October 3, 2003

Mr. Mark E. Warner, Site Vice President
c/o James M. Peschel
Seabrook Station
FPL Energy Seabrook, LLC
PO Box 300
Seabrook, NH 03874

SUBJECT: SEABROOK STATION, UNIT NO. 1 - ISSUANCE OF AMENDMENT RE: RELOCATION OF TECHNICAL SPECIFICATIONS ASSOCIATED WITH BORATION SYSTEMS AND CHEMISTRY, AND REVISION OF SELECTED TECHNICAL SPECIFICATIONS ASSOCIATED WITH THE REACTOR COOLANT SYSTEM (TAC NO. MB6614)

Dear Mr. Warner:

The Commission has issued the enclosed Amendment No. 93 to Facility Operating License No. NPF-86 for the Seabrook Station, Unit No. 1 (Seabrook), in response to your application dated October 11, 2002, filed by North Atlantic Energy Service Corporation (NAESCO), as the then licensee for Seabrook Station, Unit No. 1. On November 1, 2002, the U.S. Nuclear Regulatory Commission (NRC or the Commission) approved the transfer of the license for Seabrook, to the extent held by NAESCO, and certain co-owners of the facility, on whose behalf NAESCO was also acting, to FPL Energy Seabrook, LLC (FPLE Seabrook). By letter dated December 20, 2002, FPLE Seabrook requested that the NRC continue to review and act upon all requests before the Commission that had been submitted by NAESCO. FPLE Seabrook subsequently supplemented the application by letter dated May 29, 2003.

The amendment relocates Technical Specifications (TSs) Sections 3.1.2.1, “Reactivity Control Systems-Boration Systems-Flow Paths-Shutdown;” 3.1.2.2, “Reactivity Control Systems-Boration Systems-Flow Paths-Operating;” 3.1.2.3, “Reactivity Control Systems-Boration Systems-Charging Pumps-Shutdown;” 3.1.2.4, “Reactivity Control Systems-Boration Systems-Charging Pumps-Operating;” 3.1.2.5, “Reactivity Control Systems-Boration Systems-Borated Water Sources-Shutdown;” 3.1.2.6, “Reactivity Control Systems-Boration Systems-Borated Water Sources-Operating;” and 3.4.7, “Reactor Coolant System-Chemistry,” to the Seabrook Station Technical Requirements Manual (SSTR). The amendment also revises TS 3.1.2.7, “Reactivity Control Systems-Boration Systems-Isolation of Unborated Water Sources-Shutdown.”

The amendment also revises TSs 3.4.1.2, “Reactor Coolant System-Reactor Coolant Loops and Coolant Recirculation-Hot Standby;” 3.4.3, “Reactor Coolant System-Pressurizer;” 3.4.7, “Reactor Coolant System-Chemistry;” and 3.9.2, “Refueling Operations-Instrumentation,” to adopt wording that more closely resembles NUREG-1431, Revision 2, “Standard Technical Specifications - Westinghouse Plants.” The revision to TS 3/4.9.2 also involves surveillance changes. The associated Bases have been modified as a result of the changes.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/RA/

Victor Nerses, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosures: 1. Amendment No. 93 to NPF-86
2. Safety Evaluation

cc w/encls: See next page

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/RA/

Victor Nerses, Senior Project Manager, Section 2
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Division of Licensing Project Management
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Docket No. 50-443

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cc w/encls: See next page

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*SE input provided - no major changes made.
**See previous concurrence

OFFICE	PDI-2/PM	PDI-2/LA	IROB/SC*	SRXB/SC*	EEIB/SC**	OGC**	PDI-2/SC
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FPL ENERGY SEABROOK, LLC, ET AL.*

DOCKET NO. 50-443

SEABROOK STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 93
License No. NPF-86

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment filed by FPL Energy Seabrook, LLC, et al. (the licensee), dated October 11, 2002, as supplemented May 29, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

*FPL Energy Seabrook, LLC (FPLE Seabrook), is authorized to act as agent for the: Hudson Light & Power Department, Massachusetts Municipal Wholesale Electric Company, and Taunton Municipal Light Plant and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

2. Accordingly, the license is amended to approve the relocation of certain Technical Specification requirements to the Seabrook Station Technical Requirements Manual (SSTR), as described in the licensee's application dated October 11, 2002, as supplemented by letter dated May 29, 2003, and evaluated in the NRC staff's Safety Evaluation associated with this amendment. This relocation shall be reflected in the next scheduled update of the Updated Final Safety Analysis Report, which references the SSTR, submitted to the NRC pursuant to 10 CFR 50.71(e)(4). The license is also amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-86 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 93, and the Environmental Protection Plan contained in Appendix B are incorporated into Facility License No. NPF-86. FPLE Seabrook shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: October 3, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 93

FACILITY OPERATING LICENSE NO. NPF-86

DOCKET NO. 50-443

Replace the following pages of the Appendix A, Technical Specifications, with the attached revised pages as indicated. The revised pages are identified by amendment number and contain marginal lines indicating the area of change.

Remove	Insert
iii	iii
v	v
x	x
3/4 1-7	3/4 1-7
3/4 1-8	3/4 1-8
3/4 1-9	3/4 1-9
3/4 1-10	3/4 1-10
3/4 1-11	3/4 1-11
3/4 1-12	3/4 1-12
3/4 1-13	3/4 1-13
3/4 1-14	3/4 1-14
3/4 4-2	3/4 4-2
3/4 4-3	3/4 4-3
3/4 4-10	3/4 4-10
3/4 4-25	3/4 4-25
3/4 4-26	3/4 4-26
3/4 9-2	3/4 9-2
B 3/4 1-2	B 3/4 1-2
B 3/4 1-3	B 3/4 1-3
B 3/4 4-1	B 3/4 4-1
----------	B 3/4 4-1a
B 3/4 4-5	B 3/4 4-5
B 3/4 9-2a	B 3/4 9-2a
----------	B 3/4 9-2b
----------	B 3/4 9-2c
----------	B 3/4 9-2d

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 93 TO FACILITY OPERATING LICENSE NO. NPF-86

FPL ENERGY SEABROOK, LLC

SEABROOK STATION, UNIT NO. 1

DOCKET NO. 50-443

1.0 INTRODUCTION

On October 11, 2002, North Atlantic Energy Service Corporation (NAESCO) filed an application to amend facility operating license NPF-86 for the Seabrook Station, Unit No. 1 (Seabrook). On November 1, 2002, the U.S. Nuclear Regulatory Commission (NRC or the Commission) approved the transfer of the license for Seabrook to the extent held by NAESCO, and certain co-owners of the facility, on whose behalf NAESCO was also acting, to FPL Energy Seabrook, LLC (FPLE Seabrook or licensee). By letter dated December 20, 2002, FPLE Seabrook requested that the NRC continue to review and act upon all requests before the Commission that had been submitted by NAESCO. FPLE Seabrook subsequently supplemented the application by letter dated May 29, 2003.

The amendment proposes to relocate Technical Specifications (TSs) Sections 3.1.2.1, “Reactivity Control Systems-Boration Systems-Flow Paths-Shutdown;” 3.1.2.2, “Reactivity Control Systems-Boration Systems-Flow Paths-Operating;” 3.1.2.3, “Reactivity Control Systems-Boration Systems-Charging Pumps-Shutdown;” 3.1.2.4, “Reactivity Control Systems-Boration Systems-Charging Pumps-Operating;” 3.1.2.5, “Reactivity Control Systems-Boration Systems-Borated Water Sources-Shutdown;” 3.1.2.6, “Reactivity Control Systems-Boration Systems-Borated Water Sources-Operating;” and 3.4.7, “Reactor Coolant System-Chemistry,” to the Seabrook Station Technical Requirements Manual (SSTR). The amendment would also revise TS 3.1.2.7, “Reactivity Control Systems-Boration Systems-Isolation of Unborated Water Sources-Shutdown.”

The amendment would also revise TSs 3.4.1.2, “Reactor Coolant System-Reactor Coolant Loops and Coolant Recirculation-Hot Standby;” 3.4.3, “Reactor Coolant System-Pressurizer;” 3.4.7, “Reactor Coolant System-Chemistry;” and 3.9.2, “Refueling Operations-Instrumentation,” to adopt wording that more closely resembles NUREG-1431, Revision 2, “Standard Technical Specifications - Westinghouse Plants.” The revision to TS 3/4.9.2 would also involve surveillance changes. The licensee also proposed to modify the associated Bases as a result of the changes.

The May 29, 2003, letter provided clarifying information and did not expand the scope of the amendment beyond that of the original notice and did not change the initial proposed no significant hazards consideration determination.

2.0 REGULATORY EVALUATION

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.36, each license authorizing operation of a utilization facility must include TSs. Section 50.36 of 10 CFR requires that the TSs include items in eight specific categories: 1) safety limits, limiting safety system settings, and limiting control settings; 2) limiting conditions for operation (LCOs); 3) surveillance requirements (SRs); 4) design features; 5) administrative controls; 6) decommissioning; 7) initial notification; and 8) written reports. Section 50.36(c)(2)(ii) of 10 CFR gives four criteria to be used to determine if an LCO is required to be established in the TS for a particular item. An LCO must be established for any item meeting one or more of the criteria. The four criteria listed in this section are as follows:

1. Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

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.

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.

4. A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Existing LCOs and related surveillances included as TS requirements which satisfy any of the criteria stated above must be retained in the TS. Pursuant to 10 CFR 50.90, the licensee may request an amendment to the TSs to relocate selected requirements to other licensee-controlled documents, provided they satisfy none of the criteria of 10 CFR 50.36(c)(2)(ii).

Furthermore, there are two classes of changes to TSs: (1) changes needed to reflect modifications to the design basis (TSs are derived from the design basis), and (2) changes to take advantage of the evolution in policy and guidance as to the required content and preferred format of TSs over time. In determining the acceptability of such changes, the staff interprets the requirements of 10 CFR 50.36, using as a model the accumulation of generically-approved guidance in NUREG-1431, Revision 2, “Improved Standard Technical Specifications, Westinghouse Plants (ISTS)”. Within this general framework, licensees may revise the remaining TSs to adopt current ISTS format and content, provided that plant-specific review supports a finding of continued adequate safety because: (1) the change is editorial, administrative, or provides clarification (i.e., no requirements are materially altered); (2) the change is more restrictive than the licensee’s current requirement; or (3) the change is less restrictive than the licensee’s current requirement, but nonetheless still affords adequate protection of the public health and safety when judged against current regulatory standards.

Therefore, the staff has reviewed the licensee's proposed relocations of LCOs to determine if 10 CFR 50.36 requires those LCOs to remain in TDS.

3.0 TECHNICAL EVALUATION

3.1 TSs 3/4.1.2, "Boration Systems," (TSs 3.1.2.1 through 3.1.2.6) and TS 3/4.4.7, "Reactor Coolant System, Chemistry"

TS 3.1.2.1, TS 3.1.2.2, TS 3.1.2.3, TS 3.1.2.4, TS 3.1.2.5, and TS 3.1.2.6 address the boration subsystem of the Chemical and Volume Control System. This group of TSs deals with maintaining shutdown margin (SDM) by boration. The requirements of TS 3.1.2.1 through TS 3.1.2.6 define the minimum operable boron injection path, and the minimum operable borated water sources. Operation of the boration subsystem is not credited for mitigation of any design basis accident (DBA) or for an Anticipated Transient Without Scram (ATWS) for which 10 CFR 50.62 establishes requirements. This evaluation of the relocation of TS 3.1.2.1 through TS 3.1.2.6 considers the boration function of the affected equipment to maintain SDM. The current TS 3.4.7 ensures the proper chemistry specification of the oxygen, chloride, and fluoride content in the reactor coolant system (RCS) to minimize corrosion, and maintain RCS structural integrity.

The staff evaluated TS 3.1.2.1 through TS 3.1.2.6 and TS 3.4.7 against the four criteria set forth in 10 CFR 50.36(c)(2)(ii), using NUREG-1431 as guidance. The boration subsystem, borated water sources, and the chemistry limits are not a form of instrumentation or a process variable, design feature or operating restriction that is an initial condition of a DBA or an ATWS and, therefore, do not meet Criterion 1 or 2.

The boration subsystem and borated water sources are categorized as a structure, system, or component (SSC). However, the boration function of the system to maintain SDM and the chemistry limits to maintain RCS integrity are not a primary success path that functions or actuates to mitigate a DBA or an ATWS. The accident analyses assume that the required SDM at the start of an accident has been established since the TS SDM requirements have to be met before entering a certain plant's operation MODE. This existing SDM for a certain reactor operation MODE provides sufficient time for the plant operators to recognize the event and terminate the event prior to a complete loss of SDM. Given this consideration, the boration subsystem and the borated water sources, therefore, do not meet Criterion 3.

The chemistry limits are not an SSC that is part of the primary success path to mitigate a DBA or transient that presents a challenge to the integrity of a fission product barrier. Therefore, the chemistry limits do not meet Criterion 3.

The boration subsystem as modeled in the current Seabrook Station Probabilistic Safety Study (SSPSS) has a low risk contribution. TS 3.4.7 ensures RCS integrity by maintaining proper chemistry limits to minimize corrosion. The chemistry limits are not an SSC and have not been modeled in the SSPSS. Since the chemistry limits are not an SSC for which operating experience or probabilistic risk assessment has shown to be significant to public health and safety, the chemistry limits do not meet Criterion 4.

Based on the discussion above, the items subject to the requirements of TS 3.1.2.1 through TS 3.1.2.6 and TS 3.4.7 do not satisfy the four criteria in 10 CFR 50.36(c)(2)(ii). Therefore, the

aforementioned TSs Sections may be relocated to other licensee-controlled documents. The licensee proposed to relocate these TS to its SSTR which is referenced in the Seabrook Updated Final Safety Analysis Report. All changes to the SSTR are evaluated pursuant to 10 CFR 50.59 and, therefore, any changes to this system would still be appropriately evaluated pursuant to NRC regulatory controls.

3.2 TS 3.1.2.7, “Boration Systems, Isolation of Unborated Water Sources - Shutdown”

TS 3.1.2.7 requires the isolation of the RCS from sources of unborated water during Modes 4, 5, and 6 to prevent boron dilution accidents. Consequently, this TS identifies the boron thermal regeneration system (BTRS) as one of the systems required to be isolated from the RCS in these Modes. However, the licensee proposed modifying SR 4.1.2.7.a to allow for the BTRS demineralizer beds to be used for reactor coolant system shutdown chemistry cleanup. To implement this proposal while preventing boron dilution, the licensee would saturate the demineralizers intended for cleanup with boron until the boron is within 5% or 5 ppm (whichever is greater) of the influent RCS boron concentration. Additionally, the licensee would isolate the individual manual outlet isolation valves for the remaining BTRS demineralizers.

Furthermore, FPLE Seabrook proposed adding a note to allow a demineralizer to be unisolated to saturate a bed with boron, provided that the effluent is not directed back to the RCS. This note would allow the licensee to place a demineralizer saturated with boron into service while preventing a boron dilution transient.

The staff reviewed the Seabrook BTRS and the Chapter 15 accident analysis for boron dilution and determined that the BTRS can supply water at a rate comparable to that of one Reactor Makeup Water pump. However, water from the BTRS goes to the Chemical and Volume Control System Volume Control Tank (VCT), where it mixes with water maintained at, or nearly equal to, the RCS boron concentration. Because of the size of the VCT and the mixing of BTRS flow with water in the VCT, the inadvertent operation of the BTRS would be capable of creating only a mild boron dilution transient. Additionally, since the proposed TS would require the in-service demineralizers to be saturated with boron, this dilution event would be even more mild. Either way, the current Seabrook Chapter 15 accident analyses include a dilution caused by the BTRS. Furthermore, this accident remains bounded by the analysis of an inadvertent opening of the Reactor Makeup Water control valve in conjunction with a failure in the blend system permitting 0 ppm water to flow from the discharge of a single Reactor Makeup Water pump to the charging pump suction. This event is the limiting boron dilution event for all Modes of operation at Seabrook.

The plant conditions allowed by these proposed TS changes remain bounded by the Seabrook boron dilution accident analyses, which shows the consequences of postulated accidents to remain within the limits of 10 CFR Part 100. Given this consideration, the staff finds the proposed change acceptable.

3.3 TS 3/4.4.1.2, “Reactor Coolant System, Reactor Coolant Loops and Coolant Circulation, Hot Standby”

When in Mode 3, this TS requires that at least two reactor coolant loops be operable with two reactor coolant loops in operation when the Reactor Trip System (RTS) breakers are closed. With the RTS breakers open, TS 3.4.1.2 requires one reactor coolant loop to be in operation.

The licensee proposed, consistent with the ISTSs, replacing the words, "...the Reactor Trip System breakers are closed" with "the Control Rod Drive System is capable of rod withdrawal." Additionally, the licensee proposed replacing the words "the Reactor Trip System breakers are open" with "the Control Rod Drive System is not capable of rod withdrawal." These changes would effectively keep the requirements for the number of operational loops (i.e., when the rods are capable of withdrawal), while providing operational flexibility, by allowing the licensee to use breakers other than the RTS breakers to prevent rod withdrawal. These changes would maintain requirements equivalent to the current TS requirements with regard to the number of operable loops depending on whether the control rods are capable or incapable of being withdrawn. Therefore, the staff finds these changes acceptable.

Similarly, the licensee proposed rewording Action "b" of TS 3.4.1.2. It originally stated, "With only one reactor coolant loop in operation and the Reactor Trip System breakers in the closed position, within 1 hour open the Reactor Trip System breakers." The licensee proposes it be revised to read, "With only one reactor coolant loop in operation and the Control Rod Drive System capable of rod withdrawal, within 1 hour return the required reactor coolant loop to operation or place the Control Rod Drive System in a condition incapable of rod withdrawal." As discussed previously, the staff finds the change from "breakers open" and "breakers closed" to "Control Rod Drive System incapable of rod withdrawal" and "capable of rod withdrawal" to be acceptable. However, for this change, the licensee also proposed adding the option to restore the reactor coolant loop to operable status within one hour. This proposed action follows the guidance of the ISTSs, and would address the safety concern by placing the plant in the desired condition within the one-hour period. Since this action would address the safety concern of inoperable reactor coolant loops in a manner equivalent to the current TSs and within the same time frame set in the current s TSs, the staff finds the proposed action acceptable.

The current TS specifies the required reactor coolant loops, Loops A, B, C, and D and their associated steam generators and reactor coolant pumps. The licensee proposed moving this description of what constitutes the RCS loops to the TS Bases. With this change, TS 3.4.1.2 would continue to maintain the requirements for loop operability, and it would conform to the guidance of NUREG-1431. Because the criteria in 10 CFR 50.36 do not require the coolant loops to be described in the TSs, the staff finds the proposed change acceptable.

Currently, the LCO provides an exception that allows all of the reactor coolant pumps to be de-energized for up to one hour given certain conditions. The licensee has proposed, consistent with the ISTSs, to limit entry into this condition to once per eight hours. Currently, this exception has no limits on number of times entered, and the licensee could, absent any restrictions, de-energize all pumps for an hour, start them, and then immediately reenter the exception by de-energizing them for another hour. Because this type of operation was not intended for this exception, the licensee proposed adopting the once per eight-hour restriction to the exception. Since this change is more restrictive than the original exception, the staff finds it acceptable.

The licensee proposed deleting selected wording from SR 4.4.1.2.1. This SR requires the licensee to verify reactor coolant pump operability once every seven days. FPLE Seabrook proposed deleting the words, "...if not in operation," from the surveillance. This change would now require the licensee to verify the operability of operating pumps (in addition to de-energized pumps), whereas this was not previously required. This deletion is conservative in nature and,

therefore, acceptable. The proposed change would require performing the surveillance 24 hours after a required pump stops operating and every seven days thereafter until the pumps are operating again. Currently, the licensee must perform the surveillance every seven days regardless of the plant condition. Because an operating pump verifies operability, this proposed change does not reduce the effectiveness of the SR. Additionally, this exception follows the guidance of the ISTSs. Since the SR continues to verify the operability of the required reactor coolant pumps, the staff finds the proposed changes acceptable.

3.4 TS 3/4.4.3, “Reactor Coolant System, Pressurizer”

TS 3.4.3 sets the limits for pressurizer operability. The licensee has proposed adding the requirement that the pressurizer heaters be capable of being powered from an emergency power supply. This change is conservative with respect to accident analyses and, therefore, the staff finds it acceptable.

The licensee, consistent with the ISTSs, proposed deleting the requirement to open the reactor trip breakers when the pressurizer is inoperable, replacing it with the requirement to fully insert all of the rods and to place the Control Rod Drive System in a condition incapable of rod withdrawal when the pressurizer is inoperable. Fully inserting the control rods and making the Control Rod Drive System incapable of rod withdrawal performs the same function as opening the reactor trip breakers. These changes to the TS would add operational flexibility as to which breakers could be opened for preventing rod withdrawal. The purpose of this action is to immediately place the reactor in a safe condition and prevent any subsequent positive reactivity additions. This action is accomplished by removing power from the control rod drive assemblies. Opening the reactor trip breakers is only one of the ways available to the operators to accomplish this action. The proposed change will require the same safety function to be accomplished in a manner equivalent to that of the current TSs and is, therefore, acceptable.

3.5 TS 3/4.9.2, “Refueling Operations, Instrumentation”

LCO 3.9.2 sets the requirements for Source Range Neutron Flux Monitor operability, and Action “b” of the TS sets the actions to be taken when both of the required monitors are inoperable. Consistent with the ISTSs, FPLE Seabrook proposed adding a requirement to Action “b” to immediately initiate corrective action to restore one source range neutron flux monitor to operable status. This proposal is conservative with respect to the previous requirements; therefore, the staff finds the change acceptable.

Additionally, the licensee has proposed to replace the performance of the ANALOG CHANNEL OPERATIONAL TESTS eight hours prior to core alterations and once per seven days with the performance of a CHANNEL CALIBRATION once per 18 months (which coincides with Seabrook’s refueling frequency). The proposed change is consistent with the ISTS. TS 3/4.9.2 is only applicable in MODE 6 (Refueling), which is a condition where all control rods are fully inserted and the control rod drive system is incapable of rod withdrawal. The purpose of TS 3/4.9.2 is to ensure that there is redundant monitoring capability of reactivity changes in the core.

This TS works in concert with TS 3/4.9.1, which requires verification that K_{eff} is maintained at, or below, 0.95 (i.e., subcritical) or that the refueling canal has a boron concentration of 2000 ppm or greater, whichever is more restrictive. This restriction, in combination with the control rods being fully inserted, provides protection against inadvertent criticality.

As previously stated, the purpose of TS 3/4.9.2 is to ensure the redundant monitoring of reactivity changes in the core. Before entering MODE 6, where this TS becomes applicable, the operability of the Source Range Neutron Flux Monitors is verified in MODES 2 through 5 by TS 3/4.3.1. Additionally, the licensee stated that the historic surveillance data for the instruments indicates that they will not drift significantly during the time frame of a refueling outage. Given the previous verification of operability of the monitors by TS 3/4.3.1, and their historic stability, the staff finds that TS modification will continue to provide adequate verification that the Source Range Neutron Monitors are capable of monitoring reactivity changes in the core. In addition, there is a low likelihood of any changes in the core reactivity. The staff, therefore, finds the change to be acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Hampshire and Massachusetts State officials were notified of the proposed issuance of the amendment. The State officials had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR Part 20, and changes SRs. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (67 FR 75880). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (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.

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