L-2014-257
10 CFR 50.54(f)
August 7, 2014

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

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Renewed Facility Operating License Nos. DPR-31 and DPR-41

Subject: Supplemental Information Regarding the Flood Hazard Reevaluation

References:

1. NRC Letter, "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated March 12, 2012, ML12073A348.

2. NRC Letter, "Prioritization of Response Due Dates for Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Flooding Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated May 11, 2012, ML12097A509.

3. Florida Power & Light Company Letter L-2013-087, "Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flood Hazard Reevaluation of Recommendation 2.1," dated March 11, 2013.

On March 12, 2012, the U.S. Nuclear Regulatory Commission (NRC) issued Reference 1 to all power reactor licensees and holders of construction permits in active or deferred status. Enclosure 2 of Reference 1 contains specific Requested Actions, Requested Information and Required Responses associated with Recommendation 2.1 for Flooding Hazard Reevaluation. Item 1 of the Requested Information asks for a Flood Hazard Reevaluation Report. In accordance with Reference 2, Florida Power & Light Company (FPL) submitted a Flood Hazard Reevaluation Report for Turkey Point Units 3 and 4 in Reference 3.

The purpose of this letter is to provide supplemental information regarding the Flood Hazard Reevaluation Report. One of the reevaluated hazards is the hurricane storm surge. As part of the flooding hazard reevaluation for the Integrated Assessment Report,

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new storm surge level and new wave run-up levels were determined for the storm surge hazard. Additionally, the wave run-up, which was previously evaluated only for the east side of the power block, needs to be re-evaluated on all sides.

This condition is captured in the Turkey Point Corrective Action Program. The new storm and wave run-up levels were compared to the current licensing bases and it was determined the flooding protection features were adequate to withstand the new storm and wave run up levels at the present time. This condition will be evaluated in the Integrated Assessment for long term effects.

This supplemental information was discussed with the NRC Staff on July 29, 2014. Based on the NRC/FPL discussion and because this condition will be addressed in the Integrated Assessment Report no updates are needed at this time to the Flood Hazard Reevaluation Report. The Integrated Assessment Report will be submitted to the NRC as requested in Item 2 of Enclosure 2 of Reference 1 prior to March 12, 2015 as provided in Reference 3.

This letter contains no new regulatory commitments.

Should you have any questions concerning the content of this letter, please contact Robert J. Tomonto, Licensing Manager, at (305) 746-7327.

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

Executed on August 7 , 2014.

Sincerely,

Michael Kiley
Vice President
Turkey Point Nuclear Plant

Enclosure: Supplement to Flooding Hazard Reevaluation Report

cc: USNRC Regional Administrator, Region II,
USNRC Senior Resident Inspector Turkey Point
USNRC Project Manager for Turkey Point

Flooding Hazard Reevaluation
Supplemental Information
Enclosure

Background

NRC directives associated with the Fukushima Dai-ichi accident require that each site be reevaluated for certain natural hazards. Among these are flooding hazards that could impact safe operation and shutdown of the units.

A flooding hazard reevaluation report (FHRR) was completed in March 2013 and submitted to the NRC to comply with the directive. One of the hazards that were reevaluated was hurricane storm surge. A new storm surge level was determined as part of the reevaluation, and new wave run-up levels associated with the surge were also determined. These new storm surge levels and wave run-up were compared to the current licensing basis (CLB), and it was determined that although margin had been lost, the flooding protection features were adequate to withstand the new levels.

The next step in the flooding hazard reevaluation, as prescribed by the NRC directive, is to perform an integrated assessment of flooding effects when the new hazard exceeds the CLB. In the process of performing this evaluation, it was determined that the wave run-up hazard that was only evaluated for the east side of the power block, similar to the CLB, needs to be considered all around. A Condition Report was initiated in the Corrective Action Program to identify the discrepancy and evaluate any interim measures needed until the integrated assessment is completed.

Technical Discussion

The FHRR determined that the existing eastern power-block flood barriers provide a margin of 0.6 ft when considering the new hurricane storm surge, associated wave run-up, and sea level rise. When the wave run-up is applied to the northern and southern power-block flood protection walls during the probable maximum storm surge (PMSS) there is a potential for the waves to overtop the barriers towards the end of plant life.

The PMSS level presented in the FHRR includes a future, 20-year sea level rise component of 0.4 feet, which does not characterize the present hazard. When future sea level rise is removed from the wave run-up calculation, a margin exists on the east, north, west, and south flood protection walls. The margin on the east flood protection wall is 1.0 feet. The margin on the west flood protection wall is 0.7 feet. The margin on the south flood protection wall is 0.2 feet while the margin on the north flood protection wall is 0.1 feet.

However, when sea level rise is included, there is a potential overtopping on the north and south flood protection walls by 0.3 and 0.2 feet respectively. The overtopping would only occur

during the peak of the storm; for most of the event, the south flood protection wall would not be overtopped.

Based on the above, no immediate actions are needed to address this hazard; however, this condition will need to be addressed in the long term.

Immediate Actions Taken

None Required

Recommended Actions

The integrated assessment will document this condition and present options to address it. These may include recommendations to monitor potential margin loss on the flood protection walls through annual analysis of regional sea level rise and walkdowns of barrier walls or installation of protection features for the wave run-up hazard.