## PMTurkeyCOLPEm Resource

**From:** Mier, Jena <Jena.Mier@nexteraenergy.com>
**Sent:** Friday, July 08, 2016 6:04 PM
**To:** Megan Clouser (Megan.L.Clouser@usace.army.mil); Ingrid.N.Gilbert@usace.army.mil
**Cc:** Raffenberg, Matthew; Proctor jr., Kennard; Bullock, Karl; Frank Matthews (frankm@hgslaw.com); Tammaro, Michael; Scroggs, Steven; Williamson, Alicia; Bryan_Faehner@nps.gov; Orthen, Richard; Maher, William
**Subject:** [External_Sender] Turkey Point 6&7 RAI Response
**Attachments:** USACE_5-20-16_RAI_FPL_Response_7-8-16.pdf

Megan and Ingrid –

Please find attached FPL's response to the USACE May 20, 2016 Request for Additional Information. The attachments are too large to send by email so I have provided a secure ftp site link to download the attachments. Please let me know if you have any difficulty so we can make other arrangements to get them to you. Thanks.

**Secure File Downloads:**
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**USACE 5-20-16 RAI_FPL Response Attachments 7-8-16.pdf**
32.02 MB

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July 8, 2016

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SAJ-2009-02417 (IP-MLC)

Re: FPL Turkey Point Units 6 & 7 Project, Application No. SAJ-2009-02417 (IP-MLC)

Dear Ms. Gilbert:

This letter is in response to your May 20, 2016 letter requesting additional information concerning Florida Power & Light Company's (FPL) application for a Department of the Army permit, assigned number SAJ-2009-02417 (IP-MLC). Where applicable, the Corps' questions have been separated by issue for clarity in FPL's response.

***Question 1: As part of the alternatives analysis requested by the Corps and your response dated October 31, 2011, information is still needed. It is unclear what wetland acreages are associated with each alternative site. Please provide a table which depicts the amount of impacts to waters of the United States (WOTUS). Please include impacts to both surface waters and wetlands that FPL is proposing for each alternative reactor site that you considered as part of the 404(b)(1) guidelines analysis. Also include which FLUCCS codes are included in the WOTUS determination. If avoidance and minimization have not been achieved, discussion of compensatory mitigation cannot be conducted and that aspect of the project is still outstanding.***

**FPL Response:** The wetland impacts associated with each alternative site were provided in the October 2011 *Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis*, specifically Tables 4.1.2-1 (Glades Site), 4.2.2-1 (Martin Site), 4.3.2-1 (Okeechobee Site), 4.4.2-1 (St. Lucie Site), and 4.5.2-1 (Turkey Point Site). These tables include impact acreages for each alternative site by individual FLUCFCS codes for all surface waters (FLUCFCS codes 510, 511, 520, 530, 531, 534, 541, and 542) and wetlands (FLUCFCS codes 612, 617, 618, 619, 621, 625, 630, 641, 6411, 643, 644, and 650). Wetlands and surface waters at each site are considered WOTUS for purposes of the comparative evaluation. A table summarizing the impacts at each alternative site is provided in Attachment A, as well as the original tables from the 2011 Alternatives Analysis report which provide the additional details of impacts for each wetland and surface water type in accordance with the FLUCFCS.

A summary of avoidance and minimization was provided in Section 9.0 of the 2011 *Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis*, as well as within Section 1.0 of the August 2012 *Turkey Point Units 6 & 7 Mitigation Plan Rev 2 (USACE Supplement)*. These sections are provided in Attachment B.

***Question 2: In response to the information supplied in your March 14, 2015, letter, the Corps is still concerned about how the alternatives analysis was applied.***

***(a) It appears that a zero cost was chosen to represent the value of the Turkey Point site, based on zero additional cost to acquire a site you already possess. Current costs of the existing site must be considered as well as costs of acquisition of land for alternative sites in the financial analysis. The fact that one alternative costs more than another does not mean that the more expensive alternative is entirely impracticable. Cost is analyzed in the context of the overall cost of the project and whether it is unreasonably expensive or exorbitant. In addition, cost is an objective, industry-neutral inquiry that does not consider an individual applicant's financial standing. The data used for any cost or financial feasibility analysis must be current with respect to the time of the alternatives analysis.***

**FPL Response:** Clarification - the RAI response referenced above was submitted by FPL on March 14, 2014 rather than 2015, and is provided in Attachment C.

As the Clean Water Act Section 404(b)(1) guidelines provide, cost is one factor that is to be considered when determining whether an alternative is practicable. FPL's analysis was not limited to whether an alternative would be cost effective; rather, for each alternative site, FPL analyzed issues of availability, cost, existing technology, and logistics in light of the overall project purpose. As FPL has acknowledged, costs regarding non-traditional water sources at the inland sites were considered as part of the overall alternatives analysis. Some scenarios for the inland sites would be costly due to the 3,000-acre reservoir needed to provide a consistent water supply for cooling purposes, and also due to the reverse osmosis needed to treat saline water from lower aquifers. Those costs include acquisition, construction, and treatment. As stated in the March 14, 2014 RAI response (Attachment C), on balance in light of the overall project costs the relative costs of many of the sites are fairly comparable but that ignores that the certainty of the re-allocation of existing agricultural water use permits from existing users is wholly unknown, use of brackish water within the interior of the state is problematic, and that the use of reclaimed water proposed at Turkey Point adds considerable costs to that site but achieves a considerable environmental benefit.

This evaluation of cost was in addition to the question of whether the water sources required for the inland sites would be licensable from a regulatory standpoint. The discussion of costs was not intended to reflect a determination that those water supply scenarios would be so expensive as to render the sites altogether unreasonable or not practicable.

***(b) The RAI response discusses cost and logistics under item (B) but nothing is mentioned about technology. The RAI also discusses the benefits of reducing the cost of design and construction of new infrastructure (security, administration, switchyards, parking, etc.) by building Units 6 & 7 within the existing facility. With the exception of reducing security costs, administration, parking and switchyards are all proposed as part of the current application so it is unclear why these factors are considered preferable at the Turkey Point site.***

**FPL Response:** Question #1(B) from the March 14, 2014 RAI requested additional information regarding the following practicability factors: current land use/zoning, the presence of existing infrastructure, impacts to roads, and location relative to need; and how those factors would affect logistics and cost. Therefore, the response focused upon the implications of each practicability factor upon cost and logistics. In accordance with Table 5.1-1 of the 2011 *Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis*, the practicability factors referenced in the question are identified under the categories of "Availability" and "Logistics" rather than "Technology". As described in Section 5.1.3, technology-related practicability factors included water supply facilities, proximity of transmission facilities, and proximity to transportation facilities.

Technology alternatives for power generation are described in Section 3.2 of the 2011 *Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis*, Section 9.2 of the 2015 *Draft Environmental Impact Statement for Combined Licenses (COLs) for Turkey Point Nuclear Plant Units 6 and 7*, and in Section 9.2 of the 2009 COLA Environmental Report. As described in these reports, technological options for alternative power generation either could not produce the amount of power needed, would result in substantially greater environmental impacts on air quality including greenhouse gases, or would require a large land area to achieve.

Construction of the Project at an existing nuclear facility site provides inherent advantages relative to a greenfield site with regards to associated facilities. The benefits of the necessary infrastructure for the site (parking, administration building, etc.) are tied to cost and logistics as the area where the buildings are planned are already located on a secure site.

Logistics, in combination with technology limitations related to water supply, transmission, and generation/load imbalance requirements, were the deciding factors for why the three inland sites (Glades, Martin, and Okeechobee) were deemed impractical alternatives. Section 5.1.4 of the 2011 Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis provides an evaluation of logistics factors. Then, Sections 5.2.1, 5.2.2, and 5.2.3 discuss each of the inland sites and provide specific limitations for the alternative sites. For each of the three inland sites, it was found that the site does not fulfill the water supply and transmission facility requirements. As a whole, the logistics needed for each inland site make them impractical.

***(c) It is unclear to the Corps as to why constructing 3,000 acre reservoirs at the alternative sites are necessary when the anticipated salt drift would only impact a radius of 2 km around the cooling towers. Can you please elaborate?***

**FPL Response:** The 3,000 acre reservoir is necessary in order to provide a reliable water supply source at the inland sites; the mitigation of salt drift is not the primary purpose. As explained in the *Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis*, without an adequate and consistently reliable cooling water source, the project could not reasonably be constructed and operated. It is required to ensure power plant reliability and to reduce risk and uncertainty associated with extended droughts. In addition, the reservoir allows blending of various water sources to minimize operating costs, water use and wastewater production and disposal requirements. The reservoir is an important component of the power plant operating system when multiple sources of water, with different quality characteristics, must be used. Otherwise,

every component of the power plant that relates to the cooling cycle must be designed to operate at the extremes rather than in the middle. This causes waste and increases risk and cost. For example, at the inland sites the environmental objective is to minimize the use of groundwater, which is a limited resource, and maximize the use of short-duration excess surface flow. This cannot be accomplished without a large storage facility. While this is a potentially licensable approach there is a significant amount of risk associated with reliance on a combination of multiple sources of cooling water supply for baseload generation. For this reason, we are unaware of any baseload generating facility developer that has elected to undertake this level of risk, much less a multi-billion dollar nuclear generating facility.

The drift calculations discussed in the *Turkey Point Units 6 & 7 Section 404(b)(1) Alternatives Analysis* and the March 14, 2014 RAI response conservatively demonstrate a zone of elevated sodium chloride concentrations extending 5 km (3.1 miles) from the cooling towers when utilizing Lower Floridan groundwater. This distance was the minimum distance assumed based on total deposition of 10 kg/ha-month using modeling results with a TDS in the cooling tower circulating water of 40,000 ppm (refer to March 14, 2014 RAI Response E). At distances greater than 2 km the deposition would still be significantly greater than the natural background of 4 kg/ha-month with the potential for vegetative impacts extending to 5 km.

More importantly, the percentage of naturally occurring atmospheric sodium chloride, which has the greatest potential adverse effect on vegetation, is much higher at coastal locations (60%) than inland locations (40%). This is evidenced by the sodium chloride content that occurs in seawater (85%) regardless of the salinity (NOAA, 2016). In Florida the natural inland deposition of sodium chloride is 1.2 to 1.5 kg/ha-month (FCG, 1986). In contrast, at coastal sites in Florida where vegetation has adapted to a sea-salt rich environment, sodium chloride deposition is greater than 4 kg/ha-month (FGC, 1986) within 4 km of the coast. The decrease of salt deposition is a logarithmic function with salt deposition of about 14 kg/ha-month at 1 km from the coast in Florida to about 1.4 kg/ha-month at 15 km from the coast (NASA, 1980).

Using high salinity water with a TDS over 40,000 ppm in the cooling towers would result in sodium chloride concentrations equal to or greater than seawater at 35,000 ppm. The resulting deposition of sodium chloride ("salt") would be over 8 kg/ha-month at a distance of 2 km and well above background at 5 km. The threshold for impacts to vegetation that have low resistance to salt is estimated to range between 2 to 4 kg/ha while the threshold for damage to moderate resistant vegetation is estimated to range from 4 to 10 kg/ha (KBN, 1988). For very low to intolerant salt resistant vegetation such as citrus that is grown in the interior areas of Florida, the threshold for effects is 0.4 kg/ha. Vegetative species that are near the coast have adapted to high salt environment with high resistance species having a threshold for impacts greater than 10 kg/ha-month. Clearly, the use of highly saline water in circulating water cooling towers at an inland site in Florida would have significant potential environmental impacts beyond 2 km.

***(d) Please also note that the Corps disagrees with the statement, "As a result, no adverse effects would occur from the use of cooling towers at coastal sites and cooling towers using seawater are a practicable alternative at coastal sites." The premise would be that a coastal site would remain unchanged even with an increase in salinity from salt drift. Increasing salinity tends to***

***lead to a hypersaline system which in turn would change the vegetative community at the coastal site as evidenced by existing conditions at the Turkey Point site.***

***Please note that the response from March 14, 2015, regarding drift calculations is being reviewed internally and further questions may be forthcoming.***

**FPL Response:** The statement regarding lack of adverse salt drift effects from cooling towers using salt water at coastal sites is accurate, based on evidence of existing power generation facilities located in coastal environments. Extensive studies have been conducted related to the environmental effects of cooling tower drift deposition at power plants utilizing brackish water or saltwater. Long-term cooling tower drift studies were conducted for two power plants using saltwater in Florida, the St. Johns River Power Plant located in Jacksonville and the Duke Energy Crystal River Energy Center located in Citrus County. Environmental studies of vegetation and cooling tower drift at these coastal sites determined that there was no apparent injury to vegetation (KBN, 1988 and Ebasco Environmental, 1990). Similar results were found by the California Energy Commission (CEC) in its evaluation of the performance, cost, and effects of saltwater cooling towers. This evaluation consisted of facilities across the U.S. using saltwater cooling towers as well as those in Florida (CEC, 2010). As stated in the CEC report: "All studies reach essentially similar conclusions: that no significant increase in salt concentrations in soils or vegetation, nor any symptoms of environmental injury, were observed in the vicinity of the plants." (CEC, 2010). The plants evaluated by the CEC and using brackish to saltwater were located at coastal sites where the vegetation is adapted to high natural salt environment (see response 2.c above).

As stated on page 5-85 and 5-86 of the *Draft Environmental Impact Statement for Combined Licenses (COLs) for Turkey Point Nuclear Plant Units 6 and 7*: *"Although use of the reclaimed wastewater is the primary water source, FPL modeled the cooling-tower drifts assuming the use of saltwater to demonstrate the maximum possible salt deposition.....On the basis of the analysis presented in the ER and the review team's independent evaluation of that analysis, the review team concludes that atmospheric impacts of Turkey Point Units 6 and 7 cooling towers would be minimal."*

As stated in the June 2013 *Generic Environmental Impact Statement for License Renewal of Nuclear Plants* (NUREG 1437)**:** *"Cooling tower operations and the impacts from salt drift, icing, fogging, or increased humidity associated with cooling tower operation have the potential to affect adjacent vegetation. However, these impacts have been SMALL at operating nuclear power plants and are not expected to change over the license renewal term."*

The statement *"Increasing salinity tends to lead to a hypersaline system which in turn would change the vegetative community at the coastal site as evidenced by existing conditions at the Turkey Point site"* is not pertinent to the discussion of cooling tower drift at alternative sites. The high salinity level in the Turkey Point cooling canals is not caused by cooling tower drift. No cooling tower drift from saltwater occurs at the Turkey Point facility. Cooling towers are utilized for Turkey Point Unit 5, however these towers operate on low salinity groundwater from the Floridan aquifer rather than seawater.

It is also important to note that reclaimed water is the primary cooling water source for Units 6 & 7, not saline groundwater from the radial collector well system. As detailed in the Conditions of Certification B.VI.C.2.b, use of saline groundwater from the radial collector well system is limited to 60 days per year, as a backup water supply in the event that reclaimed water is not available:

*B.VI.C.2.b. Radial Collector Well Withdrawals*
*There may be temporary interruptions in the delivery of reclaimed water to the plant site. Consequently, authorizing a reliable secondary water supply source for the project is in the public interest and is consistent with the criteria set forth in Section 2.2 of the Basis of Review for Water Use Applications within the SFWMD.*
*i. Secondary Source Identification.*

*(1) Only in the event that reclaimed water is not available in the quantity or the quality required by Licensee for cooling water purposes shall Licensee be authorized to withdraw cooling water from the RCW system, except as authorized in paragraphs (2) and (4) below.*

*(2) Prior to Units 6 & 7 commercial operation, Licensee shall be authorized to withdraw water from the RCWs to perform operational tests of RCW caissons and laterals for the purposes of determining flow within laterals and caissons, verifying system components are meeting design requirements and testing to ensure that the systems necessary to run Units 6 & 7 on the back-up water source work properly, including the gradual switch from reclaimed water to saltwater from the RCW system.*

*(3) Licensee shall be authorized to operate the RCW system up to sixty (60) days and withdraw a maximum volume of 7,465 MG in any consecutive twelve (12) month period [equivalent to sixty (60) days at full capacity of 124.416 MGD].*

*(4) Licensee shall be authorized to operate the RCW system for periodic testing and system integrated testing purposes.*

***Question 3:***
***(a) The final 408 review and the 404(b)(1) guidelines analysis, which includes the least environmentally damaging practicable alternative (LEDPA) determination, cannot be completed as the application contains a two-pronged western transmission line corridor, that is comprised of the west preferred corridor and the west consensus corridor.***

**FPL Response:** On August 30, 2013, FPL entered into an agreement with the Miami-Dade Limestone Products Association (MDLPA) to join in support of a Western Consensus Corridor (WCC) utilizing the MDLPA Alternate Corridor #2 proposed in the State Certification process. The selection of the WCC as FPL's primary transmission corridor was introduced in FPL's RAI response submitted to the USACE on September 11, 2013. This modification, as well withdrawal of the West Secondary Corridor from the Project, was further discussed in the December 23, 2013 submittal to the USACE (Attachment D). The design for both corridors has been completed and reflect substantially the same wetland impacts except for one divergent segment; the difference (approximately 15 acres) corresponds to only approximately 7% of the total wetland impact acreage of the West Preferred Corridor (WPC) or WCC (see response to Question 3 part b).

The WCC crosses over land that currently is not owned or controlled by FPL; if FPL is successful in obtaining easements within that corridor, the WCC will be used for construction of the western transmission lines. If FPL is unable to obtain the needed control, the WPC will be used for construction

of the western transmission lines. Only one alignment of the western corridor will be constructed, but both are evaluated and alternatively authorized under the Conditions of Certification of the State Site Certification. Both the WCC and the WPC environmental impacts were evaluated in the Draft Environmental Impact Statement (EIS) and should be included in the NRC's Final EIS for the Units 6 & 7 Project.

In light of the determination made in this RAI that the Corps cannot move forward in the Section 404 and Section 408 licensing processes, including the Corps' input of the LEDPA determination as part of the Final EIS, unless FPL elects to select one of the two corridors and provides the wetland impacts data for that alignment, FPL elects to proceed with the WCC at this time.

During our meeting with you on June 30, 2016 we discussed the challenges to obtaining the property interests ultimately required to utilize the WCC to construct the Project's required transmission facilities. We noted specifically that the WCC would not be a practicable alternative unless it ultimately becomes available to FPL. Corps staff acknowledged these circumstances and advised that if, after pursuit of the WCC as specified in the MDLPA agreement and the Conditions of Certification of the State Site Certification, FPL cannot obtain the land interests it needs in the WCC under the conditions specified in the MDLPA agreement and the Conditions of Certification , FPL could request to modify any issued permits to fall back to utilization of the WPC as the only practicable alternative if the WCC proves to be unavailable, and that the initial election to pursue the WCC would not prejudice such an application. We request that the ROD reflect these commitments from the Corps.

***(b) Our request for additional information dated June 4, 2013 requested the final build out for the transmission line structures and verification of conceptual transmission line right-of-way assumptions. Your response on September 11, 2013, stated this information was located in Chapter 9 of the Site Certification Application and Attachment A. If items are referenced from another agency but not provided to the Corps, the information is considered incomplete and the applicant has not met the burden of clearly demonstrating the LEDPA.***

**FPL Response:**

The Site Certification Application reference in the September 11, 2013 RAI response was provided to the USACE in June 2009 when it was filed with the state of Florida and the federal agencies and is publicly available through the following link:

http://publicfiles.dep.state.fl.us/Siting/Outgoing/FPL_Turkey_Point/Units_6_7/Application/

The conceptual wetland impact evaluation included in Attachment A of the September 11, 2013 RAI response has been further refined to include the location of transmission structure pads and roads for both the WCC and WPC; please see Attachments E and F. Based on the design detailed in Attachments E and F, the total acreage of wetland dredge/fill impacts within the WCC and WPC are 212 and 227, respectively. Construction within the WCC reduces wetland impacts by approximately 15 acres, or 7%. FPL will continue to refine the layout prior to construction, with a goal of further reducing the acreage of wetland impacts where feasible, including efforts to locate structure pads on the east side of the L-31N Canal south of Tamiami Trail as illustrated on pages 53 through 65 of Attachment E. The relocation of structures to the east of the L-31N Canal is not anticipated to significantly reduce wetland impacts, however use of the area to the east to the greatest extent practicable is consistent with the

State Certification Condition of Certification C.XVI.E. Final construction drawings will be submitted to the USACE prior to construction.

***(c) Additionally please clarify why both an eastern and a western transmission line corridor are needed for this project.***

**FPL Response:** New 500- and 230-kV electric transmission lines are needed to deliver approximately 2,200 megawatts of new generation from Turkey Point Units 6 & 7 to the state's electric grid through connections to other existing FPL substations in Miami-Dade County. Both eastern and western transmission lines are required as power from the new units must be delivered to different substations for distribution in order to maintain electrical system reliability. The East transmission corridor includes a 230-kV transmission line between the proposed Clear Sky Substation at Turkey Point to the Miami Substation at the northeast intersection of SW 2nd Avenue and the Miami River. The west transmission corridor includes two 500-kV transmission lines between the proposed Clear Sky Substation and the Levee Substation located east of State Road 997/Krome Avenue and north of U.S. Highway 41/Tamiami Trail, and one 230-kV transmission line between the proposed Clear Sky Substation and the Pennsuco Substation located along NW 106th Street, south of U.S. Highway 27 near Medley.

***Question 4: The Seminole Tribe of Florida (STOF) is currently evaluating the survey protocol outlined in your correspondence dated March 31, 2016. Consultation is still ongoing and any comments from the STOF will be forwarded to you as appropriate. Please note that the Corps is the lead federal agency on this action and all FP&L submittals should be directed to the Corps.***

**FPL Response:** Comment noted.

***Question 5: Sea level rise and global climate change continue to be a concern in the review of this application. Please be advised that the Corps is independently reviewing the studies associated with and generated for this project. More information may be required if the material or modeling is unclear.***

**FPL Response:** Comment noted.

FPL appreciates your expedited review of the information provided and the enclosed drawings and details. Please contact me at 561-691-2808 (Matthew.Raffenberg@fpl.com) or Ken Proctor at 561-691-7068 (Kennard.Proctorjr@fpl.com) if you have any questions.

Sincerely,

Jena S Mier

for Matthew J. Raffenberg
Sr. Director of Environmental Licensing and Permitting

Enclosures

CC: Alicia Williamson, NRC
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References:

California Energy Commissions, 2010. Performance, Cost and Effects of Saltwater Cooling Towers. PIER Final Project Report.

Ebasco Environmental, 1990. St. Johns River Power Park Salt Drift Monitoring Program, Final Report, September 1986-September 1989.

FCG, 1986. Florida Acid Deposition Study; Final Report: A Synthesis of the Florida Acid Deposition Study.

KBN Engineering and Applied Sciences, Inc. 1988. Environmental Assessment of Salt Drift from Florida Power Corporation Crystal River Plant.

NASA, 1980. Report on Relative Corrosively of Atmospheres at Various Distances from the Seacoast. Malfunction/Materials Analysis Section, NASA, January 16, 1980.

NOAA 2016 http://www.marinebio.net/marinescience/02ocean/swcomposition.htm