

PMTurkeyCOLPEm Resource

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To: Kugler, Andrew
Subject: FPL-ACOE Letter
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As requested FYI.

Rick

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Mr. Donald W. Kinard
Chief, Regulatory Division
Jacksonville District Corps of Engineers
701 San Marco Blvd. Room 372
Jacksonville, FL 32207-8175

October 11, 2010
FPLNNP-10-0341

Re: Proposed Exploratory Drilling at Florida Power & Light Company's Turkey Point Power Plant, Miami-Dade County, Florida

Dear Mr. Kinard:

In an October 4, 2010 letter to you, the Environmental Protection Agency (EPA) recently shared some observations addressing whether a Clean Water Act (CWA) Section 404 permit could be required in conjunction with exploratory drilling in a 2.5 acre area within Florida Power & Light Company's (FPL's) Industrial Waste Water Facility (hereinafter the "IWWF" or "system") at the Turkey Point Plant. EPA did not take official responsibility for the matter, and merely recommended that the Corps take action based on EPA's review.

In reviewing Turkey Point's records, it is clear that EPA itself has repeatedly taken the position that the IWWF is non-jurisdictional, based on a line of analysis not mentioned in EPA's recent letter to you. We would like to focus on that history here, in order to ensure that the Corps' decision regarding non-jurisdiction for this work, and also for all subsequent work within the IWWF, is based on a complete and accurate understanding of Turkey Point's factual and regulatory history. We appreciate the Corps' consideration of EPA's record of unequivocal decisionmaking on this matter.

For several years, both FPL and the Corps have relied on the waste treatment systems exemption cited in your letter. FPL continues to believe, as explained in your letter to EPA, that the exception clearly applies in this circumstance based on the documented long-term use of the IWWF for wastewater treatment as authorized by the facility's National Pollutant Discharge Elimination System (NPDES) permit. Notwithstanding this status, FPL is cognizant of its environmental stewardship responsibilities, and has committed to provide full mitigation for loss of functional value caused by its construction activities on the site once the proposed power plant construction begins.

Overview of the Turkey Point Cooling Canal System

The two 400-megawatt (MW) (nominal) fossil fuel-fired steam electric generation units at the Turkey Point Plant have been in service since 1967 (Unit 1) and 1968 (Unit 2). The two 700-MW (nominal) nuclear units have been in service since 1972 (Unit 3) and 1973 (Unit 4). Turkey Point Units 3 and 4 are pressurized water reactor units, each rated

at 693 MW (nominal net). Turkey Point Unit 5 is a nominal 1,120 MW combined cycle fossil fuel unit that began operation in 2007.

The IWWF is a closed cycle wastewater treatment system of recirculating canals used for cooling water and wastewater disposal by Units 1 through 4 with no surface water discharge. Unit 5 has mechanical draft cooling towers for the steam generation cycle, using water from the Upper Floridan Aquifer as makeup and routing cooling tower blowdown to the IWWF. The IWWF occupies an area approximately 2 miles wide by 5 miles long. The main canal receives heated water from the plant and distributes it into 32 feeder canals. Water in these feeder canals flows south into a single collector canal on the southern perimeter of the system, which distributes water to seven return canals. Water in the return canals flows north to the intakes that serve Units 1 through 4. These canals converge at the island area where the proposed exploratory work will take place. As the Corps is aware, the area of exploratory drilling and associated activities is and has always been located within the boundaries of this system. A visual depiction of the main portion of the IWWF is included with Attachment 1 to this letter.

Vegetation typically associated with wetland characteristics grows in some areas along the berms that separate the feeder and return canals, and also within the area that separates portions of the canals in the northeast corner of the cooling canal system. The feeder and return canals are shallow, generally 1 to 3 feet deep, with the exception of the westernmost return canal (formerly Card Sound Canal) which extends to a depth of -18 feet mean sea level (ft-msl). All of the IWWF canals undergo routine maintenance of the canal bottoms and removal of aquatic vegetation to minimize flow restriction and ensure efficient operation.

Significantly, public access to all of the areas within the boundaries of the IWWF is strictly prohibited. Accordingly, the areas within the boundaries of the IWWF do not have a nexus with interstate commerce.

Early History of the IWWF

Concerns regarding thermal impacts of Turkey Point discharges to Biscayne Bay initially arose in 1967, just before the Atomic Energy Commission issued construction permits for Nuclear Units Nos. 3 and 4. The plant cooling water management system at that time consisted of several canals located south and west of the plant and directly connected to Biscayne Bay. Agency concerns regarding thermal impacts caused FPL to consider a range of potential solutions. In that respect, FPL at one point proposed extension of a canal from the existing South Canal to Card Sound, the thought being that the six-mile length of the canal would dissipate the heat before discharging to Card Sound. FPL obtained several permits from Dade County and one from the Florida Board of Trustees of the Internal Improvement Trust Fund ("the Trustees") for this proposed expansion of the cooling system. The Trustees' Dredge Permit No. 253.123-691 (dated December 16, 1970) authorized construction of portions of the Card Sound Canal and plugging of several of the existing canals, as well as construction of a "dilution canal." In 1969, FPL

commenced proceedings in Circuit Court for condemnation of property owned by Seadade Industries, Inc. required for the “Card Sound Canal” (discussed above). The Circuit Court’s Order of Taking for that project was affirmed by the Florida Supreme Court on February 3, 1971.

However, as a result of a lawsuit filed by the federal government in the United States District Court for the Southern District of Florida, the initial Card Sound Canal approach was never implemented. The federal government initiated a legal proceeding alleging that the Turkey Point Plant discharges constituted pollution in violation of applicable laws, and sought injunctive relief regarding operation of the facility. This litigation was eventually resolved via a Final Judgment by the District Court on September 10, 1971. The Court’s order required FPL to construct a closed cycle recirculating cooling system (incorporating the Card Sound Canal and several of the other, existing canals near the plant) for abatement of thermal pollution from the Turkey Point Plant, “upon receipt of all necessary construction permits.” This Final Judgment resulted in construction of the IWWF now in operation at the plant. The Final Judgment further required that all water used by FPL to cool its plant condensers must be discharged into the facility, and prohibited FPL from discharging wastewater from the facility into Biscayne Bay or Card Sound unless required to prevent excessive concentrations of salt in the cooling system.

Note that the District Court Final Judgment mandating construction of the current IWWF characterized that term expansively as including:

any and all water-ways, lakes, ponds, canals, dikes, levees, dams, barriers, or other structures, devices, or appurtenant facilities which under the provisions of this Judgment shall be constructed and employed to reduce the temperature of water discharged from Florida Power and Light’s generating facilities.

Thus, the judicially-mandated system includes not only the canals themselves, but also the “dikes, levees, dams, barriers, and other structures, devices, or appurtenant facilities,” indicating that the term “system” meant the canals, and the areas between and among the canals as well.

Permitting History of the Cooling Canal System

Throughout its permitting history, the system has remained non-jurisdictional. FPL obtained several permits and approvals for initial construction and operation of the current IWWF, including:

- Corps of Engineers (Corps) Permit No. 70-684, dated November 18, 1971, authorizing FPL “to dredge along south side of intake canal connecting into Biscayne Bay at Turkey Point; dredge a discharge canal connecting into existing upland...(FPL) canal at Card Sound, and to place plugs in four canals...”

- Florida Department of Pollution Control (FDPC) Construction Permit IC-1268, issued October 14, 1971. This permit authorized construction of the industrial wastewater treatment system, and contained conditions pertaining to the volume and temperature of any discharges to Card Sound.
- FDPC Wastewater Discharge Certification pursuant to §21 of the 1970 Federal Water Pollution Control Act (FWPCA), dated October 22, 1971.
- FDPC Dredge and Fill Certification pursuant to §21 of the 1970 FWPCA, dated October 22, 1971. This Certification noted that consideration was given to “dredge and fill activities at the intake and discharge points of the system.”
- Trustees’ amendment to Permit No. 253.123-691 (above) so as to allow material temporarily deposited on each side of the discharge canal to remain in place, dated March 22, 1972.
- Dade County Building and Zoning Department “Zoning Use Permit No. W-49833,” issued March 31, 1972, for cooling water “return canal” connecting Grand Canal to East Canal and Loch Rosetta. (This permit was renewed on April 3, 1972.)

Neither EPA nor the Corps asserted during the construction period that a CWA Section 404 permit was necessary or appropriate for construction of the current IWWF. In fact, the judicially-mandated construction of the IWWF was already well underway at the time the modern CWA (including the new Section 404 program) was enacted into law in October, 1972. At the time construction of the IWWF was undertaken, the area impounded was not considered to be waters of the United States.

By 1973, EPA established the NPDES permitting program pursuant to the new CWA requirements, and EPA then issued NPDES Permit No. FL0001562 for the Turkey Point system on September 23, 1973. The NPDES permit provided that discharges from the system could occur only if required to prevent excessive concentrations of salt in the system’s waters. The enclosed figure from the 1973 NPDES permit (Attachment 2) shows that the exploratory drilling area at issue is clearly to the west of the easternmost canal within the permitted cooling canal system. There were specific monitoring requirements (flow, temperature, salinity) for any such discharges. The NPDES permit did not require FPL to monitor for compliance with water quality standards within the system, because EPA conceived of the IWWF as a wastewater treatment system, not jurisdictional waters. Significantly, the Turkey Point NPDES permit has been renewed regularly on five year intervals since 1973, and neither EPA, or the Florida Department of Environmental Protection (FDEP) (after NPDES delegation in 1995) have required monitoring for compliance with water quality standards within the system. Again, this is because the federal and state NPDES permitting agencies always have understood the IWWF to be a “waste treatment system,” and not jurisdictional waters. It also is significant that no agency has ever before asserted that a CWA Section 404 permit is necessary for the Turkey Point system to qualify for the waste treatment system

exemption. As noted previously, construction of the system pre-dated the Section 404 program.

Note that the most recent NPDES permit, issued in 2005, continues to use the phrase “cooling canal system.” This permit also states that no discharges to surface waters are authorized, and that is because FDEP (which issued the permit) and EPA (which reviewed and approved the permit) understood the system as not constituting jurisdictional waters under the CWA.

Regulatory History

Since the inception of the CWA regulations, EPA has systematically increased its regulatory control over many facilities, but the Agency has quite deliberately refrained from defining certain facilities that are, for example, closed to the public, such as the IWWF, as “waters of the United States.” A summary of these regulatory activities follows which further supports the conclusion that the Turkey Point IWWF is not jurisdictional:

The status of power plant discharges to open thermal wastewater treatment systems (such as cooling ponds and the Turkey Point IWWF) under the pre-1979 definition of “waters of the United States” was specifically addressed in EPA General Counsel’s Opinion 77-5 (March 21, 1977):

[A]rtificial ponds built for cooling and located on the property of the utility constitute an acceptable process technology for the control of heat. Whether the pond is used for recreation is not relevant to its status as a “cooling pond,” as defined in 40 CFR §423.11(m), with regard to the thermal effluent limitations and standards contained in [40 CFR §423]....

Although...all of the thermal effluent limitations guidelines for the steam electric generating plant category have been remanded to EPA for further consideration and repromulgation, substantial portions of the chemical guideline limitations are still in effect; chemical discharges into artificial water bodies which constitute navigable waters must comply with limitations on pollutants other than heat.

It is clear, therefore, that if the pond should be opened for use by interstate travelers for recreational (or other) purposes the pond would become navigable waters. Thereafter any introduction of pollutants into the pond would constitute a “discharge of pollutants” pursuant

to...the federal Water Pollution Control Act. The only pertinent requirements under the effluent limitations guidelines would be those relating to chemicals. Other limitations might eventually be imposed under other regulating provisions, such as Sections 303 and 307 of the Act. Of course, if you limit use of the pond to [state] residents only, then the pond would not be covered by our regulatory definition of “navigable waters”.

Based on this analysis, the common understanding of FPL and the regulatory agencies under the pre-1979 CWA regulations was that the IWWF was not jurisdictional waters so long as it was not utilized by interstate travelers.

On June 7, 1979, EPA revised the definition of “waters on the United States” by greatly expanding the scope of that term, yet also exempting waste treatment systems:

“Navigable waters” means “waters of the United States including the territorial seas.” This term includes:

- (1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate commerce...

* * *

- (3) All other waters such as intrastate lakes, rivers, streams...the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - (i) Which are or could be used by interstate travelers for recreational or other purposes;
 - (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce;
 - (iii) Which are used or could be used for industrial purposes by industries in interstate commerce.
- (4) All impoundments of waters otherwise defined as navigable waters under this paragraph;
- (5) Tributaries of waters identified in paragraphs (t)(1) – (4) of this section, including adjacent wetlands; and
- (6) Wetlands adjacent to waters identified in paragraphs (t)(1) – (5) of this section...;

provided that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

40 C.F.R. § 122.3(t) (1979), now renumbered at 40 C.F.R. § 122.2. (emphasis added).

In the preamble to these revised regulations, EPA stated:

Some commenters suggested that waste treatment systems be excluded from the definition of navigable waters. EPA disagrees with this comment where cooling ponds are involved. Such ponds are frequently extremely large in size and some harbor fish populations which invite recreational uses. If such ponds are opened for recreational use, recreational users of the previously non-navigable waters could be exposed to potentially harmful effects where, for example, fish are contaminated and consumed by such users. EPA believes this use should remain subject to control under the Act's regulatory provisions, and that such broad jurisdiction is consistent with the thrust of the Act and its legislative history.

* * *

[E]xcept for cooling ponds which meet the criteria for "waters of the United States" (such as, for example, those which are used for fishing or other recreational purposes by interstate travelers), EPA agrees with a frequently encountered comment that waste treatment lagoons or other waste treatment systems should not be considered waters of the United States. Accordingly, the definition has been revised to exclude such treatment systems.

44 Fed. Reg. 32858 (emphasis added). EPA indicated again that the primary circumstance in which it would assert "waters of the United States" jurisdiction over open cooling systems was where interstate recreational usage or sale or consumption of fish occurs. EPA's rationale was that jurisdiction is necessary in that limited circumstance in order to protect public health, safety, and welfare.

By letter dated August 9, 1979, FPL wrote to EPA General Counsel Joan Bernstein and requested clarification of the definition of "waters of the United States" as applied to open cooling systems. FPL noted that "the utility-owner [FPL] is engaged in interstate commerce" and that "no other industries are allowed to utilize the ponds for industrial purposes." FPL was particularly concerned that the new definition of "navigable waters"

had expanded coverage to include all waters that “could affect interstate commerce.” FPL argued that to bring the privately-owned and used cooling ponds within the definition of navigable waters on the basis of FPL’s own use of the ponds “would be contrary to past agency practice, inconsistent with regulatory necessity and most likely beyond the scope of EPA’s statutory authority.”

EPA, by letter dated August 29, 1979, responded to FPL’s inquiry. EPA stated:

A cooling pond which is fenced off or otherwise closed to public access is not, under these regulations, a water which “could affect interstate commerce....”

* * *

Obviously, if the pond is in fact opened to interstate travelers, or to commercial fishing, or to industrial use by other industries, it could become waters of the United States. However, we continue to adhere to the view...that a cooling pond does not become waters of the United States merely because the industry which uses it sells power in interstate commerce.

(Emphasis added.) EPA’s approach here, once again, was oriented towards a functional assessment. Because the cooling canal system remained closed to any use by interstate travelers, it was not jurisdictional.

On May 19, 1980, EPA promulgated an amendment to the above-quoted waste treatment systems exemption, thereby expressly limiting its scope to waste treatment systems that were neither created in nor resulted from impoundment of waters of the United States:

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 C.F.R. 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States.

40 C.F.R. § 122.3. (1980) (emphasis added). In the preamble accompanying this amendment, EPA stated:

Because CWA was not intended to license dischargers to freely use waters of the United States as waste treatment systems, the definition makes clear that treatment systems

created in those waters or from their impoundment remain waters of the United States.

45 Fed. Reg. 33298.

Significantly, on July 21, 1980, EPA suspended the last sentence (underlined above) of the new regulatory definition of “waters of the United States.” EPA explained this development as follows:

Certain industry petitioners wrote to EPA expressing objections to the language of the definition of “waters of the United States.” They objected that the language of the regulation would require them to obtain permits for discharges into existing waste treatment systems, such as power plant ash ponds, which had been in existence for many years. In many cases, they argued, EPA has issued permits for discharges from, not into, these systems. They requested EPA to revoke or suspend the last sentence of the definition.

EPA agrees that the regulation should be carefully re-examined and that it may be overly broad. Accordingly, the Agency is today suspending its effectiveness. EPA intends promptly to develop a revised definition and to publish it as a proposed rule for public comment. At the conclusion of that rulemaking, EPA will amend the rule, or terminate the suspension.

45 Fed. Reg. 48620. EPA’s 1980 suspension of that sentence remains in effect. Accordingly, the waste treatment system exemption can still apply to manmade bodies of water originally created in waters of the United States. However, as noted above, at the time construction was undertaken, the IWWF in this case was not in fact created in what was considered to be waters of the United States.

In the mid-1980’s EPA Region III and West Virginia were engaged in litigation over that state’s policy of allowing coal mining operations to build and operate new waste treatment facilities instream. The term “instream treatment,” as used in the context of that debate, meant treatment facilities or areas constructed in waters of the United States, either through damming or other means. Region III took the position that the waste treatment exemption in the definition of “waters of the United States” applied only to “existing” (pre-June, 1979) waste treatment facilities, and that all discharges to all new instream treatment facilities must comply with applicable effluent limitations guidelines and water quality standards. Region III’s interpretation was upheld in federal court, but it has no bearing on FPL’s Turkey Point cooling canal system, which was constructed prior to 1979 (in fact, prior to 1972) pursuant to a federal court Final Judgment and with the issuance of the type of Corps permits that were available at that time. During this period

FPL consulted with EPA Region IV concerning the meaning of the Region III precedent, and documented that discussion as follows:

Tom DeRose [NPDES lawyer for Region IV] has characterized Region IV's position as follows: EPA suspended the last sentence as overbroad only because, and to the extent that, it applied to waste treatment systems created in waters of the United States, then in existence (presumably, also those then under construction). All new waste treatment systems created in or resulting from impoundment of waters of the United States are waters of the United States, unless permitted under Section 404 of the Clean Water Act. The date for determining what is an "existing" or "new" system is not clear.

Again, the unique facts and circumstances concerning the initial construction of the Turkey Point system, coupled with EPA Region IV's contemporaneous interpretation, confirm that the IWWF is not waters of the United States. The policy mentioned in EPA's October 4, 2010 letter (concerning issuance of a Section 404 permit) simply is not applicable to the Turkey Point IWWF.

Additional Analysis

The exploratory well site is located within the boundaries of the Turkey Point IWWF, which is not CWA jurisdictional waters pursuant to a long line of EPA determinations and NPDES permit decisions. There simply is no requirement, as suggested in EPA's October 4, 2010, letter, that FPL demonstrate that the site is an "integral part of the system designed to meet the requirements of the CWA." What is relevant is that the site is within the system (as defined in the 1971 Final Judgment and depicted in subsequent NPDES permits), and therefore also within the area that is closed to any recreational or other uses affecting interstate commerce.

Policy Considerations

As shown above, the Turkey Point IWWF was specifically required by the Federal government, and built and operated under close supervision by EPA and the Corps. EPA's consistent interpretation has been that such open systems are non-jurisdictional so long as they are not available for recreational usage by interstate travelers, fishing, or other interstate commerce. Simply put, the Turkey Point IWWF is not within the aquatic inventory reserved for special protection under Section 404 of the CWA.

Despite the factual and regulatory history of the Turkey Point Plant IWWF summarized above, and its longstanding status as a permitted industrial wastewater treatment facility, FPL has, for purposes of mitigation for the overall Units 6 & 7 project, chosen to treat the

site as a wetlands resource. Consequently, ecological and other impacts resulting from the use of the site have been comprehensively addressed in the Site Certification Application filed with the Florida DEP and other state agencies, in the COLA documents filed with the NRC and in FPL's application for a CWA section 404 permit filed with the Corps. In these documents, FPL has proposed full mitigation for loss of functional value resulting from construction of the proposed power plant on the site. FPL has taken best management practice steps to protect and respect the resource in all its IWWF activities within the system and will do so during this exploratory well installation activity. FPL's considerate and responsible approach to the licensing of this important project should also be recognized in assessing the regulatory requirements applicable to the construction of an exploratory well within the IWWF.

Please confirm by November 1st that a Section 404 permit will not be required for the exploratory work. In order to avoid cost and schedule impacts, FPL intends to proceed with the work with the understanding that this area is not jurisdictional, consistent with the Corps' position and guidance to date and as communicated in your letter to Mr. Welborn of the EPA on August 31, 2010.

Should you or members of your staff have any questions, or wish to discuss this matter further, please contact me or Barbara Linkiewicz, Director of Environmental Licensing, at (561) 691-7518, or Barbara.P.Linkiewicz@fpl.com.

Very truly yours,
Florida Power & Light Company



Randall R. LaBauve
Vice President, Environmental Services

Attachments:

- (1) Visual Depiction of the cooling canal system
- (2) 1973 NPDES Permit Figure

Cc: Christina Storz, Esq. (ACOE)
Megan Clouser (ACOE)
Thomas C. Welborn (U.S. EPA)



