



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

November 1, 2011

LICENSEE: NextEra Energy Seabrook, LLC

FACILITY: Seabrook Station

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON FEBRUARY 03, 2011, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND NEXTERA ENERGY SEABROOK, LLC, CONCERNING REQUEST FOR ADDITIONAL INFORMATION PERTAINING TO THE SEABROOK STATION LICENSE RENEWAL APPLICATION (TAC NO. ME4028)

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of NextEra Energy Seabrook, LLC (NextEra or the applicant), held a telephone conference call on February 03, 2011, to discuss and clarify the staff's draft request for additional information (RAI) concerning the Seabrook Station license renewal application. The telephone conference call was useful in clarifying the intent of the staff's RAIs.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the draft RAIs that were discussed with the applicant, including a brief description on the status of the item. In addition RAI 3.4.2.2.2, issued by the staff on January 21, 2011, was discussed with the applicant and is documented in Enclosure 2.

The applicant had an opportunity to comment on this summary.

A handwritten signature in black ink, appearing to read "Richard Plasse".

Richard Plasse, Project Manager  
Projects Branch 1  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosures:  
As stated

cc w/encls: Listserv

**TELEPHONE CONFERENCE CALL  
SEABROOK STATION LICENSE RENEWAL APPLICATION**

**LIST OF PARTICIPANTS**  
February 03, 2011

**PARTICIPANTS**

Richard Plasse

William Holston

Jim Gavula

John Wise

Richard Cliche

Ali Kodal

Bill Roberts

Paul Willoughby

**AFFILIATIONS**

U.S. Nuclear Regulatory Commission (NRC)

NRC

NRC

NRC

NextEra Energy Seabrook, LLC. (NextEra)

NextEra

NextEra

NextEra

**TELEPHONE CONFERENCE CALL  
SEABROOK STATION  
LICENSE RENEWAL APPLICATION**

**Draft RAI 3.2.2.2.4.2-1**

Background:

The Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants (SRP-LR) Section 3.2.2.2.4, item 2, is associated with SRP-LR Table 3.2.1, item 3.2.1-10 and states that reduction of heat transfer due to fouling could occur for stainless steel heat exchanger tubes exposed to treated water. The SRP-LR also states that the existing program relies on control of water chemistry to manage reduction of heat transfer due to fouling but that since control of water chemistry may have been inadequate, the effectiveness of the chemistry control program should be verified to ensure that reduction of heat transfer due to fouling is not occurring. SRP-LR Table 3.2.1, item 3.2.1-10 states that it applies to both boiling water reactors (BWRs) and pressurized water reactors (PWRs), and cites related item EP-34, which corresponds to the Generic Aging Lessons Learned (GALL) items V.A-16 for PWR containment spray system heat exchanger tubes and V.D2-13 for BWR emergency core cooling system heat exchanger tubes. Although the SRP-LR and the GALL Report list the environment as treated water, the basis for including GALL item EP-34, as documented in NUREG-1833, was a precedent established in the R.E. Ginna Nuclear Power Plant (Ginna) safety evaluation report (SER), NUREG-1786. The environment specifically noted in the Ginna SER was "treated water-borated," and as such, the applicable environment for this item is not strictly limited to treated water, and also includes treated borated water.

License renewal application (LRA) Section 3.2.2.2.4, item 2 states that item 3.2.1-10 is not applicable to Seabrook, and that there are no stainless steel heat exchanger tubes exposed to treated water in the emergency safeguard feature systems. However, the staff noted that LRA Section 3.2 includes several systems with heat exchanger tubes exposed to treated borated water with an intended function of heat transfer that do not indicate that reduction in heat transfer due to fouling is an aging effect being managed.

Issue:

It is not clear to the staff why LRA Section 3.2.2.2.4, item 2 and LRA Table 3.2.1, item 3.2.1-10 state that this item is not applicable, given that NUREG-1833 states that the item is applicable to both BWR and PWR heat exchanger tubes exposed to treated water and treated borated water. It is also not clear to the staff why several heat exchanger items in LRA Section 3.2 specify an intended function of heat transfer, but do not indicate that reduction in heat transfer due to fouling is an aging effect being managed.

Request:

1) Provide the technical bases for the determination that LRA Section 3.2.2.2.4, item 2, which is associated with LRA Table 3.2.1 item 3.2.1-10, is not applicable to Seabrook. If it is determined to be applicable, provide the information regarding how Seabrook intends to meet the further evaluation criteria specified in the corresponding SRP-LR section.

2) For the line items in LRA Section 3.2 which have an intended function specified as "heat transfer," provide the technical bases for not managing reduction in heat transfer due to fouling as an aging effect.

***Discussion:** Following discussion of the draft request for additional information, the applicant stated that they understood what was being requested and would be able to respond.*

#### **Draft RAI 3.3.2.2-1**

##### Background:

SRP-LR Section 3.3.2.2.2 is associated with SRP-LR Table 3.3.1, item 3.3.1-3 and states that reduction of heat transfer due to fouling could occur for stainless steel heat exchanger tubes exposed to treated water. The SRP-LR also states that the existing program relies on control of water chemistry to manage reduction of heat transfer due to fouling but that since control of water chemistry may have been inadequate, the effectiveness of the chemistry control program should be verified to ensure that reduction of heat transfer due to fouling is not occurring. SRP-LR Table 3.3.1, item 3.3.1-3 states that this item applies to BWRs and PWRs, and cites related item AP-62, which corresponds to GALL items VII.A4-4 for BWR spent fuel pool cooling and cleanup heat exchanger tubes and VII.E3-6 for reactor water cleanup system heat exchanger tubes. Although the SRP-LR and the GALL Report list the environment as treated water, the basis for including GALL item AP-62, as documented in NUREG-1833, was a precedent established in the R.E. Ginna SER, NUREG-1786. The environment specifically noted in the Ginna SER was "treated water – borated," and as such, the applicable environment for this item is not strictly limited to treated water, and also includes treated borated water.

LRA Section 3.3.2.2.2 states that item 3.3.1-3 is not applicable for auxiliary system components at Seabrook, and that this line item is associated with GALL Report item, VII.E3-6 which is applicable to BWR reactor water cleanup system heat exchangers. However, the staff noted that LRA Section 3.3 includes several systems with heat exchanger tubes exposed to treated borated water with an intended function of "heat transfer," that do not indicate that reduction of heat transfer due to fouling is an aging effect being managed.

##### Issue:

It is not clear to the staff why LRA Section 3.3.2.2.2, which is associated with SRP-LR Table 3.3.1 item 3.3.1-3, states that this item is not applicable, given that NUREG-1833 states that the item is applicable to both BWR and PWR heat exchanger tubes exposed to treated water and treated borated water. It is also not clear to the staff why several heat exchanger items in LRA Section 3.3 specify an intended function of "heat transfer," but do not indicate that reduction in heat transfer due to fouling is an aging effect being managed.

##### Request:

1) Provide the technical bases for the determination that LRA Section 3.3.2.2.2, which is associated with LRA Table 3.3.1 item 3.3.1-3, is not applicable to Seabrook. If it is determined to be applicable, provide information regarding how Seabrook intends to meet the further evaluation criteria specified in the corresponding SRP-LR section.

2) For the line items in LRA Section 3.3 which have an intended function specified as "heat transfer," provide the technical bases for not managing reduction in heat transfer due to fouling as an aging effect.

***Discussion:** Following discussion of the draft RAI, the applicant stated that they understood what was being requested and would be able to respond.*

**RAI 3.4.2.2-2**

By letter dated January 21, 2011, the staff issued RAI 3.4.2.2-2 concerning site use of potable water from the town of Seabrook. Following discussion of the RAI, the applicant stated that they understood what was being requested and would be able to respond.

November 1, 2011

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FACILITY: Seabrook Station  
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The applicant had an opportunity to comment on this summary.

*/RA/*  
Richard Plasse, Project Manager  
Projects Branch 1  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosures:  
As stated

cc w/encls: Listserv

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OFFICE	LA:DLR*	PM:RPB1:DLR	BC:RPB1:DLR	PM:RPB1:DLR
NAME	SFigueroa	RPlasse	DMorey	RPlasse
DATE	10/21/2011	10/24/2011	10/31/2011	11/1/2011

OFFICIAL RECORD COPY

Memorandum to NextEra Energy Seabrook, LLC from R. Plasse dated November 1, 2011

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