

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: FLORIDA POWER & LIGHT)
COMPANY MANATEE UNIT 3) Case No. 02-0937EPP
POWER PLANT SITING)
APPLICATION NO. PA 02-44.)
_____)

RECOMMENDED ORDER

Pursuant to notice, the Division of Administrative Hearings, by its duly-designated Administrative Law Judge, Charles A. Stampelos, held a certification hearing in the above-styled case on January 27, 2003, in Parrish, Florida.

APPEARANCES

For Florida Power & Light Company:

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For the Southwest Florida Water Management District:

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For Manatee County:

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For ManaSota-88, Inc.:

Glenn Compton, Chairman
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STATEMENT OF THE ISSUE

The issue to be resolved in this proceeding is whether the Governor and Cabinet, sitting as the Siting Board, should issue certification to Florida Power & Light Company ("FPL") to construct and operate a new 1,100 megawatt (MW) combined-cycle electrical generating unit to be located at FPL's existing Manatee Plant site in Manatee County, Florida, in accordance with the Florida Electrical Power Plant Siting Act, Section 403.501, et seq., Florida Statutes.

FINDINGS OF FACT

Background

1. The entire Project Area is outside the 100-year flood zone. Construction activities will alter runoff in parts of the site, but no adverse effects are expected from these activities.

Construction period surface water runoff will be conveyed to stormwater ponds that can provide detention for all runoff from these areas.

2. Impacts to offsite surface waters from construction-related runoff are expected to be negligible. Onsite construction activities will not cause adverse ecological effects as the Project Area is already highly altered, and maintained as either grassy or cultivated areas. These areas do not contain unique wildlife species and are not considered important wildlife habitats because of their disturbed nature. (No wetlands are located within the Project Area.)

3. Construction noise will comply with the Manatee County Noise C by individual contractors.

Project Description

4. Manatee Unit 3 will consist of four advanced combustion turbines ("CT") and four heat recovery steam generators ("HRSG") in a configuration referred to as a "4-on-1" combined cycle unit. Each combustion turbine will generate approximately 170 MWs. The CTs operate much like a jet engine, in which air and fuel, in this case natural gas, are combined in the CT and then combusted. The heated gases then rotate a shaft that drives an electrical generator. The exhaust gases from the combustion turbines produce steam in the heat recovery steam generators, which is used in turn to drive a separate steam turbine

generator. By utilizing the waste heat from the CTs, the resulting combined cycle unit will be more efficient than the simple cycle CTs and traditional steam-electrical units. Manatee Unit 3 will be among the most efficient electric generators in Florida.

5. Cooling water for the Manatee Unit 3 will be provided by the existing cooling pond. Wastewaters and stormwater from the power block will be treated onsite and recycled to the cooling pond. Other onsite facilities to be constructed as part of the Project will include interconnections with the existing onsite transmission facilities, along with storage facilities for ammonia, hydrogen, demineralized water, and condensate water.

6. Natural gas will be the only fuel used in the Manatee Unit 3. Gas will be delivered to the Plant by pipeline. The Manatee Plant site is already served by an existing natural gas pipeline that may supply gas to the Unit 3, or another gas pipeline may be installed and would be independently permitted and constructed. Natural gas will not be stored onsite.

Water Uses and Sources

7. Water uses for Manatee Unit 3 will include circulating water for the condensers and other cooling, demineralized water for use in the power generation process, and general service

water for washdowns and other uses. The existing cooling pond, with makeup water provided from the Little Manatee River, will be the source of cooling, service, and process water for Unit 3, as it is currently the source of water for the existing Manatee Plant. Potable water will be supplied from an existing permitted onsite potable well.

8. The existing cooling pond is man-made and has earthen embankments. The 4,000-acre pond has a gross storage volume of approximately 52,000 acre-feet of water. The pond contains two splitter dikes to prevent short circuiting in the circulating water, thereby enhancing the cooling pond's heat dissipation efficiency.

9. A spillway is located on the northern embankment of the cooling pond and is designed to safeguard against overtopping of the embankment. The only planned releases from the cooling pond are annual testing of the spillway gates.

10. Seepage from the cooling pond through the embankments is captured in a system of toe drains around the perimeter of the pond. The seepage is collected in sumps and returned to the cooling pond. An average of approximately three million gallons per day of seepage is returned to the cooling pond.

11. The Unit 3 circulating water system may require the construction of new inlet and outfall structures within the cooling pond and installation of circulating water pumps and

underground piping to move water to and from the new Unit 3. The existing inlet structure may be utilized and a new diffuser pipe may be installed as part of the circulating water system, which would eliminate the need to construct new facilities in the pond dike. The existing weir at the Little Manatee River intake will be upgraded to ensure minimum river flows are maintained. No other changes are needed to the cooling pond or the existing cooling water systems for Units 1 and 2 or to the cooling pond makeup system.

12. An existing Permit Agreement between FPL and the Southwest Florida Water Management District, originally entered into in 1973, allows sufficient makeup water for the operation of the Manatee Plant cooling pond even with the addition of Unit 3. Under the existing agreement, withdrawals may not exceed 190 cubic feet per second ("cfs") and are not allowed to lower river flow below 40 cfs. The existing agreement would allow FPL, under certain flows in the Little Manatee River, to withdraw up to 47 percent of the river flow.

13. After Unit 3 begins operation, makeup water for the cooling pond will continue to be withdrawn from the Little Manatee River. FPL has proposed, and SWFWMD has recommended, a more restrictive schedule for diversions from the Little Manatee River beginning in October 2004. With the proposed diversion schedule, withdrawals will reduce the rate of river flow by no

more than 10 percent. During emergency conditions, when the level of the cooling pond falls below 62 feet above mean sea level ("msl"), FPL will be allowed to revert to the existing diversion schedule for October through July, under the current Permit Agreement until the cooling pond reaches 63 feet msl. Under either schedule, diversions will neither reduce the river flow below 40 cfs nor exceed 190 cfs.

14. A modeling analysis of the revised schedule indicates that the average monthly diversion or withdrawal for all three units from the Little Manatee River is estimated to be about 8.9 million gallons per day ("mgd") when Unit 3 becomes operational. Flow in the Little Manatee River averages 114 mgd near the FPL Manatee Plant. The modeling analysis showed that only three events in a 24-year period would qualify as "emergencies" in which the current diversion schedule would have been used. Under this analysis, withdrawals under the proposed diversion schedule would have exceeded 10 percent of the river flow only three percent of the time. Historical withdrawals for the FPL Manatee Plant have exceeded 10 percent of the river flow 18.5 percent of the time.

15. The Little Manatee River is approximately 40 miles long from its origins to its mouth at Tampa Bay. The FPL Manatee Plant is about 18.5 miles above the mouth of the river. From its mouth up to about river mile 12, the vegetation in this

part of the river is mangroves, salt marsh, and tidal marsh. At river mile 12 and above, the river is generally freshwater with freshwater bottom land stream swamp vegetation. Water flows and levels exhibit significant variability, with flows ranging between a low of four cubic feet per second and a high of 10,000 cubic feet per second at a location 3.5 miles downstream from the FPL Manatee Plant. At that location, water levels can vary between two feet and 12 feet above mean sea level.

16. Withdrawals from the Little Manatee River have the effect of reducing flow in the river, which could affect water levels along the river, as well as the location of the saltwater interface in the river itself. The saltwater interface represents the point at which fresh and saltwater meet, and it may move up and down the river due to river flow and tidal forces. There has been no adverse effect on the ecology of the Little Manatee River or its estuary from the historical withdrawals for the FPL Manatee Plant.

17. An evaluation of the hydrologic and ecological effects of the projected withdrawals under the revised diversion schedule indicate that the withdrawals after Manatee Unit 3 commences operation should not result in adverse impacts to the Little Manatee River. Hydrologic analyses indicate that the effects of withdrawals under the proposed diversion schedule on water levels, water flows, and salinity in the Little Manatee

River will all be within the natural variability of the river and similar to the effects of the historical withdrawals for the Manatee Plant.

18. No significant adverse effects on the ecological features of the Little Manatee River will result from the withdrawals under the new diversion schedule. Flora and fauna in the river are well adapted to fluctuating water levels and salinity. The new diversion schedule will more closely mimic natural rainfall patterns and the 40 cfs cutoff for diversions will protect critical low flow periods in the river. The new diversion schedule with Manatee Unit 3 will be more environmentally sensitive than the existing diversion schedule. These diversions will occur in a manner that better mimics the natural fluctuations in daily river flow by allowing more water to be diverted during high flow periods when the ecology of the river and its estuary is less sensitive to withdrawals.

19. FPL has provided reasonable assurances that the proposed withdrawals after Unit 3 commences operation will have no adverse effects on the Little Manatee River and its estuary. SWFWMD has proposed that FPL undertake a hydrobiological monitoring program of the River. This program will map and monitor vegetation in the river and collect data on salinity and tides in the river. The monitoring program will require regular

reports to SWFWMD on the effects of FPL's withdrawals on the ecology of the Little Manatee River and its estuary.

Groundwater Impacts

20. The only groundwater withdrawal associated with Manatee Unit 3 will be the withdrawal of approximately 1,000 gallons per day of additional groundwater for potable use. This would increase total potable groundwater withdrawals to 8,000 gallons per day. This is within the permitted withdrawal rates under the existing Manatee Plant's consumptive use permit for potable water. Thus, it is anticipated there will be no adverse impacts on groundwater supplies as a result of groundwater withdrawals for Unit 3. Groundwater will not be used in the cooling or other processes for the Project.

21. The existing Manatee Plant cooling pond is the principal source of potential impacts to groundwater at the Plant. Because the cooling pond is generally above the surficial aquifer, seepage from the cooling pond may move laterally through the earthen embankments and vertically into the groundwater beneath the cooling pond. The cooling pond is surrounded by a toe drain system and sumps that are designed to collect horizontal seepage from the cooling pond. This system captures most, if not all, of the seepage and recycles it to the cooling pond, thereby minimizing potential groundwater quality impacts to the surficial aquifer.

CONDITIONS OF CERTIFICATION: PA 02-44

FLORIDA POWER & LIGHT CORPORATION
MANATEE ELECTRIC POWER GENERATION FACILITY UNIT 3

XXIX. WATER

The construction and operation of the Manatee Unit 3 project shall not cause or contribute to violation of any applicable provision of National Pollutant Discharge Elimination System (NPDES) Permit No. FL 0002267 Rev A or as subsequently revised, Chapters 62-4 through 62-699, F.A.C., and rules of the Department and the Southwest Florida Water Management District.

Any violation of such permit or rules shall constitute a violation of these conditions of certification.

XXXIII. WATER MANAGEMENT DISTRICT

Reports

1. All Water Management District-related reports required by the Site Certification shall be submitted to the Southwest Florida Water Management District on or before the fifteenth (15th) day of the month, unless otherwise indicated, following data collection and shall be addressed to:

Permit Data Section, Records and Data Department
Southwest Florida Water Management District
2379 Broad Street
Brooksville, Florida 34609-6899

2. Unless otherwise indicated, three copies of each plan or report are required to be submitted to the Southwest Florida Water Management District by the Site Certification. The exceptions are routine monthly pumpage, rainfall, evapotranspiration, water level or water quality data which require only one copy.

B. As of October 1, 2004, the Permit Agreement and First Amendment to the Permit Agreement between the Southwest Florida Water Management District and FPL, dated April 17,

1973 and November 12, 1975, respectively, shall become null and void. It is acknowledged that, although this Site Certification applies only to Unit 3, the diversion schedules authorized under this Site Certification authorize diversions for Units 1 and 2.

C. Any wells not in use, and in which pumping equipment is not installed shall be capped or valved in a water-tight manner in accordance with Chapter 62-532.500(3)(a)(4), F.A.C.

D. Minimum Flows for Little Manatee River

1. The Southwest Florida Water Management District anticipates establishment of Chapter 373.021(1), Florida Statutes, Minimum Flows for the Little Manatee River. Once adopted, the Minimum Flow adopted by the Southwest Florida Water Management District shall automatically be applicable, and withdrawals authorized under the diversion schedules included under this Site Certification shall be modified to be consistent with the adopted Minimum Flow.

2. FPL shall cease or reduce surface water withdrawal as directed by the Southwest Florida Water Management District if rates of flow in the Little Manatee River fall below the minimum levels established in Chapter 40D-8.

E. Flow Meters

1. FPL shall continue to maintain and operate totalizing flow meters or other flow measuring devices as approved by the Regulation Department Director, for District ID. No. 1, Permittee ID. No. 1, (Little Manatee River water-intake structure).

2. The flow meters shall have and maintain accuracies within five percent of the actual flow as installed.

3. Total flow in both cubic feet per second (cfs) and gallons per day (gpd) and meter readings from each metered source listed above shall be recorded on a daily basis and reported to the Permit Data Section (on District approved forms) on or before the fifteenth (15th) day of the following month. If a metered withdrawal is not utilized during a given month, a report shall be submitted to the Permit Data Section indicating zero gallons.

F. By May 1, 2007, FPL shall submit an updated Water Conservation Plan for approval by the Resource Regulation Director. Subsequent reports shall be due every five years thereafter. These plans shall document all water conservation measures implemented by FPL at this site, and shall provide an analysis of the feasibility of implementing further water conservation measures beyond those already implemented. Such conservation measures shall include, but not be limited to, new water conserving technologies and industry best management practices. The intent of these measures shall be to decrease overall water usage. The report shall explain the experienced and potential water savings of each measure in gallons. In addition, the report shall address the economic, technical, and environmental feasibility of implementing any water conserving measures that are not already implemented. This plan shall be implemented immediately upon Southwest Florida Water Management District approval.

G. **Little Manatee River Flow Data**

1. On a daily basis, flow in the Little Manatee River shall be recorded at the FPL gauge station located ¼ mile upstream of diversion weir and reported to the Permit Data Section (using District approved forms) on or before the fifteenth (15th) day of the following month. The recordings shall include average daily water flow in cubic feet per second (cfs) and average daily water flow in million gallons per day (mgd).

2. By October 1, 2003, FPL shall provide to the SWFWMD Resource Regulation Director, a quality control and assurance (QA/QC) program for the flow measurements.

a. This shall include an annual operation and maintenance program which includes specific information on measurement devices utilized, updated river profiles, flow rating tables, re-surveying of the gauge, and other measures as necessary to ensure accurate readings and that diversions are consistently undertaken in compliance with diversion schedule(s).

b. Flow data from the FPL gauge shall be compared with the United States Geological Survey (USGS) Station 02300500 located near Wimauma, Florida as a cross-check to assess the accuracy of measurement of the FPL gauge. Any divergence noted between these two gauges shall be further evaluated to determine if FPL's gauge is accurate. Any action necessary to ensure the accuracy of the FPL gauge shall be implemented immediately thereafter.

c. Reports regarding the results of the QA/QC program shall be provided to the SWFWMD Resource Regulation Director by May 1 of each year thereafter.

d. The QA/QC program shall be implemented upon approval by the Resource Regulation Director.

H. The existing weir at the river interface with the pump house withdrawal point(s) shall be upgraded to ensure that the 40 cfs threshold is complied with at all times.

I. Diversion Schedules

1. On October 1, 2004, FPL shall permanently implement the Regular diversion schedule (RDS) for withdrawals of water from the Little Manatee River with the following limitations:

Withdrawals shall not occur when Little Manatee River flow, as measured at FPL's gauging station (at the point of diversion), is less than 40 cfs (25.9 mgd).

The maximum authorized diversion is 190 cfs (122.8 mgd).

Withdrawals shall be limited to not greater than 10% of the Little Manatee River flow as measured at FPL's gauging station.

In no case shall the diversion reduce the flow in the Little Manatee River below the point of diversion to less than 40 cfs.

2. As of October 1, 2004, FPL is authorized to implement an emergency diversion schedule (EDS) in the event the water level in the cooling pond falls below 62.00 ft. N.G.V.D. subject to the following limitations:

a. Withdrawals shall not occur when Little Manatee River flow, as measured at FPL's gauging station (at the point of diversion), is less than 40 cfs (25.9 mgd).

b. The maximum authorized diversion is 190 cfs (122.8 mgd).

c. EDS withdrawals shall be limited according to the Table below:

Little Manatee River Flow in cfs As Measured at the FPL Gauging Station	Maximum Allowed Diversion in cfs
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$Q_{riv} < 40$	0
$40 \leq Q_{riv} < 60$	$0.85 Q_{riv} - 34.0$
$60 \leq Q_{riv} < 100$	$0.325 Q_{riv} - 2.5$
$100 \leq Q_{riv} < 150$	$0.52 Q_{riv} - 22.0$
$150 \leq Q_{riv} < 200$	$0.74 Q_{riv} - 55.0$
$200 \leq Q_{riv} < 400$	$0.485 Q_{riv} - 4.0$
$400 \leq Q_{riv}$	190

Note: Q_{riv} is the Little Manatee River Flow in cfs as measured at the FPL gauging station.

d. In no case shall the diversion reduce the flow in the Little Manatee River below the point of diversion to less than 40 cfs.

The river diversion schedule shall revert from the EDS to the RDS upon cooling pond water levels reaching an elevation of 63.00 ft N.G.V.D.

f. Prior to implementation of withdrawals under the EDS, FPL shall make every feasible effort to avoid the need to initiate use of the EDS (e.g. enhanced conservation). When it becomes apparent that such enhanced measures are insufficient to avoid having to undertake withdrawals under the EDS, FPL shall provide-written notice to the SWFWMD Resource Regulation Director. This notification shall be provided no less than 14 days prior to the anticipated date for initiating diversions under the EDS. Such notification shall include reasons for utilizing the EDS, details on enhanced conservation and other efforts which were enacted to avoid undertaking withdrawals under the EDS, details of any further enhanced conservation efforts that shall be implemented during use of the EDS, and the anticipated duration of EDS usage.

g. Within 30-days of cessation of withdrawals under the EDS, FPL shall provide written notification to the SWFWMD Resource Regulation Director, notifying the Southwest Florida Water Management District of cessation of these withdrawals. Notification shall also provide a summary of the number of days the EDS was in effect, the number of days when withdrawals actually occurred under the EDS, the percent of daily river flow diverted per day, and total volume diverted over the time the EDS was in use. Additionally, FPL shall include in the summary, an evaluation of the monitoring data collected for the period the EDS is in use and an analysis of the effects of the increased withdrawals on salinity movements of the Little Manatee River as measured at the two fixed monitoring stations.

H. Hydrobiological Monitoring Program (HBMP)

1. By October 1, 2003, FPL shall submit for approval of the SWFWMD Resource Regulation Director a proposed

Hydrobiological Monitoring Program (HBMP) describing all data collection, monitoring locations, and analytical methods to be used in the program.

2. On or before May 1, 2004, FPL shall implement the Southwest Florida Water Management District approved HBMP. Variables that shall be measured in the monitoring program include:

a. Specific conductance using automated instruments at two fixed locations in the lower tidal river channel. The specific conductance recorders shall be operated to measure temperature corrected specific conductance in the river at approximate mid-depth at each location. Specific conductance measurements shall be converted to salinity using calculations approved by the Southwest Florida Water Management District and these instruments shall be referred to as salinity recorders. Automated specific conductance measurements shall be made at fifteen-minute intervals and the time of day shall be recorded for each measurement. Data shall be reduced to mean, minimum, and maximum salinity values for each tidal cycle, with time of day retained for the daily minimum and maximum values.

b. Continuous tide stage recorder. The continuous tide stage recorder shall also be installed near one of the specific conductance recorders. Tide measurements shall be made at fifteen-minute intervals and the time of day shall be recorded for each measurement. Tide data shall be reduced to mean, minimum, and maximum values for each tidal cycle, with time of day retained for the daily minimum and maximum values.

c. The continuous salinity and tide stage recorders shall be regularly maintained and calibrated to reference standards to ensure that accurate data are collected at all times. Upon the Southwest Florida Water Management District's approval FPL, shall install the automated salinity and tide recorders at the approved locations.

d. The HBMP shall include color infra-red aerial photography and mapping of vegetative communities in the Little Manatee River estuary within the 100-Year flood plain, extending between river mile 3 and river mile 11. River miles are defined in Figure SWFWMD 1-1 contained within the FPL Sufficiency Response received by the Southwest Florida Water Management District on June 10, 2002. Infra-red aerial photography, at a minimum scale of 1" = 1,000', with 60% stereo

overlap, shall be geo-referenced for scale with all subsequent photos scaled to the same references. All photography shall be taken in early October, as practicable. Should October photography prove impracticable, FPL shall notify the SWFWMD Resource Regulation Director of when photography will be completed. Such photography shall be completed as shortly after the October timeframe, as practicable.

(1) Initial aerial photography and baseline vegetative mapping shall be performed in October 2004. Such photography shall be taken prior to start-up of Unit 3. This mapping shall be included with the first data baseline summary report due May 1, 2005.

(2) Subsequent aerial photographs (at the same scale as the initial photographs) and vegetative mapping shall be performed in October, 2007 and October, 2011. These photographs shall be included in the Interpretive Reports due May 1, 2009 and May 1, 2013. Upon written request and approval by the SWFWMD Resource Regulation Director, adjustment to this schedule may be implemented to document the effect of a particular wet or dry year or series of years, or if weather conditions prevented collection of photographs of sufficient quality during specified timeframes. Additionally, these

photographs shall be made available to the Southwest Florida Water Management District for inspection, upon request, prior to the submittal of the Interpretive Reports.

(3) A combination of high-resolution infra-red aerial photography and concurrent field reconnaissance of the river shall be performed to identify the distribution of major plant communities such as mangroves, salt marshes, brackish marshes and freshwater aquatic and floodplain communities. Within these communities more discrete diagnostic plant assemblages shall be located and described, including stands of individual species or mixtures of species [eg. red mangrove (*Rhizophora mangle*), black needlerush (*Juncus roemerianus*), sawgrass (*Cladium jamaicense*), cattails (*Typha* spp.), leather ferns (*Acrostichum* spp.), spatterdock (*Nuphar luteum*) or other conspicuous indicator species]. The distribution of these communities (including assemblages) shall be digitized into a Geographic Information System (GIS) compatible with the Southwest Florida Water Management District GIS system. Both electronic and hard-copy versions of the maps shall be provided for each mapping episode and the changes in the vegetation of the river shall be described by comparing the distribution of plant communities on the maps and quantifying the total area for each community. The location of these

communities along the estuarine gradient shall be described and potential relationships to changes in salinity and freshwater inflows and withdrawals by FPL shall be described.

3. Submittal and interpretation of monitoring data

a. The results of the HBMP monitoring program shall be submitted to the Southwest Florida Water Management District in a series of Data Summary and Interpretive Reports.

(1) Data Summary Reports shall be submitted to the Southwest Florida Water Management District with the first data baseline summary report due May 1, 2005. Subsequent Data Summary Reports shall be due on May 1, 2007, and May 1, 2011.

(2) The Data Summary Reports shall include plots of mean, minimum and maximum salinity values for all tidal cycles, and tables of the salinity data. These data and other raw data specified in the Southwest Florida Water Management District approved HBMP shall be provided on paper and electronic medium in a format meeting District specifications. The results and dates of the field calibrations of the salinity meters shall be provided in the reports. Vegetation maps (hard copy and GIS files) that have been completed to that point in time shall be included with the Data Summary Reports.

FPL shall meet with the Sarasota Regulation Department of the Southwest Florida Water Management District no less than 60 days prior to submittal of the first Data Summary Report in order to reach agreement as to the content and format of the report.

Interpretive Reports shall be submitted to the Southwest Florida Water Management District with the first interpretive report due May 1, 2009. A subsequent Interpretive Report shall be due on May 1, 2013. The submittal of an Interpretive Report shall preclude the submittal of a separate Data Summary report for that period. In lieu of a separate report, the Data Summary can be provided as an appendix of the Interpretive Reports. The Interpretive Reports should include all data for that period. The Southwest Florida Water Management District and FPL may agree to adjust the timing of these reports depending on the initial operation of the new generating unit.

(1) Salinity data from the monitored sites (converted from specific conductance) shall be analyzed to examine trends in salinity over time. Along with graphic presentation of the data, one or more parametric or non-parametric statistical tests shall be run to examine trends in the data. The statistical methods for these tests shall be described in the HBMP. Data from the continuous salinity and tide stage recorders shall also be used to develop models for predicting salinity at the monitored sites as a function of streamflow and tide stage. These models shall be used to evaluate the effect of withdrawals on salinity at these locations. By comparison to other salinity data available for the river (SWFWMD longitudinal transects), these sites shall be used as representative locations to characterize the general salinity regime of the river. The Interpretive Reports shall include the results of the trend analysis, the salinity modeling, and the analysis of the vegetation mapping effort. The interpretative reports shall discuss the results of the monitoring program with regard to the freshwater flow regime and ecology of the lower river, and their relationship to the FPL withdrawals. Variations in freshwater inflows resulting from changes in climatic conditions and physical modifications to the watershed shall be discussed. The relative effect of withdrawals on the freshwater inflows and ecology of the lower

river shall be assessed in detail. The information obtained through the vegetative mapping and photography shall be included with the 2009 and 2013 Interpretive Reports.

FPL shall meet with the Sarasota Regulation Department of the Southwest Florida Water Management District no less than 60 days prior to submittal of all Interpretive Reports in order to reach agreement as to the content and format of the reports, as well as discuss the results.

4. If results of the HBMP indicate that withdrawals by FPL have caused, or will cause, adverse impacts to the ecology of the river and/or its estuary (as defined by Southwest Florida Water Management District Rule and associated Performance Standards), the diversion schedule shall be modified so as to not cause adverse impacts. If such a determination is made, FPL shall propose revisions to the diversion schedule for the Southwest Florida Water Management District's approval. Upon approval, FPL shall implement said revised diversion schedule. Nothing in this Site Certification shall be construed to replace, limit, or impair the Southwest Florida Water Management District's right to require modification of the RDS or the EDS in accordance with applicable law.

5. Continuation of HBMP after 2013

a. If after eight years of continuous monitoring, following the start-up of the new generating unit, the monitoring program demonstrates that FPL's withdrawals have not affected the flow rates of the Little Manatee River to the extent that water quality, vegetation, animal populations, salinity distributions, recreational or aesthetic qualities are adversely impacted, the monitoring plan may be discontinued or modified as deemed appropriate by the Southwest Florida Water Management District.

b. Any requests to modify or discontinue the HBMP shall be made in writing to the SWFWMD Resource Regulation Director. Only upon receipt of written authorization from the SWFWMD may FPL modify or discontinue the HBMP.

c. If after eight years of monitoring, additional data is necessary as determined by evaluation of data submittals to date, FPL shall continue implementation of the HBMP with submittal of Data Summary Reports every two years and Interpretive Reports every four years. Implementation of the HBMP and reporting requirements shall continue until sufficient information exists for the District to definitively determine that FPL's withdrawals have not affected the flow rates of the Little Manatee River to the extent that water quality,

vegetation, animal populations, salinity distributions, recreational or aesthetic qualities are adversely impacted.

I. Alternative Water Sources Report

1. By May 1, 2005, and every five years thereafter, FPL shall submit an Alternative Water Sources Report for approval by the SWFWMD Resource Regulation Director. These plans shall assess the feasibility of obtaining alternative water sources to reduce FPL's dependence upon surface water from the Little Manatee River. This plan shall include an economic, technical and environmental feasibility assessment of using alternative sources including reclaimed water from the Manatee Agricultural Reuse System (MARS), sufficiently treated water from the Piney Point, Inc. site, stormwater (including on-site and offsite sources), desalination, and other non-groundwater sources.

2. MARS

a. FPL shall evaluate the optimal disposition of MARS water at the FPL site. This shall include evaluation of the feasibility of use of MARS water by FPL and/or providing wet weather storage for MARS (for ultimate use by other users) to help obtain the optimal net benefit for water resources within the Southern Water Use Caution Area (SWUCA). FPL shall work in close coordination with the Southwest Florida Water Management District and Manatee County in making this determination.

b. If sufficient volumes of alternative sources are available for use by FPL to meet all or a portion of the total demand allowed by this Site Certification and obtaining such water is economically, technically, and environmentally feasible, FPL shall connect to the source(s) as soon as possible. FPL shall notify the Southwest Florida Water Management District that such a connection has been made within 30 days of said connection, or upon use of the cooling pond for storage of MARS water.

c. If Manatee County is unable to provide reclaimed water to FPL for its use or for storage for MARS or if it is not economically, technically, nor environmentally feasible for FPL to use the reclaimed water, FPL shall submit a report to the Southwest Florida Water Management District. This report shall be submitted to the SWFWMD Resource Regulation Director by May 1, 2005, and shall explain, in detail, why the implementation of these options is not feasible.

3. FPL shall continue to coordinate with the Florida Department of Environmental Protection and the Southwest Florida Water Management District to evaluate the feasibility of using sufficiently treated water from the Piney Point Phosphates, Inc. site. By September 1, 2003, FPL shall provide a report for the approval of the SWFWMD Resource Regulation Director, regarding the feasibility of obtaining and using these waters from the Piney Point Phosphates, Inc. site. Subsequent reports shall be due annually on this same date, thereafter. If receipt of this water is determined to be infeasible by the Southwest Florida Water

Management District, the annual reporting regarding this source of water shall cease upon written request by FPL to the Southwest Florida Water Management District.

4. Reclaimed Water

a. FPL shall continue to investigate the feasibility of using reclaimed water as a supplemental water source for the term of this Site Certification. The report shall contain an analysis of reclaimed water sources for the area, including the relative location of these sources to FPL's property, the quantity of reclaimed water available, the projected date(s) of availability, costs associated with obtaining the reclaimed water, and an implementation schedule for reuse, if feasible. If additional treatment of the reclaimed water would be necessary to make its use economically, technically, or environmentally feasible, FPL shall address pertinent issues in the report. Infeasibility shall be supported with a detailed explanation.

b. When sufficient volumes are available to meet all or a portion of the total demand allowed by this Site Certification, FPL shall connect to the source(s) as soon as possible. A report to the SWFWMD Resource Regulation Director shall indicate when receipt of reclaimed water is anticipated by FPL. The Southwest Florida Water Management District shall be notified within 30 days after connection is completed. Any effects that receipt of reclaimed water would have upon the need to withdraw water from the Little Manatee River under the normal diversion schedule and/or the EDS shall be identified in the report.

c. If it is determined that reclaimed water will not be feasible for FPL for a period longer than five years after the date of any report, FPL may provide a written request to the Southwest Florida Water Management District to modify the reporting schedule under this condition.

L. If any of the statements in the application and in the supporting data are found to be untrue or inaccurate, or if FPL fails to comply with all of the provisions of Chapter 373, F.S., Chapter 40D, or the Water Management District-related conditions set forth herein, the SWFWMD Governing Board shall request the Florida Department of Environmental Protection to revoke or modify this Site Certification in accordance with applicable law.

M. This certification issued based on information provided by FPL demonstrating that the use of water is reasonable and beneficial, consistent with the public interest, and will not interfere with any existing legal use of water. If, during the term of this Site Certification, it is determined by the Southwest Florida Water Management District that the use is not reasonable and beneficial, in the public interest, or does interfere with an existing legal use of water, the SWFWMD Governing Board may request the DEP to revoke or modify this Site Certification in accordance with applicable law.

N. FPL shall not deviate from any of the Water Management District-related terms or conditions of this Site Certification without written approval by the Southwest Florida Water Management District and the DEP.

O. In the event the Southwest Florida Water Management District declares that a Water Shortage exists pursuant to Chapter 40D-21, the SWFWMD Governing Board may request the FDEP to alter, modify, or declare inactive all or parts of these conditions of certification as necessary to address the water shortage.

P. The Southwest Florida Water Management District may collect water samples from any withdrawal point listed in the certification or shall require FPL to submit water samples when the Southwest Florida Water Management District determines there is a potential for adverse impacts to water quality.

Q. FPL shall provide access to an authorized Southwest Florida Water Management District representative to enter the property at any reasonable time to inspect the facility and make environmental or hydrologic assessments. FPL shall either accompany Southwest Florida Water Management District staff onto the property or make provision for access onto the property.

R. Issuance of this Site Certification does not exempt FPL from any other Southwest Florida Water Management District requirements.

S. FPL shall practice water conservation to decrease waste and to minimize runoff from the property. At such time as the SWFWMD Governing Board adopts specific conservation requirements for FPL's water use classification, the facility shall be subject to those requirements upon notice and after a reasonable period for compliance.

T. The Southwest Florida Water Management District may establish special regulations for Water Use Caution Areas. At such time as the Governing Board adopts such provisions, this Site Certification shall be subject to them upon notice and after a reasonable period for compliance.

U. FPL shall mitigate any adverse impact to existing legal water uses caused by FPL withdrawals. When adverse impacts occur or are imminent, the Southwest Florida Water Management District may require FPL to mitigate the adverse impacts. Adverse impacts include:

A reduction in water levels which impairs the ability of a well to produce water;

2. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or

3. Significant inducement of natural or manmade contaminants into a water supply or into a usable portion of any aquifer or water body.

V. FPL shall mitigate any adverse impact to environmental features or offsite land uses as a result of withdrawals. When adverse impacts occur or are imminent, the Southwest Florida Water Management District shall require FPL to mitigate the impacts. Adverse impacts include the following:

1. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams, or other watercourses;

Sinkholes or subsidence caused by reduction in water levels;

3. Damage to crops and other vegetation causing financial harm to the owner; and

4. Damage to the habitat of endangered or threatened species.

W. A Southwest Florida Water Management District identification tag shall be prominently displayed at each withdrawal point by permanently affixing the tag to the withdrawal facility.

X. FPL shall notify the Southwest Florida Water Management District within 30 days of the sale or conveyance of certified water withdrawal facilities or the land on which the facilities are located.

Y. All conditions in this section are contingent upon continued ownership or legal control of all property on which pumps, wells, diversions or other water withdrawal facilities are located.