



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

June 20, 2018

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
NextEra Energy Seabrook, LLC
Mail Stop: EX/JB
700 Universe Blvd.
Juno Beach, FL 33408

SUBJECT: SEABROOK STATION, UNIT NO. 1 – REVIEW OF THE SPRING 2017 STEAM GENERATOR TUBE INSPECTIONS (EPID L-2017-LRO-0043)

Dear Mr. Nazar:

By letter dated October 17, 2017 (Agencywide Documents Access and Management System Accession No. ML17291B270), NextEra Energy Seabrook, LLC (NextEra) submitted information summarizing the results of the spring 2017 steam generator inspections at Seabrook Station, Unit No. 1 (Seabrook). These inspections were performed during the 18th refueling outage.

The U.S. Nuclear Regulatory Commission (NRC) staff has completed its review of the information and determined that NextEra provided the information required by the Seabrook technical specifications. In addition, the NRC staff did not identify any technical issues that warrant followup action at this time. A summary of the NRC staff's review is enclosed.

If you have questions, you can contact me at 301-415-2048 and/or via e-mail at Justin.Poole@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Justin C. Poole".

Justin C. Poole, Project Manager
Plant Licensing Branch I
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosure:
Review of the Spring 2017 Steam Generator
Tube Inspections

cc: Listserv

REVIEW OF THE SPRING 2017 STEAM GENERATOR TUBE INSPECTIONS

NEXTERA ENERGY SEABROOK, LLC.

SEABROOK STATION, UNIT NO. 1

DOCKET NO. 50-443

By letter dated October 17, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17291B270), NextEra Energy Seabrook, LLC (the licensee) submitted information summarizing the results of the spring 2017 steam generator (SG) inspections at Seabrook Station, Unit No. 1 (Seabrook). These inspections were performed during the 18th refueling outage (RFO 18).

Seabrook has four Westinghouse Model F SGs, each of which contains 5,626 thermally-treated Alloy 600 tubes. Each tube has a nominal outside diameter of 0.688 inches and a nominal wall thickness of 0.040 inches. During SG fabrication, the tube ends were hydraulically expanded over the full depth of the tubesheet. Type 405 stainless steel support plates, which have broached quatrefoil holes, support the vertical section of the tubes, and anti-vibration bars support the U-bend section of the tubes.

The licensee provided the scope, extent, methods, and results of its SG tube inspections in the letter dated October 17, 2017. The licensee also described corrective actions in the form of tube plugging taken in response to the inspection findings.

Based on the U.S. Nuclear Regulatory Commission (NRC) staff's review of the information submitted by the licensee, the NRC staff has the following observations/comments:

- Based on the inspection findings during RFO 17 (four tubes with indications of cracking were identified in three SGs), the licensee determined that an inspection for outside diameter stress corrosion cracking (ODSCC) and primary water stress corrosion cracking (PWSCC) was required in RFO 18. The previous operational assessment had justified continued operation for all other degradation mechanisms until RFO 19. No ODSCC or PWSCC indications were found during the RFO 18 inspections.

Based on a review of the information provided, the NRC staff concludes that the licensee provided the information required by the Seabrook technical specifications. In addition, the NRC staff concludes that there are no technical issues that warrant followup action 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.

SUBJECT: SEABROOK STATION, UNIT NO. 1 – REVIEW OF THE SPRING 2017 STEAM GENERATOR TUBE INSPECTIONS (EPID L-2017-LRO-0043) DATED JUNE 20, 2018

DISTRIBUTION:

PUBLIC

RidsACRS_MailCTR Resource

RidsNrrDorlLpl1 Resource

RidsNrrLALRonewicz Resource

RidsNrrPMSeabrook Resource

RidsNrrDmlrMccb Resource

RidsRgn1MailCenter Resource

PKlein, NRR

AJohnson, NRR

AHuynh, NRR

ADAMS Accession No.: ML18163A189

*via memo

| | | | |
|--------|------------------|------------------|-------------------|
| OFFICE | NRR/DORL/LPL1/PM | NRR/DORL/LPL1/LA | NRR/DMLR/MCCB/BC* |
| NAME | JPoole | LRonewicz | SBloom |
| DATE | 06/18/18 | 06/13/18 | 05/21/18 |
| OFFICE | NRR/DORL/LPL1/BC | NRR/DORL/LPL1/PM | |
| NAME | JDanna | JPoole | |
| DATE | 06/20/18 | 06/20/18 | |

OFFICIAL RECORD COPY