September 7, 2017

Mr. G. Alan Farmer, Director
Resource Conservation and Restoration Division
U.S. Environmental Protection Agency-Region 4
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Dear Mr. Farmer:

The U.S. Nuclear Regulatory Commission (NRC) is in receipt of your letter dated December 22, 2016, regarding the final environmental impact statement (EIS) prepared in support of the environmental review of the Florida Power & Light Company (FPL) combined license (COL) application for Turkey Point Units 6 and 7 located near Homestead, Florida. The NRC staff published the final EIS in October 2016 and published a supplement to the final EIS in December 2016. The final EIS documents the NRC staff evaluation of the potential environmental impacts of the construction and operation of two new nuclear plants at the Turkey Point site. The evaluation was conducted in accordance with the National Environmental Policy Act of 1969, as amended (NEPA), Title 10 of the Code of Federal Regulations, Part 51, and the NRC's Environmental Standard Review Plan, NUREG-1555.

Your letter stated that the U.S. Environmental Protection Agency (EPA) had concerns regarding the adequacy of the final EIS with respect to EPA's comments on the draft EIS for the proposed new units. The topics about which EPA expressed concern included potential impacts related to wetlands, ground and surface water (including drinking water), deep well injection, adjacent National Parks and aquatic preserves, environmental justice (EJ), and hurricanes and severe storms. Furthermore, your letter indicates the final EIS did not address issues related to the existing facility, specifically Turkey Point Units 3 and 4. As described below, the final EIS addressed the comments received on the draft EIS in these topic areas. The responses, including the responses to EPA's comments, are in Appendix E of the final EIS (Volume 4).

Regarding wetland issues, including those related to the adjacent National Parks and aquatic preserves, those resources were considered and addressed in the final EIS. In response to comments received on the draft EIS, the NRC staff expanded the wetland discussion and quantification in Section 4.3.1.1 in the final EIS, compared to the draft EIS, to include additional details of the staff's analysis. The U.S. Army Corps of Engineers (Corps), which serves as a cooperating agency on this EIS, updated EIS Section 4.3.1.6 to explain how the Corps will follow the Clean Water Act Section 404(b)(1) Guidelines. The Corps' determination regarding wetland mitigation is still ongoing and will be a part of the Corps' Record of Decision as described in EIS Section 4.3.1.6. Your comments on the National Parks and aquatic preserves adjacent to or otherwise near the proposed new nuclear power units also relate in large measure to ground and surface water, which are discussed below.

In regard to ground and surface water, Sections 4.2 and 5.2 of the final EIS documents the staff's review of how the proposed project would affect both ground and surface water, including disposal of wastewater into a deep aquifer, the Boulder Zone, via deep well injection. FPL plans

to rely primarily on treated wastewater supplied by the Miami-Dade Water and Sewer Department for operation of the Turkey Point Units 6 and 7 cooling towers. The treated wastewater, while “fresh” in terms of salinity, is not suitable for most other uses including municipal, agricultural, and wetland restoration because concentrations of nutrients and other contaminants are too high, as described in Appendix E of the final EIS (e.g., page E-159). Furthermore, the staff’s analysis concluded that the impact of deep well injection of the treated wastewater used in the cooling towers and other effluents would be small. This is based on published studies relating to deep well injection in South Florida, modeling performed by the applicant, confirmatory evaluations performed by the NRC, and regulations implemented by the Florida Department of Environmental Protection’s Underground Injection Control Program.

FPL also proposed a radial collector well (RCW) system that would draw water from beneath Biscayne Bay as a backup water supply. Analyses presented in the draft EIS show that impacts as a result of the operation of these proposed systems would be small. In response to comments on the draft EIS, the staff performed additional groundwater modeling of the backup RCWs and the impacts of their operation on the existing hypersaline plume and cooling canals, which support Turkey Point Units 3 and 4, to determine if recent changes to the environmental baseline would alter the staff’s conclusions. The additional analysis performed in support of the final EIS showed that surface and groundwater impacts of the proposed plant would remain small. As described in in detail in the final EIS, Sections 4.2.1.1, 4.2.1.4, 7.2.1, and 7.2.2, the impacts of building and operating proposed Turkey Point Units 6 and 7 on the cooling canals would be small, and cumulative impacts would also be small. There is no indication that construction or operation of proposed Turkey Point Units 6 and 7 will complicate or exacerbate the existing environmental impacts of the cooling canals.

In regard to RCW system operation for more than 60 days per year, the State of Florida Siting Board Conditions of Certification for proposed Turkey Point Units 6 and 7 limit RCW system operation to 60 days per year. This is a legal limit enforceable by the State of Florida. Should FPL operate the RCW system for 60 days in a single year, the Conditions of Certification would prohibit further RCW use, and the only other option for FPL would be to use treated wastewater in the cooling towers, which they have indicated will be their primary source of water. If treated wastewater was not available to use in the Turkey Point Units 6 and 7 cooling towers, and FPL had used the yearly maximum of water from the RCW system, the NRC expects the Units would be unable to operate, and FPL would be required to shut them down based on the limits set in the Conditions of Certification. Section 5.21 of the Final EIS documents this analysis.

Section 2.6.1 of the final EIS explains the NRC's approach to the EJ analysis. This methodology is consistent with the NRC's NEPA and Executive Order 12898 guidance. Sections 4.5 and 5.5 of the final EIS summarize the results of the NRC staff’s analysis, which concluded that no special pathways were identified through which EJ populations of interest could be disproportionately affected by adverse impacts. Appendices B through F of the final EIS provide detailed documentation of the NRC staff’s community outreach and participation efforts over the course of the review.

Finally, regarding severe weather and hurricanes, Section 2.9.1.4 of the final EIS discusses the potential for severe weather events, including hurricanes, at the Turkey Point site. The safety evaluation report (SER) (Agencywide Documents Access and Management System Accession No. ML16264A045) documents the NRC staff’s review as to whether the site is suitable from a safety standpoint based on the potential for flooding, storm surge, and other severe weather events. Sections 2.3 and 2.4 of the SER provided a detailed safety analysis and findings that

the plant at this site would meet all NRC regulatory requirements related to hurricanes and flooding.

The NRC staff believes that all of the issues raised in your letter have been adequately addressed in the final EIS and meet the applicable regulations. The staff appreciates the interaction with the EPA since the beginning of the environmental review process.

If you have any questions and require additional information, please contact Ms. Alicia Williamson, Environmental Project Manager, at (301) 415-1878 or via e-mail to Alicia.Williamson@nrc.gov.

Sincerely,

***/RA/***

Francis M. Akstulewicz, Director
Division of New Reactor Licensing
Office of New Reactors

Docket Nos.: 52-040
52-041

LETTER TO MR. G. ALAN FARMER SUBJECT: FINAL ENVIRONMENTAL IMPACT STATEMENT (EIS) PREPARED IN SUPPORT OF THE ENVIRONMENTAL REVIEW OF THE FLORIDA POWER & LIGHT COMPANY DATED SEPTEMBER 07, 2017

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