



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

Docket  
File

50-443

November 28, 1995

Mr. Ted C. Feigenbaum  
Senior Vice President  
and Chief Nuclear Officer  
North Atlantic Energy Service Corporation  
P.O. Box 300  
Seabrook, NH 03874

SUBJECT: AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE NPF-86: REACTOR  
COOLANT SYSTEM PRESSURE ISOLATION VALVES - DELETE TABLE 3.4-1 FROM  
SURVEILLANCE REQUIREMENT 4.4.6.2.2 - LICENSE AMENDMENT REQUEST 95-03  
(TAC NO. M92959)

Dear Mr. Feigenbaum:

The Commission has issued the enclosed Amendment No. 44 to Facility Operating License No. NPF-86 for the Seabrook Station, Unit No. 1, in response to your application dated July 24, 1995, as supplemented by letter dated October 30, 1995.

The amendment revises the Appendix A Technical Specifications (TS) relating to reactor coolant system leakage. Specifically, the amendment deletes Table 3.4-1, "Reactor Coolant System Pressure Isolation Valves" from the Seabrook Station, Unit No. 1 TS section 3.4.6.2. Also, reference to Table 3.4-1 is deleted from Limiting Condition for Operation 3.4.6.2 f and from Surveillance Requirement 4.4.6.2.2. The information contained in Table 3.4-1 is to be relocated to the *Technical Requirements Manual*. Additionally, a footnote providing certain exceptions from the requirements of SR 4.4.6.2.2d for the RHR Pump A and RHR Pump B Suction Isolation Valves previously located on Table 3.4-1 is relocated as a footnote to SR 4.4.6.2.2d.

North Atlantic is requested to confirm, prior to entry into Mode 4 from the fourth refueling outage, that the list of PIVs is located in the *Technical Requirements Manual*. This requirement affects nine or fewer respondents, and, therefore, is not subject to Office of Management and Budget review under P.L. 96-511.

In the October 30, 1995, supplement to the application, North Atlantic requested that the exception to the requirements of SR 4.4.6.2d also be extended to the RHR pump suction isolation valve bypass check valves. We have not made a determination regarding this proposal pending the submittal of additional information as discussed in the enclosed safety evaluation.

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DFOI  
w/

T. Feigenbaum

November 28, 1995

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

Sincerely,

Original signed by:

Albert W. De Agazio, Sr. Project Manager  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-443  
Serial No. SEA-95-026

Enclosures: 1. Amendment No. 44 to NPF-86  
2. Safety Evaluation

cc w/encls: See next page

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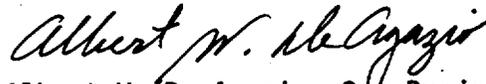
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T. Feigenbaum

November 28, 1995

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

Sincerely,



Albert W. De Agazio, Sr. Project Manager  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket No. 50-443  
Serial No. SEA-95-026

Enclosures: 1. Amendment No. 44 to NPF-86  
2. Safety Evaluation

cc w/encls: See next page

T. Feigenbaum  
North Atlantic Energy Service Corporation

Seabrook Station, Unit No. 1

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

NORTH ATLANTIC ENERGY SERVICE CORPORATION, ET AL\*

DOCKET NO. 50-443

SEABROOK STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 44  
License No. NPF-86

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by North Atlantic Energy Service Corporation, et al. (the licensee), dated July 24, 1995, and supplemented by letter dated October 30, 1995, 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.

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\*North Atlantic Energy Service Company (NAESCO) is authorized to act as agent for the: North Atlantic Energy Corporation, Canal Electric Company, The Connecticut Light and Power Company, Great Bay Power Corporation, Hudson Light and Power Department, Massachusetts Municipal Wholesale Electric Company, Montaup Electric Company, New England Power Company, New Hampshire Electric Cooperative, Inc., Taunton Municipal Light Plant, and The United Illuminating Company, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

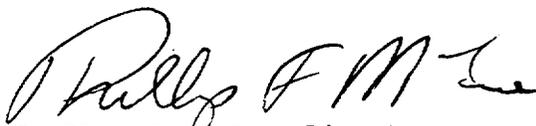
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-86 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 44, and the Environmental Protection Plan contained in Appendix B are incorporated into Facility License No. NPF-86. NAESCO shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION



Phillip F. McKee, Director  
Project Directorate I-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: November 28, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 44

FACILITY OPERATING LICENSE NO. NPF-86

DOCKET NO. 50-443

Replace the following pages of Appendix A, Technical Specifications, with the attached pages as indicated. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change. Overleaf pages have been provided.

Remove

3/4 4-21

3/4 4-22\*

3/4 4-23

3/4 4-24

Insert

3/4 4-21

3/4 4-22\*

3/4 4-23

3/4 4-24

## REACTOR COOLANT SYSTEM

### REACTOR COOLANT SYSTEM LEAKAGE

#### OPERATIONAL LEAKAGE

#### LIMITING CONDITION FOR OPERATION

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3.4.6.2 Reactor Coolant System leakage shall be limited to:

- a. No PRESSURE BOUNDARY LEAKAGE,
- b. 1 gpm UNIDENTIFIED LEAKAGE,
- c. 1 gpm total reactor-to-secondary leakage through all steam generators and 500 gallons per day through any one steam generator,
- d. 10 gpm IDENTIFIED LEAKAGE from the Reactor Coolant System,
- e. 40 gpm CONTROLLED LEAKAGE at a Reactor Coolant System pressure of 2235 psig  $\pm$  20 psig, and
- f. 0.5 gpm leakage per nominal inch of valve size up to a maximum of 5 gpm at a Reactor Coolant System pressure of 2235  $\pm$  20 psig from any Reactor Coolant System Pressure Isolation Valve.\*

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTION:

- a. With any PRESSURE BOUNDARY LEAKAGE, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With any Reactor Coolant System leakage greater than any one of the above limits, excluding PRESSURE BOUNDARY LEAKAGE and leakage from Reactor Coolant System Pressure Isolation Valves, reduce the leakage rate to within limits within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With any Reactor Coolant System Pressure Isolation Valve leakage greater than the above limit, isolate the high pressure portion of the affected system from the low pressure portion within 4 hours by use of at least two closed manual or deactivated automatic valves, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

\*Test pressures less than 2235 psig but greater than 150 psig are allowed. Observed leakage shall be adjusted for the actual test pressure up to 2235 psig assuming the leakage to be directly proportional to pressure differential to the one-half power.

## REACTOR COOLANT SYSTEM

### REACTOR COOLANT SYSTEM LEAKAGE

#### OPERATIONAL LEAKAGE

#### SURVEILLANCE REQUIREMENTS

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4.4.6.2.1 Reactor Coolant System leakages shall be demonstrated to be within each of the above limits by:

- a. Monitoring the containment atmosphere particulate radioactivity monitor at least once per 12 hours;
- b. Monitoring the containment drainage sump inventory and discharge at least once per 12 hours;
- c. Measurement of the CONTROLLED LEAKAGE to the reactor coolant pump seals when the Reactor Coolant System pressure is  $2235 \pm 20$  psig at least once per 31 days with the modulating valve fully open. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 or 4;
- d. Performance of a Reactor Coolant System water inventory balance within 12 hours after achieving steady-state operation\* and at least once per 72 hours thereafter during steady-state operation, except that not more than 96 hours shall elapse between any two successive inventory balances; and
- e. Monitoring the Reactor Head Flange Leakoff System at least once per 24 hours.

\* $T_{avg}$  being changed by less than 5°F/hour.

REACTOR COOLANT SYSTEM

REACTOR COOLANT SYSTEM LEAKAGE

OPERATIONAL LEAKAGE

SURVEILLANCE REQUIREMENTS

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4.4.6.2.2 Each Reactor Coolant System Pressure Isolation Valve shall be demonstrated OPERABLE by verifying leakage to be within its limit:

- a. At least once per 18 months,
- b. Prior to entering MODE 2 whenever the plant has been in COLD SHUTDOWN for 7 days or more and if leakage testing has not been performed in the previous 9 months,
- c. Prior to returning the valve to service following maintenance, repair, or replacement work on the valve, and
- d. Within 24 hours following valve actuation due to automatic or manual action or flow through the valve.\*
- e. As outlined in the ASME Code, Section XI, paragraph IWV-3427(b).

The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 or 4.

\*Not applicable to RHR Pumps 8A and 8B suction isolation valves.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE NO. NPF-86

NORTH ATLANTIC ENERGY SERVICE CORPORATION

SEABROOK STATION, UNIT NO. 1

DOCKET NO. 50-443

1.0 INTRODUCTION

By application dated July 24, 1995, North Atlantic Energy Service Corporation (North Atlantic) proposed an amendment to the Appendix A Technical Specifications (TS) for the Seabrook Station, Unit 1 (Seabrook). The proposed amendment would delete Table 3.4-1, "Reactor Coolant System Pressure Isolation Valves" from TS section 3.4.6.2. Reference to Table 3.4-1 also would be deleted from Limiting Condition for Operation (LCO) 3.4.6.2 f and from Surveillance Requirement (SR) 4.4.6.2.2. North Atlantic supplemented the application by letter dated October 30, 1995. The supplement proposes to relocate the exceptions provided by the footnote on Table 3.4-1 to a footnote to SR 4.4.6.2d. The footnote provides exceptions from the requirements of SR 4.4.6.2.2d for the RHR Pump A and RHR Pump B Suction Isolation Valves. North Atlantic also proposed to extend the exceptions provided by the footnote to certain other valves.

The information contained in Table 3.4-1 would be relocated to the *Technical Requirements Manual* (TRM).

The October 30, 1995, letter provided a minor revision to the application but that revision does not change the initial proposed no significant hazards consideration determination. However, that letter also contained a proposed change that cannot be considered to be encompassed by the initial proposed no significant hazards consideration determination. This latter proposal is not being acted upon at this time pending the submittal of additional information from North Atlantic. This latter proposal also will be discussed in an appropriate Federal Register notice pursuant to 10 CFR 50.91.

2.0 EVALUATION

North Atlantic has proposed to delete Table 3.4-1 and any reference thereto from TS 3.4.6.2, and to relocate the listing of pressure isolation valves (PIV) to the TRM. The TRM is a North Atlantic controlled document that has been developed to hold requirements relocated from the TS. Revisions to the TRM are reviewed pursuant to 10 CFR 50.59, and summaries of changes are included with the periodic 10 CFR 50.59 report. North Atlantic asserts that relocating the table from the TS will eliminate the burden of processing license amendments when changes are made to PIV configurations and will facilitate the more effective utilization of NRC and North Atlantic resources.

On May 6, 1991, the Commission issued Generic Letter 91-08 (GL 91-08) relating to the issue of removing component lists from the TS. GL 91-08 stated in part:

This guidance includes the incorporation of lists into plant procedures that are subject to the change control provisions for plant procedures in the Administrative Controls Section of the TS.

The removal of component lists from TS permits administrative control of changes to these lists without processing a license amendment, as is required to update TS component lists. Any change to component lists contained in plant procedures is subject to the requirements specified in the Administrative Controls Section of the TS on changes to plant procedures. Therefore, the change control provisions of the TS provide an adequate means to control changes to these component lists, when they have been incorporated into plant procedures, without including them in TS.

Licensees and applicants planning to adopt the line-item improvement were encouraged to propose changes consistent with the guidance contained in the two enclosures with the GL. Specific issues identified in Enclosure 1 to GL 91-08 to be addressed with a request to remove component lists from the TS include:

- (1) an appropriate description of the scope of the components to which the TS requirements apply,
- (2) revision of the specifications to incorporate any modification of or exception to TS requirements that are provided by notes to the deleted component lists, and
- (3) confirmation that the lists of components removed from the TS are located in appropriately controlled plant procedures.

With regard to item (1) above, the TS requirement remaining after the deletion of Table 3.1-1 from LCO 3.4.6.2.f still would apply to any PIV. 10 CFR 50.2, 10 CFR 50.55a(c), and General Design Criteria 55 of 10 CFR 50, Appendix A, define Reactor coolant system (RCS) pressure isolation valves (PIVs) as any two normally closed valves in series within the reactor coolant pressure boundary, which separate the high pressure RCS from an attached low pressure system. Therefore, deletion of reference to Table 3.4-1 from LCO 3.4.6.2.f does not affect the scope of component to which the TS requirements apply.

North Atlantic's supplement to the amendment request, dated October 30, 1995, would incorporate, in accordance with item (2) above, the exceptions from the requirements of SR 4.4.6.2.2d for the RHR Pump A and RHR Pump B suction isolation valves provided by the footnote to Table 3.4-1 into a footnote to SR 4.4.6.2d. This exception would be extended to the RHR Pump suction isolation valve bypass check valves which are to be installed during the fourth refueling outage as part of a modification to preclude the potential for

pressure-locking of the isolation valves. However, North Atlantic did not provide a description of the modification, an analysis of the safety aspects of the proposed modification and extension of the SR exception, and an analysis of the issue of no significant hazards relating to the proposed change. Therefore, pending submittal of this information, the staff is not acting upon this portion of the proposed amendment.

With regard to item (3), North Atlantic is requested to confirm, prior to entry into Mode 4 from the fourth refueling outage, that the list of PIVs is located in the TRM.

The enclosure to GL 91-08 specifically addressed the issue of PIVs stating, "Guidance on removing from the TS the list of reactor coolant system pressure isolation valves is pending the NRC staff's resolution of generic concerns with existing lists for these valves. In the interim, licensees should not submit proposals to remove this list from the TS."

Explicit guidance on removal of lists of PIVs from the TS has not been issued by the Commission. However, in September 1992, the Commission issued NUREG-1441, "Standard Technical Specifications, Westinghouse Plants" (STS). The list of PIVs is not included in STS section 3.4.14, "RCS Pressure Isolation Valve (PIV) Leakage", and STS Basis section 3.4.14 indicates that PIVs are listed in the FSAR (or other document). Furthermore, STS SR 3.4.14.1 contains the identical performance requirement for PIV leakage as presently contained in the Seabrook TS LCO 3.4.6.2f, viz., "Verify leakage from each RCS PIV is equivalent to  $\leq 0.5$  gpm per nominal inch of valve size up to a maximum of 5 gpm at an RCS pressure  $\geq 2215$  psig and  $\leq 2255$  psig." North Atlantic asserts that the proposed change to TS 3.4.6.2 is administrative in that it merely relocates the PIV list from the TS to the TRM but maintains the requirements for PIV testing and the acceptance criteria for the testing in the Limiting Condition for Operation (LCO) 3.4.6.2(f).

The staff agrees with North Atlantic's assertion that the deletion of Table 3.4-1 does not alter any requirement with respect to PIVs. Furthermore, the staff finds that the deletion of Table 3.4-1 from the TS and relocation to the TRM is consistent with the STS. Therefore, the staff finds that this change is acceptable.

The staff finds acceptable the portion of the proposed footnote to SR 4.4.6.2.2d retaining the exception for the RHR Pump suction isolation valves. However, the staff is making no determination at this time regarding the acceptability of the proposal to extend the SR exception to the isolation valve bypass check valves. This proposal will be reviewed upon submittal of additional information.

### 3.0 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.

#### 4.0 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 a surveillance requirement. 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 (60 FR 45180). 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.

#### 5.0 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.

Principal Contributor: Albert W. De Agazio

Date: November 28, 1995