

PMTurkeyCOLPEm Resource

From: Franzone, Steve [Steve.Franzone@fpl.com]
Sent: Thursday, January 08, 2015 8:44 AM
To: Williamson, Alicia; Comar, Manny
Cc: Orthen, Richard; Maher, William
Subject: Administrative Order for PTN Units 3&4
Attachments: PTN AO 141223.pdf

As requested.

Thanks

Steve Franzone

NNP Licensing Manager - COLA

"Be always at war with your vices, at peace with your neighbors, and let each new year find you a better man."

Benjamin Franklin

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**BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

IN THE MATTER OF:

Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408

OGC No. 14-0741

Turkey Point Power Plant
DEP State License No. PA03-45

ADMINISTRATIVE ORDER

I. STATUTORY AUTHORITY

The Department of Environmental Protection (Department) issues this Administrative Order under the authority of Sections 403.061(8), and 403.151, Florida Statutes (F.S.). The Department makes the following findings of fact.

II. FINDINGS OF FACT

1. Florida Power & Light Company ("FPL") is a "person" as defined under Section 403.031(5), F.S.
2. FPL owns and operates a steam electric power generating facility known as Turkey Point Power Plant ("Turkey Point" or "Facility"). The Facility consists of five steam electric generating units: three fossil fuel-fired units ("Units 1, 2 and 5") and two nuclear units ("Units 3 and 4"). Unit 2 is retired. Unit 1 has a continuous generating capacity of approximately 404 megawatts ("MW"). Unit 5 has a continuous generating capacity of approximately 1150 MW. Units 3 and 4 each have continuous generating capacity of approximately 820 MW.
3. The FPL property on which Turkey Point is located covers approximately 11,000 acres in unincorporated southeast Miami-Dade County, located, on the shores of Biscayne Bay and Card Sound, about 25 miles south of Miami and about nine miles east of Florida City. Properties adjacent to Turkey Point are almost exclusively undeveloped land.
4. FPL owns and operates a cooling canal system ("CCS"), an approximately 5,900-acre network of unlined canals at Turkey Point. FPL began construction on the CCS in 1970. In 1971, FPL signed a Consent Decree with the U.S. Department of Justice that required the construction, after permitting, of a closed-loop cooling configuration with limitations on make-up and blowdown water. The salinity of the blowdown water was not to exceed 110 percent of that in Biscayne Bay.
5. The Florida Department of Pollution Control (later to become the Florida Department of Environmental Protection), in 1971, issued Construction Permit No. IC-1286 for the CCS. In 1972, Dade County issued Zoning Use Permit No. W-49833 for the excavation of the proposed Alternate Cooling Water Return Canal. In 1973, the construction of the CCS was completed; and the CCS was closed from the surface waters of both Biscayne Bay and Card Sound, becoming a closed-loop system.
6. An approximate 18 foot deep interceptor ditch located along the west side of the CCS was designed and constructed to create a hydraulic barrier to keep water in the CCS from migrating inland or westward. During the dry season, when the natural groundwater gradient is westward from Biscayne Bay and Card Sound toward the Everglades, water is pumped from the interceptor ditch into the CCS to create an artificial ground water gradient from the Everglades into the interceptor ditch. The intent is to restrict the flow of saline water from the CCS toward the Everglades. FPL monitors and operates the CCS on a routine basis

and annual reports incorporating groundwater monitoring data, along with surface water stage, rainfall and pumpage data are provided to the South Florida Water Management District (“District”).

7. In 1972, FPL entered into an agreement with the Central and Southern Florida Flood Control District (later to become the South Florida Water Management District or “District”) addressing the operations and impacts of the CCS. The agreement has been updated several times, with the most recent version being the Fifth Supplemental Agreement between the District and FPL entered into on October 16, 2009 (“Fifth Supplemental Agreement”).
8. The Fifth Supplemental Agreement brings forward much of the language and commitments from the prior agreements. Among these commitments is that “FPL shall operate the interceptor ditch system to restrict movement of saline water from the cooling canal system to those amounts which would occur without the existence of the cooling canal system.” (See Section II(A)(1), Fifth Supplemental Agreement). The Fifth Supplemental Agreement also provides that if the District, in its sole discretion, determines that the interceptor ditch is not effective in restricting movement of the saline water westward of the L-31E canal to those amounts which would occur without the existence of the CCS, FPL, upon notification by the District, shall begin consultation with the District to identify measures to mitigate, abate or remediate impacts from the CCS and to promptly implement those approved measures.
9. Saltwater has been documented as early as the 1940s to occur near the base of the Biscayne aquifer west of the Turkey Point Facility, prior to construction of the Facility in 1970. Based on the groundwater test data collected in the early 1970s, it was determined that non-potable groundwater (TDS $\geq 10,000$ mg/l) occurred beneath much of the proposed CCS, at a depth and within the deeper portions of the aquifer west of the site. The U.S. Geological Survey, using best available data, has produced several maps over the years that estimate the inland extent of saltwater at the base of the Biscayne aquifer in southeastern Miami-Dade County. Due to changes in monitoring locations, monitoring methods and area hydrology, the estimated inland position of saltwater shown on these maps has varied over the years. These studies did not include a determination of the thickness and orientation of the potable groundwater resources existing near the CCS prior to construction.
10. There is a freshwater lens northwest and west of the CCS, which extends from the surface to approximately 15 to 20 feet below the surface near the CCS and increases in thickness with distance. Well stations at the farthest locations to the west, TPGW-7, TPGW-8, and TPGW-9, each consist of a cluster of three wells; a deep well, an intermediate well, and a shallow well. The TPGW-8 and TPGW-9 well clusters are completely fresh and have remained this way throughout the monitoring period from July 2010 to the present date. The shallow and intermediate wells associated with the TPGW-7 well cluster are also fresh and have remained this way throughout the monitoring period. However, the deep well associated with the TPGW-7 well cluster has experienced an increasing trend in salinity and specific conductance beginning in September 2013.
11. The freshwater lens in southeast Miami-Dade County is an important natural resource that supports critical marsh wetland communities and is utilized by numerous existing legal water uses including irrigation, domestic self-supply and public water supply.
12. As part of the Fifth Supplemental Agreement and Turkey Point’s State License No. PA03-45 Conditions of Certification, FPL was required to implement an extensive monitoring program for the CCS, entitled the Turkey Point Plant Groundwater, Surface Water and Ecological Monitoring Plan (“2009 Monitoring Plan”), incorporated as Exhibit A of the Fifth Supplemental Agreement. The purpose of the 2009 Monitoring Plan was to provide information to determine the vertical and horizontal effects, and extent, of saline CCS water on existing and projected surface and groundwater resources, and ecological conditions surrounding the Turkey Point Facility. The 2009 Monitoring Plan was amended on June 2, 2013 and on July 17, 2013 (“2009 Monitoring Plan, as Amended”).
13. FPL expeditiously implemented the 2009 Monitoring Plan, installing an extensive monitoring network of 42 groundwater wells, 33 surface water stations, a meteorological station, and rainfall gauges at the CCS and

surrounding area. In addition, FPL continued to monitor five previously installed historic Turkey Point monitoring wells. Each new well station consisted of a cluster of three wells: a deep well, an intermediate well, and a shallow well. The groundwater and surface water stations measured and recorded specific conductance, salinity, water levels, and temperature at 15-minute intervals during 2010 through 2012. The sampling frequency of those stations was changed to hourly during the post uprate monitoring period commencing in February 2013. FPL collected groundwater and surface water chemistry data across the network of stations every three months, and it analyzed the samples for a broad suite of parameters. FPL also conducted ecological monitoring under the 2009 Monitoring Plan, which included analyzing the flora and fauna in Biscayne Bay, marshes and mangroves, along with porewater and soil chemistry sampling.

14. Consequently, FPL has collected a significant amount of data regarding the CCS and the surrounding area since the implementation of the 2009 Monitoring Plan and 2009 Monitoring Plan, as Amended. FPL has submitted a geology/hydrogeology report (October 2010), a bathymetric survey report (June 2010), an initial ecological condition characterization report (June 2012), three semi-annual reports (February 2011, March 2012, and February 2014), two pre-uprate annual reports (August 2012 and October 2012), an interim operation report (July 2013), two semi-annual data reports (July 2013 and February 2014), and one post uprate annual report (August 2014).
15. In order to establish a baseline of the saltwater orientation within the aquifer prior to the construction of the CCS, FPL and the District compiled and evaluated available groundwater quality data collected from 1971 - 1973. In August 2011, FPL documented the evaluation and findings in a report entitled "Saltwater Orientation in the Biscayne Aquifer in the Turkey Point Plant Vicinity Prior to Installation of the Cooling Canal System." The District in conjunction with technical staff from the Department reviewed and concurred with FPL's report.
16. There are many factors that may influence saltwater orientation and movement in southeastern Miami-Dade County, including sea level rise, storm surges, the CCS, groundwater withdrawals, mining, land use practices, other private uses and local and regional water management actions conducted as described in the USACOE Central and Southern Florida Project for Flood Control and Other Purposes, Master Water Control Manual, East Coast Canals Volume 5.
17. There have been a number of actions implemented by local, state and federal agencies in recent years to improve the area hydrology and limit inland saltwater intrusion in southeastern Miami-Dade County. These actions have included capping Biscayne aquifer withdrawals from area public water supply wells, requiring the development of alternative water supplies to prevent increased withdrawals of fresh groundwater near the coast, installation of plugs in the C-110, L-31E and Card Sound Road canals, design and permitting of water control structures on the Florida City Canal, and the initiation of operational changes at the S-20 structure.
18. FPL has implemented actions to improve the area hydrology and limit inland saltwater intrusion in southeastern Miami-Dade County. These actions have included implementing provisions of DEP Permit No. 0193232-001, Dade County Everglades Mitigation Bank, such as placement of an operable structure in the Card Sound Road Canal, emplacement of earthen berms along the L-31E Canal and historic operation of the CCS interceptor ditch.
19. Development of a comprehensive regional model of the area that takes into account all these factors in order to identify the causes and relative contributions from various sources associated with inland saltwater intrusion is considered to be a lengthy, expensive and potentially inconclusive process. Accordingly, such a model has not been developed.
20. Long term dissolved chloride data collected from four monitoring wells located west of the CCS (L-3, L-5, G-21 and G-28) from the early 1970s to the present indicate increases in salinities within the lower monitored horizon of each well. The deep monitoring horizons of the two wells located closest to the CCS, L-3 and L-5, have had salinity levels consistent with G-III ($\geq 10,000$ mg/l TDS) groundwaters since CCS began operations. Salinity within the deep monitoring horizons of the two inland monitoring wells located

on Tallahassee Road (G-21 and G-28) have increased from potable G-II (< 10,000 mg/l TDS) to non-potable levels since the 1970's.

21. The 2009 Monitoring Plan includes a provision for FPL to conduct an assessment and present findings regarding the identification of potential tracer monitoring parameters for use in determining the occurrence of CCS waters in the region. FPL conducted a detailed evaluation of potential chemical tracer parameters and documented the findings in the August 2011 annual monitoring report. The District, working with the Department and Miami-Dade Department of Regulatory and Economic Resources ("Miami-Dade RER"), reviewed FPL's findings and recommendations along with independent evaluations to the data. In a letter to FPL dated September 26, 2012, the District, in consultation with the Department and Miami-Dade RER, identified tritium in conjunction with saline water as the tracer to be used by FPL in the estimation of the spatial extent of waters originating from the CCS, the rate/direction of any movement of these waters and estimates of percent contribution of waters originating from the CCS at various locations beyond the boundaries of the Facility.
22. The 2009 Monitoring Plan also required FPL to develop a water and salt budget for the CCS. This budget calculates components of water and salt inflow and outflow from the CCS on a daily basis that is summarized on a monthly basis. The water budget aids in understanding the dynamics of the CCS in response to climatic and operational changes.
23. On October 31, 2012, FPL submitted its Turkey Point Plant Comprehensive Pre-Uprate Monitoring Report (Pre-Uprate Report) to the District, Miami-Dade RER and the Department. Utilizing the tracer parameters, FPL identified the approximate landward extent of the CCS water. FPL reported CCS groundwater near the base of the aquifer at 20,000 feet west of the CCS around G-21 and 25,000 feet from the CCS west of G-28. Given that the CCS has been in operation since 1974 (approximately 38 years), the average rate of migration to the west is estimated between 525 (northern part) and 660 (southern part) feet per year. FPL concludes that the highest concentrations of CCS water occur in groundwater immediately adjacent to the west of the CCS. Further west from the CCS, there is evidence of CCS water in decreasing concentrations at depth out approximately 3 miles. In addition, the salt balance model identified an average daily loss of approximately 600,000 pounds per day of salt from the CCS.
24. Upon conducting an evaluation of the Pre-Uprate Report, and supporting data, the District, in consultation with the Department and Miami-Dade RER, concluded that the interceptor ditch was effective at restricting the westward movement of saline CCS water in the upper portion of the aquifer. However, the interceptor ditch system has not been effective at restricting the westward movement of the hypersaline water from the CCS into the deeper portions of the aquifer. As a result, saline water from the CCS has moved westward of the L-31E Canal in excess of those amounts that would have occurred without the existence of the CCS.
25. Units 3, 4 and 5 are licensed (State License No. PA03-45 or the "State License") under the Florida Electrical Power Plant Siting Act, pursuant to Sections 403.501-.518, F.S. Condition X.D. of the State License, provides, in part, that, if the Department, in consultation with the District and the Miami-Dade RER, determines that the monitoring data from the 2009 Monitoring Plan indicates harm or potential harm to the waters of the State, then additional measures shall be required to evaluate or to abate such impacts. The Department consulted with these agencies and, recognizing that all contributing factors affecting groundwater movement in the South Miami-Dade County region (including the saltwater migration to the west of the CCS) have not been fully established, determined that the CCS is one of the contributing factors in the western migration of CCS saline water. The Department determined the western migration of the saline water must be abated to prevent further harm to the waters of the State.
26. In a letter dated April 16, 2013, the District notified FPL of their determination and pursuant to the provisions of the Fifth Supplemental Agreement, initiated consultation with FPL for the mitigation, abatement or remediation of the saline water movement.
27. In a letter dated May 1, 2013, FPL responded to the District's letter by agreeing to consult and work with the District and Department to evaluate mitigation, abatement, and remediation options.

28. On June 18, 2013, FPL presented the District and Department with a proposal to manage the CCS groundwater located west of the L-31E Canal, and on July 15, 2013, FPL provided a technical memorandum and other documentation related to its proposal (the "FPL Proposal").
29. The FPL Proposal provides for reducing the salinity within the CCS to a level comparable to the salinity of Biscayne Bay through the addition of less saline ground and/or surface waters. FPL estimated that the addition of 14 million gallons per day of upper Floridan aquifer water would be sufficient to reduce the CCS salinity levels at or below that of Biscayne Bay and that the rate of westward movement of CCS saline waters would be reduced over a 30 year operational period. This estimate was based on a starting salinity in the CCS at or below 60 Practical Salinity Units (PSU).
30. FPL provided the District with all of the data, calculations and models used in the preparation of the FPL Proposal in order to allow the District to conduct a technical review. The District's independent evaluation generally concurs with FPL's conclusion that the reduction of salinity within the CCS would reduce the rate of westward movement of saline CCS water in the aquifer.
31. The District concluded the two dimensional model used by FPL was a reasonable proof of concept tool to address the CCS contribution but found it is limited in representing many of the hydrologic features and affects associated with the regional hydrogeologic system. The model slightly over-estimated the rate and distance of westward saline water movement when compared to long-term field data. Therefore, the model's future predicted westward saline migration estimates might be over stated.
32. Both FPL and District modeling suggest that reducing CCS salinities has the potential to moderate westward migration of CCS water compared to a no action option. Recognizing the limitations of the two dimensional model, the historic slow rate of saline water movement and management actions being taken by FPL, local, state and federal agencies to improve the area hydrology and limit inland saltwater intrusion in southeastern Miami-Dade County, the Department, in consultation with the District, concludes that there is a reasonable likelihood that the FPL Proposal will be effective in abating further westward movement of saline CCS water into potable waters of the State. The Department finds that to ensure the effectiveness of the FPL Proposal in abating westward movement of CCS water, the 2009 Monitoring Plan, as Amended, should remain in effect until this Order is terminated. Incorporation of an appropriate compliance monitoring program into the State License Conditions of Certification after this Order is terminated is prudent.
33. In August 2014, FPL submitted the first Annual Post-Uprate Monitoring Report to the District, Miami-Dade RER and the Department. FPL reported the salinity in the CCS had steadily increased since the first quarter of 2013. By the end of May 2014, the salinity in the CCS was averaging approximately 90 PSU.
34. Salinities at approximately 90 PSU and the reduced circulation flow in the CCS contributed, in part, to an algal bloom within the CCS reported by FPL in 2014. On June 18, 2014, FPL sent a request to the Department to temporarily add copper sulfate into the CCS to aid in controlling algae. The Department on June 28, 2104, acknowledged that request and application of copper sulfate began in early July 2014. During this time, Unit 1 was operating as needed and Unit 2 was retired. In order to increase circulation in the CCS, FPL ran the Unit 1 and 2 circulating pumps. Unit 5, which is authorized by the District to withdraw cooling water from the Floridan aquifer, was not using its full withdrawal allocation. On June 27, 2014, FPL received District approval to divert any excess allocation to the CCS to aid in salinity reduction. Despite the use of the excess allocation, the salinity remained high and water levels in the CCS were well below normal. On August 8, 2104, the District issued an emergency order to FPL that allowed FPL to divert water to the CCS that would otherwise be discharged to tide from the District's S-20F, S-20G, and S-21A water control structures, in excess of flows reserved for protection of fish and wildlife under Rule 40E-10.061, Florida Administrative Code. Based on these activities and improved weather conditions, algal counts were reduced from over 1.2 million cells/liter to just over 200,000 cells/liter. Salinity levels dropped from 90 PSU to 63 PSU in late October 2014. However, due to cessation of additional fresh water additions and the dry season, FPL reports salinities have increased to over 70 PSU in December 2014.

35. Reducing the salinity from a higher base salinity condition will require additional measures such as a greater addition of fresh water, removal of salt mass from the CCS, and alteration of CCS inflows and outflows. Higher precipitation amounts, lower temperatures, and higher regional water levels will also assist in reducing CCS salinity levels.
36. The Department and District agree that the historic regulatory role the District has held with regard to monitoring and operation of the CCS with FPL under the provisions of the Fifth Supplemental Agreement is redundant with the authorities vested with the Department through the Power Plant Siting Act. Accordingly, the Department finds that the State License shall be the sole license pursuant to State authorities to regulate the monitoring and operation of the CCS upon termination of this Order.

III. ORDER

Based on the foregoing findings of fact,

IT IS ORDERED,

37. Within ninety (90) days from the effective date of this Order, FPL shall submit to the Department, for review and approval, a detailed CCS Salinity Management Plan ("Management Plan"). FPL shall also provide the District and Miami-Dade RER a copy of the Management Plan.
- a. The primary goal of the Management Plan shall be to reduce the hypersalinity of the CCS to abate westward movement of CCS groundwater into class G-II (< 10,000 mg/L TDS) groundwaters of the State. This westward movement abatement shall be evidenced by decreasing salinity trends in the monitor wells located adjacent to the CCS specifically those designated as TPGW-1, TPGW-2, TPGW-13, L-3 and L-5. For the purposes of this Order, the term 'abate' or 'abatement' means to reduce in amount, degree or intensity; lessen; diminish. To achieve this goal, FPL shall reduce and maintain the average annual salinity of the CCS at a practical salinity of 34 and monitor salinity trends in groundwater wells as specified in Paragraph 37.f. below.
 - b. The Management Plan shall specify all actions needed for implementation including: 1) a listing and descriptions of all permits or other approvals necessary for the construction and operation of related facilities; 2) a schedule, with milestones, for completion of all actions needed to implement the Management Plan; and 3) continuation of the 2009 Monitoring Plan, as Amended, along with additional monitoring as may be necessary to comply with the elements contained in Paragraphs 37.e., f., and g., below, including site locations, parameters measured and sampling frequencies. The schedule shall provide for the attainment of the CCS salinity reduction goal component within four years from the Effective Date of the Management Plan.
 - c. The Management Plan shall describe the operational protocols for the salinity management facilities and the interceptor ditch system. The operational protocols and associated monitoring for interceptor ditch operations shall initially comport with the approved procedures of the modified Interceptor Ditch Operational Plan (IDOP) contained in the Fifth Supplemental Agreement. Based on the results of the Management Plan, FPL may propose modifications to the initial IDOP.
 - d. The Management Plan may propose options, or combination of options, for reducing the salinity of the CCS. Among the options, FPL may propose to: 1) utilize the existing unused allocation of water for Unit 5 from the Floridan aquifer; 2) license and construct new Floridan wells; 3) utilize water from the L-31E canal consistent with District water reservation and consumptive use rule criteria; 4) utilize water from the Card Sound Canal consistent with Department and District rule criteria; 5) remove organic and sediment biomass within the CCS, and/or 6)

remove hypersaline water from within and/or beneath the CCS through use of an Underground Injection Control (“UIC”) well.

- e. The Management Plan shall provide for monitoring of salinity in the CCS to determine the effectiveness of salinity management operations in reducing salinity levels in the CCS, and shall include:
 - i. Monitoring of salinity and water levels using existing monitoring facilities in the CCS and surface water within Biscayne Bay, and the L-31E/Interceptor Ditch/Canal 32 as needed, for monitoring salinity levels within the CCS, to support operational decision making of the interceptor ditch system, and for calculation of monthly CCS water and salt budgets.
 - ii. All data shall be sampled, processed, compiled, and posted consistent with the Quality Assurance Project Plan (QAPP) requirements contained in the 2009 Monitoring Plan, as Amended.
 - f. The Management Plan shall include:
 - i. The monitoring of the wells/well clusters identified in the 2009 Monitoring Plan, as Amended.
 - ii. The installation and monitoring of a new deep well (to be designated as TPGW-15) located at the City of Homestead baseball complex, east of Kingman Rd. (SW152nd Ave.) near the western parking area. The deep well will have a screened interval open to the deep high flow interval identified in the same manner as those described in “Geology & Hydrogeology Report for FPL, Turkey Point Plant Groundwater, Surface Water, & Ecological Monitoring Plan, FPL, Turkey Point Plant Homestead, Florida” prepared by JLA Geosciences, Inc., October 2010. FPL shall install this monitoring well within 180 days of the Effective Date of the Management Plan.
 - iii. The monitoring wells shall be utilized to collect water level, water quality data, and annual induction logs. All data shall be sampled, processed, analyzed, compiled and stored consistent with the QAPP requirements in the 2009 Monitoring Plan, as Amended.
 - g. The Management Plan shall describe the procedures for the monitoring data to be collected, analyzed, maintained, archived, and presented in electronic formats consistent with the procedures set forth in the QAPP contained in the 2009 Monitoring Plan, as Amended.
38. The Department, District, and Miami-Dade RER shall be notified by FPL at least five (5) days in advance of a sampling event and be allowed to attend the sampling and to collect split samples. The Department, District, and Miami Dade RER agree to provide FPL a copy of any split sampling results. The right of access shall be codified in a separate agreement mutually acceptable to FPL, the Department, the District, and Miami-Dade RER.
39. The Department shall review the Management Plan, and within thirty (30) days either: 1) notify FPL the Management Plan is approved; 2) request additional information; and/or 3) recommend changes to the Management Plan for FPL’s consideration. If the Department requests additional information or recommends changes, FPL shall supply the additional information or revisions within the time frame specified in the request or recommendation. FPL shall be provided two opportunities to supply additional information or revisions. In the event that agreement cannot be reached after the second opportunity, the Department shall specify changes to the Management Plan to make it acceptable to conform to this Order and notify FPL.
40. The Management Plan shall become effective when the Department approves the Management Plan or provides notification to FPL of changes to the Management Plan that make it acceptable to the Department

(“Effective Date of the Management Plan”). Upon the Effective Date, FPL shall implement the Management Plan.

41. Within ninety (90) days of the Effective Date of the Management Plan, FPL shall begin to monitor salinity in the CCS and any additional monitoring of groundwater wells in accordance with the approved Management Plan.
42. Within four years of the Effective Date of the Management Plan, the average annual CCS salinity as calculated per the approved Management Plan shall be reduced to or below a practical salinity of 34.
43. Thereafter, FPL shall continue to maintain the average annual salinity of the CCS at or below a practical salinity of 34 so long as the CCS is in operation and serving units under operation at Turkey Point or unless otherwise directed by amendment to this Order or as specified in the State License.
44. After the Effective Date of the Management Plan, FPL shall submit to the Department, District, and Miami-Dade RER written progress reports (“Progress Reports”) every six months for at least four years or until all milestones have been completed as determined by the Department. The Progress Reports shall provide a summary of activities conducted during the reporting period, work to be conducted during the next reporting period, any milestones achieved, any schedule changes, and any problems encountered or anticipated and the corresponding corrective actions taken or proposed to be taken to resolve the problems. FPL shall submit the reports within thirty (30) days of the end of each reporting period.
45. FPL shall provide an annual comprehensive report (the “Annual Report”) one year after the Effective Date of the Management Plan and each year thereafter for a period of five years to the Department, the District, and Miami-Dade RER. The Annual Report shall include:
 - a. a brief summary of the status of implementation of the Management Plan;
 - b. a description of monitoring and CCS salinity management activities conducted;
 - c. graphic and tabular summaries of monitoring data (pumpage, water level and water quality);
 - d. spreadsheet summaries of physical parameters, sample results, sampling field forms and laboratory results;
 - e. monitoring well induction logging reports;
 - f. monthly CCS water and salt budget calculations;
 - g. operations and monitoring data/summaries associated with the interceptor ditch operational plan implementation; and
 - h. conclusions regarding the success of the Management Plan in achieving the goals contained in Paragraph 37. a., above.
46. Within sixty (60) days after the Department’s receipt of an Annual Report, the Department may send a written request to FPL that FPL address concerns, questions or omissions in the Annual Report. FPL shall respond within the time frame specified in the request.
47. Within ninety (90) days of submittal of the fifth Annual Report, the Department, in consultation with the District and Miami-Dade RER, will make a determination of whether FPL has achieved the goals contained in Paragraph 37.a. This determination will be based on whether the Annual Reports, and supporting data, clearly demonstrate: 1) FPL’s compliance with Paragraphs 42 and 43 of this Order related to managing salinity levels in the CCS; and 2) decreasing salinity trends in the monitor wells TPGW-1, TPGW-2, TPGW-13, L-3 and L-5. The Department shall consider the degree to which external factors, beyond the control of FPL, could have effected groundwater salinity movement, including the factors listed in Paragraph 16, in determining the success of the Management Plan. FPL may request that a determination of successful compliance be made sooner than submittal of the fifth Annual Report. In such a case, the Department shall review the request in consultation with the District and Miami-Dade RER, and within 90

days, make a determination whether the Annual Reports and supporting data clearly demonstrate FPL's compliance with Paragraphs 37, 42, and 43 of this Order.

48. If the Department determines that FPL has successfully achieved the goals of the Management Plan, FPL may apply to the Department to modify, or the Department may unilaterally modify, the State License to include conditions related to maintaining average annual salinity levels in the CCS at or below a practical salinity of 34, monitoring and operation of the CSS, and applicable and appropriate provisions of the Fifth Supplemental Agreement. Upon the effective date of such State License modification, this Order is terminated.
49. If at any time the Department determines that the implementation of the Management Plan has not achieved the goals of the Management Plan, upon notification by the Department, FPL shall immediately begin consultation with the Department to identify additional measures to mitigate, abate or remediate impacts from the CCS, including the identification of other potential sources and responsible parties, and then FPL shall promptly implement those measures approved by the Department through modification of this Order.
50. At any time after the Effective Date of the Management Plan, FPL may propose an alternative method for CCS salinity management or monitoring and/or abatement of westward movement of saline water from the CCS. The Department, in consultation with the District and Miami-Dade RER, shall review and approve acceptable alternative method(s) using the same review and approval process contained in Paragraph 39 of this Order.
51. FPL, or any substantially affected person, may challenge any Department agency action under this Order. This specifically includes the right to file a petition requesting a formal or informal administrative hearing pursuant to Section 120.569 and 120.57, Florida Statutes, objecting to the Department's determination under Paragraph 47 of this Order. This Paragraph does not create, modify or expand FPL's rights provided under Chapter 120, Florida Statutes.
52. The Department may, for good cause shown, extend the dates in this Order in writing if requested by FPL.
53. The Department shall process in a timely manner and in accordance with applicable laws and regulations; any permit applications or other requests for approvals necessary to implement this Order. All the necessary permits or other approvals, as appropriate, shall be obtained prior to construction or implementation.
54. FPL shall maintain and operate its facilities in compliance with all other conditions of the State License.
55. Unless otherwise specified herein, reports or other information required by this Order shall be sent to: Siting Coordination Office, ATTN: Mail Station 5500, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, with copies sent to: Industrial Wastewater Program, ATTN: Mail Station 3545, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and Applied Sciences Bureau, South Florida Water Management District, P.O. Box 24680, West Palm Beach, Florida 33416-4680.
56. FPL shall be entitled to relief from the time requirements in this Order in the event of force majeure, which includes, but is not limited to, delays in regulatory approvals, construction, labor, material, or equipment delays; acts of God or other similar events that are beyond the control of FPL. If any event occurs that causes delay or the reasonable likelihood of delay, in complying with the requirements of this order, FPL shall have the burden of demonstrating that the delay was (or will be) caused by circumstances beyond the reasonable control of FPL and could not have been or cannot be overcome by FPL's due diligence. Economic circumstances shall not be considered circumstances beyond the reasonable control of FPL, nor shall the failure of a contractor, subcontractor, materialman or other agent (collectively referred to as "contractor") to whom responsibility for performance is delegated to meet contractually imposed deadlines be a cause beyond the control of FPL, unless the cause of the contractor's late performance was also beyond the contractor's control. Delays in final agency action on a permit application or requested for approval are eligible for consideration under this paragraph, provided that none of those delays were a result of late submission by FPL. Upon occurrence of an event causing delay, or upon becoming aware of a potential for

delay, FPL shall notify the Department, in writing, of the anticipated length and cause of the delay, the measures taken or to be taken to prevent or minimize the delay and the timetable by which FPL intends to implement these measures. The written notification shall be sent to: Siting Coordination Office, ATTN: Mail Station 5500, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, with copies sent to: Industrial Wastewater Program, ATTN: Mail Station 3545, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and Applied Sciences Bureau, South Florida Water Management District, P.O. Box 24680, West Palm Beach, Florida 33416-4680. If the delay or anticipated delay has been (or will be) caused by circumstances beyond the reasonable control of FPL, the time for performance hereunder shall be extended for a period equal to the delay resulting from such circumstances.

57. FPL maintains all rights they may have to request a proceeding under Chapter 120, Florida Statutes, to challenge any proposed final agency action taken by the Department that affects FPL's substantial interests under this Order.
58. Failure to comply with the requirements of this Order shall constitute a violation of this order and may subject FPL to penalties as provided in Section 403.161, F.S.
59. The Department hereby expressly reserves the right to initiate appropriate legal action to address any violations of statutes or the rules administered by the Department that are not specifically resolved by this Order. Nothing herein shall be construed to limit the Department's authority to take any action against FPL in response to or to recover the costs of responding to conditions at or from the Facility that require Department action to abate an imminent hazard to the public health, welfare, or the environment.
60. This Order is final when filed with the clerk of the Department unless a petition for an administrative proceeding (hearing) is filed in accordance with the notice set forth in the following Section.

IV. NOTICE OF RIGHTS

A person whose substantial interests are affected by the Department's decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the F.S. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions by the applicant or any of the parties listed below must be filed within twenty-one days of receipt of this written notice. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within twenty-one days of publication of the notice or within twenty-one days of receipt of the written notice, whichever occurs first.

Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within twenty-one days of receipt of such notice, regardless of the date of publication.

The petitioner shall mail a copy of the petition to FPL at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name, addresses, email addresses, and telephone number of each petitioner; the Department order or permit identification number and the county in which the subject matter or activity is located;
- (b) A statement of how and when each petitioner received notice of the Department action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department action;
- (d) A statement of the material facts disputed by the petitioner, if any;

(e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;

(f) A statement of which rules or statutes the petitioner contends require reversal or modification of the Department action, including an explanation of how the alleged facts relate to the specific rules or statutes; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under Section 120.573, F.S., is not available for this proceeding.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above. Upon the timely filing of a petition, this order will not be effective until further order of the Department.

Any party to the order has the right to seek judicial review of the order under Section 120.68, F.S., by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the final order is filed with the Clerk of the Department.

DONE AND ORDERED on this 23 day of December 2014 in Tallahassee, Florida.

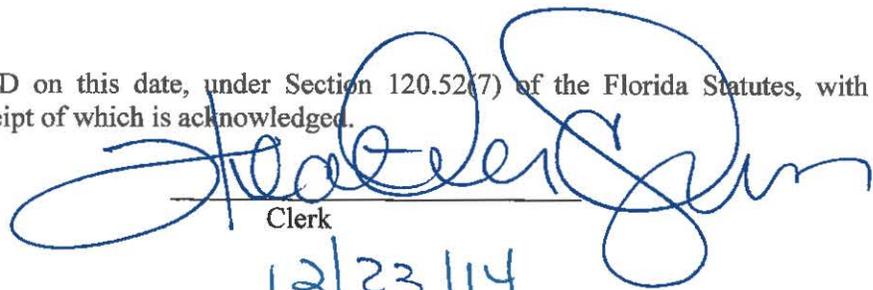
**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**



Clifford D. Wilson III
Interim Secretary

CLERK STAMP

FILED AND ACKNOWLEDGED on this date, under Section 120.52(7) of the Florida Statutes, with the designated Department Clerk, receipt of which is acknowledged.



Clerk
12/23/14

Date

Copies furnished to State License Distribution List