

# New Hampshire Yankee

Ted C. Feigenbaum  
President and  
Chief Executive Officer

NYN-91011

January 24, 1991

United States Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Document Control Desk

- References: (a) Facility Operating License No. NPF-86, Docket No. 50-443
- (b) WCAP-11736-A, "Residual Heat Removal System Autoclosure Interlock Removal Report for the Westinghouse Owners Group," Revision 0.0, October 1989

Subject: Request for License Amendment - Residual Heat Removal System Isolation Valve Autoclosure Interlock Removal

Gentlemen:

Pursuant to 10 CFR 50.90, New Hampshire Yankee (NHY) hereby proposes to amend the Seabrook Station Operating License (Facility Operating License NPF-86) by incorporating the proposed changes, provided herein as Enclosure 1, into the Seabrook Station Technical Specifications. The proposed changes involve changes to the Residual Heat Removal (RHR) suction relief valve setpoint upper limit of Technical Specification 3.4.9.3, "Reactor Coolant System, Pressure/Temperature Limits, Overpressure Protection Systems", and the Surveillance Requirements of Technical Specifications 4.4.9.3.2, "Reactor Coolant System, Pressure/Temperature Limits, Overpressure Protection Systems," and 4.5.2, "Emergency Core Cooling Systems, ECCS Subsystems -  $T_{avg}$  Greater Than or Equal to 350°F." These changes are associated with the proposed removal of the Residual Heat Removal (RHR) Isolation Valve Autoclosure Interlock (ACI). The RHR suction relief valve setpoint upper limit is decreased to ensure adequate relief valve capacity and overpressure protection. Revised BASES are provided as Enclosure 2 to this letter. In accordance with 10 CFR 50.36, these BASES are not considered to be part of the Technical Specifications.

The Westinghouse Owners Group (WOG) undertook an effort to address concerns of the nuclear industry about inadvertent RHR isolation events caused by spurious actuation of the ACI circuitry. The topical report resulting from this effort [WCAP-11736-A, Reference (b)] was reviewed and accepted by the NRC staff for use as a supplement for plant specific requests to remove the ACI. The Seabrook plant specific evaluation of the proposed changes is based on WCAP-11736-A and is provided as Enclosure 3.

Based upon the information contained in Enclosure 3, NHY has determined that the proposed changes do not constitute an unreviewed safety question pursuant to 10CFR50.59, nor do they involve a significant hazards consideration pursuant to 10CFR50.92.

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New Hampshire Yankee has reviewed the proposed changes utilizing the criteria specified in 10CFR50.92 and has determined that the proposed changes would not

1. Involve a significant increase in the probability or consequences of an accident previously evaluated. The probability of an accident previously evaluated in the PSAR is not increased since the WCAP -11736-A probabilistic analyses for Callaway are applicable to Seabrook. These analyses show that the net effect of ACI removal is an improvement in plant safety. ACI removal does not affect any function of the RHR system or Reactor Coolant System (RCS) other than automatic isolation. The ACI function was provided to ensure that the isolation valves are closed during heatup to prevent an intersystems LOCA. Adequate RHR system protection is provided by administrative controls, alarms, and the RHR suction relief valves. Reducing the RHR suction relief valve setpoint upper limit ensures adequate relief capacity and overpressure protection.
2. Create the possibility of a new or different kind of accident from any accident previously evaluated. ACI removal does not change the function or failure modes of the RHR suction isolation valves that could cause an accident of a different kind. The change in the RHR suction relief valve setpoint upper limit will not affect the passive function of the valves and ensures that the required overpressure protection is provided.
3. Involve a significant reduction in a margin of safety. Reducing the RHR suction relief valve setpoint upper limit ensures adequate relief capacity and overpressure protection in the event of an overpressure transient. ACI removal eliminates one of the possible causes of spurious valve closure that could reduce the availability of the RHR suction relief valves for RCS low temperature overpressure protection. Also, the probabilistic analyses demonstrate that administrative controls, combined with the valve not closed alarms, increases the probability of all RHR suction valves being closed when the RCS is at high pressure thereby providing greater assurance that the ECCS subsystems are properly aligned and reducing the probability of an intersystems LOCA.

Enclosure 4 provides the NHY responses to the NRC staff positions contained in Section 3.0 of the staff's safety evaluation of WCAP-11736.

Implementation of the modifications required to delete the RHR autoclosure interlock are scheduled to occur during the next refueling outage. New Hampshire Yankee requests approval of these proposed changes by May 31, 1991 to support this implementation schedule.

Should you have any questions regarding this request, please contact Mr. Terry L. Harpster, Director of Licensing Services, at (603) 474-9521, extension 2765.

Very truly yours,



Ted C. Feigenbaum

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Enclosure(s)

TCF:RRB/tad