



March 1, 2013

10 CFR 50.90

SBK-L-13028

Docket No. 50-443

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Seabrook Station

License Amendment Request 13-01

Application for Administrative Change and Corrections to the Technical Specifications

In accordance with the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), NextEra Energy Seabrook, LLC (NextEra) is submitting License Amendment Request (LAR) 13-01 to revise the Seabrook Station Technical Specification (TS). The proposed changes delete the TS Index and make corrections to TS 3.4.8, Reactor Coolant System Specific Activity, and TS 6.8.1.6.a, Core Operating Limits Report.

The Enclosure to this letter provides NextEra's evaluation of the proposed changes. Attachment 1 to the enclosure provides markups of the TS that show the changes. As discussed in the evaluation, the proposed changes do not involve a significant hazards consideration pursuant to 10 CFR 50.92, and there are no significant environmental impacts associated with the change.

No new commitments are made as a result of this change.

The Station Operation Review Committee has reviewed this LAR. A copy of this LAR has been forwarded to the New Hampshire State Liaison Officer pursuant to 10 CFR 50.91(b).

NextEra requests NRC review and approval of LAR 13-01 by March 1, 2014 and implementation within 60 days.


Should you have any questions regarding this letter, please contact Mr. Michael O'Keefe, Licensing Manager, at (603) 773-7745.

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NRB

I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 1, 2013.

Sincerely,



Kevin T. Walsh
Site Vice President
NextEra Energy Seabrook, LLC

Enclosure

cc: NRC Region I Administrator
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Enclosure

NextEra Energy Seabrook's Evaluation of the Proposed Change

Subject: Application for Administrative Change and Corrections to the Technical Specifications

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Attachment 1 – Markup of Technical Specifications

1.0 SUMMARY DESCRIPTION

License Amendment Request (LAR) 13-01 proposes to delete the index from the Seabrook Station Technical Specifications (TS) and make corrections to TS 3.4.8, Reactor Coolant System (RCS) Specific Activity, and TS 6.8.1.6.a, Core Operating Limits Report (COLR).

2.0 DETAILED DESCRIPTION

- TS index pages i through xii are deleted.
- TS Table 4.4-3, Reactor Coolant Specific Activity Sample and Analysis Program, currently specifies the following sample and analysis frequency for isotopic analysis for iodine:

Once per 4 hours, whenever the specific activity exceeds 1 $\mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT I-131 or 100/ \bar{E} Ci/gram of gross radioactivity

This requirement is revised to provide the correct units of activity for 100/ \bar{E} as indicated below.

*Once per 4 hours, whenever the specific activity exceeds 1 $\mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT I-131 or 100/ \bar{E} **micro**Ci/gram of gross radioactivity*

- TS 6.8, Core Operating Limits Report, item 2, requires operating limits for:
 2. Cycle dependent maximum allowable combination of thermal power, pressurizer pressure and the highest operating loop average temperature (T_{avg}) for Specifications 2.1.1 and 2.1.2.

The reference to TS 2.1.2, Reactor Coolant System Pressure Safety Limit, is incorrect and is removed as shown below.

2. Cycle dependent maximum allowable combination of thermal power, pressurizer pressure and the highest operating loop average temperature (T_{avg}) for Specifications 2.1.1 **and 2.1.2.**

3.0 TECHNICAL EVALUATION

TS Index

This LAR proposes to delete the index from the TS. Past submittals to the NRC have included the TS index to supplement requested TS changes, and a revised index has been included in issued amendments. This change will eliminate the need to include TS index pages as part of the license amendment request for future TS changes and to issue revised index pages with an amendment.

Although the index will not be considered part of the TS, NextEra will maintain and update the TS index. In addition, the distribution process currently in place will ensure that holders of controlled copies of the TS, including the NRC, will receive updated versions of the TS index similar to the way they currently receive changes to the TS and the TS Bases. When NextEra receives an approved change to the TS (including changes to the TS index) from the NRC or makes changes to the TS Bases, a transmittal form with the accompanying changes is sent to controlled copy holders, which includes offsite organizations that maintain controlled copies of the TS. Changes to TS index pages would be distributed similarly following approval of this amendment request. Therefore, stakeholders will continue to be informed of any changes to the index after it is removed from the TS.

The TS index identifies the contents of the TS but does not contain any technical information. Therefore, this is an administrative change and no technical evaluation is required. Regulatory requirements related to this change are discussed in Section 4.0 of this LAR.

Similar amendments to remove the TS index were approved for Waterford Unit 3 in Amendment 200 in May 2005 [Reference 1], and for Arkansas Nuclear One, Unit 2 in Amendment 260 in June 2005 [Reference 2].

TS 3.4.8, Reactor Coolant System Specific Activity

The limiting condition for operation (LCO) in TS 3.4.8 limits RCS specific activity to less than or equal to 100/Ē microCuries per gram of gross radioactivity. If the LCO is not met, the Action requires:

With the specific activity of the reactor coolant greater than 1 microCurie per gram DOSE EQUIVALENT I-131 or greater than 100/Ē microCuries per gram, perform the sampling and analysis requirements of Item 4.a) of Table 4.4-3 until the specific activity of the reactor coolant is restored to within its limits.

However, item 4.a) of Table 4.4-3 referred to in the Action does not identify the correct threshold at which sampling and analysis is required. The value specified in the table, 100/Ē Ci/gram of gross radioactivity, is much greater than the LCO limit and is inconsistent with the value of 100/Ē *micro*Curies specified in the Action. In the early version of the Seabrook Station TS (NUREG-1331 issued in May 1989), Table 4.4-3 correctly specified a threshold value of 100/Ē *micro*Curies per gram. In some subsequent revision of the TS, the prefix *micro* was dropped from the units of activity. When the error was introduced into the table is unknown.

The intent of the Action is to require increased sampling when RCS activity exceeds the limit of 100/Ē *micro*Curies per gram established in the LCO. Therefore, the proposed change revises the units in TS Table 4.4-3, item 4.a) from 100/Ē Curies per gram to 100/Ē *micro*Curies per gram. This change is of an administrative nature to correct an error that was inadvertently introduced into TS Table 4.4-3 at some time in the past.

TS 6.8, Core Operating Limits Report (COLR)

TS 6.8 requires that core operating limits shall be established and documented in the COLR for certain parameters prior to each reload cycle. TS 6.8.1.6.a. 2 identifies one of the required parameters:

Cycle dependent maximum allowable combination of thermal power, pressurizer pressure and the highest operating loop average temperature (Tavg) for Specifications 2.1.1 and 2.1.2.

The reference to Specification 2.1.2 in the requirement above is incorrect. Specification 2.1.2 (shown below) is related to the RCS pressure safety limit and is not a cycle dependent value.

2.1.2 REACTOR COOLANT SYSTEM PRESSURE SL

In MODES 1, 2, 3, 4, and 5, the RCS pressure shall be maintained less than or equal to 2735 psig.

Specification 2.1.1, which requires the combination of THERMAL POWER, Reactor Coolant System (RCS) highest loop average temperature, and pressurizer pressure shall not exceed the limits specified in the COLR, is the only TS section 2.1 requirement applicable to this COLR requirement. Therefore, this proposed change removes from TS 6.8.1.6.a.2 the reference to Specification 2.1.2. This change is administrative in nature as it removes an incorrect reference to a TS that is not applicable.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

10 CFR 50.36 requires that each applicant for a license authorizing operation of a production or utilization facility shall include in his application proposed technical specifications in accordance with the requirements of this section. A summary statement of the bases or reasons for such specifications, other than those covering administrative controls, shall also be included in the application, but shall not become part of the technical specifications. The regulation also provides the categories of items that must be included in the TS:

1. Safety limits, limiting safety system settings, and limiting control settings
2. Limiting conditions for operation
3. Surveillance requirements
4. Design features
5. Administrative Controls

The TS index, which this LAR proposes to remove from the TS, is not a required component of the TS in 10 CFR 50.36. Similar to the TS Bases, the index provides information about the TS but is not part of the TS. Because the index does not provide technical information required by 10 CFR 50.36, the proposed administrative change to remove the index from the TS is consistent with regulatory requirements.

4.2 Significant Hazards Consideration

No Significant Hazards Consideration

The proposed changes delete the index from the Seabrook Station Technical Specifications (TS) and make corrections to TS 3.4.8, Reactor Coolant System Specific Activity, and TS 6.8.1.6.a, Core Operating Limits Report.

In accordance with 10 CFR 50.92, NextEra has concluded that the proposed change does not involve a significant hazards consideration (SHC). The basis for the conclusion that the proposed change does not involve a SHC is as follows:

1. *The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.*

The proposed changes (1) remove the index from the TS, (2) correct an error in the units of activity for $100/\bar{E}$ in TS 3.4.8, Reactor Coolant System Specific Activity, and (3) remove an incorrect, non-applicable reference in TS 6.8, Core Operating Limits Report. The proposed changes are all administrative in nature. The administrative changes are not initiators of any accident previously evaluated, and, consequently, the probability and consequences of an accident previously evaluated is not significantly increased.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. *The proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.*

The proposed changes are administrative in nature so no new or different accidents result from the proposed changes. The changes do not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed), a significant change in the method of plant operation, or new operator actions. The changes do not alter assumptions made in the safety analysis.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. *The proposed changes do not involve a significant reduction in the margin of safety.*

Margin of safety is associated with confidence in the ability of the fission product barriers (i.e., fuel cladding, reactor coolant system pressure boundary, and containment structure) to limit the level of radiation dose to the public. The proposed administrative changes do not involve a change in the method of plant operation, do not affect any accident analyses, and do not relax any safety system settings.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, NextEra concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(b), and, accordingly, a finding of “no significant hazards consideration” is justified.

4.3 Conclusions

Based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

5.0 ENVIRONMENTAL CONSIDERATION

NextEra has evaluated the proposed amendment for environmental considerations. The review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendments meet the eligibility criterion for categorical exclusion set for in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the proposed amendment.

6.0 REFERENCES

1. NRC Letter "Waterford Steam Electric Station, Unit 3 – Issuance of Amendment Re: Modification to Technical Specification (TS) 5.3.1, Fuel Assemblies, T.S. 5.6.1, Criticality, T.S. 6.9.1.11.1, Core Operating Limits Reports, and Deletion of TS Index (TAC No. MC3584)," May 9, 2005
2. NRC Letter "Arkansas Nuclear One, Unit 2 – Issuance of Amendments Re: Deletion of Index Pages from the Technical Specification (TAC No. MC4236)," June 22, 2005

Attachment 1

Markup of Proposed Technical Specifications Changes

The attached markups reflect the currently issued version of the TS and Facility Operating License. At the time of submittal, the Facility Operating License was revised through Amendment No. 132.

Listed below are the license amendment requests that are awaiting NRC approval and may impact the currently issued version of the Facility Operating License affected by this LAR.

LAR	Title	NextEra Energy Seabrook Letter	Date Submitted
10-02	Application for Change to the Technical Specifications for the Containment Enclosure Emergency Air Cleanup System	SBK-L-10074	05/14/2010
11-04	Changes to the Technical Specifications for New and Spent Fuel Storage	SBK-L-11245	01/30/2012
11-06	Application to Revise the Applicability of the Reactor Coolant System Pressure – Temperature Limits and the Cold Overpressure Protection Setpoints	SBK-L-11186	11/17/2011
12-06	Application for Technical Specification Improvement to Extend the Inspection Interval for Reactor Coolant Pump Flywheels Using the Consolidated Line Item Improvement Process	SBK-L-12235	12/20/2012

The following TS pages are included in the attached markup:

Technical Specification	Title	Page
----	TS Index	i through xii
TS 3.4.8	Table 4.4-3, Reactor Coolant Specific Activity Sample and Analysis Program	3/4 4-21
TS 6.8.1.6.a.2	Core Operating Limits Report	6-16

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REACTOR COOLANT SPECIFIC ACTIVITY SAMPLE AND ANALYSIS PROGRAM

<u>TYPE OF MEASUREMENT AND ANALYSIS</u>	<u>SAMPLE AND ANALYSIS FREQUENCY</u>	<u>MODES IN WHICH SAMPLE AND ANALYSIS REQUIRED</u>
1. Gross Radioactivity Determination	At least once per 72 hours.	1, 2, 3, 4
2. Isotopic Analysis for DOSE EQUIVALENT I-131 Concentration	1 per 14 days.	1
3. Radiochemical for \bar{E} Determination*	1 per 6 months**	1
4. Isotopic Analysis for Iodine Including I-131, I-133, and I-135	a) Once per 4 hours, whenever the specific activity exceeds 1 $\mu\text{Ci/gram}$ DOSE EQUIVALENT 1-131 or 100/ \bar{E} Ci/gram of gross radioactivity, and b) One sample between 2 and 6 hours following a THERMAL POWER change exceeding 15% of the RATED THERMAL POWER within a 1-hour period.	1#, 2#, 3#, 4#, 5#

micro

* A radiochemical analysis for \bar{E} shall consist of the quantitative measurement of the specific activity for each radionuclide, except for radionuclides with half-lives less than 10 minutes and all radioiodines, which is identified in the reactor coolant. The specific activities for these individual radionuclides shall be used in the determination of \bar{E} for the reactor coolant sample. Determination of the contributors to \bar{E} shall be based upon those energy peaks identifiable with a 95% confidence level.

** Sample to be taken after a minimum of 2 EFPD and 20 days of POWER OPERATION have elapsed since reactor was last subcritical for 48 hours or longer.

#Until the specific activity of the Reactor Coolant System is restored within its limits.

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CORE OPERATING LIMITS REPORT

6.8.1.6.a Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT prior to each reload cycle, or prior to any remaining portion of a reload cycle, for the following:

1. Cycle dependent Overpower ΔT and Overtemperature ΔT trip setpoint parameters and function modifiers for operation with skewed axial power profiles for Table 2.2-1 of Specification 2.2.1.
2. Cycle dependent maximum allowable combination of thermal power, pressurizer pressure and the highest operating loop average temperature (T_{avg}) for Specifications ~~2.1.1~~ and ~~2.1.2~~
3. SHUTDOWN MARGIN and minimum boron concentration limits for MODES 1, 2, 3, and 4 for Specification 3.1.1.1.
4. SHUTDOWN MARGIN and minimum boron concentration limits for MODE 5 for Specification 3.1.1.2.
5. Moderator Temperature Coefficient BOL and EOL limits, and 300 ppm surveillance limit for Specification 3.1.1.3.
6. The minimum boron concentration for Modes 4, 5, and 6 for Specification 3.1.2.7.
7. Shutdown Rod Insertion limit for Specification 3.1.3.5.
8. Control Rod Bank Insertion limits for Specification 3.1.3.6.
9. AXIAL FLUX DIFFERENCE limits for Specification 3.2.1
10. Heat Flux Hot Channel Factor, F_Q^{RTP} and $K(Z)$ for Specification 3.2.2.
11. Nuclear Enthalpy Rise Hot Channel Factor, and $F_{\Delta H}^{RTP}$ for Specification 3.2.3.
12. Cycle dependent DNB-related parameters for reactor coolant system average temperature (T_{avg}), and pressurizer pressure for Specification 3.2.5.
13. The boron concentration limits for MODES 1, 2 and 3 for Specification 3.5.1.1.
14. The boron concentration limits for MODES 1, 2, 3 and 4 for Specification 3.5.4.
15. The boron concentration limits for MODE 6 for Specification 3.9.1.