



**North  
Atlantic**

North Atlantic Energy Service Corporation  
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The Northeast Utilities System

June 12, 2001  
Docket No. 50-443

NYN-01043

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Seabrook Station  
License Amendment Request 01-03  
“Reactor Coolant Pump Flywheel Inspection And Administrative Changes”

North Atlantic Energy Service Corporation (North Atlantic) has enclosed herein License Amendment Request (LAR) 01-03. License Amendment Request 01-03 is submitted pursuant to the requirements of 10 CFR 50.90 and 10 CFR 50.4.

LAR 01-03 proposes changes to the Seabrook Station Technical Specifications (TS) 3/4.4.10 (“Reactor Coolant Systems – Structural Integrity”) and its associated Bases Section 3/4.4.10. In addition, LAR 01-03 proposes changes to Seabrook Station TS 6.4 (“Review And Audit”), specifically subsections 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3.

TS Surveillance 4.4.10 requires each reactor coolant pump flywheel to be inspected per the recommendations of Regulatory Position C.4b of NRC Regulatory Guide 1.14, Revision 1, August 1975. The NRC, in a letter dated September 12, 1996, “Acceptance for Referencing of Topical Report WCAP-14535 ‘Topical Report on Reactor Coolant Pump Flywheel Inspection Elimination,’” provided an acceptable inspection alternative to that currently specified in TS Surveillance 4.4.10. This proposed revision to the Seabrook Technical Specifications incorporates the alternative inspection requirements into TS Surveillance 4.4.10 and provides further information in TS Bases Section 3/4.4.10. The NRC has issued reactor coolant pump flywheel inspection License Amendments to several plants, with the most recent including Millstone 3, McGuire and South Texas.

When 10 CFR 50.59 was revised, the terminology “unreviewed safety question,” was removed. TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 use the phrase “an unreviewed safety question” and this LAR proposes replacing the phrase with “a need for a license amendment.” These changes are consistent with the revision to 10 CFR 50.59.

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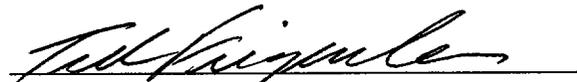
The Station Operation Review Committee and the Nuclear Safety Audit Review Committee have reviewed LAR 01-03.

As discussed in the enclosed LAR Section IV, the proposed change does not involve a significant hazard consideration pursuant to 10 CFR 50.92. A copy of this letter and the enclosed LAR has been forwarded to the New Hampshire State Liaison Officer pursuant to 10 CFR 50.91(b). North Atlantic requests NRC Staff review of LAR 01-03, and issuance of a license amendment by December 10, 2001 (see Section V enclosed).

North Atlantic has determined that LAR 01-03 meets the criterion of 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10) for a categorical exclusion from the requirements for an Environmental Impact Statement (see Section VI enclosed).

Should you have any questions regarding this letter, please contact Mr. James M. Peschel, Manager - Regulatory Programs, at (603) 773-7194.

Very truly yours,  
NORTH ATLANTIC ENERGY SERVICE CORP.



Ted C. Feigenbaum  
Executive Vice President  
and Chief Nuclear Officer

cc: H. J. Miller, NRC Region I Administrator  
V. Nerses, NRC Project Manager, Project Directorate I-2  
G.T. Dentel, NRC Senior Resident Inspector

Mr. Woodbury P. Fogg, P.E., Director  
New Hampshire Office of Emergency Management  
State Office Park South  
107 Pleasant Street  
Concord, NH 03301



**North  
Atlantic**

**SEABROOK STATION UNIT 1**

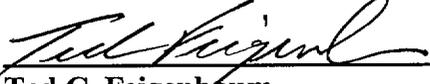
**Facility Operating License NPF-86  
Docket No. 50-443**

**License Amendment Request 01-03,  
"Reactor Coolant Pump Flywheel Inspection And Administrative Changes"**

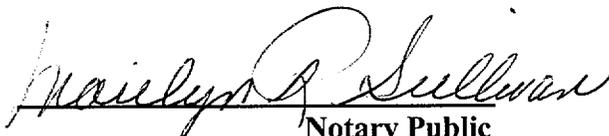
**This License Amendment Request is submitted by North Atlantic Energy Service Corporation pursuant to 10CFR50.90. The following information is enclosed in support of this License Amendment Request:**

- **Section I - Introduction and Safety Assessment for Proposed Changes**
- **Section II - Markup of Proposed Changes**
- **Section III - Retype of Proposed Changes**
- **Section IV - Determination of Significant Hazards for Proposed Changes**
- **Section V - Proposed Schedule for License Amendment Issuance  
And Effectiveness**
- **Section VI - Environmental Impact Assessment**

**I, Ted C. Feigenbaum, Executive Vice President and Chief Nuclear Officer of North Atlantic Energy Service Corporation 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.**

  
**Ted C. Feigenbaum  
Executive Vice President  
and Chief Nuclear Officer**

**Sworn and Subscribed  
before me this  
12th day of June, 2001**

  
**Notary Public**

**MARILYN R. SULLIVAN, Notary Public  
My Commission Expires March 19, 2002**

**SECTION I**

**INTRODUCTION AND SAFETY ASSESSMENT FOR PROPOSED CHANGES**

## **I. INTRODUCTION AND SAFETY ASSESSMENT OF PROPOSED CHANGES**

### **A. Introduction**

License Amendment Request (LAR) 01-03 proposes changes to the Seabrook Station Technical Specifications (TS) 3/4.4.10 (“Reactor Coolant Systems – Structural Integrity”) and its associated Bases Section 3/4.4.10. In addition, LAR 01-03 proposes changes to Seabrook Station TS 6.4 (“Review And Audit”), specifically subsections 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3.

TS Surveillance 4.4.10 requires each reactor coolant pump flywheel to be inspected per the recommendations of Regulatory Position C.4b of NRC Regulatory Guide 1.14, Revision 1, August 1975. The NRC, in a letter dated September 12, 1996, “Acceptance for Referencing of Topical Report WCAP-14535 ‘Topical Report on Reactor Coolant Pump Flywheel Inspection Elimination,’” provided an acceptable inspection alternative to that currently specified in TS Surveillance 4.4.10. This proposed revision to the Seabrook Station Technical Specifications incorporates the alternative inspection requirements into TS Surveillance 4.4.10 and provides further information in TS Bases Section 3/4.4.10.

When 10 CFR 50.59 was revised, the terminology “unreviewed safety question,” was removed. TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 use the phrase “an unreviewed safety question” and this LAR proposes replacing the phrase with “a need for a license amendment.” These changes are consistent with the revision to 10 CFR 50.59.

### **B. Safety Assessment of Proposed Changes**

Topical Report WCAP-14535A provides the technical basis for reducing reactor coolant pump flywheel inspections on all operating domestic Westinghouse plants and several Babcock and Wilcox plants. WCAP-14535A, Sections 3 and 4 provide a historical survey of inspection results, and document the stress and fracture evaluations done in support of the recommendation to eliminate inspections. The inspection survey included 57 plants. A total of 729 examination results on 217 flywheels were reported. WCAP-14535A concludes that in no case were there indications that would affect flywheel integrity. In particular, WCAP-14535A, Table 3-1 identifies that Seabrook Station has had 8 flywheel inspections with no recordable indications.

WCAP Table 2-1 organizes the affected power plants into 15 groups with each group having flywheels of identical parameters which are: outer diameter, bore keyway radial length, pump and motor inertia, and material type. The Seabrook Station reactor coolant pump flywheels are in Group 3 and have the following parameters:

Outer Diameter:	75.00 inches
Bore:	9.375 inches
Keyway Radial Length:	0.937 inches
Pump and Motor Inertia:	95,000 Lb <sub>m</sub> -ft <sup>2</sup>
Material Type:	SA533B

From the flywheel dimensional information provided in Table 2-1, six groups were selected for stress and fracture evaluation, which encompass the range of domestic flywheel dimensions covered by the WCAP. While Group 3 was not selected, Group 1, which conservatively bounds Group 3, was included in the evaluation. The parameter values for Group 1 are identical to Group 3 except that the Outer Diameter is 76.50 inches and Pump and Motor Inertia is 110,000 Lb<sub>m</sub>-ft<sup>2</sup>.

The stress and fracture evaluation included ductile failure analysis, nonductile failure analysis (including fatigue crack growth), and excessive deformation analysis. The WCAP Stress and Fracture Summary states that the reactor coolant pump flywheels have a very high tolerance for the presence of flaws, and that there is no significant deformation of the flywheels even at maximum overspeed conditions. The Stress and Fracture Summary also indicates that calculations show fatigue crack growth from large postulated flaws in each of the flywheel groups is only a few mils. The Stress and Fracture Summary concludes that the flywheel inspections completed prior to service are sufficient to ensure their integrity during service, and indicates the most likely source of inservice degradation is damage to the keyway region which could occur during disassembly or reassembly for inspection.

The NRC reviewed WCAP-14535 at the request of Duquesne Light Company for Beaver Valley 1 & 2. The NRC, in a letter dated September 24, 1996, found the WCAP to be acceptable for referencing in license applications to the extent specified and under the limitations delineated in the report and the associated NRC Safety Evaluation. The NRC Safety Evaluation conclusions (Section 4) are that the WCAP evaluation methodology is appropriate and the criteria is in accordance with the design criteria of RG 1.14. However, the NRC Safety Evaluation also concludes that even for flywheels meeting all the design criteria of Regulatory Guide 1.14, as modified by the NRC Safety Evaluation, inspections should not be completely eliminated. The NRC Safety Evaluation notes that inspections are performed in part to protect against events or degradation that are not anticipated and have not been considered in the analysis. While the NRC Safety Evaluation concludes it is not acceptable to eliminate flywheel inspection, it does recommend the following (as applied to Seabrook Station):

- (1) Licensees who plan to submit a plant-specific application of this topical report for flywheels made of SA533B material need to confirm that their flywheels are made of SA533B material.
- (2) Licensees, meeting the above criteria (or another material criteria not applicable to Seabrook Station) should, once every 10 years, either conduct a qualified in-place UT examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius, or conduct a surface examination (MT and/or PT) of exposed surfaces of the disassembled flywheels.\*

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\* As stated in Follow-up Clarification 3 (WCAP-14535A, Appendix H, November 1996), the SER statement "exposed surfaces defined by the volume of the disassembled flywheels" was clarified by the NRC Staff to mean the "exposed surfaces of the disassembled flywheels."

Seabrook Station has Certified Material Test Reports that verify the flywheel material is SA533B for all four reactor coolant pump motors and the spare motor. Additionally, this proposed revision to TS Surveillance 4.4.10 will implement the inspection criteria specified in item (2) above.

The proposed changes to TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 are administrative in nature and simply update the Seabrook Station Operating License to reflect the requirements of 10 CFR 50.59. The proposed changes do not delete or modify any requirements of the Operating License. In addition, the proposed changes do not affect nor modify the physical configuration of the facility or the manner in which it responds to normal, transient or accident conditions, nor do they affect nor the revise the operation, maintenance and management of the facility.

North Atlantic concludes that based upon the above discussion as well as the Determination of Significant Hazards for Proposed Changes, presented in Section IV, that the proposed changes do not adversely affect or endanger the health or safety of the general public or involve a significant safety hazard.

## SECTION II

### MARKUP OF PROPOSED CHANGES

Refer to the attached markup of the proposed changes to the Technical Specifications. The attached markup reflects the currently issued revision of the Technical Specifications listed below. Pending Technical Specifications or Technical Specification changes issued subsequent to this submittal are not reflected in the enclosed markup.

The following Technical Specification changes are included in the attached markup:

<u>Technical Specification</u>	<u>Title</u>	<u>Page</u>
4.4.10	Reactor Coolant System Structural Integrity	3/4 4-37
Bases 3/4.4.10	Reactor Coolant System Structural Integrity	B 3/4 4-17
6.4.1.7.b	Administrative Controls Review And Audit Station Operation Review Committee (SORC) Responsibilities	6-8
6.4.2.2.d and 6.4.2.3	Administrative Controls Review And Audit Station Qualified Reviewer Program Responsibilities	6-8A

## REACTOR COOLANT SYSTEM

### STRUCTURAL INTEGRITY

#### LIMITING CONDITION FOR OPERATION

3.4.10 The structural integrity of ASME Code Class 1, 2, and 3 components shall be maintained in accordance with Specification 4.4.10.

APPLICABILITY: All MODES.

#### ACTION:

- a. With the structural integrity of any ASME Code Class 1 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) prior to increasing the Reactor Coolant System temperature more than 50°F above the minimum temperature required by NDT considerations.
- b. With the structural integrity of any ASME Code Class 2 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) prior to increasing the Reactor Coolant System temperature above 200°F.
- c. With the structural integrity of any ASME Code Class 3 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) from service.

#### SURVEILLANCE REQUIREMENTS

4.4.10 In addition to the requirements of Specification 4.0.5, each reactor coolant pump flywheel shall be inspected per the recommendations of Regulatory Position C.4.b of Regulatory Guide 1.14, Revision 1, August 1975.

inspected at least once every 10 years. This inspection shall be by either of the following examinations:

- a. An in-place examination, utilizing ultrasonic testing, over the volume from the inner bore of the flywheel to the circle of one-half the outer radius; or
- b. A surface examination, utilizing magnetic particle testing and/or penetrant testing, of the exposed surfaces of the disassembled flywheel.

## REACTOR COOLANT SYSTEM

### BASES

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#### 3/4.4.10 STRUCTURAL INTEGRITY

The inservice inspection and testing programs for ASME Code Class 1, 2, and 3 components ensure that the structural integrity and operational readiness of these components will be maintained at an acceptable level throughout the life of the plant. These programs are in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a(g) except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i).

Components of the Reactor Coolant System were designed to provide access to permit inservice inspections in accordance with Section XI of the ASME Boiler and Pressure Vessel Code.

#### 3/4.4.11 REACTOR COOLANT SYSTEM VENTS

Reactor Coolant System vents are provided to exhaust noncondensable gases and/or steam from the Reactor Coolant System that could inhibit natural circulation core cooling. The OPERABILITY of at least one Reactor Coolant System vent path from the reactor vessel head and the pressurizer steam space ensures that the capability exists to perform this function.

The valve redundancy of the Reactor Coolant System vent paths serves to minimize the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve, power supply, or control system does not prevent isolation of the vent path.

The function, capabilities, and testing requirements of the Reactor Coolant System vents are consistent with the requirements of Item II.B.1 of NUREG-0737, "Clarification of TMI Action Plant Requirements," November 1980.

As stated in Appendix H of WCAP-14535A (November 1996), Appendix VIII of Section XI of the ASME Boiler and Pressure Vessel Code is not applicable when examining the reactor coolant pump flywheels.

## ADMINISTRATIVE CONTROLS

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### 6.4.1.7 The SORC shall:

- a. Recommend in writing to the Station Director approval or disapproval of items considered under Specification 6.4.1.6a. through d;
- b. Render determinations in writing with regard to whether or not each item considered under Specification 6.4.1.6a., b. and d. constitutes ~~an~~ *unreviewed safety question*; and *a need for a license amendment*
- c. Provide written notification within 24 hours to the Executive Vice President & Chief Nuclear Officer and the NSARC of disagreement between the SORC and the Station Director however, the Station Director shall have responsibility for resolution of such disagreements pursuant to Specification 6.1.1.

## RECORDS

6.4.1.8 The SORC shall maintain written minutes of each SORC meeting that, at a minimum, document the results of all SORC activities performed under the responsibility provisions of these Technical Specifications. Copies shall be provided to the Executive Vice President & Chief Nuclear Officer and the NSARC.

## 6.4.2 STATION QUALIFIED REVIEWER PROGRAM

### FUNCTION

6.4.2.1 The Station Director may establish a Station Qualified Reviewer Program whereby required reviews of designated procedures or classes of procedures required by Specification 6.4.1.6.a are performed by Station Qualified Reviewers and approved by the designated department heads. These reviews are in lieu of reviews by the SORC. However, procedures which require a 10 CFR 50.59 evaluation must be reviewed by the SORC.

### RESPONSIBILITIES

#### 6.4.2.2 The Station Qualified Reviewer Program shall:

- a. Provide for the review of designated procedures, programs, and changes thereto by a Qualified Reviewer(s) other than the individual who prepared the procedure, program, or change.
- b. Provide for cross-disciplinary review of procedures, programs, and changes thereto when organizations other than the preparing organization are affected by the procedure, program, or change.
- c. Ensure cross-disciplinary reviews are performed by a Qualified Reviewer(s) in affected disciplines, or by other persons designated by cognizant department heads as having specific expertise required to assess a particular procedure, program or change. Cross-disciplinary reviewers may function as a committee.

## ADMINISTRATIVE CONTROLS

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- d. Provide for a screening of designated procedures, programs and changes thereto to determine if an evaluation should be performed in accordance with the provisions of 10 CFR 50.59 to verify that ~~an unreviewed safety question~~ does not exist. This screening will be performed by personnel trained and qualified in performing 10 CFR 50.59 screenings.
- e. Provide for written recommendation by the Qualified Reviewer(s) to the responsible department head for approval or disapproval of procedures and programs considered under Specification 6.4.1.6a and that the procedure or program was screened by a qualified individual and found not to require a 10 CFR 50.59 evaluation.

6.4.2.3 If the responsible department head determines that a new program, procedure, or change thereto requires a 10 CFR 50.59 evaluation, that designated department head will ensure the required evaluation is performed to determine if the new procedure, program, or change involves ~~an unreviewed safety question~~. The new procedure, program, or change will then be forwarded with the 10 CFR 50.59 evaluation to SORC for review.

6.4.2.4 Personnel recommended to be Station Qualified Reviewers shall be designated in writing by the Station Director for each procedure, program, or class of procedure or program within the scope of the Station Qualified Reviewer Program.

6.4.2.5 Temporary procedure changes shall be made in accordance with Specification 6.7.3 with the exception that changes to procedures for which reviews are assigned to Qualified Reviewers will be reviewed and approved as described in Specification 6.4.2.2.

### RECORDS

6.4.2.6 The review of procedures and programs performed under the Station Qualified Reviewer Program shall be documented in accordance with administrative procedures.

### TRAINING AND QUALIFICATION

6.4.2.7 The training and qualification requirements of personnel designated as a Qualified Reviewer in accordance with the Station Qualified Reviewer Program shall be in accordance with administrative procedures. Qualified reviewers shall have:

- a. A Bachelors degree in engineering, related science, or technical discipline, and two years of nuclear power plant experience;

OR

- b. Six years of nuclear power plant experience;

OR

- c. An equivalent combination of education and experience as approved by the designated department head.

### **SECTION III**

#### **RETYPE OF PROPOSED CHANGES**

Refer to the attached retype of the proposed changes to the Technical Specifications. The attached retype reflects the currently issued version of the Technical Specifications. Pending Technical Specification changes or Technical Specification changes issued subsequent to this submittal are not reflected in the enclosed retype. The enclosed retype should be checked for continuity with Technical Specifications prior to issuance.

## REACTOR COOLANT SYSTEM

### STRUCTURAL INTEGRITY

#### LIMITING CONDITION FOR OPERATION

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3.4.10 The structural integrity of ASME Code Class 1, 2, and 3 components shall be maintained in accordance with Specification 4.4.10.

APPLICABILITY: All MODES.

ACTION:

- a. With the structural integrity of any ASME Code Class 1 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) prior to increasing the Reactor Coolant System temperature more than 50°F above the minimum temperature required by NDT considerations.
- b. With the structural integrity of any ASME Code Class 2 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) prior to increasing the Reactor Coolant System temperature above 200°F.
- c. With the structural integrity of any ASME Code Class 3 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) from service.

#### SURVEILLANCE REQUIREMENTS

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4.4.10 In addition to the requirements of Specification 4.0.5, each reactor coolant pump flywheel shall be inspected at least once every 10 years. This inspection shall be by either of the following examinations:

- a. An in-place examination, utilizing ultrasonic testing, over the volume from the inner bore of the flywheel to the circle of one-half the outer radius; or
- b. A surface examination, utilizing magnetic particle testing and/or penetrant testing, of the exposed surfaces of the disassembled flywheel.

## REACTOR COOLANT SYSTEM

### BASES

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#### 3/4.4.10 STRUCTURAL INTEGRITY

The inservice inspection and testing programs for ASME Code Class 1, 2, and 3 components ensure that the structural integrity and operational readiness of these components will be maintained at an acceptable level throughout the life of the plant. These programs are in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a(g) except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i).

Components of the Reactor Coolant System were designed to provide access to permit inservice inspections in accordance with Section XI of the ASME Boiler and Pressure Vessel Code.

As stated in Appendix H of WCAP-14535A (November 1996), Appendix VIII of Section XI of the ASME Boiler and Pressure Vessel Code is not applicable when examining the reactor coolant pump flywheels.

#### 3/4.4.11 REACTOR COOLANT SYSTEM VENTS

Reactor Coolant System vents are provided to exhaust noncondensable gases and/or steam from the Reactor Coolant System that could inhibit natural circulation core cooling. The OPERABILITY of least one Reactor Coolant System vent path from the reactor vessel head and the pressurizer steam space ensures that the capability exists to perform this function.

The valve redundancy of the Reactor Coolant System vent paths serves to minimize the probability of inadvertent or irreversible actuation while ensuring that a single failure of a vent valve, power supply, or control system does not prevent isolation of the vent path.

The function, capabilities, and testing requirements of the Reactor Coolant System vents are consistent with the requirements of Item II.B.1 of NUREG-0737, "Clarification of TMI Action Plant Requirements," November 1980.

## ADMINISTRATIVE CONTROLS

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### 6.4.1.7 The SORC shall:

- a. Recommend in writing to the Station Director approval or disapproval of items considered under Specification 6.4.1.6a. through d;
- b. Render determinations in writing with regard to whether or not each item considered under Specification 6.4.1.6a., b. and d. constitutes a need for a license amendment; and
- c. Provide written notification within 24 hours to the Executive Vice President & Chief Nuclear Officer and the NSARC of disagreement between the SORC and the Station Director however, the Station Director shall have responsibility for resolution of such disagreements pursuant to Specification 6.1.1.

## RECORDS

6.4.1.8 The SORC shall maintain written minutes of each SORC meeting that, at a minimum, document the results of all SORC activities performed under the responsibility provisions of these Technical Specifications. Copies shall be provided to the Executive Vice President & Chief Nuclear Officer and the NSARC.

## 6.4.2 STATION QUALIFIED REVIEWER PROGRAM

### FUNCTION

6.4.2.1 The Station Director may establish a Station Qualified Reviewer Program whereby required reviews of designated procedures or classes of procedures required by Specification 6.4.1.6.a are performed by Station Qualified Reviewers and approved by the designated department heads. These reviews are in lieu of reviews by the SORC. However, procedures which require a 10 CFR 50.59 evaluation must be reviewed by the SORC.

### RESPONSIBILITIES

#### 6.4.2.2 The Station Qualified Reviewer Program shall:

- a. Provide for the review of designated procedures, programs, and changes thereto by a Qualified Reviewer(s) other than the individual who prepared the procedure, program, or change.
- b. Provide for cross-disciplinary review of procedures, programs, and changes thereto when organizations other than the preparing organization are affected by the procedure, program, or change.
- c. Ensure cross-disciplinary reviews are performed by a Qualified Reviewer(s) in affected disciplines, or by other persons designated by cognizant department heads as having specific expertise required to assess a particular procedure, program or change. Cross-disciplinary reviewers may function as a committee.

## ADMINISTRATIVE CONTROLS

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- d. Provide for a screening of designated procedures, programs and changes thereto to determine if an evaluation should be performed in accordance with the provisions of 10 CFR 50.59 to verify that a need for a license amendment does not exist. This screening will be performed by personnel trained and qualified in performing 10 CFR 50.59 screenings.
- e. Provide for written recommendation by the Qualified Reviewer(s) to the responsible department head for approval or disapproval of procedures and programs considered under Specification 6.4.1.6a and that the procedure or program was screened by a qualified individual and found not to require a 10 CFR 50.59 evaluation.

6.4.2.3 If the responsible department head determines that a new program, procedure, or change thereto requires a 10 CFR 50.59 evaluation, that designated department head will ensure the required evaluation is performed to determine if the new procedure, program, or change involves a need for a license amendment. The new procedure, program, or change will then be forwarded with the 10 CFR 50.59 evaluation to SORC for review.

6.4.2.4 Personnel recommended to be Station Qualified Reviewers shall be designated in writing by the Station Director for each procedure, program, or class of procedure or program within the scope of the Station Qualified Reviewer Program.

6.4.2.5 Temporary procedure changes shall be made in accordance with Specification 6.7.3 with the exception that changes to procedures for which reviews are assigned to Qualified Reviewers will be reviewed and approved as described in Specification 6.4.2.2.

## RECORDS

6.4.2.6 The review of procedures and programs performed under the Station Qualified Reviewer Program shall be documented in accordance with administrative procedures.

## TRAINING AND QUALIFICATION

6.4.2.7 The training and qualification requirements of personnel designated as a Qualified Reviewer in accordance with the Station Qualified Reviewer Program shall be in accordance with administrative procedures. Qualified reviewers shall have:

- a. A Bachelors degree in engineering, related science, or technical discipline, and two years of nuclear power plant experience;

OR

- b. Six years of nuclear power plant experience;

OR

- c. An equivalent combination of education and experience as approved by the designated department head.

**SECTION IV**

**DETERMINATION OF SIGNIFICANT HAZARDS FOR PROPOSED CHANGES**

#### **IV. DETERMINATION OF SIGNIFICANT HAZARDS FOR PROPOSED CHANGES**

License Amendment Request (LAR) 01-03 proposes changes to the Seabrook Station Technical Specifications (TS) 3/4.4.10 (“Reactor Coolant Systems – Structural Integrity”) and its associated Bases Section 3/4.4.10. In addition, LAR 01-03 proposes changes to Seabrook Station TS 6.4 (“Review And Audit”), specifically subsections 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3.

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When 10 CFR 50.59 was revised, the terminology “unreviewed safety question,” was removed. TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 use the phrase “an unreviewed safety question” and this LAR proposes replacing the phrase with “a need for a license amendment.” These changes are consistent with the revision to 10 CFR 50.59.

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

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

This proposed revision to TS Surveillance 4.4.10, incorporates alternative reactor coolant pump flywheel inspection requirements into TS Surveillance 4.4.10 based on Topical Report WCAP-14535A. WCAP-14535A provided a technical basis for the elimination of inspection requirements for reactor coolant pump flywheels based on industry data. The industry data indicated that no indications that would affect the integrity of flywheels were revealed during 729 examinations of 217 flywheels at 57 plants (including Seabrook Station). The NRC, during their review and approval of the WCAP required continued inspections on a ten-year interval to protect against events and degradation that were not anticipated and had not been considered in the WCAP analysis. The proposed alternate inspection requirements are consistent with the conclusions of an NRC review and generic approval of Topical Report WCAP-14535A. Thus, it is concluded that the proposed revision to TS Surveillance 4.4.10 does not significantly increase the probability of an accident. Additionally, the performance of reactor coolant pump flywheel surveillances does not increase the consequence of an accident previously evaluated.

The proposed changes to TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 do not adversely affect accident initiators or precursors nor alter the design assumptions, conditions, and configuration of the facility or the manner in which the plant is operated and maintained. In addition, these proposed changes do not affect the manner in which the plant responds in normal operation, transient or accident conditions nor do they change procedures related to operation of the plant. The proposed changes to TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 do not alter or prevent the ability of structures, systems and components (SSCs) to perform their intended function to mitigate the consequences of an initiating event within the acceptance limits assumed in the Updated Final Safety Analysis Report (UFSAR). These proposed changes are administrative in nature and only update the Operation License.

The proposed changes to TS 4.4.10, 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 are administrative in nature and only update the Seabrook Station Operating License. These proposed changes do not affect the source term, containment isolation or radiological release assumptions used in evaluating the radiological consequences of an accident previously evaluated in the Seabrook Station UFSAR. Further, the proposed changes do not increase the types and amounts of radioactive effluent that may be released offsite, nor significantly increase individual or cumulative occupational/public radiation exposures.

Therefore, it is concluded that these proposed revisions to TS 4.4.10, 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 do not involve a significant increase in the probability or consequence of an accident previously evaluated.

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

This proposed revision to TS Surveillance 4.4.10 does not change the operation or the design basis of any plant system or component during normal or accident conditions. The proposed change incorporates alternate inspection requirements for the reactor coolant pump flywheels, which were generically approved by the NRC for use by licensees. This change does not include any physical changes to the plant. The proposed changes do not change the function or operation of plant equipment or introduce any new failure mechanisms. The plant equipment will continue to respond per the design and analyses and there will not be a malfunction of a new or different type introduced by the proposed changes.

The proposed changes to TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 are administrative in nature and only update the Seabrook Station Operating License. These proposed changes do not modify the facility nor do they modify the manner in which the plant will be operated nor do they affect the plant's response to normal, transient or accident conditions. The proposed changes to TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 do not introduce a new mode of plant operation. The plant's design and design basis are not revised and the current safety analyses will remain in effect and the plant will continue to be operated in accordance with the existing Technical Specifications.

Thus, these proposed revisions to TS 4.4.10, 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 do 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.*

This proposed revision to TS Surveillance 4.4.10 incorporates alternative reactor coolant pump flywheel inspection requirements into TS Surveillance 4.4.10 that are consistent with the conclusions of an NRC review and generic approval of Topical Report WCAP-14535A. The current inspection requirements of TS Surveillance 4.4.10 and the NRC review of WCAP-14535A were both based on the recommendations of Regulatory Guide 1.14. The proposed changes do not change the function or operation of plant equipment or affect the response of that equipment if it is called upon to operate. The performance capability of the reactor coolant pumps will not be affected. Reactor coolant pump reliability and availability will be unaffected by implementation of the proposed changes.

The proposed changes to TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 are administrative in nature and only update the Seabrook Station Operating License. The safety margins established through Limiting Conditions for Operation, Limiting Safety System Settings and Safety Limits as specified in the Technical Specifications are not revised. Neither the plant design, nor its method of operation, are revised by these proposed changes. Finally, the proposed changes to TS 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 do not change the physical design or the operation of the plant.

Thus, it is concluded that these proposed revisions to TS 4.4.10, 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 do not involve a significant reduction in a margin of safety.

Based on the above evaluation, North Atlantic concludes that the proposed changes to TS 4.4.10, 6.4.1.7.b, 6.4.2.2.d and 6.4.2.3 do not constitute a significant hazard.

**SECTIONS V AND VI**  
**PROPOSED SCHEDULE FOR LICENSE AMENDMENT ISSUANCE**  
**AND EFFECTIVENESS**  
**AND**  
**ENVIRONMENTAL IMPACT ASSESSMENT**

**V. PROPOSED SCHEDULE FOR LICENSE AMENDMENT ISSUANCE AND EFFECTIVENESS**

North Atlantic requests NRC review of License Amendment Request 01-03, and issuance of a license amendment by December 10, 2001, having immediate effectiveness and implementation within 90 days.

**VI. ENVIRONMENTAL IMPACT ASSESSMENT**

North Atlantic has reviewed the proposed license amendment against the criteria of 10 CFR 51.22 for environmental considerations. The proposed changes do not involve a significant hazards consideration, nor increase the types and amounts of effluent that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, North Atlantic concludes that the proposed changes meet the criterion delineated in 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10) for a categorical exclusion from the requirements for an Environmental Impact Statement.