

II. MARKUP OF PROPOSED CHANGES

See attached markup of proposed changes to Technical Specifications.

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
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	M	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	R	M	N.A.	N.A.	N.A.	N.A.	N.A.	1, 2, 3, 4
See Item 1. above for all Safety Injection Surveillance Requirements.								



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
9. Loss of Power (Start Emergency Feedwater)								
a. 4.16 kV Bus E5 and E6 Loss of Voltage	N.A.	R	N.A.	M	N.A.	N.A.	N.A.	1, 2, 3, 4
b. 4.16 kV Bus E5 and E6 Degraded Voltage Coincident With Safety Injection	N.A.	R	N.A.	M	N.A.	N.A.	N.A.	1, 2, 3, 4
10. Engineered Safety Features Actuation System Interlocks								
a. Pressurizer Pressure, P-11	N.A.	R	M	N.A.	N.A.	N.A.	N.A.	1, 2, 3
b. Reactor Trip, P-4	N.A.	N.A.	N.A.	N.A.	R	N.A.	N.A.	1, 2, 3
c. Steam Generator Water Level, P-14	S	R	M	N.A.	M(1)	M(1)	Q	1, 2, 3

TABLE NOTATION

- (1) Each train shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (2) A DIGITAL CHANNEL OPERATIONAL TEST will be performed on this instrumentation.
- (3) Setpoint verification is not applicable

III. RETYPE OF PROPOSED CHANGES

See attached retype of proposed changes to Technical Specifications. The attached retype reflects the currently issued version of 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.

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION SURVEILLANCE REQUIREMENTS

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
9. Loss of Power (Start) Emergency Feedwater)								
a. 4.16 kV Bus E5 and E6 Loss of Voltage	N.A.	R	N.A.	M	N.A.	N.A.	N.A.	1, 2, 3, 4
b. 4.16 kV Bus E5 and E6 Degraded Voltage Coincident With Safety Injection	N.A.	R	N.A.	M	N.A.	N.A.	N.A.	1, 2, 3, 4
	See Item 1. above for all Safety Injection Surveillance Requirements							
10. Engineered Safety Features Actuation System Interlocks								
a. Pressurizer Pressure, P-11	N.A.	R	M	N.A.	N.A.	N.A.	N.A.	1, 2, 3
b. Reactor Trip, P-4	N.A.	N.A.	N.A.	N.A.	R	N.A.	N.A.	1, 2, 3
c. Steam Generator Water Level, P-14	S	R	M	N.A.	M(1)	M(1)	Q	1, 2, 3

TABLE NOTATION

- (1) Each train shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (2) A DIGITAL CHANNEL OPERATIONAL TEST will be performed on this instrumentation.
- (3) Setpoint verification is not applicable.

IV. DETERMINATION OF SIGNIFICANT HAZARDS FOR PROPOSED CHANGES

The testing inadequacy notwithstanding, North Atlantic believes that the narrow range RWST level transmitters are OPERABLE and fully capable of fulfilling their intended safety function. North Atlantic has established contingency actions to ensure that the requirements of a periodic channel check are satisfied. These actions constitute an unnecessary operational burden to North Atlantic without any commensurate increase in safety. North Atlantic believes that performance of a quarterly TADOT provides equivalent assurance that the narrow range RWST level instruments remain OPERABLE between Channel Calibrations and that there is no significant safety impact associated with the proposed license amendment request. The basis for this determination is discussed below:

1. The proposed license amendment request does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The accident of concern is the Loss of Coolant Accident (LOCA). The function of the RWST low-low transmitters and the related instrumentation is to ensure that the suction for the ECCS equipment is switched from the RWST to the containment sump when the RWST has injected to the low-low level. The RWST circuitry is designed with four channels and operates on 2/4 low-low logic to provide one half of the transfer logic. The other half of the transfer logic is provided by the existence of a safety injection signal.

This License Amendment Request (LAR) does not involve a change in the design or operation of the plant, nor does it affect the plant's response to an accident. This LAR involves the revision of Technical Specification surveillance requirements for devices which are used in the mitigation of an accident. The performance of the revised surveillance requirements will not affect the operation of the equipment. The RWST low-low level transmitters could potentially fail in the high state, low state or be out of calibration. None of these failure modes are accident initiators and would be detected during the proposed quarterly TADOT or during calibrations. Therefore the probability of an accident previously analyzed has not been increased. The equipment will still operate as required to mitigate the consequences of an accident, and the consequences would not be increased.

The revised surveillance requirements have been reviewed to determine if they provide adequate assurance that the equipment will perform its specified function if called upon to do so. The implementation of the TADOT is consistent with the surveillance requirements established for other instrumentation without remote or local indication. The TADOT in combination with the ACOT and the 18 month calibration provides adequate assurance that the devices will be capable of performing their specified functions.

The narrow range RWST low-low level transmitters have not experienced any gross failures and have not required significant adjustment during periodic calibrations. These transmitters have been installed and operational since 1986. Other like transmitters are installed in the plant and have MCB indication. These transmitters would provide indication of common mode transmitter problems. North Atlantic believes that the RWST low-low level transmitters are accurate and reliable instruments and that the requirement to perform a quarterly TADOT is sufficient to detect an instrument failure in the time period between channel calibrations. In addition, none of the postulated failures could result from the single failure of a narrow range RWST level transmitter. It is highly unlikely that a common mode failure would occur which would result in multiple failures.

The function of the RWST low-low level transmitters is to allow the 2/4 coincidence to be made up when the RWST reaches its low-low level condition. The input from two of the transmitters will allow the transfer of the ECCS suction from the RWST to the Containment sump to take place when the Safety Injection signal is present. The revision of the surveillance from a 12 hour CHANNEL CHECK to a quarterly TADOT does not affect the operation of the level transmitters nor their input to the 2/4 logic and the completion of the RWST portion of the transfer logic. The function of the bistable will still be verified by the performance of the ACOT as required by the current Technical Specifications.

The transfer of the ECCS water supply from the RWST to the Containment sump is not a fully automatic operation. The only automatic action which takes place is the opening of the containment sump suction valves. Once these valves are open, operator action is required to complete the transfer. The procedure for transferring to cold leg recirculation contains a step to verify that the containment sump recirculation valves are open, and if they are not open, the operator is directed to manually open the valves. Once these valves are open, the transfer to cold leg recirculation can be completed and the response to the accident would remain unchanged.

Therefore, since the response of the plant to an accident is unchanged, the requested exercise of enforcement discretion will not result in a significant increase in either the probability or consequences of an accident previously evaluated.

2. The proposed license amendment request will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed license amendment request does not affect the operation or response of any plant equipment or introduce any new failure mechanisms. The change affects only the frequency of surveillance performance and does not alter the manner in which the equipment will respond in either normal operation or in accident conditions. Therefore, the previous accident analyses are unchanged and bound all expected plant transients and there are no new or different accident scenarios introduced.

3. The proposed license amendment request will not involve a significant reduction in the margin of safety.

The proposed license amendment request does not reduce the margin of safety as defined in the bases of the Technical Specifications. The BASES for Technical Specification 3.3.2, Engineered Safety Features Actuation System Instrumentation, states, in part, that OPERABILITY of these systems, (i.e. narrow range RWST low-low level transmitters), is required to provide the overall reliability, redundancy, and diversity assumed available in the facility design for the protection and mitigation of accident and transient conditions. The integrated operation of each of these systems, in this case the narrow range RWST low-low level transmitters, is consistent with the assumptions used in the safety analysis. The Surveillance Requirements specified for these systems ensure that the overall system functional capability is maintained comparable to the original design standards. The periodic surveillance tests performed at the specified frequencies are sufficient to demonstrate this capability. The performance of the TADOT in place of the CHANNEL CHECK is consistent with the design of the plant and provides the assurance that the RWST low-low level transmitters will perform their specified functions if required. The function of the RWST low-low level transmitters is to provide the input to the 2/4 logic for transfer of ECCS suction from the RWST to the Containment sump in the event of a loss of coolant accident. The performance of the TADOT provides greater assurance of the bistable tripping than does the performance of the CHANNEL

CHECK and therefore ensures that the margin of safety as described in the basis of Technical Specifications is maintained.

Therefore, the assumptions in the Bases of Technical Specifications are not affected and the proposed license amendment request will not result in a significant reduction in the margin of safety.

V. 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 effluents that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Based upon the foregoing, north Atlantic concludes that the proposed change meets the criteria delineated in 10CFR50.22(c)(9) for a categorical exclusion from the requirements for an Environmental Impact Statement.