



November 17, 2011

SBK-L-11194  
Docket No. 50-443

10 CFR 50.90

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

Seabrook Station  
License Amendment Request 11-09

Removal of Locations Specified in Technical Specification 3.3.3.5,  
Remote Shutdown System, Table 3.3-9

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) 11-09 for an amendment to the Technical Specifications (TS) for Seabrook Station. The proposed change would revise Technical Specification 3.3.3.5, Remote Shutdown System Table 3.3-9, by removing the location information of transfer switches, control circuits and instruments.

Attachment 1 to this letter provides NextEra's evaluation of the change, and Attachment 2 provides a markup of the TS showing the proposed change. As discussed in the evaluation, the proposed change does not involve a significant hazards consideration pursuant to 10 CFR 50.92, and there are no significant environmental impacts associated with the 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 11-09 with issuance of a license amendment by September 30, 2012 and implementation of the amendment within 30 days. This schedule will support work activities planned for the fall 2012 refueling outage.

A001  
NRK

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

Sincerely,

NextEra Energy Seabrook, LLC



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Paul O. Freeman  
Site Vice President

Attachments

1. NextEra Energy Seabrook's Evaluation of the Proposed Change
2. Markup of the Technical Specifications

cc: W.M. Dean, NRC Region I Administrator  
G. E. Miller, NRC Project Manager  
W. J. Raymond, NRC Senior Resident Inspector

Mr. Christopher M. Pope, Director Homeland Security and Emergency Management  
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AFFIDAVIT

**SEABROOK STATION UNIT 1**  
Facility Operating License NPF-86  
Docket No: 50-443  
**License Amendment Request 11-09**  
**Removal of Locations Specified in Technical Specification 3.3.3.5,**  
**Remote Shutdown System, Table 3.3-9**


The following information is enclosed in support of this License Amendment Request:

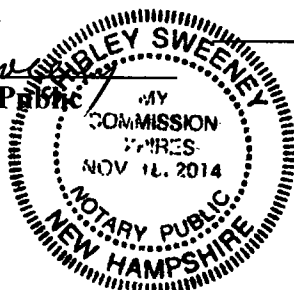
- NextEra Energy Seabrook's Evaluation of the Proposed Change
- Markup of the Technical Specifications


I, Paul O. Freeman, Site Vice President of NextEra Energy Seabrook, LLC hereby affirm that the information and statements contained within this license amendment request are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

Sworn and Subscribed  
before me this

17 day of November, 2011

  
Notary Public





Paul O. Freeman  
Site Vice President

Attachment 1

NextEra Energy Seabrook's Evaluation of the Proposed Change

Subject: License Amendment Request 11-09, Removal of Locations Specified in Technical Specification 3.3.3.5, Remote Shutdown System, Table 3.3-9

1.0 SUMMARY DESCRIPTION

2.0 DETAILED DESCRIPTION

3.0 TECHNICAL EVALUATION

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

4.2 Significant Hazards Consideration

4.3 Conclusion

5.0 ENVIRONMENTAL CONSIDERATION

6.0 REFERENCES

## **1.0 SUMMARY DESCRIPTION**

The proposed change removes the specific location information listed in Technical Specification (TS) 3.3.3.5, Remote Shutdown Systems, Table 3.3-9 for transfer switches / control circuits and instruments.

## **2.0 DETAILED DESCRIPTION**

The proposed change removes the specific location information listed in TS 3.3.3.5, Remote Shutdown Systems, Table 3.3-9 for transfer switches / control circuits and instruments. The location information is contained in the specific test surveillances for these circuits and is controlled by NextEra's design control program.

## **3.0 TECHNICAL EVALUATION**

### Background

The operability of the Remote Shutdown System (RSS) ensures that sufficient capability is available to permit safe shutdown of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criterion 19 of Appendix A to 10 CFR Part 50. The operability of the RSS also ensures that a fire will not preclude achieving safe shutdown. The RSS instrumentation, control, and power circuits and transfer switches necessary to eliminate effects of the fire and allow operation of instrumentation, control and power circuits required to achieve and maintain a safe shutdown condition are independent of areas where a fire could damage systems normally used to shut down the reactor. This capability is consistent with General Design Criterion 3 and Appendix R to 10CFRPart 50.

TS Table 3.3-9, Remote Shutdown System, lists the locations of the RSS transfer switches and instruments. During the refueling outage in the fall of 2012, NextEra will be implementing design changes to change or add additional locations for some of the existing transfer switches and control circuits listed in TS Table 3.3-9. The placement of new control locations and circuit modifications will be conducted under NextEra's design control program. Because the list of equipment locations in Table 3.3-9 does not meet the criteria of 10 CFR 50.36 for inclusion in the TS, NextEra proposes to delete the list of locations.

## Evaluation

The removal of the location information currently specified in Table 3.3-9 does not change the intent of TS 3.3.3.5, Remote Shutdown Systems. Eliminating the location information allows NextEra to enhance the design of Seabrook Station under the design control program without unnecessarily expending NextEra and NRC resources to process license amendments to revise the location information presently included in TS Table 3.3-9.

## Precedent

NextEra has reviewed the TS of similarly designed plants and found that location information is not contained in the corresponding table or text of the TS. Specifically reviewed were:

- Callaway Plant Unit No. 1 Facility Operating License License No. NPF-30 (Adams Accession Number MI053110040) (Reference 1)
- Vogtle Electric Generating Plant, Unit 1 Renewed Facility Operating License Renewed License No. NPF -68 (Adams Accession Number MI052840233) (Reference 2)
- Wolf Creek Generating Station, Unit 1 Renewed Facility Operating License Renewed License No. NPF -42 (Adams Accession Number MI052720315) (Reference 3)

## Conclusion

The proposed change would remove the specific location information listed in TS 3.3.3.5, Remote Shutdown Systems, Table 3.3-9 for transfer switches / control circuits and instruments. The requirements in the TS would not change with the removal of the location information and would allow NextEra to enhance the design of Seabrook Station under the design control program without the undue burden of seeking future administrative changes to TS Table 3.3-9.

## **4.0 REGULATORY EVALUATION**

### **4.1 Applicable Regulatory Requirements/Criteria**

#### *Criteria for Technical Specifications*

Section 50.36c(2)(ii) of Title 10 of the Code of Federal Regulations (10 CFR 50.36c(2)(ii)) contains the requirements for items that must be in TS. This regulation provides four criteria that can be used to determine the requirements that must be

included in the TS. A TS limiting condition for operation (LCO) of a nuclear reactor must be established for each item meeting one or more of the following criteria:

- Criterion 1: Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- Criterion 2: A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier.
- Criterion 3: A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier.
- Criterion 4: A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The Remote Shutdown System and associated surveillance testing meet the requirements of 10 CFR 50.36c(2)(ii) Criterion 4 for items that must be in TS. However, the location information in TS 3.3.3.5, Table 3.3-9 does not meet any of the 10 CFR 50.36c(2)(ii) criteria for inclusion; therefore, NextEra concludes that removal of location information of TS 3.3.3.5 Table 3.3-9 is acceptable. The requirements in this TS would not change with the removal of the location information. Location information is contained in the applicable design documents and test surveillances. The proposed change is also consistent with NUREG-1431, Standard Technical Specifications Westinghouse Plants, which does not contain equipment locations. (Reference 4)

## **4.2 Significant Hazards Consideration**

### *No Significant Hazards Consideration*

In accordance with 10 CFR 50.92, NextEra Energy Seabrook 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 change does not impact the physical function of plant structures, systems, or components (SSCs) or the manner in which SSCs perform their design function. The proposed change neither adversely affects accident initiators or precursors, nor alters design assumptions. The proposed change does not alter or prevent the ability of operable SSCs to perform their intended function to mitigate the consequences of an initiating event within assumed acceptance limits.

The proposed change would remove the specific location information listed in Technical Specification 3.3.3.5, Remote Shutdown Systems; Table 3.3-9 for transfer switches / control circuits and instruments. The requirements in this Technical Specification would not change with the removal of the location information and the location information does not meet any of the criteria in 10 CFR 50.36c(2)(ii) for items that must be retained in the Technical Specifications. Removing the location information will have no adverse effect on plant operation, the availability or operation of any accident mitigation equipment, or plant response to a design basis accident.

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 change will not impact the accident analysis. The change does 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 proposed change will not introduce failure modes that could result in a new accident. The change does 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 change does not involve a change in the method of plant operation, and no accident analyses will be affected by the proposed changes.



Additionally, the proposed changes will not relax any criteria used to establish safety limits and will not relax any safety system settings. The safety analysis acceptance criteria are not affected by this change. The proposed change will not result in plant operation in a configuration outside the design basis. The proposed change does not adversely affect systems that respond to safely shutdown the plant and to maintain the plant in a safe shutdown condition.

Therefore, these proposed changes do 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. Callaway Plant Unit No. 1 Facility Operating License No. NPF-30 (Adams Accession Number MI053110040)
2. Vogtle Electric Generating Plant, Unit 1 Renewed Facility Operating License Renewed License No. NPF -68 (Adams Accession Number MI052840233)
3. Wolf Creek Generating Station, Unit 1 Renewed Facility Operating License Renewed License No. NPF -42 (Adams Accession Number MI052720315)
4. NUREG-1431 Standard Technical Specifications Westinghouse Plants , Rev. 3.0, March 2004

Attachment 2

Mark-up of the Technical Specifications (TS)

The attached markup reflects 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. 126.

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
LAR 10-02	Application for Change to the Technical Specifications for the Containment Enclosure Emergency Air Cleanup System	SBK-L-10074	05/14/2010
LAR 11-01	Application to Revise the Technical Specifications for Reactor Coolant Leakage Detection Instrumentation	SBK-L-11066	04/21/2011
LAR 11-03	License Amendment Request Regarding Containment Spray Nozzle Surveillance Requirement	SBK-L-11130	07/14/2011
LAR 11-05	License Amendment Request Cold Leg Injection Permissive	SBK-L-11181	9/30/2011

The following TS pages are included in the attached markup:

Technical Specification	Title	Page
TS Table 3.3-9	Remote Shutdown System	3/4 3-47 3/4 3-48

TABLE 3.3-9

REMOTE SHUTDOWN SYSTEM

<u>INSTRUMENT</u>	<u>LOCATION</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Intermediate Range Neutron Flux	CP-108 A and B	2	1
2. Source Range Neutron Flux	CP-108 A and B	2	1
3. Reactor Coolant Temperature - Wide Range for Loops 1 and 4			
a. T <sub>c</sub>	CP-108 A and B	2	2
b. T <sub>H</sub>	CP-108 A and B	2	2
4. Pressurizer Pressure	CP-108 A and B	2	2
5. Pressurizer Level	CP-108 A and B	2	2
6. Steam Generator Pressure	CP-108 A and B	1/stm. gen.	1/stm. gen.
7. Steam Generator Water Level	CP-108 A and B	1/stm. gen.	1/stm. gen.
8. Steam Generator-Emergency Feedwater Flow Rate	CP-108 A and B	1/stm. gen.	1/stm. gen.
9. Boric Acid Tank Level	CP-108 A and B	1/tank	1/tank

TRANSFER SWITCHES/CONTROL CIRCUITS

1. Emergency Feedwater Pump Steam Supply Valves MS-V-393
2. Emergency Feedwater Pump Steam Supply Valves MS-V-394
3. Emergency Feedwater Pump Steam Supply Valves MS-V-395
4. Emergency Feedwater Pump FW-P-37B
5. Emergency Feedwater Recirculation Valve FW-V-346
6. Emergency Feedwater Recirculation Valve FW-V-347
7. SG A EFW Control Valve FW-FV-4214 A
8. SG A EFW Control Valve FW-FV-4214 B
9. SG B EFW Control Valve FW-FV-4224 A
10. SG B EFW Control Valve FW-FV-4224 B
11. SG C EFW Control Valve FW-FV-4234 A
12. SG C EFW Control Valve FW-FV-4234 B
13. SG D EFW Control Valve FW-FV-4244 A
14. SG D EFW Control Valve FW-FV-4244 B
15. SG A Atmospheric Relief Valve MS-PV-3001
16. SG B Atmospheric Relief Valve MS-PV-3002
17. SG C Atmospheric Relief Valve MS-PV-3003

LOCATION

1. CP-108 A
2. CP-108 B
3. CP-108 A and B
4. Bus 6 SWGR
5. CP-108 A
6. CP-108 B
7. CP-108 A
8. CP-108 B
9. CP-108 A
10. CP-108 B
11. CP-108 A
12. CP-108 B
13. CP-108 A
14. CP-108 B
15. CP-108 A
16. CP-108 B
17. CP-108 A

TABLE 3.3-9 (Continued)  
REMOTE SHUTDOWN SYSTEM

TRANSFER SWITCHES/CONTROL CIRCUITS

- 18. SG D Atmospheric Relief Valve MS-PV-3004
- 19. MS Isolation Valves MS-V-86/88/90/92
- 20. MS Isolation Valves MS-V-86/88/90/92
- 21. Pressurizer Heaters, Group A
- 22. Pressurizer Heaters, Group B
- 23. Charging Pump CS-P-2A
- 24. Charging Pump CS-P-2B
- 25. Charging Pump Suction from RWST CS-LCV-112D
- 26. Charging Pump Suction from RWST CS-LCV-112E
- 27. Pressurizer Relief Valve (PORV) RC-PCV-456A
- 28. Pressurizer Relief Valve (PORV) RC-PCV-456B
- 29. PORV Block Valve RC-V-122
- 30. PORV Block Valve RC-V-124
- 31. High Pressure Injection SI-V-138
- 32. High Pressure Injection SI-V-139
- 33. VCT Discharge Isolation Valve CS-LCV-112B
- 34. VCT Discharge Isolation Valve CS-LCV-112C

<u>LOCATION</u>
<del>CP-108 B</del>
<del>CP-108 A</del>
<del>CP-108 B</del>
<del>CP-108 A</del>
<del>CP-108 B</del>
<del>BUS 5 SWGR</del>
<del>BUS 6 SWGR</del>
<del>CP-108 A</del>
<del>CP-108 B</del>
<del>CP-108 A</del>
<del>CP-108 B</del>
<del>CP-108 A</del>
<del>CP-108 B</del>
<del>CP-108 A</del>
<del>CP-108 B</del>
<del>CP-108 A</del>
<del>CP-108 B</del>