



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

May 11, 2015

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
NextEra Energy
P. O. Box 14000
Juno Beach, FL 33408-0420

**SUBJECT: ST. LUCIE PLANT, UNIT NO. 2 - REQUEST FOR ADDITIONAL INFORMATION
REGARDING THE SPRING 2014 STEAM GENERATOR TUBE INSPECTIONS
(TAC NO. MF4847)**

Dear Mr. Nazar:

By letter dated September 18, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14279A237), Florida Power and Light Company (FPL, the licensee) submitted "St. Lucie Unit 2 Steam Generator Inspection Report for SL2-21 [Refueling Outage 21]" summarizing the results of the spring 2014 refueling steam generator tube inspections performed at St. Lucie Plant, Unit No. 2. These inspections were conducted from March 17 to March 23, 2014. The licensee provided this report to meet the requirements of St. Lucie, Unit 2 Technical Specification 6.9.1.12, "Steam Generator Tube Inspection Report." The U.S. Nuclear Regulatory Commission (NRC) staff summarized a conference call held with the licensee on March 20, 2014, in a letter dated August 8, 2014 (ADAMS Accession No. ML14189A090). The licensee responded to the NRC staff first round of request for additional information (RAI) by letter dated March 23, 2015 (ADAMS Accession No. ML15091A306).

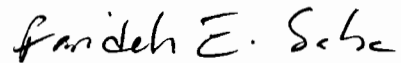
The NRC staff has reviewed the information the licensee provided and determined that additional information is needed to complete the review. The NRC staff's draft second round RAI was sent to FPL staff by e-mail dated April 7, 2015. The NRC staff and FPL staff discussed the draft RAI during a clarification conference call on April 21, 2015. The enclosure to this letter contains the NRC staff's modified and finalized second RAI. This request was discussed with Mr. William Cross, and it was agreed that a response would be provided by June 23, 2015.

M. Nazar

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If you have any questions, please contact me at (301) 415-1447 or farideh.saba@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Farideh E. Saba". The signature is written in a cursive, flowing style.

Farideh E. Saba, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-389

Enclosure:
Request for Additional Information

cc w/enclosure: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION¹
REGARDING THE SPRING 2014 STEAM GENERATOR TUBE INSPECTIONS
FLORIDA POWER AND LIGHT COMPANY
ST. LUCIE PLANT, UNIT NO. 2
DOCKET NO. 50-389

By letter dated September 18, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14279A237), Florida Power and Light Company (FPL, the licensee) submitted "St. Lucie Unit 2 Steam Generator Inspection Report for SL2-21 [Refueling Outage 21]" summarizing the results of the spring 2014 refueling steam generator tube inspections performed at St. Lucie Plant, Unit No. 2. These inspections were conducted from March 17 to March 23, 2014. The licensee provided this report to meet the requirements of St. Lucie, Unit 2 Technical Specification 6.9.1.12, "Steam Generator Tube Inspection Report." The U.S. Nuclear Regulatory Commission (NRC) staff summarized a conference call held with the licensee on March 20, 2014, in a letter dated August 8, 2014 (ADAMS Accession No. ML14189A090). The licensee responded to the NRC staff first round of request for additional information (RAI) by letter dated March 23, 2015 (ADAMS Accession No. ML15091A306).

The NRC staff has reviewed the information the licensee provided and determined that the following additional information is needed to complete the review.

- RAI-8 The Florida Power and Light Company (FPL), in its response to request for additional information (RAI)-3, by letter dated March 23, 2015, indicates that no degradation related to Nuclear Safety Advisory Letter 12-01 was detected, which could imply that some corrosion degradation was detected. Confirm that no corrosion related degradation was found in the channel head.
- RAI-9 FPL, in its response to RAI-4, by letter dated March 23, 2015, indicates that the analysis performed for the loose parts has been evaluated within the corrective action program, but no results were provided. Confirm that the analysis supported a full cycle of operation.
- RAI-10 Clarify the difference between U-bend apex (AV4/5) wear, AVB [anti-vibration bar]-transition tube wear, V-shaped support pad wear, and V-shaped support bar wear. For example, does U-bend apex (AV4/5) wear mean wear at the apex on the extrados of the tube as a result of the tube interacting with the bottom edge of the AVB? Does AVB-transition tube wear mean wear at the apex on the flank of the tube as a result of the tube interacting with side of an AVB? Does V-shaped support pad wear mean wear as a result of the tube interacting with the support pad "sitting"

¹ Started from RAI-8 as a continuation to the previously asked RAIs.

on that tube, whereas V-shaped support bar wear is wear on a tube from the tube interacting with a neighboring tube's V-shaped support bar?

- RAI-11 FPL, in its response to RAI-6 by letter dated March 23, 2015, indicates that the tube is supported by the V-shaped support pad. Clarify whether the tube is supported by the V-shaped support pad or whether the V-shaped support pad supports the U-bend supports (by "sitting/resting" on the tube).
- RAI-12 The U.S. Nuclear Regulatory Commission staff noticed that the number of indications reported in FPL's response to RAI-5, by letter dated March 23, 2015, is slightly different than what was provided during a conference call on March 20, 2014 (refer to summary of conference call dated August 8, 2014, (ADAMS Accession No. ML14189A090)). Confirm that the values in response to RAI-5 are correct. Is the difference in the number of indications/tubes due to various factors such as completing the inspection (including confirming the nature/presence of the indication with a rotating or array probe), performing quality assurance checks, and possibly reclassifying some of the March 2014 indications as other types of wear (V-shaped support pad/bar wear, etc.)? Also, confirm whether there were 16 indications in 16 tubes attributed to U-bend apex wear in Steam Generator (SG) A (or whether the 16 indications were in 15 tubes since your September 18, 2014, report implies that the 16 indications were in 15 tubes rather than 16 tubes in SG A).

M. Nazar

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If you have any questions, please contact me at (301) 415-1447 or farideh.saba@nrc.gov.

Sincerely,

/RA/

Farideh E. Saba, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-389

Enclosure:
Request for Additional Information

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