



April 18, 2008  
L-2008-089  
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 Request Notification

In accordance with Section 3.2.3 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 request to revise the Industrial Wastewater Permit Number FL0001562. The minor permit modification is requested to reflect the proposed plan to add about 100 Megawatts (MW) of electrical generation to each of the Turkey Point nuclear units. The net power output of both Units 3 and 4 will be increased from about 700 MW to 804 MW.

Should there be any questions, please contact us.

Very truly yours,

A handwritten signature in black ink, appearing to read 'W. Jefferson, Jr.', is written over the typed name.

William Jefferson, Jr.  
Vice President  
Turkey Point Nuclear Plant

Enclosure

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

**ENCLOSURE TO**

**L-2008-089**



April 18, 2008

Marc Harris, P.E.  
Supervisor, Power Plant NPDES Permitting  
Industrial Wastewater Section  
Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 3545  
Tallahassee, Florida 32399-2400

RE: FPL – Turkey Point Plant  
State of Florida Industrial Wastewater Facility Permit No. FL001562  
Request for Minor Revision Due to Minor Modification of Facility

Dear Mr. Harris:

Attached please find the following items to support a request for a minor revision to the Florida Power & Light Company (FPL) Turkey Point Plant State of Florida Industrial Wastewater Facility Permit No. FL0001562:

- 1) Four (4) signed, sealed copies of FDEP Form 62-620.910(9), "Application for a Minor Revision to a Wastewater Facility or Activity Permit" including Attachment to Request Minor Modification.
- 2) An FPL Check payable to the Florida Department of Environmental protection for the \$250 application fee.

If you have any questions or need additional information on this matter, please contact Ron Hix at (561) 691-7641.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Jefferson", is written over a large, stylized, cursive flourish.

William Jefferson  
Vice President – Turkey Point Nuclear Plant

Enclosures

cc:  
USNRC Document Control Desk  
FDEP – SE District – Tim Powell



# APPLICATION FOR A MINOR REVISION TO A WASTEWATER FACILITY OR ACTIVITY PERMIT

## 1. Instructions

- In accordance with Rule 62-620.325, F.A.C., this form must be submitted to the appropriate Department district office or approved local program when requests for minor revisions to a permit or minor modifications to a facility are made by a permittee, except for transfer of a permit to a new permittee and addition of a major user of reclaimed water to a Part III reuse system. Application for transfer of a permit to a new permittee shall be made on DEP Form 62-620.910(11). Application for addition of a major user of reclaimed water shall be made on DEP Form 62-610.300(4)(a)1.
- Each applicable item must be completed in full in order to avoid delay in processing of this form. Where attached sheets or other technical documentation are provided, indicate appropriate cross-references.
- Three (3) copies of this application with supporting documentation shall be submitted with this form.
- All information is to be typed or printed in ink. Dates are to be entered in MM/DD/YR format.
- This application and attachments shall be signed in accordance with Rule 62-620.305, F.A.C. Also, as applicable, this application and all attachments shall be signed and sealed by a professional engineer registered in Florida in accordance with Rule 62-620.310, F.A.C.

## 2. Facility Information

- a. Permit Number: FL0001562      b. Facility Identification Number: \_\_\_\_\_
- c. Project/Facility Name: Florida Power & Light Company Turkey Point Plant Unit 3 & 4
- d. Contact Name: William Jefferson
- Number and Street: 9760 S.W. 344 Street
- City/State/Zip Code: Florida City, FL 33035
- Telephone: 305-246-6113

## 3. Type of Revision

- Correct Typographical Errors<sup>1</sup>** - Submit one copy of each page of the permit showing revisions being requested.
- Change Improvement Schedule<sup>1</sup>** - Provide a description of the improvement, a list of the dates to be revised, and a reason for the proposed change in each date.
- Change Expiration Date of Permit<sup>1</sup>** - Provide the current and proposed expiration dates for the permit and the reasons for the proposed change.
- Change Staffing Requirements<sup>2</sup>** - Describe the proposed change and submit justification for the change in accordance with Chapter 62-699, F.A.C.

<sup>1</sup> A processing fee is not required.

<sup>2</sup> A processing fee is required with the application in accordance with Rule 62-4.050, F.A.C.

- Change Monitoring and Reporting Requirements<sup>2</sup>** - Describe the proposed change and submit justification for the change in accordance with Chapter 62-601, F.A.C.
- Modify Approved Pretreatment Program<sup>1</sup>** - Describe the proposed modification and provide the information required by Rule 62-625.540, F.A.C.
- Delete Point Source Outfall<sup>1</sup>** - Identify the outfall and explain why the outfall is being eliminated.
- Modify or Expand Approved Residuals Land Application Sites<sup>2</sup>** - Attach a new or updated Agricultural Use or Dedicated Site Plan as required by Chapter 62-640, F.A.C.
- Minor Modification to the Facility<sup>2</sup>** - Provide a description of the proposed modification. If applicable, attach any reports, plans, and specifications which have been developed to implement this modification.
- Other<sup>2</sup>** - Provide appropriate documentation. Describe.

**4. Certifications**

a. Applicant or Authorized Representative

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

*[Signature]* (Signature of Applicant or Authorized Representative<sup>3</sup>)      4/3/08 (Date)

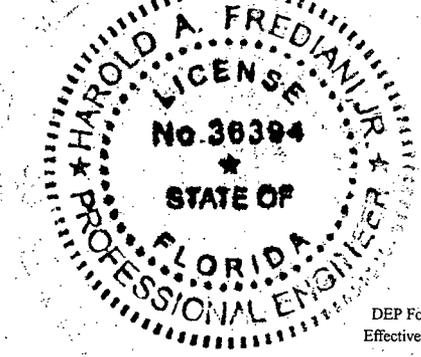
Name (please type) William Jefferson Company Name Florida Power & Light Company  
 Title Plant Vice President Company Address: 9760 S.W. 344 Street  
 Phone: 305-246-6113 City/State/Zip Code: Florida City, FL 33035

b. Professional Engineer Registered in Florida

I certify that the engineering features of this project have been (designed) (examined) by me and found to conform to engineering principles applicable to such projects. In my professional judgement, this facility, when properly constructed, operated, and maintained, will comply with all applicable statutes of the State of Florida and rules of the Department.

Name (please type): Harold A. Frediani, Jr.  
 Florida Registration Number: 36394  
 Company Name: Golder Associates Inc, Cert No.1670  
 Company Address: 3730 Chamblee Tucker Road  
 City/State/Zip Code: Atlanta, GA 30341  
 Phone Number: 770-492-8218

*Harold A. Frediani, Jr.* 3/19/08  
 (Seal, Signature, Date, and Registration Number)



<sup>3</sup>If signed by the authorized representative, attach a letter of authorization in accordance Rule 62-620.305, F.A.C.

## **Attachment to Request for Minor Modification**

### **I Introduction**

FPL proposes plans to add about 200 MW of electrical generation resources to its system in order to continue to provide reliable, safe, and cost-effective service to its customers. This increase will be accomplished by the Turkey Point Uprate Project which is an innovative application of technological advancements and efficiencies that will increase the net power output of both Unit 3 and Unit 4 from about 700 Megawatts (MW) to 804 MW. The extra power output will result from improving the performance of the steam turbine and from using more nuclear fuel which will result in increased thermal MWs produced in the reactor core. The additional heat will raise the temperature exchange between the primary and secondary systems, creating more steam for turning the turbines.

The Project consists of upgrades to each unit. The upgrades will include refurbishment and improvement activities to the steam turbine-electric generator, electrical systems, and cooling systems. These refurbishment and improvement activities will primarily occur during outages between 2010 and 2012. Certain improvements will also be made while the units are operating. All refurbishment and improvement activities will occur within the building and structures associated with existing Units 3 and 4.

### **II Heat Dissipation System**

Turkey Point Units 3 and 4 use cooling water from a closed-cycle cooling canal system to remove heat from the main (turbine) condensers, and to remove heat from other auxiliary equipment. The additional heat from the uprate will result in an increase in the hot water temperature leaving the nuclear units. The existing cooling canal system can accommodate the increase in heat load. The maximum predicted increase in hot water temperature entering the cooling canal system is about 2.5 deg F, from 106.1 to 108.6 deg F. The associated maximum increase in cold water temperature returning to the units is about 0.9 deg F, from 91.9 to 92.8 deg F.

### **III Proposed Permit Conditions**

The Turkey Point cooling canal system is a permitted wastewater treatment facility; therefore, state and federal water quality standards do not apply within it. The NPDES permit is a no-discharge permit and will remain so; therefore, the Uprate Project will have no impact on discharges to surface water. No changes in permit conditions are required. A revision to the facility's State IWW Permit is required to reflect the increase in the megawatts for Units 3 and 4 from 700 MW to 804 MW as a result of the uprate.