



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

April 23, 2012

Mr. Richard Anderson
Vice President
6451 S. Ocean Drive
Jensen Beach, Florida 34957

Certified Mail
Return Receipt Requested

Re: Florida Power & Light Company
St. Lucie Plant
NPDES Permit No. FL0002208
Minor Permit Revision for Permanent Storm Water
Structure at Outfall I-008

Dear Mr. Anderson,

On March 26, the Department received a minor permit revision application for the St. Lucie Plant. The proposed permit revision authorizes FPL to operate the permanent discharge structure depicted in the permit revision application. After review of the application and other supporting documentation, the Department has determined that the proposed modification does not substantially change the characteristic of the effluent or increase the potential for adverse impact on the receiving water body. Because the proposed modification is not expected to result in any water quality degradation, the permit is hereby modified pursuant to Rules 62-620.200(24), 62-620.200(25), and 62-620.325(2), Florida Administrative Code.

Note, this letter does not alter the September 28, 2016 expiration date, other Specific or General Conditions, or monitoring requirements of the permit. This letter must be attached to the original permit.

The permit is modified as stated in the attached revised permit pages unless FPL decides to file a timely, sufficient petition for an administrative hearing under Section 120.57, Florida Statutes. The procedures for petitioning for a hearing are set forth in the attachment titled "Notice of Rights."

Attached are the updated pages of the permit for FL0002208 in strikethrough and underline format in order to highlight the changes.

Sincerely,

Mark P. Thomasson
Director

Division of Water Resources Management

MPT/mh/bn

Attachment

cc: John Armstrong, P.E., DEP West Palm Beach
John Jones, FPL

**STATE OF FLORIDA
INDUSTRIAL WASTEWATER FACILITY PERMIT**

PERMITTEE:

Florida Power & Light (FPL)

PERMIT NUMBER:

FL0002208 (Major) (Rev. B)

FILE NUMBER:

FL0002208-011-IW1S

ISSUANCE DATE:

September 29, 2011

REVISION DATE :

April 23, 2012

EXPIRATION DATE:

September 28, 2016

RESPONSIBLE OFFICIAL:

Richard L. Anderson
6501 S. Ocean Drive
Jensen Beach, Florida 34957

FACILITY:

St. Lucie Power Plant Units 1 and 2
Hutchinson Island
St. Lucie County, Florida

Latitude: See Note Below

Longitude: See Note Below

Note: Latitude and longitude are not shown at the permittee's request, for purposes of Homeland Security pursuant to federal regulations found at 18 CFR 388.113(c)(i) and (ii) and by Presidential Directive dated December 17, 2003.

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.) and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. This permit is accompanied by an Administrative Order, pursuant to paragraphs 403.088(2)(e) and (f), Florida Statutes. Compliance with Administrative Order, AO022TL is a specific requirement of this permit. The above named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

FACILITY DESCRIPTION:

The facility is an electric generating plant with a total nameplate rating of 1908 megawatts. The facility consists of two nuclear powered steam electric generating units (Unit 1 and Unit 2).

Units 1 and 2 use water from the Atlantic Ocean, a Class III marine water body, to remove heat from the main condensers via the once-through cooling water (OTCW) and auxiliary equipment cooling water (AECW) systems. Cooling water gravity flows from the Atlantic Ocean through three offshore intake structures into the intake canal. The water is then pumped through the main condensers for each unit. Heated cooling water is released to the discharge canal and back to the Atlantic Ocean through existing offshore Y and multi-port diffusers.

Units 1 and 2 are also regulated under the Florida Electrical Power Plant Siting Act (License No. PA74-02).

The radioactive component of the discharge is regulated by the U.S. Nuclear Regulatory Commission under the Atomic Energy Act, and not by the Department or the U.S. Environmental Protection Agency under the Clean Water Act.

WASTEWATER TREATMENT:

Facility discharge and treatment include the following. Once-through non-contact condenser cooling water (OTCW) and auxiliary equipment cooling water (AECW) are chlorinated. Low volume waste (LVW) (consisting of water treatment system wastewater, steam generator/boiler blowdown, and equipment area floor drainage), non-radioactive wastes/liquid radiation waste, and stormwater associated with industrial activity are treated by chemical/physical processes including neutralization, settling, ion exchange and micro filtration. Non-industrial stormwater and intake screen wash water are discharged without treatment.

REUSE OR DISPOSAL:

PERMITTEE: Florida Power & Light (FPL)
FACILITY: St. Lucie Power Plant

PERMIT NUMBER: FL0002208 (Rev. B)
EXPIRATION DATE: September 28, 2016

Surface Water Discharge D-001: An existing 1,487 MGD daily maximum flow, 1,362 annual average daily flow permitted discharge to the onsite discharge canal, thence to the Atlantic Ocean, Class III Marine Waters, (WBID 8103).

Internal Outfall I-003: An existing permitted discharge to the discharge canal.

Internal Outfall I-005: An existing permitted discharge to the discharge canal.

Internal Outfall I-007: An existing permitted discharge to the discharge canal.

Storm Water Outfall I-06B: An existing intermittent permitted storm water discharge to the intake canal via an outlet control structure.

Storm Water Outfall I-06C: An existing intermittent permitted storm water discharge to the intake canal via an outlet control structure.

Storm Water Outfall I-06D: An existing intermittent permitted storm water discharge to the intake canal via an outlet control structure.

Internal Storm Water Outfall I-008: An existing intermittent permitted storm water discharge to the intake canal via an outlet control structure.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in this Cover Sheet and Part I through Part IX on pages 1 through 25 of this permit.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

STATEMENT OF BASIS FOR MINOR PERMIT REVISION

Permit Number: FL0002208

Permit Writer: Bala Nori

1. SYNOPSIS OF APPLICATION

A. Name and Address of Applicant:

Florida Power & Light
6501 S. Ocean Drive
Jensen Beach, FL 34957

For:

Florida Power & Light
St. Lucie Power Plant
Hutchinson Island
St. Lucie County, FL

B. Description of Proposed Activity

On March 26, 2012, the Department received a minor revision application for the above referenced NPDES permit for the Florida Power & Light Company (FPL) St. Lucie Power Plant.

FPL is seeking authorization to modify the method for drawing down the water level in the existing onsite stormwater management evaporation/percolation basin. The stormwater is discharged via Outfall I-008 to the intake canal of the once-through cooling water system and ultimately released to the Atlantic Ocean. The current method for drawing down the water level is through the use of portable pumps. These pumps must be monitored and refueled during operation in the midst of storm events, which introduces safety and environmental risks. On occasion, high winds have prevented the successful placement of the portable pumps.

FPL has proposed an alternative draw down method, which is not anticipated to change the quality or quantity of the discharge from the stormwater management evaporation/percolation basin. FPL will construct a permanent discharge structure that is normally closed but can be manually opened to drain the basin. Provided sketches show a precast concrete structure that has a control weir cast into the face of the structure. A manually activated sluice gate will be mounted on the inside of the structure to control the flow through the structure. Discharge pipe(s) will be installed between the discharge structure and the intake canal. The number and sizes of the pipes will be dependent on the construction method chosen by FPL. The discharge pipes will protrude through the existing intake canal revetment system above the water level during normal operating conditions. The discharge pipes will be equipped with flap gates to prevent backflow from the canal into the basin. The flow through the structure will be automatically metered and recorded as per existing permit conditions. This alternative draw down method is expected to reduce the safety and environmental hazards as it will be a passive system once activated and can be monitored by existing plant surveillance systems.

The proposed structure was also reviewed by the Southeast District office's Environmental Resource Permitting staff.

Change to Permit

Page 2. The permit description for Storm Water Outfall I-008 was updated to reflect the permanent discharge structure to the intake canal.

This constitutes Revision B (Rev. B) to the permit. All changes to the permit are noted in Rev. B by underline or strike-through where changes have been made for this revision.