



St. Johns River Water Management District

Kirby B. Green III, Executive Director • David W. Fisk, Assistant Executive Director

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On the Internet at www.sjrwmd.com.

June 12, 2009

Via Electronic Mail and U.S. Mail

Ann Seiler
Environmental Specialist
Department of Environmental Protection
Siting Coordination Office
3900 Commonwealth Blvd.
Tallahassee, FL 32399
ann.seiler@dep.state.fl.us

**RE: Florida Power & Light Company
Cape Canaveral Energy Center
Siting Case No. PA08-53; DEP Case No. 08-2971;
DOAH Case No. 09-039EPP; SJRWMD File of Record No. 2009-02**

Dear Ms. Seiler:

Pursuant to section 403.507(2)(a)2., Florida Statutes, the St. Johns River Water Management District prepared a report as to matters within the jurisdiction of the District related to the above referenced application. That report was adopted by the Governing Board on June 9, 2009 and is hereby submitted to the Department.

Subject to the imposition of the conditions identified in the Agency Report, the St. Johns River Water Management District recommends approval of the application.

If you have any questions regarding the Agency Report, please contact me at (386) 329-4391.

Sincerely,

Gail L. Hankinson
Assistant General Counsel
Office of General Counsel

Enclosure

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**ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
AGENCY POWER PLANT SITING REPORT**

May 27, 2009

Applicant: Florida Power and Light (FPL)
700 Universe Boulevard
Juno Beach, Florida 33408

Project: Cape Canaveral Energy Center

Subject: Site Certification Application for the Cape Canaveral Energy Center
DOAH Case No. 09-0039
FDEP OGC Case No. 08-2971
PPSA No. PA08-53

Background

Pursuant to the Florida Electrical Power Plant Siting Act, FPL is seeking site certification for the Cape Canaveral Energy Center (CCEC) to construct and operate an electrical power generating plant in Brevard County, Florida. In its Site Certification Application (SCA), FPL is proposing to convert an existing 43-year old plant, which includes two 400-megawatt (MW) conventional dual-fuel fired generating units, into a more efficient, lower-emission clean energy center using combined cycle technology. The converted plant will use at least 33 percent less fuel for an equivalent amount of electricity production, and will be capable of producing 1,250 MW compared to 800 MW at the existing plant. The existing generating units will be decommissioned and dismantled and the new plant will be constructed on the same site. The site is located between Cocoa and Titusville, and is bounded on the east by the Indian River Lagoon and on the west by U.S. Highway 1. Some existing components will remain, including the cooling water intake and discharge structures and the transmission facilities.

The proposed power facility will use approximately 25 percent less water than the existing plant. Water use on an average annual basis will consist of approximately 619 million gallons per day (mgd) of surface water from the Indian River Lagoon; 0.232 mgd of potable water from the City of Cocoa; 0.13 mgd of groundwater from the Floridan aquifer; and 0.0016 mgd of reclaimed water from Brevard County. In addition, during dismantling of the existing plant and construction of the new plant, dewatering activities will occur for approximately 12 months. The estimated annual average dewatering rate will be 2.52 mgd of ground water from the surficial aquifer. Appropriate measures will be required to ensure that on-site ground water recharge is maximized and that all water discharged from the site meets appropriate water quality standards.

The existing plant was previously permitted under CUP#10652 to withdraw 823 mgd of surface water from the Indian River Lagoon; up to 0.25 mgd of ground water from the surficial aquifer system; and 0.15 mgd of reclaimed water from the Brevard County Port St. John Wastewater Facility when available.

Pursuant to subparagraph 403.507(2)(a)3, Florida Statutes (F.S.), the St. Johns River Water Management District (SJRWMD or the District) is required to prepare a report as to matters within its jurisdiction. The District regulations relevant to this proposed project include Chapter 40C-2 (Consumptive Uses of Water).

REVIEW OF CONSUMPTIVE USES OF WATER

Statutory Requirements

The nonprocedural statutory requirements of the District related to the consumptive uses of water for this application are found in Part II of Chapter 373, Florida Statutes. Two of the key substantive statutory requirements are set forth in sections 373.219 and 373.223, Florida Statutes. Subsection 373.219(1), Florida Statutes, provides:

“The governing board or the department may require such permits for consumptive use of water and may impose such reasonable conditions as are necessary to assure that such use is **consistent with the overall objectives of the District or department and is not harmful to the water resources of the area.**” *Emphasis added.*

Subsection 373.223(1), Florida Statutes, requires an applicant to establish that the proposed use of water:

- (a) is a reasonable-beneficial use;
- (b) will not interfere with any presently existing legal use of water; and
- (c) is consistent with the public interest.

The nonprocedural rule requirements of the District regarding the consumptive uses of water for this application are set forth in Chapter 40C-2, Florida Administrative Code and the Applicant’s Handbook: Consumptive Uses of Water, March 8, 2009 (A.H.).

The District has reviewed the SCA for the CCEC pursuant to the above-described substantive requirements and is recommending approval of the SCA with a number of conditions.

A summary of the District review is presented below.

Summary of Proposed Use

The CCEC will include three advanced combustion turbines (CT) and one steam turbine/electric generator. Each CT will be connected to a heat recovery steam generator (HRSG) which will use the waste heat energy from the CTs to produce steam for the steam turbine/electric generator. Electrical energy is produced from the CTs by direct connection to an electric generator. The exhaust heat from the CTs will be routed through the HRSG. Natural gas will be the primary fuel; ultra low-sulfur light oil will be a

backup fuel. The primary source of cooling water will be the Indian River Lagoon, which is also the cooling water source for the existing plant. Process water will be provided by the City of Cocoa. Groundwater will be used for the cooling water pump seals. Reclaimed water from Brevard County will be used for landscape irrigation.

The applicant proposes to withdraw 619 mgd of surface water from the Indian River Lagoon, and 0.13 mgd of ground water from the Floridan aquifer and to use 0.232 mgd of potable water supplied by the City of Cocoa and 0.0016 mgd of reclaimed water from Brevard County on an average annual basis.

Water will be utilized as follows at the proposed facility:

- Cooling water for heat dissipation from the steam-cycle condenser and for auxiliary cooling, including pump seal water and intake screen wash;
- Process water, which is used primarily to make demineralized water for steam system makeup and for air emission control and secondarily for washing operations and fire protection;
- Potable water for use by employees; and
- Reclaimed water for landscape irrigation.

The majority of water used by the proposed project will be for heat dissipation. The exhaust heat from the CTs will be routed through the HRSGs that act as boilers to produce steam for the new turbine generator. Potable water and recovered HRSG blowdown water will be used as makeup water by the water treatment plant to produce demineralized water for use in the HRSGs and for service water use in the plant. The demineralization process creates a reject (approximately 25 percent) which is blended with the condenser cooling system intake water and reused for condenser cooling.

Additional water uses include:

- Groundwater from the existing upper Floridan aquifer wells will be used for the cooling water pump seals. The water from these pumps is used as pump bearing lubrication and cooling water.
- The applicant also proposes to use reclaimed water for urban landscape irrigation of 0.52 acres of shrubs/ground cover and 0.06 acres of trees/palms.
- Construction activities will require dewatering the surficial aquifer for a 12-month period at approximately 2.52 mgd.

Groundwater Resources

Groundwater resources at the site include the surficial aquifer system and the Floridan aquifer. The surficial aquifer system is the uppermost water-bearing unit, and groundwater occurs under unconfined conditions in pore spaces of sandy sediment. Groundwater from the surficial aquifer system is potable and considered to be a high quality water source in this area. The surficial aquifer system is recharged primarily from rainfall with some minor upward leakage from the underlying Floridan aquifer system. The base of the surficial aquifer system occurs at the contact with the

intermediate confining layer, which is a lower permeability unit that restricts the vertical movement of ground water between the surficial aquifer system and the upper Floridan aquifer. The intermediate confining layer includes the Hawthorn Group, which consists primarily of siliciclastic clays in this area. The upper Floridan aquifer is under semi-confined conditions with groundwater stored primarily in pore spaces of marine shell deposits and transported by fractures, joints, and solution channels within limestone in the Ocala Formation. The upper Floridan aquifer is considered to be a lower quality water source in this area because of relatively high chloride concentrations.

The existing plant is currently permitted to withdraw 0.25 mgd of ground water from the surficial aquifer from wells located west of US Highway #1. This application eliminates the surficial aquifer withdrawal from these wells and requests withdrawal of 0.13 mgd of ground water from the upper Floridan aquifer. There are three existing upper Floridan aquifer wells that are located adjacent to the Indian River Lagoon intake structures. This is an existing use that was misidentified during the previous permit cycle as pumps associated with surface water withdrawals (previous Station ID#s 26970 and 26971).

Dewatering Activities

The application indicates that locations where dewatering will be necessary include the areas for the construction of the new plant that requires excavation to depths below the water table. Dewatering may consist of pumping from sumps in the excavation, the installation of well points, vacuum underdrain, or a combination of the above to lower the water table. The selection of the dewatering method depends on several factors including: (1) depth of excavation below the water table; (2) aerial extent of the excavation; (3) nature of the subsurface materials; (4) proximity of sources of recharge; (5) and critical nature of the construction.

At this time, geotechnical investigations have not been conducted to determine the nature and impacts due to dewatering activities. When dewatering is determined to be required for a structure, geotechnical information will be collected to determine the dewatering method along with analysis for sizing and design. Design considerations would include well or well point depth, size, pumping rate, spacing, length of time needed, type of power, the need for standby power, and water discharge locations.

The District does not anticipate that there will be offsite impacts, flood damage, or unacceptable environmental harm as a result of dewatering activities. FPL has submitted a conceptual dewatering plan, since the exact sequencing of construction activities has not been finalized. The conceptual plan estimates that dewatering will occur at a rate of 2.52 mgd. The details for dewatering will be determined upon completion of the geotechnical investigation post certification. Therefore, staff is including a condition of Certification that requires FPL to prepare and submit a final Dewatering Plan for staff review and approval.

Surface Water Sources

The surface water resource available for use at the site is brackish water from the Indian River Lagoon. The Indian River Lagoon consists of three interconnected

estuarine lagoons – the Mosquito Lagoon, Indian River Lagoon and the Banana River. The Indian River Lagoon extends south about 155 miles from Ponce de Leon Inlet in Volusia County to Jupiter Inlet in Palm Beach County.

The existing plant is currently permitted to withdraw 823 mgd from the Indian River Lagoon. This application represents a reduction in withdrawal from the Lagoon to 619 mgd. Cooling water will be withdrawn from the Lagoon through two existing intake structures and each structure has two intake bays equipped with one circulating water pump per bay. Each intake bay has an auxiliary equipment cooling water pump and screen wash pump. The screen wash pumps require 1.73 mgd of surface water (included in the 619 mgd) that is discharged back to the Indian River Lagoon after use. Discharge from the existing plant's cooling water system is via two existing discharge structures. Cooling water for the new plant will continue to be withdrawn from the Indian River Lagoon through the existing intake structures.

Secondary Use Potable Water Source

Process water is required for CT inlet air cooling, nitrogen oxide injection water when firing low-sulfur light oil, steam cycle makeup, service water and fire protection. The City of Cocoa will supply potable water for process water uses as well as potable water use by the employees. The converted plant will require 0.232 mgd annual average (0.86 mgd maximum), plus an additional 0.05 mgd (0.07 mgd maximum) in the event the HRSG blowdown is not recycled and reused in the demineralization system because of poor water quality. Since the estimated use exceeds 100,000 gallons per day, and is supplied in whole by the City of Cocoa, and has not previously been reviewed for consistency with the criterion in Section 9.3 of the Applicant's Handbook, this is a secondary consumptive use as defined in 40C-2.041(1)(g), F.A.C., and must satisfy the criteria specified in sections 9.3 and 10.3(a), (b,) (d), (e), (f), (g), (i), and (k), A.H. Based on the review in this proceeding, District staff has determined that those criteria have been satisfied.

Reclaimed Water Source

The Brevard County Port St. Johns Wastewater Treatment Plant (WWTP), located approximately two miles from the site, has the capacity to treat up to 0.23 mgd of reclaimed water to public access standards. The Port St. Johns WWTP is a package plant that can only supply reclaimed water for about 18 hours a day. As part of previous permit conditions, FPL agreed to a 5-year reuse implementation plan that would provide a lower quality source water for process water to the plant. The implementation plan was a multi-pronged approach to decrease groundwater use in response to significant increases in levels of chlorides in a number of wells. The implementation plan included construction of a reclaimed pipeline from the WWTP to FPL's site and conducting a feasibility study to determine if the reclaimed water could be used as process water.

FPL evaluated the feasibility of using reclaimed water for process water and demonstrated that it would not be technically or environmentally feasible for the following reasons:

- FPL's industrial wastewater permit includes monitoring for nitrogen due to EPA's Total Maximum Daily Limits (TMDLs) for the Indian River Lagoon. The nitrogen levels in the reclaimed water are too high to be used as feed water to the demineralization water treatment system. The water treatment system creates a concentrated reject 0.0648 mgd average (0.22 mgd maximum/day) that is ultimately discharged to the Indian River Lagoon with the returned once-through cooling water. The concentrated level of nitrogen in the return water would result in TMDL violations of the discharge permit.
- The Port St. Johns WWTP is a package plant that can only supply reclaimed water for about 18 hours per day. This limitation results from the diurnal nature of wastewater generation and limited diurnal storage facilities at the WWTP. Average daily flow from the plant is 0.225 mgd. Historically, plant quantity and quality were unreliable due to upsets, which were attributed to chemical additions for nutrient removal. This variable reliability is typical of small package plants and contributes to the infeasibility of the use of reclaimed water to meet process water needs.

A reclaimed water pipeline was installed by FPL as a condition in the previous permit to convey reclaimed water from the Port St. Johns WWTP to the FPL site. This pipeline will be used for reclaimed water for landscape irrigation at the site. This pipeline may also be used for future landscape irrigation on adjoining properties or in medians along US#1 for reclaimed customers as demand warrants connection.

Saline Water Intrusion

Ground water monitoring was required in the conditions of the existing CUP. Water quality data showed increasing chlorides in some wells. Staff expressed concerns that long-term withdrawal of ground water from the lower zone of the surficial aquifer system will result in unacceptable saline water encroachment and eventually significant saline water intrusion if it is continued to be used as the primary source of water for electrical power generation. The converted plant will no longer withdraw groundwater from the surficial aquifer so saline water intrusion will no longer be of concern. The surficial ground water will be replaced with secondary use potable water supplied by the City of Cocoa for process water and reclaimed water supplied by Brevard County for landscape irrigation.

Potential Environmental Impacts

Withdrawals of ground water from the surficial aquifer system will cease with the converted plant. No adverse impacts to existing wetlands have been documented due to historical withdrawals of groundwater from the surficial aquifer system. Since surficial

aquifer withdrawals will no longer occur, the proposed use will not cause adverse impacts to crops, wetlands or other types of vegetation.

Although withdrawals from the Indian River Lagoon will decrease 25 percent due to increased water use efficiencies in the power generation processes, thermal protection for the local manatee populations will continue during freeze events. During cold periods during dismantlement and construction, thermal heaters will be operated to protect the manatees used to gathering at the area where heated water is currently discharged.

Existing Legal Uses

Withdrawals from the surficial aquifer will no longer occur with the converted plant, therefore existing legal uses from this source will not be adversely impacted. Withdrawals from the upper Floridan aquifer for pump seal water will continue and no known impacts to existing legal uses have occurred during the duration of the existing permit and no future impacts are anticipated. Decreased surface water used for cooling through a closed loop system will not result in adverse impacts.

Water Conservation

FPL will implement the following water conservation measures:

1. Combined cycle technology produces most of the electricity by combustion turbines which do not use water for condenser cooling. Combined cycle technology also reduces the amount of water needed to produce steam.
2. The once-through cooling system uses lower quality water source from the Indian River Lagoon.
3. Under most operating conditions, HRSG blowdown will be recycled from the combined cycle unit and reused in the demineralization system.
4. Excess water from the cooling water pump seals will be recycled and blended with the cooling water from the Indian River Lagoon.
5. Natural gas will be used as the primary fuel source. Low-sulfur distillate light oil will be used as a backup source. Nitrogen oxide emission control during natural gas firing is accomplished using dry low-NOx combustion technology and selective catalytic reduction (SCR). These processes eliminate the need for water to control emissions. NOx injection water is only needed if low-sulfur light oil is used. This represents a reduction in process water overall since natural gas will be the primary fuel.
6. Landscape on-site will use drought-resistant vegetation and will be irrigated using reclaimed water from Brevard County's Port St. John Wastewater Treatment Plant.

Compliance Reports

To assure FPL's use of the water continues to meet the conditions for issuance set forth in Chapter 40C-2 F.A.C. and sections 9.3, 9.4.2, 9.4.3, 9.4.4, 10.3(a) - (k) Applicant's Handbook: Consumptive Use of Water, FPL will submit compliance reports to FDEP and SJRWMD every five years for the life of the facility, beginning no later than June 30, 2016.

Water Use Information

The applicant was authorized under the previous CUP to withdraw surface water from the Indian River Lagoon using 13 existing pumps (two were identified as surface water pumps, but were actually groundwater wells).

Pump Information:

Pump No.	Capacity (GPM)	Status	Source Type
1B CW	137,000	Active	Indian River
2A CW	137,000	Active	Indian River
1A CW	137,000	Active	Indian River
2B CW	137,500	Active	Indian River
1A OCW	4,400	Active	Indian River
1B OCW	4,400	Active	Indian River
2A OCW	6,000	Active	Indian River
2B OCW	6,000	Active	Indian River
1A SW	600	Active	Indian River
2A SW	600	Active	Indian River
1BSW	600	Active	Indian River
2BSW	600	Active	Indian River

Three existing upper Floridan Aquifer wells will continue to be used to supply pump cooling water. These wells are located adjacent to the two intake structures for the Indian River Lagoon.

Wells:

Well No.	Casing Diameter (in.)	Casing Depth (ft.)	Total Depth (ft.)	Existing/Proposed	Source	Type Use
1A	---	---	---	Existing	Upper Floridan Aquifer	Industrial
1B Lube Water	---	---	---	Existing	Upper Floridan Aquifer	Industrial

Unit 2 Lube Water	6	193	215	Existing	Upper Floridan Aquifer	Industrial
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Wells associated with Unit 1 intake structure were constructed between 1964 and 1966. The casing diameter, depth and total well depth are unknown.

Surficial aquifer wells to the west of US#1 will no longer be used and will be abandoned.

The applicant was authorized under the existing CUP to use reclaimed water supplied by the Brevard County Port St. John Wastewater Facility. Reclaimed water will be supplied for landscape irrigation at the site.

Connection Information:

Connection Name	Type
P-1	Reuse Pipeline

Water will be supplied by the City of Cocoa for secondary use for the previously described uses.

Connection Information:

Connection Name	Type
City of Cocoa	Potable Water Pipeline

CONDITIONS RECOMMENDED BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (Chapters 40C-2 and 40C-3, Florida Administrative Code)

1. All submittals made to demonstrate compliance with the consumptive use conditions of this certification must have the certification number plainly labeled on the submittal. [Paragraphs 10.3(a)-(h)(j), A.H.]
2. SJRWMD and DEP authorized staff, upon proper identification, will have permission to enter, inspect and observe permitted and related facilities in order to determine compliance with the approved plans, specifications and conditions of this certification. [Paragraphs 10.3(a)-(h)(j), A.H.]
3. Nothing in this certification shall be construed to limit the authority of the SJRWMD to declare a water shortage and issue orders pursuant to Section 373.175, Florida

Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event of a water shortage, as declared by the SJRWMD Governing Board, the Licensee must adhere to reductions in water withdrawals as specified by the SJRWMD. [Paragraphs 10.3(c)-(e)(h)(j), A.H.]

4. Licensee must mitigate any adverse impact caused by withdrawals permitted herein on legal uses of water existing at the time of application. The DEP has the right to curtail permitted withdrawal rates or water allocations if the withdrawals of water cause an adverse impact on legal uses of water which existed at the time of certification. Adverse impacts are exemplified by, but not limited to:

- a. Reduction of water levels in an adjacent surface water body resulting in a significant impairment of the use of water in that water body.
- b. Saline water intrusion or introduction of pollutants into the water supply of an adjacent water use resulting in a significant reduction of water quality.
- c. Change in water quality resulting in either impairment or loss of use of a well or waterbody.

[Paragraphs 10.3(b)(d)(h)(j), A.H.]

5. Licensee must mitigate any adverse impact caused by withdrawals permitted herein on adjacent land uses that existed at the time of permit application. The DEP has the right to curtail permitted withdrawal rates of water allocations if withdrawals of water cause an adverse impact on adjacent land uses that existed at the time of certification. Adverse impacts are exemplified by, but not limited to:

- a. Significant reduction in water levels in an adjacent surface water body.
- b. Land collapse or subsidence caused by a reduction in water levels.
- c. Damage to crops and other types of vegetation.

[Paragraphs 10.3(b)(d)(h)(j), A.H.]

6. The SJRWMD must be notified, in writing, within 30 days of any sale, conveyance, or other transfer of a facility from which the permitted consumptive use is made or within 30 days of any transfer of ownership or control of the real property at which the permitted consumptive use is located. All transfers of ownership or transfers of permits are subject to the provisions of section 40C-1.612. [Paragraph 3.3.2(a), A.H.]

7. A SJRWMD-issued identification tag shall be prominently displayed at each withdrawal site by permanently affixing such tag to the pump, headgate, valve, or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. Licensee shall notify the SJRWMD in the event that a replacement tag is needed. [Paragraphs 10.3(b)(d)(h)(j), A.H.]

8. All landscape irrigation shall be conducted in accordance with the times, days, and within the manner set forth in section 40C-2.042, F.A.C. [Paragraphs 10.3(a)(b)(e), A.H.]
9. The maximum annual use of water supplied by the City of Cocoa as secondary use for power production and household use must not exceed 84.7 million gallons (0.232 mgd annual average). The maximum daily use authorized under peak conditions is 0.86 million gallons.
[Paragraphs 10.3(a)(b)(c)(f)(h)(j), A.H.]
10. In the event the HRSG blowdown is not recycled to the demineralization system because of poor water quality, additional water from the City of Cocoa may be used. The maximum annual amount authorized for this use is 18.4 million gallons (0.05 mgd annual average). The maximum daily use authorized under peak conditions is 0.07 million gallons. [Paragraph 10.3(a)(b)(c)(g), A.H.]
11. The annual surface water withdrawal from the Indian River Lagoon for once-through cooling water and screen wash water must not exceed 225,935 million gallons (619 mgd annual average). [Paragraph 10.3(a)(b)(c)(g), A.H.]
12. Maximum annual use of water from the upper Floridan aquifer for pump cooling water must not exceed 46.3 million gallons (0.13 mgd annual average). [Paragraph 10.3(a)(b)(c)(g), A.H.]
13. The annual reclaimed water allocation for landscape irrigation from Brevard County's Port St. John WWTP for landscape irrigation is 0.57 million gallons (0.0016 mgd annual average). Additional reclaimed water may be used when available. [Paragraphs 10.3(a)(c)(e)(f), A.H.]
14. Total flow of water from the City of Cocoa connection must be recorded continuously, totaled monthly, and reported to the District at least every six months from the initiation of monitoring using Form EN-50. The Licensee will monitor water use using an existing flow meter owned by the City of Cocoa Utilities. Flow meters must maintain 95% accuracy, be verifiable, and be installed according to manufacturer specifications. The reporting dates each year will be as follows:

<u>Reporting Period</u>	<u>Report Due Date</u>
January - June	July 31
July - December	January 31

[Paragraphs 10.3(a)(b), A.H.]
15. The Licensee has elected to implement an alternative method for withdrawals from upper Floridan aquifer wells (wells 1A, 1B Lube Water and Unit 2 Lube Water) which utilizes an hour meter in conjunction with the design pumping capacity for the pump as a basis for calculating the quantity of water withdrawn from the well. The Licensee shall not alter the approved alternative method without prior written

approval from the District. The method must maintain 95% accuracy and be verifiable. If after a period of one year, the selected alternative does not meet the accuracy criteria, totalizing flow meters or another District-approved alternative method must be used. If flow meters are used, the meters must maintain 95% accuracy, be verifiable and be installed according to manufacturer specifications.

16. Total withdrawal of ground water from the upper Floridan aquifer wells (wells 1A, 1B Lube Water and Unit 2 Lube Water) must be recorded continuously, totaled monthly, and reported to the District at least every six months from the initiation of the monitoring using Form EN-50. The reporting dates each year will be as follows:

<u>Reporting Period</u>	<u>Report Due Date</u>
January - June	July 31
July - December	January 31

[Paragraphs 10.3(a)(b), A.H.]

17. The Licensee must maintain all flow meters. In case of failure or breakdown of any meter, the DEP and SJRWMD must be notified in writing within 5 days of its discovery. A defective meter must be repaired or replaced within 30 days of its discovery. [Paragraphs 10.3(a)(b), A.H.]
18. The Licensee must have the flow meters calibrated once every 3 years within 30 days of the anniversary date of certification issuance, and recalibrated if the difference between the actual flow and the meter reading is greater than 5%. SJRWMD Form No. EN-51 must be submitted to the DEP and SJRWMD within 10 days of the inspection / calibration. [Paragraphs 10.3(a)(b), A.H.]
19. The Licensee has indicated that dewatering will be necessary to facilitate construction of the converted plant. The Licensee has estimated dewatering of the surficial aquifer will occur over an approximate 12-month period at a rate of 920 million gallons per year (2.52 mgd). Prior to commencement of construction of those portions of the project that involve dewatering activities, the Licensee shall submit a detailed plan for any such activities to the SJRWMD for a determination of compliance with the requirements of Section 10.3 of the SJRWMD Applicant's Handbook: Consumptive Uses of Water. This plan shall include at a minimum:
- a map showing the locations of dewatering activities with associated projected drawdowns. If projected drawdowns initially appear to cause adverse environmental impacts or interference to existing legal uses, mitigation measures must be proposed and included in the Dewatering Plan;
 - a map delineating the portions of the property where dewatering activities will take place and the extent of the proposed excavations, both vertically and laterally. This map must include the locations and dimensions of any proposed ponds to receive dewatering discharges;

- procedures to ensure that dewatering will not cause or contribute to flood damage including the proposed rate and duration of water pumped for dewatering;
- a map providing the proposed locations and capacities (gpm) of proposed dewatering pump(s);
- detailed description of turbidity treatment and erosion control measures at the discharge point(s).
- requested dewatering allocation and schedules;
- water quality monitoring plans; and
- if necessary, a water treatment system design.

[Paragraphs 10.3(a),(b),(c),(d),(i),(k), A.H.]

20. The Licensee must implement the Water Conservation Plan submitted to the District in December 2008, in accordance with the schedule contained therein. [Paragraphs 10.3(a),(b),(e), A.H.]

21. Pursuant to subsections 373.219 and 373. 236(4) F.S., the Licensee shall submit to FDEP and SJRWMD five-year compliance reports at the frequency and containing the information specified below:

Beginning June 30, 2016, or by June 30th of the fifth year after commercial operation of the facility begins, whichever occurs first, and every five years thereafter for the life of the facility, the Licensee shall submit a compliance report that establishes that the Licensee has a continuing need for the allocations from all sources in the permit and that Licensee's use of water will continue, for the duration of the authorization to use water, to meet the conditions for issuance set forth in Chapter 40C-2, F.A.C., and sections 9.3, 9.4.2, 9.4.3, 9.4.4, and 10.3(a) - (k) Applicant's Handbook: Consumptive Use of Water, as such rules existed at the time the certification was issued by the Siting Board.

In determining whether the Licensee has established that its use of water complies with section 9.4.4, A.H. and Chapter 40C-2, F.A.C., FDEP and SJRWMD shall evaluate whether the Licensee's use of water interferes with a legal use of water that existed at the time the certification was issued by the Siting Board.

If the FDEP determines, in consultation with the SJRWMD, based on its review of a compliance report, that the Licensee has failed to establish that the Licensee's use of water will continue to meet the relevant criteria as set forth above, FDEP shall modify the authorization to use water in the certification to ensure that the consumptive use of water meets the conditions for issuance in Chapter 40C-2, Florida Administrative Code. Modifications shall not be subject to competing applications, provided there is no increase in the permitted allocation and no change in source, except for changes in source requested by FDEP or SJRWMD.

FDEP shall review the reports pursuant to the provision of section 120.60, Florida Statutes (2008). Agency review and action on a compliance report submitted pursuant to this condition shall be as provided in section 120.60, Florida Statutes (2008).

[Sections 373.236 and 373.219 F.S.; chapter 40C-2, F.A.C.; Paragraphs 9.3, 9.4.2, 9.4.3, 9.4.4, 10.3(a)-(k) A.H.]