considered in determining building pad elevation.

23. **Section 3.3.1.4 - Spoil disposal.** It is anticipated that muck excavation, treatment and storage will result in the release of inorganic and organic nutrients that will likely enter the Wastewater Treatment Facility, and potentially exchange with Biscayne Bay via shallow groundwater movement. What is the expected quantity of nutrient release? What is the anticipated nutrient loading to Biscayne Bay? Please provide an estimate of the cubic yards of spoil material generated vs. spoil disposal capacity of the berms where spoil is proposed to be placed. Will any dewatering be proposed? How will spoil material be transported to the disposal site? How will spoil material be contained and stabilized on the existing berms? Please indicate where all fill will be utilized/dispersed.

24. **Section 3.3.1.4 - Spoil disposal.** Please provide cross-sections (existing and proposed) with elevation of the upland spoil berms located adjacent to the Grand Canal that will be used to deposit the spoil generated from the de-mucking activities. Also, please indicate how the material will be transported to the proposed disposal site. Please provide a turbidity management plan.

25. **Section 3.3.4 - Surficial Hydrology.** Will the increase in cooling water required to address the proposed Units 6 and 7 result in additional, heated water being sent to the canal system. Will this change in operation alter bay temperature or bay hydrology (i.e. salinity)?

Section 3.3.5.2 - Radial Collection System

26. For the proposed radial collector wells, have the conventional vertical wells been considered in lieu of the proposed radial wells? If so, please provide rationale as why conventional vertical wells were not considered. Provide any results from calculation, modeling etc. to substantiate selection.

It is understood that an extensive test of the radial well methodology was conducted by FPL in early 2009. Please provide the results of this test. Please include information related to production and environmental characteristics and responses (hydrology, salinity water quality).

27. How long are the proposed lateral pipes? How long will the screened portions at the ends of the pipe be? How will the lateral pipes be installed?

28. Please provide the sequence of activities necessary to install and operate the radial collection system. Please include information regarding how excavated and/or drilled materials be transported and treated and where it will be stored. What

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mechanisms are proposed to ensure State-water quality standards are complied with (OFW, Aquatic Preserve Standards)?

29. The applicant has indicated that a velocity of 0.00001 foot/second is estimated. How was this velocity calculated and what assumptions were made in the calculation?

30. How was the area of influence for the radial well system determined (page 6-3 and Figure 6.1.3-1)?

31. What is the geological structure of the rock where the lateral pipes are proposed to be installed? Do high transmissivity channels exist?

32. What is the thickness of the overlying sediments?

34. **Section 4.6 – Chemical and Biocide Waste.** This section states “ waste effluent from the plant demineralized water systems, sanitary waste treatment plant, FLP reclaimed water treatment facility, filter backwash and other non-radioactive drains throughout the plant will be pumped into deep injection wells”. Please indicate on revised plans the area where water quality treatment will occur prior to discharge into the wells. Please include drainage calculations to ensure the water quality standards will be achieved prior to injection.

35. **Section 4.8.3 Operational Site Drainage** – In the submittal it is indicated that the stormwater runoff from the proposed facilities will be routed to the existing industrial waste water facility. Provide plans with sufficient grading elevations and details to demonstrate how this is accomplished.

36. **Sections 4.9.2 and 5.7.2.2 and Section 9.0 – Roads.** Please provide all the required drainage calculations, paving, grading and drainage plans for all portions of the roadway improvements and for the new proposed roadways and bridges that demonstrate that the existing and proposed roads will not have an impact on the existing drainage patterns in the area. Also, please be advised that modifications of some existing ERP permits will be required for some of the proposed improvements. Please ensure that the underlying land owner(s) sign the ERP applications when land under their ownership is involved in project development unless there is an easement to FPL or contract for sale that allows FPL to obtain permits for the proposed work.

37. **Section 4.9.2** states that some roads may be culverted, where required to maintain drainage patterns. Please identify these areas where culverts are proposed. The project design may need to be revised to accommodate large culverts or bridges to maintain sheet flow instead of point discharges that constrict flow.

38. **Section 5.2.1.1 – Construction Water Use.** This section states that water used for cleaning, vehicle wash down, and lubrication may be disposed of during construction by routing this water to injection wells. As stated above, the applicant must demonstrate that the state-water quality criteria will be met prior to discharge of water into an injection well.

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39. **Ground water Monitoring.** Please provide a groundwater monitoring proposal which includes establishment of monitoring stations. The number of monitoring wells must be sufficient to provide a characterization analysis, at a minimum once every five years. Both upgradient and down gradient wells need to be proposed. Parameters to be monitored should include (but not limited to) aluminum, antimony, barium, beryllium, cadmium, selenium, silver, thallium, fecal coliform, gross alpha-including radium 226, combined radium 226 and 228, uranium, tritium, strontium-90, and all primary organics of EPA Methods 624 and 625, or comparable EPA methods. The analysis shall be for all primary inorganics in Rule 62-550.310, FAC, secondary standards in Rule 62-550.320, FAC and all organics of EPA Methods 624 and 625, or comparable drinking water standards. The method detection limits must be lower than the drinking/groundwater standards in Rule 62-550, FAC. The characterization analysis also needs to be conducted, at a minimum of once every five years on the wastewater effluent stream.

40. **Ground water Monitoring.** In addition, the following radionuclide will be required to be monitored annually for gross alpha-including radium 226, combined radium 226 and 228, uranium, tritium and strontium-90. Any potential liquid radioactive waste release should also be monitored.

41. **Ground water Monitoring.** Please provide revised figures depicting the locations of all monitoring wells and provide construction details for the monitoring wells.

ENVIRONMENTAL RESOURCES:

General Comments

42. The application indicates that roadway improvements (Roadway Improvement Corridor), reclaimed water pipelines (Reclaimed Water Pipeline Corridor) and potable water pipelines (Potable Water Pipeline Corridor) outside of the Turkey Point plant property boundary, is owned and will be operated by Miami-Dade County. Please provide the legal authority FPL possesses to include these activities in the application. District lands and canals are proposed to be crossed or bridged. Separate approval from the South Florida Water Management District (District) will be required for the use of District-owned lands.

43. Please be advised that there is a concern regarding the extent of wetland impacts proposed. As described in subsection 4.2.1 of the Basis of Review, the Department in determining whether to grant or deny a permit shall consider whether the applicant has implemented practicable design modifications to reduce or eliminate adverse impacts to wetland functions and other surface water functions. Your project proposes direct impacts to 810 acres of wetlands and surface waters and additional secondary impacts to wetlands and surface water functions. The following items exemplify reduction and elimination strategies to be considered.

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- Have alternatives such as using previously impacted areas within the project site been explored? Please consider relocating the Reclaimed Water Treatment System to the north in the area of the FPL source area or to the adjacent test cooling canal to the southeast.
- A review of the submittal indicates that there may be existing disturbed corridors where some linear facilities could be located, as well as design modifications that could be incorporated to reduce the extent of impacts in other areas. Please consider using existing disturbed corridors to address this criteria.
- What are the proposed widths of the construction corridors for linear facilities as well as roads? Is it possible to reduce the widths to further minimize impacts? Are the existing roads insufficient to be used for access for the radial collector wells?

Additional comments on reduction and elimination are discussed throughout this request.

62. Figures R9.0.0-1 and R9.0.0-2 indicate roadway improvements. It appears that certain wetland impacts could be reduced by utilizing existing roadway corridors instead of creating new roadways through undeveloped corridors. Please explain, or consider revisions which further reduce wetland impacts.

44. Review of the submittal indicates that the secondary impact analysis does not accurately address secondary impacts associated with the proposed linear or non-linear features. Please explain, or consider revisions that address all secondary wetland impacts associated with project development. The submittal indicated that a 25-ft. buffer would be used for secondary impacts however, the breakdown of impacts in Table 1-1 (Appendix 10-4), there were no secondary impacts identified for the Units 6&7 site, the reclaimed water pipeline, or the transmission line corridors. Specifically, how will the wetlands adjacent to the toe of slope of the perimeter berm be protected from secondary impacts during maintenance of the berm? Additionally, what is the nature of the buffer around the tree island in the northwest corner of the site? Clearly show the distance (in feet) between all proposed structures and adjacent wetlands that are to remain.

45. Is the 33.3 acre western lay-down area comprising of a mix of wetlands and surface water proposed to be restored? If not, please indicate the rationale for not restoring this area in the post construction phase.

46. Temporary wetland impacts have also not been adequately identified or quantified. Please provide a revised temporary wetland impact analysis that identifies all temporary impacts associated with project development. A UMAM analysis of temporary impacts is required to account for the time lag. For example, if forested systems are being converted to herbaceous systems, mitigation will be required.

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47. Potential mitigation options are discussed in Appendix 10.4. Once elimination and reduction of wetland impacts has been evaluated, the mitigation plan should be designed to provide type-for-type mitigation for each community type to be impacted.

48. Additional site visits with agency staff from FDEP and SFWMD should be arranged to verify the wetland lines pursuant to Chapter 62-340 F.A.C. (i.e., transmission lines, reclaimed water pipeline, FPL-owned fill source). In addition, staff will need to conduct UMAM scores for any proposed wetland impact areas as well as proposed mitigation sites. This will also help during UMAM analysis.

75. **Section 3.0 of Appendix 10.4** discusses the restoration of temporarily disturbed areas during project development. A UMAM analysis of these areas will be necessary to determine if additional mitigation will be required to offset temporary impacts due to time lag or reduced wetland functions after site restoration.

49. Show all construction equipment staging areas on a plan view. If the specific staging area is not known, describe any provisions proposed to prevent equipment staging from occurring in wetlands beyond the impact area.

50. Provide construction methodologies and details related to excavating, filling and other site construction.

Section 1.4 - Overview of the project

51. Please characterize, quantify, and score any direct and secondary wetland impacts associated with the delivery mechanism (i.e. pipeline), treatment facility, the disposal of filtrate associated with the water treatment facility and the disposal of water.

52. This project is located adjacent to Biscayne Bay which is an Outstanding Florida Water (OFW). Explain how monitoring will be proposed to determine what affects the proposed facilities will have on the OFW. Parameters to be monitored should include (but not limited to) salinity, temperature, turbidity, nutrients, and chlorophyll A concentrations. Monitoring should also include seagrass and major sessile fauna (sponges, corals, etc.). The plan should also include baseline monitoring.

53. Please quantify and provide a graphic indicating the acreage of lands within the FPL Everglades Mitigation Bank (EMB) that will be directly and secondarily impacted by project development. Additionally, please indicate the area within the EMB that will receive salt spray from normal plant operations. Please provide a schedule for when the EMB Environmental Resource Permit will be modified to reflect the credit reduction resulting from direct and secondary wetland impacts resulting from project development.

Section 3.2.4

55. As indicated in this section, a sovereign submerged lands public easement will be required for the radial collector wells associated with this project. Please provide an

easement processing fee of \$555 and provide a survey of the easement area in accordance with the attached SLER 0950.

Section 3.3.5.2 – Radial Collection System

56. Will the overlying benthic community (i.e. seagrass, hard bottom communities, etc.) be disturbed as a result of installation of the system? What is the potential for a frac-out and what are the potential impacts to the submerged bottoms (SAV, corals, etc.)?

57. How will sediments and fauna be prevented from entering the well?

58. What mechanism does the applicant propose to prevent sediment particles and nutrients from being depleted in the surrounding area as a result of the downward flow of water in this area? Please evaluate the potential impacts of this proposal on seagrass habitat and fauna.

59. How does the applicant propose to prevent water and biota from being drawn into the wells from the adjacent Biscayne Bay national Park?

Figure 3.3.9-2 and Section 6.9.2 – Lighting.

60. . Do you have an approved Sea Turtle Lighting Plan? If so, the current plan will need to be modified to incorporate the proposed facilities.

61. Section R9.4.4 states that no changes to vegetation, wildlife or aquatic systems are anticipated in the roadway improvement corridors. However, clearing of corridors, vegetation management activities, roadway improvements, altered hydrology and increased traffic will result in direct and secondary wetland impacts requiring analysis. Please provide this analysis to the agencies for review.

63. The typical section provided in Figure R9.3.2.1 indicates that some wetland impacts could be reduced by redesigning the typical section. Please provide a revised typical section that reduces wetland impacts. Additionally, Figure R9.3.2-6 indicates that work is proposed outside of the right of way. Please provide a revised typical section indicating all work it to be completed within the right of way.

64. It appears that proposed crocodile crossings will allow industrial water to enter natural wetland systems. Additionally, based on the soil transmissivity, it appears that an exchange of waters between the adjacent bay and the industrial water is likely. Please indicate how industrial water will be prevented from co-mingling with waters in the surrounding areas.

Section 5.2. 1.2 – Impact Assessment

65. Any proposed improvements to the barge offloading area or access channel must be reviewed by agency staff prior to authorization. Additionally, compliance with State water quality standards must be demonstrated through the submittal of a turbidity

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monitoring plan to ensure the project is in compliance with the non-degradation of surface water criteria contained in Rule 62-312, FAC.

66. If channel dredging is required, please evaluate the nutrient and contaminant concentration of the material and indicate the method proposed to prevent the resuspension and release of these components to the surrounding waters. Additionally, if alteration of the barge channel is proposed, please indicate what impacts this alteration will have on Biscayne Bay groundwater.

67. Section 5.2.1.2 also states that the depth of the fill material site has not been determined. Please provide revised plans indicating the proposed maximum depth of the excavation.

71. **Table 1-2 in Appendix 10.4** provides a summary of potential mitigation activities. A number of these alternatives are proposed to be located on lands not owned or controlled by FPL. Please demonstrate that these mitigation proposals are not inconsistent with State and Federal CERP planning in this region. Additionally, State regulatory staff must field verify existing site conditions and potential mitigation credit. Prior to scheduling the field trip necessary to verify site conditions, please coordinate with staff to arrange field visits to verify site conditions.

72. **Table 2-3 in Appendix 10.4** discusses non-transmission line facilities and includes a secondary wetland impact analysis. This analysis does not appear to accurately address secondary wetland impacts associated with overall project development. Please contact FDEP and District staff to discuss these issues and provide a revised secondary wetland impact analysis for the entire project (linear, non-linear, sub-station improvements, and site improvements) that accurately addresses secondary impacts incurred with project development.

73. **Section 2.1.6 of Appendix 10.4** states that details regarding culvert placement beneath proposed roads, roadway design and other details regarding project design are forthcoming. These details are required to effectively evaluate potential direct and secondary wetland impacts associated with the proposed project and to provide reasonable assurance that proposed wetland impacts will be offset through the development of the mitigation plan. Please provide the locations, sizes and numbers of culverts proposed and indicate how the appropriate locations and sizing were determined. Please indicate how erosion/sedimentation will be controlled.

74. **Section 3.5 of Appendix 10.4** indicates the applicant proposes to use high-nutrient reclaimed water to hydrologically enhance low-nutrient wetland areas within the Model Lands. Please indicate what impact the use of higher nutrient water will have on the vegetative makeup and other functions of the existing low-nutrient driven wetland community. It is anticipated that this proposal will result in a shift in the vegetative component of the natural system. It is likely that this aspect of the plan will

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result in adverse impacts to wetlands requiring additional mitigation, rather than resulting in enhancement of those wetlands.

76. **Section 3.1 of Appendix 10.4** discusses the Northwest Restoration Site – Package A. This component of the plan includes hydrologic restoration of mosquito ditches. It is unlikely that sufficient fill material will be available on site to fully restore this area to the pre-alteration conditions. Please indicate where additional fill necessary to fill these ditches will be obtained and what the material will consist of. Additionally, please identify all direct and secondary wetland impacts associated with the transport, delivery and placement of all materials proposed to be utilized during restoration activities.

77. **Section 3.2 of Appendix 10.4** discusses the Water Management Feature Restoration Site. This section indicates that the applicant-owned parcel totals 300-acres and is proposed to provide a source of fill for the proposed project. This section, however, also states that the entire site encompasses 875 acres. Please indicate the ownership of the 575 acres not owned by FPL and what legal mechanism is proposed by FPL to authorize work on these lands.

- Additionally, utilization of the preservation adjustment score, as proposed, will require a site review to confirm the proposed scores.
- This area is proposed to be transferred to public ownership for management following excavation. Please identify the management entity that will be responsible for the long term management activities required and indicate the management entity's acceptance of this proposal.
- Please provide a cost estimate and financial assurance mechanism for the completion of the construction and perpetual management of the proposed restoration area.

78. **Appendix 10.4 Attachment E** - Please identify the long term management entity (and indicate the entities acceptance of the responsibility) for all mitigation activities proposed and indicate how the long term management will be funded by the applicant.

79. **Section 3.4 Appendix 10.4** - Please indicate what impacts (positive or negative) the proposed additional weir will have upstream and how will this relate to the permitted weir. What additional benefit will the weir proposed in Section 3.4 of Appendix 10.4 have in addition to the weir required for the FPL Everglades mitigation? The applicant has provided proposed UMAM scores. These scores, however, do not appear to reflect the lift associated with the required weir associated with the FPL Everglades Mitigation Bank.

80. **Section 3.7.2 of Appendix 10.4** proposes the use of the Hole-in-the-Donut Mitigation Bank (HID) to offset wetland impacts. Any use of the HID Mitigation Bank must be for wetland impacts of a similar type to that found within HID. The HID

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Mitigation Bank is currently permitted using mitigation ratios. However, the ratios proposed in this section (1.0:1.0) are lower than the guidelines for mitigation ratios provided in Section 4.3.2 of the Basis of Review. Please revise the proposed ratios. It should be noted that the HID Mitigation Bank is currently being reviewed for conversion to UMAM. If this modification to the HID Mitigation Bank is accomplished in the near future, the mitigation calculations for any use of this bank can be re-evaluated.

81. **Section 3.11 of Appendix 10.4** states that success criteria will be evaluated at a later date. To adequately review any functional wetland scoring and associated "lift" the success criteria must be established prior to the finalization of any wetland functional analysis. Please provide a proposal for success criteria that includes required plant coverages and sizes, survivorship, plant species diversity, measurement of hydrologic improvement and wildlife usage, as well as any other factors appropriate to the mitigation plan.

82. Wetland enhancement/restoration activities are proposed in the vicinity of the Homestead Air Reserve Base (HARB). Please provide written correspondence indicating that the HARB or the Federal Aviation Administration (FAA) does not have any concerns with the proposed enhancement in this vicinity.

Section 5.5 – Air Impacts

83. Chemical dust suppressants or equivalent are proposed to control fugitive dust emissions. Please provide the chemical make-up of the dust suppressants to be used and indicate any adverse impacts to natural systems that may result from their use.

Section 6.1.1 – Temperature Effect

84. The document provided states that there will be no adverse impact to the subsurface aquifer as a result of thermal discharge through the injection wells. Please provide the analysis that was the basis for this determination.

Section 6.1.4.2 – Cooling Tower Deposition

85. Salt water blowdown and other plant operations will result in an increase of atmospheric salt. Please define the zone of influence based on predominant winds and identify non-salt tolerant vegetation that may be impacted by the proposal. Please indicate how this impact will be reduced, and potential wetland impacts offset.

86. Based on anticipated atmospheric emission rates and wind patterns, what is the expected pattern of atmospheric deposition of regulated materials on the surrounding area (including Biscayne Bay)? What is the current pattern of deposition of these materials?

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Sections 9.4.1.1 and 9.4.1.3

90. These sections indicate that fill material generated from right of way clearing and transmission line construction may be disposed of by spreading over existing uplands. Please revise this proposal to state that this material may only be used for roadway construction, if appropriate. Please indicate how surplus fill generated from project development will be transported off the site and disposed.

III. DEP SED WASTEWATER SECTION

1. Clarify whether the volume of dewatering for the radial well system construction is included with the 26 MGD for the plant site estimates. If not, how much is estimated and show that the CCS can handle the flow.
2. Provide more detail on the Concrete Batch Plant wastewater system (Type I and II Wastewaters), location, and compliance with FAC 62-621.300(3).
3. Provide details on the off-site rock mine and compliance with FAC 62-660.804.

IV. DEP SED GROUND WATER AND UIC COMMENTS - WFA

1. It is understood that disposal of most of the wastewater will be into a Class I injection well system that will be reviewed under a separate but parallel FDEP process, specifically within the UIC program.
2. It is recognized that the ground water plume from the Cooling Canal System (CCS) is being addressed in Conditions of Certification (COC's) X of the Site Certification modification called the "Uprate" project. Currently a revised monitoring plan is being negotiated and a portion of this plan is intended to determine the vertical as well as lateral extents of the plume. Additionally, COC IX addresses increased monitoring of the surface water within Biscayne Bay adjacent to the CCS - and has not been finalized - with the objective to confirm or deny saline influence to the bay by the CCS. However, neither COC X nor COC IX has been affected and more contaminated water (primarily stormwater) is proposed to be directed to the CCS under this SCA. The monitoring plan under negotiation for the Unit 3 Uprate project should also include consideration of potential impacts to the waters of Biscayne Bay from the 6 & 7 project.
3. Contingent upon location of the rock mine, a ground water monitoring plan may be required in view of the unassessed reaches of the aforementioned ground water contaminant plume in order to verify that mining and dewatering operations will not adversely affect the plume.

V. DEP SED WASTE CLEANUP/HAZARDOUS WASTE

1. Pages 3-2, 5-7 and 5-14 describe and Figures 1.4-2 and 3.3.5-3 illustrate the location of an FPL-owned fill source. Currently, land use of this area appears to be agricultural. Please provide the following: information (e.g. "Environmental Audits" or assessments) concerning whether soil, sediments, groundwater, or surface waters have

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been adversely affected (contaminated) by the agricultural and farming operations including, among other things, the details of historical and current pesticide usage, identification, including detailed, scaled maps, of current and historical fertilizer and pesticide / herbicide mixing areas in relation to canals and surface water bodies, locations of any above-ground, underground or temporary storage tanks, farming equipment maintenance and storage, petroleum product storage, on-site landfill / solid waste disposal areas, locations and types of any water production wells within a one mile radius of the site boundary (potable, pesticide make-up, irrigation, industrial, etc.), locations and types of surface water pumps and associated fuel tanks, etc. Agricultural water supply wells will need to be properly abandoned if the agricultural operations are discontinued at the Fill Source. Are there any buildings or residential homes on the Fill Source property? Project developers must ensure that all storage tanks, fertilizer storage areas, pesticide/herbicide storage areas are properly closed out and/or abandoned in accordance with Department rules and regulations, see the link below for copies of those regulations.

2. Vicinity road widening projects, electrical corridor and other off-site construction should include field investigation/reconnaissance, of potentially hazardous materials or contaminated areas within one-half mile of the proposed specific project vicinity. The Department will require a plan that would state how potentially any hazardous materials would be handled if discovered during construction activities. Provisions should be made to stage/separate for proper disposal or recycle any solid waste/potentially hazardous materials encountered during construction and excavation (including dewatering). In the event any unidentified wastes are located or if soil/ groundwater contamination is discovered, the DEP Southeast District and the Miami-Dade County Department of Environmental Resources Management (M-D DERM) need to be notified.

3. As stated above, in the event contamination is detected during construction, the Department and the M-D DERM need to be notified and FPL may need to address the problem through additional assessment and/or remediation activities. Reference should be made to the most recent FDOT specification entitled "Section 120 Excavation and Embankment -- Subarticle 120-1.2 Unidentified Areas of Contamination of the Standard Specifications for Road and Bridge Construction" in the project's construction contract documents that would require specific actions by the contractor in the event of any hazardous material or suspected contamination issue arises. Depending on the findings of any environmental assessments, there are "off-property" notification responsibilities potentially associated with this project.

4. Page 5-7. What criteria are proposed to be used to define "clean backfill" or determine what spoils material is suitable for use or "proper disposal"? Will the criteria outlined in Chapter 62-777, F.A.C. be used or referenced? Please be advised that on-site disposal of solid waste can only be conducted in accordance with the requirements of

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Chapter 62-701, F.A.C. Off-site disposal of waste should only be at permitted facilities, depending on the nature of the waste.

5. Page 5-10, 4th and 5th paragraphs. Hazardous waste determinations in accordance with the requirements of Title 40 Code of Federal Regulations (C.F.R.) Part 262.11, as referenced in Chapter 62-730, F.A.C. would need to be conducted on all waste streams, accumulated sludges, etc. in order to determine proper management, storage, handling and disposal.

6. Based on our experience, the accurate identification, characterization and cleanup of sites requires experienced consulting personnel and laboratory support, management commitment and will likely be very time-consuming. Early planning to address these issues is essential to meet construction and cleanup (if required) timeframes.

7. What specific steps does FPL propose in order to dispose of land clearing debris and construction and demolition debris generated during facility construction? Chapter 62-701, F.A.C. contains regulations governing solid waste management. Department rules and statutes are found on the DEP's Internet Web site: <http://www.dep.state.fl.us/legal/Default.htm>

8. Staging areas, with controlled access, should be planned in order to safely store raw material paints, adhesives, fuels, solvents, etc. that will be used during construction. All containers need to be properly labeled. FPL should develop written construction Contingency Plan in the event of a natural disaster (e.g. hurricane), spill, fire or environmental release of hazardous materials stored/handled for the project construction. Contingency planning should also include details on how construction and hazardous materials would be safely stored and secured prior to a hurricane or natural disaster.

9. All waste streams (including wastes generated during construction) need to be evaluated for possible inclusion in RCRA Hazardous Waste facility "Florida Notification of Regulated Waste Activities form 8700-12FL" and in biennial reporting, etc.. For more information see: <http://www.dep.state.fl.us/waste/categories/hwRegulation/default.htm>

10. Page W9-46, Levee Substation. What is the cleanup status for this substation? For example, were there any transformer fluid discharges? Did it undergo remediation during the transformer lead removal project initiated in the 1990's? Have any environmental assessments or source removals been conducted? If so, please provide details. Will other substations need to be upgraded for this project? If so, please provide details of the cleanup status of those facilities.

11. How will the Turbine Lube Oil (TLO) fluids be managed to eliminate the potential for spills, discharges and releases? Please note that secondary containment,

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alarms, access for easy visual inspection/cleanup, engineering solutions, etc. for all pipes, conveyances and storage tanks for TLO fluids is necessary.

12. All regulated storage tanks need to be constructed, operated and maintained in accordance with the requirements of Chapter 62-761 or 62-762, F.A.C., as appropriate.

VI. DEP OFFICE OF COASTAL AND AQUATIC MANAGED AREAS (CAMA)

The proposed project is located within the boundaries of Biscayne Bay Aquatic Preserve, as described in Chapter 258.397 Florida Statute (F.S.) and Chapter 18-18 Florida Administrative Code (F.A.C.) and is located in Miami-Dade County.

The Biscayne Bay Aquatic Preserve (BBAP) was established to preserve Biscayne Bay in an essentially natural condition so that its biological and aesthetic values may endure for the enjoyment of future generations. Preservation and promotion of seagrass habitat is specifically named in the 'Intent' of the Biscayne Bay Aquatic Preserve Rule, Paragraph 18-18.001(f), F.A.C. Furthermore, it was the intent of the Legislature upon designating and establishing Biscayne Bay an aquatic preserve, including Card Sound, "...that Biscayne Bay be preserved in an essentially natural condition so that its biological and aesthetic values may endure for the enjoyment of future generations" Chapter 258.397, F.S.

The project is located in the waters of the BBAP, which is a Class III Outstanding Florida Waters, pursuant to Rule 62-302.700(9)(h)5 & 6. This rule states, "It shall be the Department [of Environmental Protection] policy to afford the highest protection to Outstanding Florida Waters and Outstanding National Resource Waters." It defines this as "no degradation of water quality."

BBAP staff has identified several areas of the FPL Site Certification Application that lack sufficient data and/or pertinent information to substantiate claims that there will be little or no adverse impacts to the BBAP, thereby prohibiting any further evaluation of the proposed activities until such information can be obtained. In reviewing the Site Certification Application for completeness, staff cited authority in Chapter 18-18 F.A.C. and 258.397 F.S. that established the Biscayne Bay Aquatic Preserve, Chapter 18-21 F.A.C. that rules Sovereignty Submerged Lands Management as well as the Outstanding Florida Water designation pursuant to rule 62-302.700(9)(h) 5 and 6. Staff also employed Environmental Control 403.509(3)(e) and (f) F.S. which states that "...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...(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" as well as "...(f) Minimize, through the use of reasonable and available methods, the adverse effects on human health, the

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environment, and the ecology of the land and its wildlife and the ecology of state waters and their aquatic life.”

Each of the questions or requests that follow are categorized under seven categories including Groundwater Issues, Surface Water Issues, Benthic Resources, Aerial Deposition, Cumulative Impacts, Public Interest and Mitigation and can be qualified by the authority cited above.

Groundwater Issues

1. Provide actual data from recent Aquifer Performance Test (APT) to determine potential impacts from construction and implementation of radial collector wells.
2. Provide the model and the model documentation used to develop the conclusions drawn from the APT.
3. Please provide the model and the model documentation used to evaluate groundwater movement, its interaction with the bay bottom.
4. Please provide the actual data, model, the model documentation used to conclude that the construction and/or operation of the borrow pit for fill will not adversely impact Biscayne Bay hydrology.
5. Please provide the actual data from the test drilling and salinity profiling of the aquifer that suggests the proposed activities will not induce saltwater intrusion.
6. Please provide the actual data, model and model documentation regarding the geological structure of the aquifer to support the assertions regarding directional withdrawal by the radial collector wells.
7. Please provide data to support that moderating salinity in Biscayne Bay, an estuary, at all throughout the year maintains Biscayne Bay in its essentially natural condition.
8. Provide mixing chamber data used to generate the “mixing chamber model” that was used to evaluate the potential impacts of the radial collector wells on the salinity regime of Biscayne Bay.
9. What does available data indicate about the extent of the existing hypersaline plume from the cooling canal system and how will it interact with the proposed hydrologic modifications resulting from Units 6 & 7?
10. Provide data to show that water pumped into cooling canals during construction will not move into groundwater and subsequently into surface waters of the aquatic preserve.
11. List the compounds, constituents, and their concentrations found in process and cooling water at time of entry into and exit from the facility

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12. Characterize and provide the concentrations of compounds found in all water to be used on site and provide data and relevant information to describe the ultimate fate of these compounds once they are used in the process.
13. Explain how the reuse water from Miami Dade Water and Sewer Department will be treated coming into the plant, what constituents are contained in said reuse water, how the reuse water will be treated further before being used by units 6 and 7.
14. What will remain in the cooling water after treatment of the reuse water from Miami Dade Water and Sewer and what is the ultimate fate of these compounds?
15. How will site construction such as putting in footings and foundations affect movement of surface and ground water into the aquatic preserve?

Surface Water

1. How is removing surface water and/or raising salinity as proposed consistent with restoration efforts by the state and federal governments or consistent with the intent of the Biscayne Bay Aquatic Preserve to maintain Biscayne Bay in its essentially natural condition? This proposed activity is contrary to information found in the Key Findings in the 2005 summary of *Historical Changes in Salinity, Water Quality and Vegetation in Biscayne Bay*, G. Lynn Wingard, USGS, http://sofia.usgs.gov/projects/summary_sheets05/hist_change.html and in the Biscayne Bay Coastal Wetlands feature of the Comprehensive Everglades Restoration Plan.
2. Provide data to support the assertion that onsite dewatering, excavation, de-mucking, and movement of fill around the site will have no adverse impacts on surface water.
3. Provide assurances and the data to support the assertion that there will be no adverse impacts to surface water from operation of the heat dissipation system.
4. How will construction of the on-site cooling water sewage treatment facility and the proposed plant site construction not decrease flow of fresh surface water to the aquatic preserve?
5. What is the characterization and concentration of the constituents that will be in the slurry mixture from construction and dewatering that may adversely affect surface water?

Benthic Resources

1. Provide baseline assessment of vegetative cover, infaunal and epibenthic species in order to determine any impacts of the proposed project's construction and/or operation on benthic resources. If not currently available or incomplete, please describe how such an assessment might be undertaken or completed.

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2. Document the presence, distribution and composition of seagrasses extending along the pattern of the radial collector wells and adjacent areas via hyperspectral analysis and groundtruthing. If not currently available or incomplete, please propose a plan for obtaining or completing such documentation.
3. Provide assurances that presence of as well as habitat function and value of submerged aquatic resources will not be disrupted or diminished by the construction and operation of proposed project. To the extent that such assurances are not presently available, please explain how these concerns could be addressed.
4. Provide data to support the conclusion that the benthic resources that currently exist along the bay bottom over the footprint of the radial wells and adjacent areas will continue to support the habitat function and values that they currently sustain. If not currently available or incomplete, please propose a plan for obtaining or completing such data.
5. Provide data to support the assertion that water intake from wells will be at a slow velocity. If not currently available or incomplete, please propose a plan for obtaining or completing such data.
6. Provide data to substantiate the conclusion that no entrainment of vertebrate and/or invertebrate species at any life stage and will occur. If not currently available or incomplete, please propose a plan for obtaining or completing such data.
7. Provide data on the spatial extent of the radial collector wells and related machinery. If not currently available or incomplete, please propose a plan for obtaining or completing such data.
8. Provide assurances that construction will not lead to localized disturbances in the bay bottom at unpredicted sites. To the extent that such assurances are not presently available, please explain how these concerns could be addressed.
9. Provide assurances that the construction and/or operation of the system will not lead to more wide scale disturbances such as loss of vegetation with the associated loss of ecosystem functions due to displacement or burial of biota, placement of material into the surface water or any other cause of disturbance. To the extent that such assurances are not presently available, please explain how these concerns could be addressed.
10. Provide data on the life history of the American Crocodile, an endangered species, in the vicinity of the proposed project to substantiate the conclusion that this species will not be adversely impacted. If not currently available or incomplete, please propose a plan for obtaining or completing such data.
11. As it is defined currently, what is the spatial extent of the transmission line corridor and to what extent, if any, does the transmission line corridor reside on sovereignty submerged lands?

12. Provide assurances to substantiate the assertion that no benthic resources, surface water resources, vertebrate or invertebrate species will be adversely affected by the use of a barge in shallow coastal areas to conduct the construction portion of the proposed project. To the extent that such assurances are not presently available, please explain how these concerns could be addressed.

Aerial Deposition

1. Per figure 6.1.4-1, the radial extent of the aerial deposition extends into the surface waters of Biscayne Bay. Biscayne Bay is designated an Outstanding Florida Water and as such has a no degradation standard. Please quantify by compound the concentrations and loading over time for the life of the plant within the area of proposed deposition.

Mitigation

1. Please explain how the functional lift provided by the mitigation options listed in this application sufficiently address the potential impacts caused by the construction and operation of the proposed facility.

Public Interest

1. No environmental, social, and economic benefit analysis has been provided by the applicant related to its activity affecting the Biscayne Bay Aquatic Preserve. What is the applicant's analysis and what facts does the applicant contend support a finding that "The use, sale, lease, or transfer of interest and the project planned in conjunction with the use, sale, lease or transfer of interest are in the public interest..." per 18-18.006(3)(b)(ii), F.A.C., where "public interest" means the "demonstrable environmental, social and economic benefits which would accrue to the public at large as a result of a proposed action, and which would clearly exceed all demonstrable environmental, social and economic costs of the proposed action" per 18-18.004(20), F.A.C.

2. In providing this public interest analysis, please account for the following: According to a USGS study of salinity (Wingard, 2005) sea level rise should be considered by resource managers when evaluating the future health and salinity regime of the bay: "Sites in both central and southern Biscayne Bay show indications of increasing marine influence at the sites. These trends could be a result of rising sea level, of changes to the natural flow of fresh water or both, but the timing of changes at some of the near-shore sites suggests both factors are involved." Other key findings include implications for resource managers that "Biscayne Bay appears to be evolving toward a more marine environment and sea-level rise should be factored into the planning process." In what way has sea level rise been factored into the plans to operate the facility over an extended amount of time?

Cumulative Impacts

Chapter 18-18.008 F.A.C. states that “In evaluating applications for activities within the preserve, the Department [of Environmental Protection] recognizes that, while a particular alteration of the preserve may constitute a minor change, the cumulative effect of numerous such changes often results in major impairments to the resources of the preserve. Therefore, the Department shall evaluate a particular site for which the activity is proposed with the recognition that the activity is part of a complete and interrelated system. The impact of a proposed activity shall be considered in light of its cumulative impact on the preserve’s natural systems. The Department shall include as a part of its evaluation of an activity:

- (1) The number and extent of similar human actions within the preserve which have previously affected or are likely to affect the preserve, whether considered by the Department under its current authority or which existed prior to or since the enactment of the Act; and
- (2) The similar activities within the preserve which are currently under consideration by the Department; and
- (3) Direct and indirect effects upon the preserve which may be reasonably expected to result from the activity; and
- (4) The extent to which the activity is consistent with management plans for the preserve when developed; and
- (5) The extent to which the activity is permissible within the preserve in accordance with comprehensive plans adopted by affected local governments.”

1. In light of Chapter 18-18.008 F.A.C. and the general lack of knowledge about the extent of the hypersaline plume currently generated by the existing cooling canal system and the potential effects of the radial collectors wells on both saltwater intrusion westward and the hypersaline plume eastward, please describe how the long-term effects of the radial collector wells will be documented, monitored and managed adaptively if adverse impacts to groundwater or surface water occur.

2. Because the proposed activity may result in adverse impacts as defined in Outstanding Florida Waters authority, Biscayne Bay Aquatic Preserve rule and statute, as well as 403.509(3)(e) and (f), please provide:

- A. A statement of the project’s environmental impacts, benefits, and detriments to determine immediate, long-term and cumulative impacts to the aquatic preserve.
- B. An analysis of the environmental, social, and economic benefits required per Chapter 18-21.003(48) F.A.C., Chapter 18-18.006(3)(b)(ii) F.A.C. and Chapter 18-18.001(4)(e) to demonstrate that the project will “protect or enhance

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the biological and aesthetic values of the preserve..." and demonstrate that the proposed activity is in the public interest.

VII DEP SITING COORDINATION OFFICE

1. Provide a summary and a map of state owned lands potentially impacted by the plant and associated facilities (other than transmission lines).
2. The Department notes that FPL has conservatively estimated the "maximum" wetland impacts for the plant and associated facilities. Provide an estimate of the anticipated "actual" wetland impacts, following anticipated utility efforts to minimize impacts.
3. Provide comparative topographic maps showing the current sea level and predicted sea level in the year 2060 in the area of the Turkey Point Plant based on the most recent data available. Provide a summary of the background data (with citations) used to support the predicted sea level.
4. Provide copies of permits issued for other radial collector well systems, such as Louisville Water Company, Lake Havasu City, Missouri American Water Company and similar. Provide descriptions/information related to existing radial collector well systems utilizing seawater applications.

OTHER AGENCIES/LOCAL GOVERNMENTS

The following agencies have identified the need for additional information, and their requests are attached:

1. the South Florida Regional Planning Council;
2. the South Florida Water Management District;
3. Miami Dade County;
4. the Department of Transportation;
5. the Florida Fish and Wildlife Conservation Commission; and
6. the City of Homestead.

The above agency comments/questions are attached "*as received*" by the Department without editing. It should be noted that several questions proposed are those for which answers will not likely be available until the post-certification phase of the certification process. Additionally, some questions may be reflective of procedural requirements for which there exist no identifiable state or local standards. Furthermore, some agencies appear to have combined questions related to the transmission line and plant portions of the application.

As such, the Department requests that for this completeness filing the applicant respond to only those questions related to the plant and associated facilities other than the transmission lines. Furthermore, the applicant should identify those items which

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are more suitably handled through post-certification submittals, proposing related conditions of certification. Lastly, the applicant should identify those questions for which there exists no applicable standard.

Although a separate federal proceeding coordinated by the Nuclear Regulatory Commission will directly incorporate federal reviews, completeness comments regarding the Site Certification Application were submitted by the U.S. Department of the Interior, National Park Service, Biscayne National Park. Those questions/comments were forwarded to the applicant upon receipt.

Requests for completeness items related to federal permit applications are processed directly by the federally delegated or approved program and are not intended to be included herein.