

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
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. Low RCS T <sub>avg</sub> Coincident with Reactor Trip	4	2	3	1, 2	18

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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>
b.  Safety Injection	See Item 1. above for all Safety Injection initiating functions and requirements.				
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

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TABLE 3.3-4 (Continued)

## ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNIT	TOTAL ALLOWANCE (TA)	Z	SENSOR ERROR (S)	TRIP SETPOINT	ALLOWABLE VALUE
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. Low RCS T <sub>avg</sub> Coincident with Reactor Trip	4.6	1.12	1.38	>564°F	>561.2°F
b. Safety Injection	N.A.	N.A.	N.A.	N.A.	N.A.

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TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION  
SURVEILLANCE REQUIREMENTS

CHANNEL FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	ACTUATION LOGIC TEST	MASTER RELAY TEST	SLAVE RELAY TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED	
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. Low RCS T <sub>avg</sub> Coincident with Reactor Trip	S	R	Q	N.A.	N.A.	N.A.	N.A.	1, 2	
c. 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	

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**III. Retype of Proposed Changes**

Attached is a retype of the affected Technical Specification pages to include the proposed changes. The 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 the Technical Specifications prior to issuance.

Revision bars are provided in the right hand margin to designate a change in the text.

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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.				

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Amendment No.

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>
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 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>
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

#### IV. Determination of Significant Hazards for Proposed Changes

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

The change considered for the relocation of the feedwater isolation setpoint from the Technical Specifications does not impose any new performance requirements on any system or component which could subsequently cause associated design criteria to be exceeded. The structural and functional integrity of the plant's structures, systems and components is maintained. This change does not affect the initiators of any transients evaluated in the Updated Final Safety Analysis Report (UFSAR).

The sequence of obtaining feedwater isolation on low  $T_{avg}$  coincident with reactor trip is not credited in any of the LOCA and non-LOCA accidents evaluated in the UFSAR. Feedwater isolation is initiated for other reasons such as a Safety Injection (SI) actuation. This change is administrative in nature, in that it relocates the function from the Technical Specifications to the Seabrook Station Technical Requirements Manual and there are no changes to the plant's structures, systems and components.

Since, for the reasons given above, the results of the UFSAR analyses are not affected by the implementation of the change, there is, therefore, no adverse impact on the radiological consequences of accidents reported in the UFSAR. Furthermore, this change does not degrade fission product barriers assumed in the dose consequence analysis such as the fuel cladding, the reactor pressure vessel, and containment. The performance and integrity of accident mitigating structures, systems and components such as the Emergency Feedwater and Safety Injection systems, are not affected by the change. Consequently, the ability of these systems to limit radiological consequences as described in the UFSAR is not adversely affected. Based on the above, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

The proposed change does not create any new failure modes for any structure, system or component. All design and performance criteria will continue to be met and no new single failure scenario is created that is not bounded by the accidents described in the UFSAR. The proposed change to the Technical Specifications does not introduce any new challenges to structures, systems and components that could introduce a new type of accident. Therefore the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. *The proposed changes do not result in a significant reduction in the margin of safety.*

The accidents analyzed in the UFSAR have been reviewed relative to the feedwater isolation on low RCS  $T_{avg}$  coincident with reactor trip. The applicable design criteria and the pertinent licensing basis acceptance criteria continue to be met. The margin of safety as defined in the Bases to the Technical Specifications is not reduced and the design and safety analysis limits remain applicable.

V. Proposed Schedule for License Amendment Issuance and Effectiveness

North Atlantic requests NRC review of License Amendment Request 95-08 and issuance of a license amendment having immediate effectiveness by December 1, 1995.

**VI. Environmental Impact Assessment**

North Atlantic has reviewed the proposed license amendment against the criteria of 10CFR51.22 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 change meets the criteria delineated in 10CFR51.22(c)(9) for a categorical exclusion from the requirements for an Environmental Impact Statement.