

## TurkeyPointLANPEm Resource

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**From:** Hanek, Olga [Olga.Hanek@fpl.com]  
**Sent:** Tuesday, July 15, 2014 2:43 PM  
**To:** Klett, Audrey  
**Cc:** Tomonto, Bob; Jones, John; Foster, Stacy  
**Subject:** NRC NOTIFICATION REF: IWW Permit approval of maintenance activities to address blue green algae in CCS  
**Attachments:** L-2014-223 IWW NPDES Modification Approval NRC notification algae.pdf

Audrey,

Attached is the FPL letter notifying the NRC of DEP's approval of the maintenance activity regarding IWW permit FL0001562 allowing the short-term use of chemicals to address the blue green algae in the CCS.

This letter meets the 30-day notification requirement of Section 3.2.2 of the Turkey Point Units 3 and 4 EPP [Appendix B of DRP 31 & DPR-41].

Olga

**Hearing Identifier:** TurkeyPoint\_LA\_NonPublic  
**Email Number:** 233

**Mail Envelope Properties** (3D13FD471462794BB07764E46D727B892C0FE430)

**Subject:** NRC NOTIFICATION REF: IWW Permit approval of maintenance activities to address blue green algae in CCS  
**Sent Date:** 7/15/2014 2:42:49 PM  
**Received Date:** 7/15/2014 2:42:57 PM  
**From:** Hanek, Olga

**Created By:** Olga.Hanek@fpl.com

**Recipients:**

"Tomonto, Bob" <Bob.Tomonto@fpl.com>  
Tracking Status: None  
"Jones, John" <john.jones@fpl.com>  
Tracking Status: None  
"Foster, Stacy" <Stacy.Foster@fpl.com>  
Tracking Status: None  
"Klett, Audrey" <Audrey.Klett@nrc.gov>  
Tracking Status: None

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Files	Size	Date & Time
MESSAGE	394	7/15/2014 2:42:57 PM
L-2014-223 IWW NPDES Modification Approval NRC notification algae.pdf		
1483948		

**Options**

**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**



FPL.

July 15, 2014  
L-2014-223  
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  
Wastewater Permit Number FL0001562  
Approval of the Request for the Use of Copper Sulfate, Hydrogen Peroxide and  
A Bio-Stimulant in the Treatment and Control of Blue Green Algae in the Cooling Canal  
System (CCS) - NRC Notification

By FPL letter L-2014-198 dated June 18, 2014, and in accordance with Section 3.2.3 of the Turkey Point Units 3 and 4 Environmental Protection Plan (EPP), Appendix B of the Turkey Point Units 3 and 4 Renewed Facility Operating Licenses DPR-31 and DPR-4, Florida Power and Light Company (FPL) provided the NRC a copy of the request to revise Wastewater Permit Number FL0001562. The Florida Department of Environmental Protection (FDEP) approved the request on June 27, 2014.

In accordance with Section 3.2.2 of the Turkey Point Units 3 and 4 EPP, Enclosure 1 provides a copy of the FDEP approval of the Wastewater Permit Number FL0001562 maintenance activity allowing the short term use of copper sulfate, hydrogen peroxide, and a bio-stimulate as part of a mitigating strategy for reducing or eliminating Turkey Point CCS algae growth. The Florida Fish and Wildlife Conservation Commission (FWC) was consulted, as recommended by the FDEP. Enclosure 2 provides a copy of the Florida FWC response.

Should there be any questions, please contact Mr. Robert Tomonto, Licensing Manager, at 305-246-7327.

Very truly yours,

Michael Killey  
Vice President  
Turkey Point Nuclear Plant

Enclosures

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

Florida Power & Light Company

9760 SW 344 St Homestead, FL 33035

ENCLOSURE 1 TO

L-2014-223



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

BOB MARTINEZ, CENTER  
2600 BLAIRSTONE ROAD  
TALLAHASSEE, FLORIDA 32399-2400

**RICK SCOTT**  
GOVERNOR  
  
**CARLOS LOPEZ-CANTERA**  
L.T. GOVERNOR  
  
**HERSCHEL T. VINYARD JR.**  
SECRETARY

June 27, 2014

**SENT BY EMAIL TO:**  
([Michael.Kiley@fpl.com](mailto:Michael.Kiley@fpl.com))

Mr. Michael Kiley  
Vice President  
Florida Power & Light  
9760 S.W. 344 Street  
Florida City, FL 33035

Re: Florida Power & Light  
Turkey Point  
NPDES Permit FL0001562  
90-Day Trial Approval

Dear Mr. Kiley:

The Florida Department of Environmental Protection (Department) has reviewed your letter dated June 18, 2014 requesting approval to use a combination of copper sulfate, hydrogen peroxide and bio-stimulants (copper sulfate blend) in the cooling canal system at the Florida Power and Light (FPL) Turkey Point Power Plant. We concur that the proposed chemical use can be considered “repair of components of an industrial site or plant,” pursuant to Rule 62-620.200(26)(b), Florida Administrative Code.

As stated in your letter, the trial period (not to exceed ninety days) is intended to determine the optimum combination of these chemical products to control the blue green algae (cyanobacteria) that have caused a high incidence of condenser tube and auxiliary heat exchanger tube biofouling, reduced heat transfer and higher than normal temperatures in your cooling canal. The application rates and sites of these chemicals during the trial period are outlined in your letter.

Although the CCS is not freshwater and there is restricted access to the CCS, it is recommended that FPL, to the extent practicable, limit its employees and contractors exposure to the cyanobacterial blooms.

In addition to the parameters proposed in your letter, we ask you to monitor for total recoverable copper, and dissolved oxygen. Please submit the analytical results to the Department once the trial is completed.

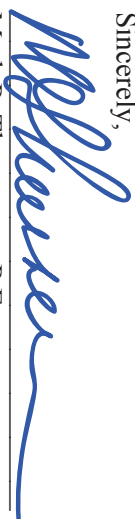
Because of the presence of the American Crocodile in your cooling canal system, we recommend that FPL consult with the Florida Fish and Wildlife Conservation Commission to determine if any additional measures are needed to protect the crocodiles.

Mr. Michael Kiley  
Florida Power & Light  
NPDES Permit FL0001562

June 27, 2014  
Page 2

Upon completion of the trial, please provide the testing results to the Industrial Wastewater Program, attention Marc Harris, P.E., at 2600 Blair Stone Road, Mail Station 3545, Tallahassee, Florida 32399-2400. If you have any questions, please contact Marc Harris, P.E., at (850) 245-8590.

Sincerely,

A handwritten signature in blue ink, appearing to read 'M. Thomasson', with a long horizontal flourish extending to the right.

Mark P. Thomasson, P.E.  
Director  
Division of Water Resource Management  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

MPT/mh

Attachment

cc: John Jones, FPL ([john.jones@fpl.com](mailto:john.jones@fpl.com))  
Linda Brien, PG, DEP West Palm Beach ([linda.brien@dep.state.fl.us](mailto:linda.brien@dep.state.fl.us))  
Michael Hambor, DEP West Palm Beach ([michael.hambor@dep.state.fl.us](mailto:michael.hambor@dep.state.fl.us))  
Marc Harris, P.E., DEP Tallahassee ([marc.harris@dep.state.fl.us](mailto:marc.harris@dep.state.fl.us))

ENCLOSURE 2 TO

L-2014-223





July 1, 2014

**Florida Fish  
and Wildlife  
Conservation  
Commission**

**Commissioners**

**Richard A. Corbett**  
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Tampa

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Hearing/speech-impaired:  
(800) 955-8771 (T)  
(800) 955-8770 (V)

MyFWC.com

Marc Harris, P.E.

Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 3545  
Tallahassee, FL 32399-2400  
[Marc.harris@dep.state.fl.us](mailto:Marc.harris@dep.state.fl.us)

RE: Florida Power and Light, Turkey Point Power Plant Maintenance Activity,  
NPDES Permit FL0001562, Miami-Dade County

Dear Mr. Harris:

Fish and Wildlife Conservation Commission (FWC) staff received the attached authorization from the Florida Department of Environmental Protection (FDEP) on June 27, 2014, regarding a short-term maintenance activity associated with treatment of algae in Florida Power and Light's (FPL) Turkey Point Nuclear Plant's cooling canal system. We have coordinated with FPL regarding this authorization and provide the following.

FPL is taking precautions to reduce the potential for a fish kill associated with application of copper sulfate to control a cyanobacteria bloom. In order to assist the FWC with documenting any unintended impacts to wildlife species utilizing the cooling canal system, FPL has agreed to:

- document any potentially related fish kills,
- report any fish kills to our hotline at 800-636-0511, and
- relay any information about toxicity of the cyanobacteria species to FWC staff.

We have also coordinated with FPL regarding crocodiles utilizing the system, and we have no additional requests at this time.

We appreciate the opportunity to provide input on this project. If you have any additional questions regarding FPL's fulfillment of this condition, I can be reached in the office at (850) 617-9380, by cell at (561) 670-6076, or by email at [Jennifer.goff@MyFWC.com](mailto:Jennifer.goff@MyFWC.com).

Sincerely,

Jennifer D. Goff  
Land Use Planning Program Administrator  
Office of Conservation Planning Services

jdg/jh  
ENV 2-11-2/3  
FPL Turkey Point Nuclear Plant Units 3 and 4 Maintenance\_19403\_070114  
Enclosure



cc:

Mark Thomasson, P.E.  
Director, Division of Water Resource Management  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400  
[Mark.thomasson@dep.state.fl.us](mailto:Mark.thomasson@dep.state.fl.us)

John Jones, FPL, [john.jones@fpl.com](mailto:john.jones@fpl.com)  
Stacy Foster, FPL, [stacy.foster@fpl.com](mailto:stacy.foster@fpl.com)  
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Bala Nori, FDEP, [Bala.Nori@dep.state.fl.us](mailto:Bala.Nori@dep.state.fl.us)