

North Atlantic Energy Service Corporation P.O. Box 300 Seabrook, NH 03874 (603) 474-9521, Fax (603) 474-2987

The Northeast Utilities System

Ted C. Feigenbaum Senior Vice President & Chief Nuclear Officer

NYN-95079

October 13, 1995

United States Nuclear Regulatory Commission Washington, D.C. 20555

Attention: Document Control Desk

Reference: Facility Operating License No. NPF-86, Docket No. 50-443

Subject: Licensee Event Report (LER) No. 95-005-01: "Non-Compliance with Technical Specification 3.3.1 Action Requirements"

Gentlemen:

Enclosed please find supplemental Licensee Event Report (LER) No. 95-005-01 for Seabrook Station. This submittal reflects the cause of the event and additional corrective actions.

Should you require further information regarding this matter, please contact Mr. James M. Peschel, Regulatory Compliance Manager, at (603) 474-9521, extension 3772.

Very troly yours, Jence Jelan hi Raya

Ted C. Feigenbaum 🥧

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Enclosures: NRC Forms 366/366A

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United States Nuclear Regulatory Commission Attention: ' ' Document Control Desk October 13, 1995 Page two

 cc: Mr. Thomas T. Martin Regional Administrator United States Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia, PA 19406

> Mr. Albert W. De Agazio, Sr. Project Manager Project Directorate 1-4 Division of Reactor Projects U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Mr. John Macdonald NRC Senior Resident Inspector P.O. Box 1149 Seabrook, NH 03874

INPO Records Center 1100 Circle 75 Parkway Atlanta, GA 30339

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DESCRIPTION OF EVENT

On July 31, 1995, North Atlantic Energy Service Corporation (North Atlantic) failed to comply with the ACTION requirements in Technical Specification 3.3.1 "Reactor Trip Instrumentation", Table 3.3-1 ACTION 2 for an inoperable Power Range Nuclear Instrumentation (NI)[IG] channel. The channel was not placed in the tripped condition within the 6 hours required by Technical Specifications during the performance of a CHANNEL CALIBRATION of Channel N41.

Technical Specification 3.3.1, Reactor Trip Instrumentation, Table 3.3-1 ACTION 2 reads as follows:

"With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within 6 hours,

b. The Minimum Channels OPERABLE requirement is met; however the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.11, and

c. Either, THERMAL POWER is restricted to less than or equal to 75% of RATED THERMAL POWER and the Power Range Neutron Flux Trip Setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER within 4 hours; or, the QUADRANT POWER TILT RATIO is monitored at least once per 12 hours per Specification 4.2.4.2."

Technical Specification Surveillance Requirement 4.3.1.1 for Reactor Trip Instrumentation requires a CHANNEL CALIBRATION on each NI Power Range channel at least once per 18 months. These surveillances have routinely been performed during refueling outages. However, the NI calibration procedure and the associated Repetitive Task Sheet (RTS) were reviewed to determine if there were any procedural or operational restrictions that would prevent these surveillances from being performed in MODE 1. The review determined that the surveillances did not meet the definition for "On-line Maintenance" as established in the North Atlantic Management Manual (NAMM). When a task is deemed as "On-line Maintenance" the review process includes risk significance considerations and unique planning, scheduling and implementation requirements. The NI CHANNEL CALIBRATION was not categorized as "On-line Maintenance".

The Power Range Channel N41 Calibration Procedure, provides the necessary instruction required to perform a calibration of NI Power Range Channel N41. The associated Repetitive Task Sheet (RTS) documents the necessary work authorizations and test data. The RTS listed the "equipment out-of-service time", or the time required to perform the surveillance, as eight hours. Actual performance of the calibration procedure varies and without encountering any problems the surveillance can normally be performed within 4 to 5 hours. The initial steps of the channel calibration procedure directs the associated Nuclear Instrumentation bistables for N41 to be tripped. However, it is necessary to have the bistable energized during the performance of certain sections of the NI channel calibration. These steps are performed later in the procedure near the end of the 6 hour ACTION requirement. In addition, the Power Range Saturation Curve Verification procedure was scheduled at the same time because it required the plant be in MODE 1.

The on-shift operating crew entered the required ACTION statements at 1200 on July 31, 1995. The control board operators acknowledged the requirement to trip the bistables within 6 hours. A shift change occurred at approximately 1430 hours and as a part of the shift turnover process the offgoing operator relayed the requirement

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to verify the bistable tripped by 1800 hours that evening. Shortly before 1800 hours, the on-shift control board operator discussed the ACTION requirement with the Instrumentation Technician performing the calibration. Due to a communication error it was believed that the bistables were in the tripped position. The channel was subsequently returned to service at approximately 2130 hours. This resulted in a violation of Technical Specification 3.3.1, Table 3.3-1 Functional Units 2, 3, and 4 ACTION 2 requirements for approximately 3.5 hours. This failure to comply with the ACTION requirement was identified on August 14, 1995 and is being reported pursuant to 10 CFR 50.73(a)(2)(i)(B).

SAFETY CONSEQUENCES

Seabrook Station

There are no adverse safety consequences as a result of this event. Sufficient redundancy exists within the Reactor Protection System [JC] to ensure a reactor trip would occur in the event of a positive reactivity excursion. The inoperable channel when placed in a trip condition results in a partial tripped condition requiring only 1 of 3 logic for actuation of trip circuitry. The bistables were intermittently tripped throughout the performance of the procedure and beyond the 6 hour requirement. It is reasonable to assume the reactor would have been protected due to the inherent redundancy of the Reactor Protection System.

ROOT CAUSE

The root cause of this event has been determined to be inadequate job scoping of the NI calibration work package. The planning and scheduling work package review did not recognize that the NI Power Range calibration and saturation curve verification was a time critical evolution when performed on-line. The surveillance cannot be performed with the bistables continuously tripped. It should have been stressed that this surveillance required a 6 hour completion time for compliance with Technical Specification ACTIONS.

A contributing cause was determined to be inadequate communications between the control board operator and the technician performing the calibration.

CORRECTIVE ACTIONS

As a result of this event, the Assistant Station Director halted all Technical Specification related work which was moved from the refueling outage to a non-outage period. This work was allowed to recommence with the following controls:

Technical Specification related work was highlighted, and identified as such in the Plan of the Day meeting.

Technical Specification related work scheduled for a specified period is discussed with the scheduled crew prior to commencement.

North Atlantic has enhanced the RTS and Surveillance coding system. This system will serve to identify Technical Specification and Major equipment work activities to ensure that the appropriate unique planning scheduling and implementation requirements are considered and evaluated. The system week scheduling process will serve as a systematic method for reviewing applicable RTSs and revising the coding as necessary.

Additional corrective actions include reviewing this event with Operations Department personnel to stress the need for clear communications when working with personnel from other departments. Furthermore, North Atlantic is evaluating the On-Line Maintenance Program and will make changes, as necessary, to ensure the effects of removing Technical Specification equipment from service are properly evaluated and implemented.

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PLANT CONDITIONS

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At the time of this event the plant was in MODE 1 at 100% power, Reactor Coolant System [AB] temperature at 586.5 ° Fahrenheit and pressure of 2235 psig.

SIMILAR EVENTS

This is the first event at Seabrook Station where the Technical Specification actions were not taken during the performance of work which was moved from the refueling outage to a non-outage period.