



Tran, Tam

Thursday, March 16, 2017 8:48 AM

'Edward.Carley@nexteraenergy.com'

James, Lois; Chazell, Russell; Morey, Dennis; Allik, Brian; Edmonds, Yvonne; Poole, Justin; McIntyre, David; Weil, Jenny; Dacus, Eugene; Harris, Brian; Ghosh, Anita; Wachutka, Jeremy; Gray, Mel; Bower, Fred; Cataldo, Paul; Meier, Peter; Vadella, Robert; Tifft, Doug; Sheehan, Neil; Screnci, Diane; Browne, Kenneth

Steam Generator ISG RAI

SG ISG RAI.pdf

Subject:

Attachments:

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

Mr. Eric McCartney
Site Vice President
NextEra Energy Seabrook, LLC
P.O. Box 300, Lafayette Road
Seabrook, NH 03874

**SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE SEABROOK
STATION LICENSE RENEWAL APPLICATION (CAC NO. ME4028)**

Dear Mr. McCartney:

By letter dated May 25, 2010, NextEra Energy Seabrook, LLC, submitted an application pursuant to 10 CFR Part 54, to renew the operating license NPF-86 for Seabrook Station, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

This request for additional information was discussed with Mr. Edward Carley, and a mutually agreeable date for the response is no later than May 19, 2017. If you have any questions, please contact me at (301) 415-3617 or e-mail Tam.Tran@nrc.gov.

Sincerely,

Tam Tran, Project Manager
Project Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

50-443

Enclosure:

Request for Additional Information
cc w/encl: See next page

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Enclosure:
Request for Additional Information

cc w/encl: Listserv

DISTRIBUTION: See following pages
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(*) concurred by e-mail

OFFICE	PM:RPB1:DLR	BC:RARB:DLR	BC:RPB1:DLR	PM:RPB1:DLR
NAME	T Tran*	D. Morey*	R. Chazell*	T Tran
DATE	03/07/2017	03/ 16 /2017	03/ 14 /2017	03/16 /2017

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SEABROOK STATION
LICENSE RENEWAL APPLICATION (LRA)
REQUEST FOR ADDITIONAL INFORMATION (RAI)

RAI B.2.1.10-3

Background:

The staff issued License Renewal Interim Staff Guidance (LR-ISG) 2016-01, "Changes to Aging Management Guidance for Various Steam Generator Components" (ADAMS Accession No. ML16237A383). LR-ISG-2016-01 provides the following guidance for aging management:

- Visual inspections: steam generator head internal areas (head interior surfaces, divider plate assemblies, tubesheets (primary side) and tube-to-tubesheet welds) in order to identify signs of cracking or loss of material (e.g., rust stains and distortion of divider plates). GALL Report AMP XI.M19, "Steam Generators," which includes these visual inspections, is used to manage loss of material due to boric acid corrosion for channel heads and tubesheets and cracking due to primary water stress corrosion cracking (PWSCC) for divider plate assemblies and tube-to-tubesheet welds.
- Frequency of the visual inspections: at least every 72 effective full power months or every third refueling outage whichever results in more frequent inspections.
- Implementation of the EPRI steam generator guidelines, including: (a) EPRI Report 1022832 (primary-to-secondary leak guidelines); (b) EPRI Report 1025132 (in-situ pressure test guidelines); (c) EPRI Report 3002007571 (integrity assessment guidelines); and (d) EPRI Report 3002007572 (examination guidelines).

Issue:

The staff needs to confirm whether the applicant's Steam Generator Tube Integrity Program is consistent with the guidance discussed above.

Request:

1. Clarify whether the Steam Generator Tube Integrity Program is consistent with the guidance discussed above (i.e., conduct of visual inspections to manage loss of material and cracking due to PWSCC; visual inspection frequency; and implementation or plans for implementation of the EPRI steam generator guidelines by the implementation dates provided by the industry). If not consistent, provide justification of why the applicant's Steam Generator Tube Integrity Program is adequate for aging management. As part of the response, clarify whether the aging management associated with LRA item 3.1.1-81 for divider plates uses the Steam Generator Tube Integrity Program.
2. Given the divider plate assemblies are made with Alloy 600 type material susceptible to primary water stress corrosion cracking, provide information to confirm that the industry

analyses in EPRI Report 3002002850 assessing the significance of divider plate cracking are applicable and bounding for the conditions at the applicant's unit. If not bounding, identify a plant-specific program that will be used to manage cracking for the divide plate assemblies.

3. Provide updated UFSAR supplement for this program as necessary.