



L-2016-011
10 CFR 52.3

January 25, 2016

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

Re: Florida Power & Light Company
Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
Supplemental Response to NRC Environmental Request for Additional Information
Letter 150211 (eRAI 8380) Related to Hydrology/Ground Water

References:

1. NRC letter to FPL dated November 2, 2015, Environmental Request for Additional Information Letter 150211 for the Combined License Application Review for Turkey Point, Units 6 and 7
2. FPL letter L-2015-299 to NRC dated December 17, 2015, Partial Response to NRC Environmental Request for Additional Information Letter 150211 (eRAI 8380) Related to Hydrology/Ground Water

Florida Power & Light Company (FPL) provides, as an attachment, its supplemental response to the Nuclear Regulatory Commission's (NRC) Request for Additional Information (RAI) No. EIS HYD/G-Q1 provided in Reference 1. This attachment completes the partial response provided on page 5 of the Reference 2 attachment.

If you have any questions, or need additional information, please contact me at 561-904-3794.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January 25, 2016.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. Maher', is written over a horizontal line.

William Maher
Senior Licensing Director – New Nuclear Projects

WDM/RFO

Florida Power & Light Company

700 Universe Boulevard, Juno Beach, FL 33408

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NRD

Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
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Attachment: FPL Supplemental Response to NRC RAI No. EIS HYD/G-Q1 (eRAI 8380)

cc:

PTN 6 & 7 Project Manager, AP1000 Projects Branch 1, USNRC DNRL/NRO
Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Units 3 & 4

NRC RAI Letter No. 150211 Dated November 2, 2015

Review Section: EIS HYD/G – Hydrology/Ground Water

Application Section: N/A

NRC RAI Number: EIS HYD/G-Q1 (eRAI 8380)

The NRC staff needs to understand how the recent changes in the operation of the IWF (Industrial Wastewater Facility) may change the environmental baseline of the affected environment in the vicinity of Units 6 and 7. Though the staff understands that the annual Extended Power Uprate Monitoring report will not be submitted to the Florida Department of Environmental Protection until spring 2016, the staff requests currently available data of recent conditions of the IWF and associated monitoring wells, including water levels, water temperature, salinity, water quality parameters, and turbidity, since May 31, 2014. Provide the existing data on past pumpage rates from various sources, including the freshwater canals and wells in the Biscayne or Upper Floridan aquifers associated with the IWF. Further, please provide a reasonable range of future pumpage rates from these sources.

Also, provide Units 3 and 4 flowrates and temperature changes at the intakes and discharges in the IWF since May 2014. Please include any data from before June 2014 that had not been included in the 2014 report.

The staff is requesting this information under the authority of 10 CFR 51.41 in order to fulfill the NRC's responsibilities under the National Environmental Policy Act of 1969 and to inform the final environmental impact statement.

FPL RESPONSE:

Provide Units 3 and 4 flow rates at the intakes and discharges in the IWF since May 2014.

Operation of Turkey Point Units 1 through 4 relies on the circulation of IWF water through their respective circulating water cooling systems. Unit 5 is not supplied water from the IWF but discharges waste water to the IWF in a relatively minor amount. As described below, water flows from Units 1 through 5 were obtained and combined in a composite weekly time series of total flow rates in the IWF, as shown in Figure 1.

Units 3 and 4 cooling water flow rates are provided by four circulating water pumps plus three Intake Cooling Water (ICW) pumps per unit. The circulating water pumps are designed to operate at 156,250 gallons per minute (gpm) each and the ICW pumps are designed to operate at 16,000 gpm each.

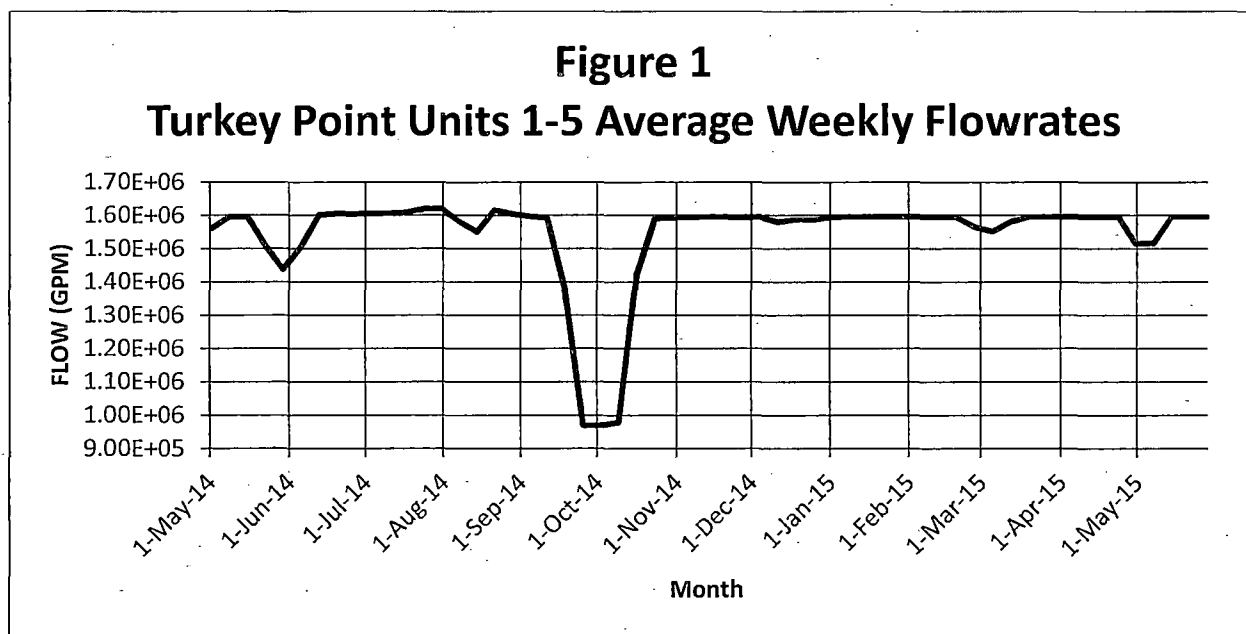
During the period of May 1, 2014 to June 1, 2015 the combined flowrates of Units 3 and 4 were a 13 month average of 1,263,920 gpm which takes into account actual pump run times that include pump operation rotations, maintenance downtime and outages. The Unit

3 average flowrate was 652,397 gpm and Unit 4 average flowrate was 611,523 gpm for the 13 month time period.

During this same time period Units 1 and 2 were a significant contributor to IWF flowrates. Unit 1 circulating water pumps provided an average of 270,352 gpm, including cooling water pumps that provided 6000 gpm cooling for miscellaneous plant equipment. The Unit 2 cooling water pumps provided an average of 6000 gpm to the IWF. Unit 2 had no large circulating water flowrates since it has not been operated as a power production facility since 2011 but instead has been operating as a synchronous condenser.

Unit 5 discharged blowdown water from cooling towers and waste water sumps to the IWF at an average rate of 4746 gpm.

The combined total average water flowrates for Units 1 through 5 pumped to the IWF was 1,545,018 gpm during the 13 month period.



This response is PLANT SPECIFIC.

References:

None

ASSOCIATED COLA REVISIONS:

There are no COLA changes identified as the result of this response.

ASSOCIATED ENCLOSURES:

None.