



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

January 8, 2014

Mr. Kevin Walsh, Site Vice President  
c/o Michael Ossing  
Seabrook Station  
NextEra Energy Seabrook, LLC  
P.O. Box 300  
Seabrook, NH 03874

SUBJECT: SEABROOK STATION, UNIT NO. 1 – REQUEST FOR ADDITIONAL  
INFORMATION FOR LICENSE AMENDMENT REQUEST 11-04, CHANGES TO  
TECHNICAL SPECIFICATIONS FOR SPENT FUEL STORAGE  
(TAC NO. ME8688)

Dear Mr. Walsh:

By letter dated January 30, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12038A036), as supplemented by letter dated May 10, 2012, September 20, 2012, and March 27, 2013 (ADAMS Accession Nos. ML12136A126, ML12271A276, and ML13099A022, respectively), NextEra Energy Seabrook, LLC (NextEra) submitted license amendment request (LAR) 11-04 for Seabrook Station, Unit No. 1 (Seabrook). The proposed change revises the technical specifications (TSs) for new and spent fuel storage, as a result of the new criticality analyses for the new fuel vault (NFV) and the spent fuel pool (SFP).

The proposed amendment would revise the TSs to: (1) reflect elimination of the need to credit Boraflex neutron absorbing material for reactivity control in the SFP; (2) credit soluble boron, burnup, cooling time, peripheral leakage, and rod cluster control assemblies within the storage racks to maintain SFP reactivity within the effective neutron multiplication factor ( $k_{eff}$ ) limits of Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.68(b)(4); and (3) revise the requirements for fuel storage within the NFV.

By letter dated December 20, 2013 (ADAMS Accession No. ML13360A045), NextEra requested that the SFP and NFV be separated into two separate LARs. The SFP LAR will be reviewed under TAC No. ME8688, and the NFV LAR will be reviewed under TAC No. MF3283.

Please note the application dated January 30, 2012, included a mark-up of changes to the TS index. The TS index page mark-up was omitted from the supplement dated December 30, 2013, since Amendment No. 137, issued on June 17, 2013, removed the TS index from the Seabrook TSs, making any future TS index changes obsolete.

The NRC staff has determined that additional information is required to complete its review under TAC No. MF3283. The NRC staff's request for additional information (RAI) is contained in the enclosed RAI. A draft of these questions was previously sent to Mr. Gary Kilby of your staff on September 25, 2013, with an opportunity to have a teleconference to ensure that the licensee understood the questions and their regulatory basis, as well as to verify that the information was not previously docketed. Conference calls were held on October 24, 2013, and on January 6, 2014, and Mr. Kilby agreed that NextEra would respond to the RAI by January 31, 2014. Please note that if you do not respond to the RAI by March 31, 2014, or provide an acceptable alternate date in writing, the NRC staff may reject your LAR under the provisions of 10 CFR, Section 2.108, "Denial of application for failure to supply information."

If you have questions, you can contact me at 301-415-3100 or by e-mail at [John.Lamb@nrc.gov](mailto:John.Lamb@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "John G. Lamb", is written over the typed name and title.

John G. Lamb, Acting Chief  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosure:  
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

LICENSE AMENDMENT REQUEST 11-04

NEXTERA ENERGY SEABROOK, LLC.

SEABROOK STATION, UNIT NO. 1

DOCKET NO. 50-443

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REQUEST FOR ADDITIONAL INFORMATION (RAI)

1. Several of the initial RAIs requested information that affected loading curve generation. Following resolution of these issues, it is noted that unexpected trends are still present in the RC5 (Loading pattern D) loading curves. In particular, the loading curves for lower cooling times and enrichments above 3.6 weight percent appear to bend up. This is inconsistent with the other loading curves documented in this analysis and with trends seen in other SFP analyses. Please explain the unexpected trends and verify that the fuel composition and  $k_{eff}$  calculations for the RC5 loading curves were performed correctly.

Enclosure

K. Walsh

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Sincerely,

/ra/

John G. Lamb, Senior Project Manager  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosure:  
Request for Additional Information

cc w/encl: Distribution via Listserv

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**ADAMS Accession No: ML13268A468**

**\*via email**

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