PSNH

Public Service of New Hampshire

New Hampshire Yankee Division

NYN-88118

August 31, 1988

United States Nuclear Regulatory Commission
Washington, DC 20555

Attention: Document Control Desk

References: (a) Facility Operating License No. NPF-56, Docket No. 50-443

(b) PSNH Letter (SBN-1211) dated October 9, 1986, "10CFR 50.59 Evaluations" G. S. Thomas to V. S. Noonan

Subject: 10 CFR 50.59 Quarterly Report

Gentlemen:

Enclosed please find the Quarterly Report of 10 CFR 50.59 Safety Evaluations for Seabrook Station. This report covers the period of April 1, 1988, to June 30, 1988, and is being submitted pursuant to the reporting requirements outlined in Reference (b).

Should you require further information regarding this matter, please contact Mr. Warren J. Hall at (603) 474-9574, extension 4046.

Very truly yours,

George S. Thomas

Enclosure

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ENCLOSURE TO NYN-88118

SEABROOK STATION
10CFR50.59 SAFETY EVALUATIONS
QUARTERLY REPORT

April 1, 1988 to June 30, 1988

1. Design Changes

The below listed design changes have been made at Seabrook Station and safety evaluations have been performed pursuant to the requirements of 10CFR50.59.

Design Coordination Report: Number 86-349
Title: Veritrak/Tobar Transmitter Replacement
Description: Design Coordination Report 86-349 was initiated to facilitate the replacement of Seabrook Station's Veritrak Group A transmitters with Rosemont transmitters. A concern with setpoint drift initiated the transmitter replacement. As a result of the replacement, New Hampshire Yankee (NHY) provided the NRC with an analysis (NHY letter NYN 88075) to support new setpoint values for the Rosemont transmitters. In addition, pursuant to 10CFR50.90, NHY has submitted a request for a change to the Technical Specifications to accommodate the transmitter replacements.

Conclusion: A 10 CFR 50.59 safety evaluation was performed for this design change and it has been determined that this change will not create any unreviewed safety concerns. Changes to the Final Safety Analysis Report will be incorporated by means of a future amendment.

Design Coordination Report: Number 86-715
Title: Fire Suppression Systems 20B and 21B Modification
Description: During the construction and start-up phase of Seabrook Station, water flushing of the underground fire protection piping was performed to ensure cleanliness of the system. During flushing strainers were installed on the individual feeds from the underground Fire Protection System piping to preclude any possible future clogging or blockage of the sprinkler heads or hose reels.

Since the completion of the original design change, it was identified that the two Fire Suppression System feeds for the Train A and Train B Emergency Diesel Generators, 20B and 21B respectively, did not have strainers installed. This design coordination report provides strainers for these two Fire Suppression Systems.

Conclusion: A 10 CFR 50.59 safety evaluation was performed for this design change and it has been determined that this change will not create any unreviewed safety concerns. Changes to the Final Safety Analysis Report will be incorporated by means of a future amendment.

Design Coordination Report: Number 87-225
Title: Seismic Monitor Location Change
Description: Certain seismic monitors, 1-SM-XR-6702, 1-SM-XR-6703, and 1-SM-XR-6706, were inaccessible during power operations due to their locations (Reactor Vessel Support, Reactor Coolant Cold Leg Piping, and Steam Generator 11B Support). Should these monitors be activated, a return to operable status would require a reduction in power level to allow the radiation levels to decay sufficiently to permit personnel access to replace the monitor scratch plates.

To eliminate this condition, NHY proposed to the NRC Staff, new locations for the monitors that would allow accessibility during full power operation. The new locations were found acceptable by the NRC and in full compliance with Regulatory Guide 1.12. The NRC stated that Technical Specification changes had been made and would be issued in the future.

Conclusion: A 10 CFR 50.59 safety evaluation was performed for this design change and it has been determined that this change will not create any unreviewed safety concerns. Changes to the Final Safety Analysis Report will be incorporated by means of a future amendment.

2. Temporary Modification

The below listed Temporary Modifications have been made at Seabrook Station and evaluations have been performed pursuant to the requirements of 10 CFR 50.59.

Temporary Modification Request: Number 88-010
Title: Temporary Power to Security System Lighting Panel ED-MM-212B
Description: The Security Guardhouse Essential Lighting Panel, ED-MM-212B, is normally powered from Motor Control Center MCC-523. Due to a scheduled outage of MCC-523, it became necessary to provide temporary power to Lighting Panel ED-MM-212B from MCC-211. This temporary modification involved replacing the normal power feed to the Guardhouse Essential Lighting Panel, ED-MM-212B, with temporary power cables from a spare circuit breaker in ED-MCC-211. The power cables were not electrically connected in any way to MCC-523 bus work and the supply breaker to MCC-523 was tagged open during the period the change was installed. The additional load on MCC-211 was evaluated and there was no significant effect on load distribution features such as circuit breaker coordination.

During this temporary modification, Diesel Generator backup to ED-MM-2123 was not available. Compensatory measures were incorporated in the unlikely event that a loss of offsite power should occur during the performance of the scheduled outage. This temporary modification has been removed and the system has been restored to its normal configuration.

Conclusion: A 10 CFR 50.59 Safety Evaluation was performed and it has been determined that installation of this temporary modification will not create any unreviewed safety concerns.

3. Technical Requirements Manual

No changes have been made to the Technical Requirements Manual during this reporting period.

4. Final Safety Analysis Report

The below listed final Safety Analysis Report (FSAR) changes have been made at Seabrook Station and safety evaluations have been performed pursuant to the requirements of 10 CFR 50.59.

FSAR Change Request: Number 87-012
Title: Tornado Strike Probability
Description: In Amendment 56 to the Seabrook Station FSAR, a correction was made to Chapter 2, Section 2.3.1.2.b.2, Tornadoes and Waterspouts, to specify that a referenced 50 mile radius was in fact 50 nautical miles. Subsequent to Amendment 56, it has been identified that an additional reference to the 50 nautical miles was required along with three editorial changes. This FSAR change request incorporates the additional changes. The effects of the FSAR change request have been reviewed against analysis that used the 50 miles as a basis. The difference of 50 nautical miles to 57.6 actual miles adds additional conservatism into the probability of tornadoes striking near Seabrook Station.

Conclusion: A 10 CFR 50.59 safety evaluation was performed for this Final Safety Analysis Report change, and it has been determined that this change will not create any unreviewed safety concerns. This change will be incorporated in the Final Safety Analysis Report by means of a future amendment.

FSAR Change Request: Number 87-028
Title: Changes to the Fire Protection Program
BTP APCSB 9.5-1, Appendix A

Description: During a review of fire seal ratings for various fire barriers, it was identified that two fire barriers had not been rated as three (3) hour barriers as required by 10 CFR 50, Appendix R. The three hour ratings were required to maintain the separation for Train A and Train B safety related cables identified in the Appendix R Safe Shutdown Analysis. Barrier upgrades were performed by providing three hour penetration seals for open conduits and sleeves.

A 10 CFR 50.59 safety evaluation was performed for this Final Safety Analysis Report change, and it has been determined that this change will not create any unreviewed safety concerns. This change will be incorporated in the Fire Protection Program Evaluation and Comparison to BTP APCSB 9.5-1, Appendix A at a later date.

FSAR Change Request: Number 88-036
Title: Revised Boron Dilution Analysis for Operating Modes 4 and 5.

Description: In response to a potential concern identified by Westinghouse Electric Corporation with regards to the Seabrook Station Boron Dilution Analysis, a new analysis was performed. The original analysis assumed that the reactor vessel upper head volume was perfectly mixed and in communication with the balance of the reactor vessel volume when in Modes 4 and 5 (filled loops) with one Residual Heat Removal (RHR) pump operating. The new analysis does not assume that the upper-head region water volume will be available for boron dilution.

The reduced water volume of the new analysis does reduce the time available to respond to a boron dilution event, but the required fifteen (15) minutes time between the shutdown monitor alarm and the actual loss of the shutdown margin has been preserved.

Conclusion: A 10 CFR 50.59 safety evaluation was performed for this Final Safety Analysis Report change, and it has been determined that this change will not create any unreviewed safety concerns. This change will be incorporated in the Final Safety Analysis Report by means of a future amendment.

5 Procedure Changes

Procedure changes that require review and approval by the Station Operation Review Committee (SORC) have been subjected to the requirements of 10 CFR 50.59. No procedure changes have been made at Seabrook Station during this reporting period that would require a change to the Final Safety Analysis Report.

6. Test or Experiments

There were no tests or experiments performed during this reporting period that require evaluations in accordance with 10 CFR 50.59.