



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001
July 12, 2017

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
Florida Power & Light Company
Mail Stop: EX/JB
700 Universe Blvd.
Juno Beach, FL 33408

SUBJECT: TURKEY POINT NUCLEAR GENERATING UNIT NO. 4 – REVIEW OF STEAM
GENERATOR TUBE INSPECTION REPORT FOR CYCLE 29 REFUELING
OUTAGE (CAC NO. MF8523)

Dear Mr. Nazar:

By letter dated October 18, 2016, as supplemented by letter dated March 14, 2017, Florida Power & Light Company (the licensee) submitted its steam generator tube inspection report for Turkey Point Nuclear Generating Unit No. 4 (Turkey Point 4) in accordance with Turkey Point Technical Specification 6.9.1.8. The report summarizes the steam generator tube inspections that the licensee performed April 2016, during the Turkey Point 4 Cycle 29 Refueling Outage. By electronic mail dated February 10, 2017, the U.S. Nuclear Regulatory Commission (NRC) staff requested additional information. By letter dated March 14, 2017, the licensee responded to the request.

The NRC staff completed its review of the submittals and concluded that the licensee provided the information required by the Technical Specifications. No additional follow-up is required at this time. This completes the NRC staff efforts for Cost Activity Code No. MF8523. The enclosure documents the NRC staff's review of the submittals.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Wentzel", is positioned above the typed name.

Michael J. Wentzel, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-251

Enclosure: As stated

cc w/enclosures: Distribution via Listserv

REVIEW BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SPRING 2016 STEAM GENERATOR TUBE INSPECTION REPORT
FLORIDA POWER & LIGHT COMPANY
TURKEY POINT NUCLEAR GENERATING STATION, UNIT 4
DOCKET NO. 50-251

By letter dated October 18, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16298A391), as supplemented by letter dated March 14, 2017 (ADAMS Accession No. ML17090A432), Florida Power & Light Company (the licensee) submitted information summarizing the results of the spring 2016 steam generator tube inspections performed at Turkey Point Nuclear Generating Station Unit No. 4 (Turkey Point 4) during refueling outage (RFO) 29. By electronic mail dated February 10, 2017 (ADAMS Accession No. ML17044A205), the U.S. Nuclear Regulatory Commission (NRC) staff requested additional information. The licensee's supplemental letter dated March 14, 2017, responded to the request.

Turkey Point 4 has three Westinghouse Model 44F steam generators (SGs), which were placed in service in 1983. Each SG has 3,214 thermally treated Alloy 600 tubes. The tubes are supported by stainless steel tube support plates with quatrefoil-shaped holes and V-shaped anti-vibration bars.

The licensee provided the scope, extent, method, and results of the Turkey Point 4 SG tube inspections in the documents referenced above. After reviewing the information provided by the licensee, the NRC staff has the following comment and observation:

- A 77 percent through-wall foreign object wear indication was reported during RFO 29 (2016) on a tube located at row 17, column 71 (R17C71) in SG B. A similar foreign object wear indication was previously reported during RFO 27 (2012) at a nearby location on a tube located at R17C74 in SG B. The licensee's operational assessment regarding the 77 percent through-wall foreign object wear indication considered two scenarios. Under the first scenario, the loose part affecting R17C71 is considered a new foreign object that would migrate to another location by RFO 30. In the second scenario, the loose part affecting R17C71 is the same foreign object that affected R17C74 in 2012. Further discussion can be found in the March 14, 2017, letter.

Based on a review of the information provided, the NRC staff concludes that the licensee provided the information required by their technical specifications. In addition, the NRC staff concludes that there are no technical issues that warrant follow-up actions at this time, since the inspections appear to be consistent with the objective of detecting potential tube degradation and the inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

TURKEY POINT NUCLEAR GENERATING UNIT NO. 4 – REVIEW OF STEAM GENERATOR
TUBE INSPECTION REPORT FOR CYCLE 29 REFUELING OUTAGE (CAC NO. MF8523)
DATED: JULY 12, 2017

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*by memorandum

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