

November 29, 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. 45 TO FACILITY OPERATING LICENSE NPF-86: FEEDWATER ISOLATION - LOW RCS T_{avg} COINCIDENT WITH A REACTOR TRIP - LICENSE AMENDMENT REQUEST 95-08 (TAC M93713)

Dear Mr. Feigenbaum:

The Commission has issued the enclosed Amendment No. 45 to Facility Operating License No. NPF-86 for the Seabrook Station, Unit No. 1, in response to your application dated September 20, 1995.

The amendment revises the Appendix A Technical Specifications (TS) relating to the relocation of Functional Unit 6.b, "Feedwater Isolation - Low RCS T_{avg} Coincident with a Reactor Trip" from TS 3.3.2. (Engineered Safety Features Actuation System Instrumentation) to the *Technical Requirements Manual* which is a North Atlantic controlled document.

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

9512040261 951129
PDR ADOCK 05000443
P PDR

Docket No. 50-443
Serial No. SEA-95-027

Enclosures: 1. Amendment No. 45 to NPF-86
2. Safety Evaluation

cc w/encls: See next page

Distribution:

Docket File SNorris BSiegel
PUBLIC ADeAgazio ACRS
PD I-3 Plant OGC JFRogge, RI
SVarga GHill (2)
PMcKee 010057 CGrimes

DOCUMENT NAME: G:\DEAGAZIO\93713AMD #95-178

OFFICE	LA:PDI-3	PM:PDI-3	BC:OTSB	D:PDI-3	OGC
NAME	SNorris	ADeAgazio:cn	CGrimes	PMcKee	R Bachmann
DATE	11/2/95	11/8/95	11/21/95	11/17/95	11/27/95

OFFICIAL RECORD COPY

BC:SRXB
RC Jones
11/20/95

DF01

cl



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 29, 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. 45 TO FACILITY OPERATING LICENSE NPF-86: FEEDWATER ISOLATION - LOW RCS T_{avg} COINCIDENT WITH A REACTOR TRIP - LICENSE AMENDMENT REQUEST 95-08 (TAC M93713)

Dear Mr. Feigenbaum:

The Commission has issued the enclosed Amendment No. 45 to Facility Operating License No. NPF-86 for the Seabrook Station, Unit No. 1, in response to your application dated September 20, 1995.

The amendment revises the Appendix A Technical Specifications (TS) relating to the relocation of Functional Unit 6.b, "Feedwater Isolation - Low RCS T_{avg} Coincident with a Reactor Trip" from TS 3.3.2. (Engineered Safety Features Actuation System Instrumentation) to the *Technical Requirements Manual* which is a North Atlantic controlled document.

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,

A handwritten signature in cursive script, reading "Albert W. De Agazio, Sr.".

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-95-027

Enclosures: 1. Amendment No. 45 to NPF-86
2. Safety Evaluation

cc w/encls: See next page

T. Feigenbaum
North Atlantic Energy Service Corporation

Seabrook Station, Unit No. 1

cc:

Lillian M. Cuoco, Esq.
Senior Nuclear Counsel
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06037

Office of the Attorney General
One Ashburton Place
20th Floor
Boston, MA 02108

Mr. Peter Brann
Assistant Attorney General
State House, Station #6
Augusta, ME 04333

Board of Selectmen
Town of Amesbury
Town Hall
Amesbury, MA 01913

Resident Inspector
U.S. Nuclear Regulatory Commission
Seabrook Nuclear Power Station
P.O. Box 1149
Seabrook, NH 03874

Mr. Jack Dolan
Federal Emergency Management Agency
Region I
J.W. McCormack P.O. &
Courthouse Building, Room 442
Boston, MA 02109

Jane Spector
Federal Energy Regulatory Commission
825 North Capital Street, N.E.
Room 8105
Washington, DC 20426

Mr. David Rodham, Director
ATTN: James Muckerheide
Massachusetts Civil Defense Agency
400 Worcester Road
P.O. Box 1496
Framingham, MA 01701-0317

Mr. T. L. Harpster
North Atlantic Energy Service
Corporation
P.O. Box 300
Seabrook, NH 03874

Jeffrey Howard, Attorney General
G. Dana Bisbee, Deputy Attorney
General
33 Capitol Street
Concord, NH 03301

Town of Exeter
10 Front Street
Exeter, NH 03823

Mr. R. M. Kacich, Director
Nuclear Planning, Licensing & Budgeting
Northeast Utilities Service Company
P.O. Box 128
Waterford, CT 06385

Mr. George L. Iverson, Director
New Hampshire Office of Emergency
Management
State Office Park South
107 Pleasant Street
Concord, NH 03301

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road



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. 45
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 September 20, 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.

*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. 45, 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, 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 29, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 45

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 are provided.

Remove

3/4 3-19

3/4 3-20

3/4 3-25*

3/4 3-26

3/4 3-33

3/4 3-34*

Insert

3/4 3-19

3/4 3-20

3/4 3-25*

3/4 3-26

3/4 3-33

3/4 3-34*

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
4. Steam Line Isolation (continued)					
b. Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2, 3	20
c. Containment Pressure--Hi-2	3	2	2	1, 2, 3	18*
d. Steam Line Pressure-Low	3/steam line	2/steam line any steam line	2/steam line	1, 2, 3#	18*
e. Steam Generator Pressure - Negative Rate-High	3/steam line	2/steam line any steam line	2/steam line	3**	18*
5. Turbine Trip					
a. Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2	22
b. Steam Generator Water Level--High-High (P-14)	4/stm. gen.	2/stm. gen.	3/stm. gen.	1, 2	18
6. Feedwater Isolation					
a. Steam Generator Water Level--High-High (P-14)	4/stm. gen.	2/stm. gen.	3/stm. gen.	1, 2	18
b. Safety Injection	See Item 1. above for all Safety Injection initiating functions and requirements.				

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
7. Emergency Feedwater					
a. Manual Initiation					
(1) Motor driven pump	1	1	1	1, 2, 3	21
(2) Turbine driven pump	2	1	2	1, 2, 3	21
b. Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2, 3	20
c. Stm. Gen. Water Level-- Low-Low					
Start Motor-Driven Pump and Start Turbine - Driven Pump	4/stm. gen.	2/stm. gen.	3/stm. gen.	1, 2, 3	18
d. Safety Injection Start Motor-Driven Pump and Turbine-Driven Pump					See Item 1. above for all Safety Injection initiating functions and requirements.
e. Loss-of-Offsite Power Start Motor-Driven Pump and Turbine-Driven Pump					See Item 9 for Loss-of-Offsite Power initiating functions and requirements.
8. Automatic Switchover to Containment Sump					
a. Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2, 3, 4	13

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TOTAL ALLOWANCE (TA)</u>	<u>Z</u>	<u>SENSOR ERROR (S)</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
3. Containment Isolation					
a. Phase "A" Isolation					
1) Manual Initiation	N.A.	N.A.	N.A.	N.A.	N.A.
2) Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	N.A.
3) Safety Injection	See Item 1. above for all Safety Injection Trip Setpoints and Allowable Values.				
b. Phase "B" Isolation					
1) Manual Initiation	N.A.	N.A.	N.A.	N.A.	N.A.
2) Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	N.A.
3) Containment Pressure--Hi-3	3.0	0.71	1.67	≤ 18.0 psig	≤ 18.7 psig
c. Containment Ventilation Isolation					
1) Manual Initiation	N.A.	N.A.	N.A.	N.A.	N.A.
2) Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	N.A.
3) Safety Injection	See Item 1. above for all Safety Injection Trip Setpoints and Allowable Values.				
4) Containment On-Line Purge Radioactivity-High	N.A.	N.A.	N.A.	< 2 x Background	N.A.

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TOTAL ALLOWANCE (TA)</u>	<u>Z</u>	<u>SENSOR ERROR (S)</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUE</u>
4. Steam Line Isolation					
a. Manual Initiation (System)	N.A.	N.A.	N.A.	N.A.	N.A.
b. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	N.A.
c. Containment Pressure--Hi-2	5.2	0.71	1.67	≤4.3 psig	≤5.3 psig
d. Steam Line Pressure--Low	13.1	10.71	1.63	≥585 psig	≥568 psig*
e. Steam Generator Pressure - Negative Rate--High	3.0	0.5	0	≤100 psi	≤123 psi**
5. Turbine Trip					
a. Automatic Actuation Logic Actuation Relays	N.A.	N.A.	N.A.	N.A.	N.A.
b. Steam Generator Water Level--High-High (P-14)	4.0	2.24	0.55	≤86.0% of narrow range instrument span.	≤87.7% of narrow range instrument span.
6. Feedwater Isolation					
a. Steam Generator Water Level--Hi-Hi-(P-14)	4.0	2.24	0.55	≤86.0% of narrow range instrument span.	≤87.7% of narrow range instrument span.
b. Safety Injection	N.A.	N.A.	N.A.	N.A.	N.A.

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

<u>CHANNEL</u> <u>FUNCTIONAL UNIT</u>	<u>CHANNEL</u> <u>CHECK</u>	<u>CHANNEL</u> <u>CALIBRATION</u>	<u>ANALOG</u> <u>CHANNEL</u> <u>OPERATIONAL</u> <u>TEST</u>	<u>TRIP</u> <u>ACTUATING</u> <u>DEVICE</u> <u>OPERATIONAL</u> <u>TEST</u>	<u>ACTUATION</u> <u>LOGIC TEST</u>	<u>MASTER</u> <u>RELAY</u> <u>TEST</u>	<u>SLAVE</u> <u>RELAY</u> <u>TEST</u>	<u>MODES</u> <u>FOR WHICH</u> <u>SURVEILLANCE</u> <u>IS REQUIRED</u>
4. Steam Line Isolation								
a. Manual Initiation (System)	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3
b. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2, 3
c. Containment Pressure-Hi-2	S	R	Q	N.A.	N.A.	N.A.	N.A.	1, 2, 3
d. Steam Line Pressure-Low	S	R	Q	N.A.	N.A.	N.A.	N.A.	1, 2, 3
e. Steam Line Pressure-Negative Rate-High	S	R	Q	N.A.	N.A.	N.A.	N.A.	3
5. Turbine Trip								
a. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2
b. Steam Generator Water Level-High-High (P-14)	S	R	Q	N.A.	N.A.	N.A.	N.A.	1, 2
6. Feedwater Isolation								
a. Steam Generator Water Level--High-High (P-14)	S	R	Q	N.A.	N.A.	N.A.	N.A.	1, 2
b. Safety Injection	See Item 1. above for all Safety Injection Surveillance Requirements.							
7. Emergency Feedwater								
a. Manual Initiation								
1) Motor-driven pump	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3
2) Turbine-driven pump	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

<u>CHANNEL FUNCTIONAL UNIT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>	<u>ANALOG CHANNEL OPERATIONAL TEST</u>	<u>TRIP ACTUATING DEVICE OPERATIONAL TEST</u>	<u>ACTUATION LOGIC TEST</u>	<u>MASTER RELAY TEST</u>	<u>SLAVE RELAY TEST</u>	<u>MODES FOR WHICH SURVEILLANCE IS REQUIRED</u>
7. Emergency Feedwater (Continued)								
b. Automatic Actuation and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2, 3
c. Steam Generator Water Level-Low-Low, Start Motor-Driven Pump and Turbine-Driven Pump	S	R	Q	N.A.	N.A.	N.A.	N.A.	1, 2, 3
d. Safety Injection, Start Motor-Driven Pump and Turbine-Driven Pump	See Item 1. above for all Safety Injection Surveillance Requirements.							
e. Loss-of-Offsite Power Start Motor-Driven Pump and Turbine-Driven Pump	See Item 9. for all Loss-of-Offsite Power Surveillance Requirements.							
8. Automatic Switchover to Containment Sump								
a. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2, 3, 4
b. RWST Level Low-Low Coincident With Safety Injection	N.A.	R	Q	Q(3)	N.A.	N.A.	N.A.	1, 2, 3, 4
	See Item 1. above for all Safety Injection Surveillance Requirements.							



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 45 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 September 20, 1995 (Reference 1), North Atlantic Energy Service Corporation (North Atlantic/the licensee) proposed an amendment to the Appendix A Technical Specifications (TS) for the Seabrook Station, Unit 1 (Seabrook). The proposed changes would relocate Functional Unit 6.b, "Feedwater Isolation - Low RCS T_{avg} Coincident with a Reactor Trip" from TS 3.3.2 "Engineered Safety Features Actuation System Instrumentation", to the *Technical Requirements Manual* which is a North Atlantic controlled document. The relocated requirements include the limiting conditions for operation (LCO) and related surveillance requirements.

2.0 BACKGROUND

Section 182a of the Atomic Energy Act of 1954, as amended (the Act) requires applicants for nuclear power plant operating licenses to include TS as part of the license. The Commission's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TS.

The Commission provided guidance for the contents of TS in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" ("Final Policy Statement"), 58 FR 39132 (July 22, 1993), in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a of the Act. These criteria were subsequently incorporated into the regulations by an amendment to 10 CFR 50.36, 60 FR 36953 (July 19, 1995). In particular, the Commission indicated that certain items could be relocated from the TS to licensee-controlled documents, consistent with the standard enunciated in *Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon

reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety."

Consistent with this approach, the four criteria defined by 10 CFR 50.36, for determining whether a particular matter is required to be included in the TS limiting conditions for operations, 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 safety assessment has shown to be significant to public health and safety.

As a result, existing TS requirements which fall within or satisfy any of the above criteria must be retained in the TS, while those TS requirements which do not fall within or satisfy these criteria may be relocated to other licensee-controlled documents.

3.0 EVALUATION

North Atlantic has stated the feedwater isolation function which isolates the main feedwater on low Reactor Coolant System (RCS) T_{avg} coincident with a reactor trip is not being removed from the plant design and will be relocated to the *Technical Requirements Manual*. The relocation from the TS is justified on the basis that the function is not required for any protective action related to accident mitigation and is not credited in the Updated Final Safety Analysis Report (UFSAR) accident analyses.

Isolation of the feedwater function on low RCS T_{avg} coincident with a reactor trip precludes overcooling events due to continued feedwater flow following a reactor trip. It also has a function in establishing the design transients which form the basis of the system and components design.

After a reactor trip, the average RCS Temperature (T_{avg}) decreases to the no-load temperature due to steam dump actuation and continued feedwater flow. Additionally, for reactor trips from power levels above 50%, the shrink in

steam generator level typically goes below the 10-10 level setpoint, actuating emergency feedwater (EFW). If feedwater flow is not isolated while the RCS is cooling down, T_{avg} will undershoot the target value of no-load temperature. The addition of EFW further aggravates the undershoot affects. This undershoot could result subsequently in safety injection actuation on low RCS pressure as well as loss of required minimum shutdown margin. Consequently, the nuclear steam supply system was designed with a feedwater isolation on low RCS T_{avg} coincident with reactor trip.

Westinghouse Electric Corporation performs the Loss of Coolant Accident (LOCA) and related analyses for Seabrook Station. North Atlantic has stated that Westinghouse reviewed and confirmed that the LOCA analyses and related analyses, including large and small break LOCA, reactor vessel and loop LOCA blowdown forces, post-LOCA long term core cooling subcriticality, post-LOCA long term core cooling minimum flow and hot leg switchover to prevent boron precipitation are not affected by the low RCS T_{avg} feedwater isolation setpoint. Feedwater isolation in these analyses is achieved as the result of the initiation of a Safety Injection. Similarly Yankee Atomic Electric Company (Yankee) performs the non-LOCA safety analyses for Seabrook Station. Yankee has reviewed and confirmed that the isolation of feedwater on low RCS T_{avg} following a reactor trip is not credited in the non-LOCA safety analyses.

The isolation of feedwater on low RCS T_{avg} following a reactor trip is generic to Westinghouse plants. Although this function is implemented in the Solid State Protection System, it is not required for any protective action related to accident mitigation. The function is not included in the Westinghouse Standard Technical Specifications in either the NUREG-0452 or NUREG-1431 versions of the Standard Technical Specifications. The Seabrook Station TS are based upon NUREG-0452. North Atlantic has concluded that because feedwater isolation on low RCS T_{avg} coincident with a reactor trip is not required for either primary or backup protective action, the function can be relocated from TS Table 3.3-3, 3.3-4 and 4.3-2 to the *Technical Requirements Manual*.

Although the feedwater flow isolation feature is not credited in the safety analysis it does perform a control function. In accordance with the guidance of NUREG-1431 and the criteria of 10 CFR 50.36, North Atlantic has concluded this function is not required to be included in the TS and, therefore, has proposed that it be relocated to the *Technical Requirements Manual*. North Atlantic has stated that this function will remain operable and any changes to the setpoint or function will be controlled pursuant to the requirements of 10 CFR 50.59.

The staff has concluded that the instrumentation utilized to cause feedwater isolation on low RCS T_{avg} coincident with reactor trip does not serve a primary protective function so as to warrant inclusion in the TS in accordance with the criteria of 10 CFR 50.36. The instrumentation does not serve to ensure that the plant is operated within the bounds of initial conditions assumed in design basis accident and transient analyses or that the plant will be operated to preclude transients or accidents. Likewise, the feedwater

isolation on low RCS T_{avg} coincident with reactor trip instrumentation does not serve as part of the primary success path of a safety sequence analysis used to demonstrate that the consequences of these events are within the appropriate acceptance criteria.

Accordingly, the staff has determined that the requirements for the feedwater isolation on low RCS T_{avg} coincident with reactor trip monitoring instrumentation do not meet the criteria in 10 CFR 50.36. Furthermore, the limiting conditions for operation and surveillance requirements for this instrumentation are not included in the Westinghouse Standard Technical Specifications in either the NUREG-0452 or NUREG-1431 versions of the Standard Technical Specifications.

In conclusion, these specific instrumentation requirements related to feedwater isolation on low RCS T_{avg} coincident with reactor trip, are not required to be in the TS under 10 CFR 50.36 or Section 182a of the Act, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Further, they do not fall within any of the four criteria which were set forth in the Commission's Final Policy Statement and incorporated into 10 CFR 50.36. In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.59, or such other specific regulatory control as may be applicable in the particular instance, to address future changes to these requirements. Accordingly, the staff has concluded that these requirements may be relocated from the TS to North Atlantic's *Technical Requirements Manual*.

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 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 54524). 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.

Principal Contributor: B. Siegel

Date: November 29, 1995