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FEB 26 2009

L-2009-052  
10 CFR 50.36

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D. C. 20555-0001

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Industrial Wastewater Permit Number FL0001562  
Minor Modification Approval Notification

By letter L-2008-011, dated January 25, 2008, Florida Power & Light (FPL) notified the NRC of a request for a minor modification to Industrial Wastewater Permit Number FL0001562.

On August 21, 2008, the Florida Department of Environmental Protection issued the minor revision to the Industrial Wastewater Permit Number FL0001562. In accordance with Section 3.2.2 of the Turkey Point Units 3 and 4 Environmental Protection Plan (Appendix B of Facility Operating Licenses DPR-31 and DPR-41), enclosed is a copy of the revised Industrial Wastewater Permit Number FL0001562. The minor permit modification reflects the installation of an alternate cooling system to cool equipment during off-normal shut-down events for Turkey Point Unit 5.

Should there be any questions, please contact us.

Very truly yours,

William Jefferson, Jr.  
Vice President  
Turkey Point Nuclear Plant

Enclosure

cc: Regional Administrator, Region II, USNRC  
Senior Resident Inspector, USNRC, Turkey Point Plant

COO1  
NRC

**ENCLOSURE TO**

**L-2009-052**



# Florida Department of Environmental Protection

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

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

August 21, 2008

Mr. Bryon Billman  
Power Generation Division  
Florida Power & Light Company  
700 Universe Blvd  
Juno Beach, Florida 33408

**By Certified Mail  
Return Receipt Requested**

RE: Florida Power & Light Company  
Turkey Point Plant, Miami-Dade County  
DEP File No. FL0001562-007-IWB/MR  
Minor Permit Revision for Internal Discharge of Auxiliary Cooling Water from Unit 5

Dear Mr. Billman:

On January 25, 2008, the Department received a minor permit revision application for Florida Power & Light Company (FPL) Turkey Point Plant. The proposed minor revision is to authorize internal discharge of auxiliary cooling water from combustion turbine electric generators at the recently constructed Turkey Point Unit 5 (a fossil fuel generating unit) to the facility's on-site closed-loop cooling canal system. The discharge will only occur during maintenance outages for the Unit 5 steam electric generating system and cooling tower.

The Department has determined that this activity qualifies as a minor modification of the operations at the Turkey Point Plant pursuant to Rule 62-620.200(24), Florida Administrative Code (F.A.C.), and can be authorized by a minor permit revision pursuant to Rule 62-620.325(2), F.A.C. This letter and attachment constitute a minor revision to the referenced wastewater permit.

The permit is revised as stated in the attached permit page 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."

If you have any questions regarding this permit revision, please contact Marc Harris, P.E., in the Industrial Wastewater Section at (850) 245-8589.

Sincerely,

Janet Llewellyn  
Director  
Division of Water Resource Management

Attachment

cc: Tim Powell, P.E., FDEP West Palm Beach  
Todd Brown, FDEP West Palm Beach

## NOTICE OF RIGHTS

A person whose substantial interests are affected by this permit revision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, within 14 days of receipt of this Permit. A petitioner, other than the applicant, shall mail a copy of the petition to the applicant at the address indicated in the attached letter at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the Department case 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 all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;
- (f) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

**STATE OF FLORIDA  
INDUSTRIAL WASTEWATER FACILITY PERMIT**

**PERMITTEE:**

Florida Power & Light Company  
9760 S.W. 344 Street  
Florida City, FL 33035

**PERMIT NUMBER:**

FL0001562 (Major) Rev. B

**PA FILE NUMBER:**

FL0001562-004-IWIN

**ISSUANCE DATE:**

May 6, 2005

**REVISION DATE:**

August 21, 2008

**EXPIRATION DATE:**

May 5, 2010

**RESPONSIBLE AUTHORITY:**

Mr. Terry O. Jones  
Vice President

**FACILITY:**

FPL Turkey Point Power Plant  
9760 S.W. 344 Street  
Florida City, FL 33035  
Dade County

Latitude: See Note Below    Longitude: See Note Below

Note: Latitude and longitude are not shown at 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 (NPDES). The above named permittee is hereby authorized to operate the facilities shown on the application and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

The facility consists of five electrical generating units: Two fossil fuel oil/natural gas-fired units (Units 1&2), two nuclear units (Units 3&4) and one combined cycle unit (Unit 5). Units 1&2 each have a generating capacity of 404 megawatts (MW), Units 3&4 each have a generating capacity of 693 MW and Unit 5 has a generating capacity of 1150 megawatts (MW).

**WASTEWATER TREATMENT:**

Wastewater from the Turkey Point facility consists of non-contact once-through condenser cooling water (OTCW), auxiliary equipment cooling water (AECW), cooling tower blowdown, non-contact once-through cooling water from Unit 5 backup cooling water system, low-volume waste (LVW), and stormwater. LVW consists of chemical treatment system wastewater, boiler blowdown, heat recovery steam generator blowdown, reverse osmosis concentrate, condensate polishing system backwash water, and other process wastestreams. Stormwater includes stormwater associated with industrial activity and stormwater not associated with industrial activity.

OTCW, AECW and cooling tower blowdown discharge to the facility's approximately 6,700 acre onsite closed loop cooling canal system. LVW, equipment area stormwater, and non-equipment area stormwater/drainage discharge either directly to the onsite closed loop cooling canal system or indirectly to the same system via solids settling basins and/or neutralization basin. The cooling canal system is not lined, and therefore, discharges to Class G-III groundwater. The cooling canal system does not discharge to surface waters of the state.

PERMITTEE:

PERMIT NUMBER: FL0001562 *(Rev. B)*

Florida Power & Light Company  
 9760 S.W. 344 Street  
 Florida City, FL 33035

Issuance date: May 6, 2005  
 Expiration date: May 5, 2010

*Additions to the permit are identified by italics and underline. Deletions are identified by strikethrough.*

**I. Effluent Limitations and Monitoring Requirements**

**A. Surface Water Discharges**

1. This permit does not authorize discharge to surface waters of the state.
2. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge non process wastewater consisting of non-contact once-through condenser cooling water (OTCW), non-contact auxiliary equipment cooling water (AECW), cooling tower blowdown, , *non-contact once-through cooling water from Unit 5 backup cooling water system* and other wastestreams (as indicated in the permit renewal application and permit revision application) from Internal Outfall I-001 to the onsite feeder canal within the facility's onsite closed loop cooling canal system. Such discharge shall be limited and monitored by the permittee as specified below:

Parameters (units)	Discharge Limitations			Monitoring Requirements		
	Maximum Daily Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Temperature (F), Water (DEG.F)	--	Report	--	Monthly	Instantaneous	OUI-1
Solids, Total Suspended (MG/L)	--	Report	--	Quarterly	Grab	OUI-1
pH (SU)	--	Report	Report	Quarterly	Grab	OUI-1
Salinity (PPT)	--	Report	--	Quarterly	Grab	OUI-1
Specific Conductance (UMHO/CM)	--	Report	--	Quarterly	Grab	OUI-1
Copper, Total Recoverable (UG/L)	--	Report	--	Semiannually	Grab	OUI-1
Iron, Total Recoverable (MG/L)	--	Report	--	Semiannually	Grab	OUI-1
Zinc, Total Recoverable (UG/L)	--	Report	--	Semiannually	Grab	OUI-1

3. Effluent samples shall be taken at the monitoring site locations listed in permit condition I.A.2. and as described below:

Sample Point	Description of Monitoring Location
OUI-1	Cooling water discharge prior to entering the feeder canal within the closed loop cooling canal system

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32399-2400

STATEMENT OF BASIS FOR MINOR REVISION FOR BACKUP COOLING WATER SYSTEM

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Permit Number: FL0001562  
DEP File No.: FL0001562-007-IWB/MR  
Designation: Major  
Permit Writer: Bala Nori

Application Date: January 25, 2008

**1. SYNOPSIS OF APPLICATION**

**A. Name and Address of Applicant**

Florida Power & Light Company  
Post Office Box 14000  
Juno Beach, Florida 33408

For:

Turkey Point Power Plant  
9760 S.W. 344<sup>th</sup> Street  
Florida City, Florida 34957

**B. Description of Proposed Activity:**

The Department received a minor permit revision application requesting authorization to operate a backup cooling water system for the recently constructed Turkey Point Unit 5 (a fossil fuel generating unit).

Turkey Point Unit 5 consists of four gas turbines, four heat recovery steam generators, a single steam turbine-electrical generator, and a mechanical draft cooling tower. Under normal operation, the cooling tower removes the surplus heat from the turbine steam and auxiliary equipment. Water is blowdown from the cooling tower to the closed-loop cooling canals at an average flow rate of 1,987 gallons per minute (gpm) with a maximum flow rate of 4,668 gpm. This discharge is permitted under the existing wastewater discharge permit for this facility. Ground water is withdrawn from the upper production zone of the Floridan aquifer as make-up water to replace the lost water volume from the cooling tower.

Under rare situations where the primary electrical power supply is lost to the cooling tower, FPL may be required to shutdown Unit 5 using emergency diesel generators (EDGs). The EDGs are not capable of powering all of the existing cooling tower water pumps. FPL is proposing to install an backup cooling water system to safely shutdown Unit 5 when the primary power supply is lost to the cooling tower pumps. The backup cooling water system consists of heat exchangers and will be used to cool the auxiliary equipment. The groundwater withdrawn from the Floridan aquifer will be diverted from the cooling tower and used as once-through cooling water in the and then discharged into the existing cooling canals at an average flow rate of 2,250 gpm with a maximum flow rate of 4,500 gpm. Thus, the cooling tower and backup cooling water system will not be operation simultaneously.

The cooling canals are a closed-loop system used by all five generating units at the Turkey Point plant. The NPDES permit does not authorize discharge from the cooling canals to surface water. This minor revision does not authorize any discharge except internal discharge to the cooling canal system from the

backup cooling water system during abnormal shutdown of Unit 5 and testing events. The revision does not authorize use of any chemical additives or biocides in the backup cooling water system. 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.