

New Hampshire Yankee

Ted C. Feigenbaum
President and
Chief Executive Officer

NYN-91067

April 24, 1991

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

Attention: Document Control Desk

References: (a) Facility Operating License No. NPF-86, Docket No. 50-443
(b) USNRC Generic Letter 88-17 dated October 17, 1988, "Loss of Decay Heat Removal"
(c) NHY Letter NYN-90211 dated December 14, 1990, "Safety Injection Pump Operability in a Reduced Inventory Condition", T. C. Feigenbaum to USNRC

Subject: Request for License Amendment: Safety Injection Pump Operability in MODES 5 and 6

Gentlemen:

Pursuant to 10 CFR 50.90, New Hampshire Yankee (NHY) 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. These proposed changes will allow a Safety Injection (SI) pump to be made OPERABLE in MODES 5 and 6 when the Reactor Coolant System has a vent area equal to or greater than 18 square inches. This request for a license amendment addresses the recommendations, and in particular programmed enhancement (3b), of NRC Generic Letter 88-17 [Reference (b)]. Revised BASES are provided as Enclosure 2 to this letter. In accordance with the provisions of 10 CFR 50.36, these BASES are not considered to be part of the Technical Specifications.

This request for a license amendment supersedes our previous request of December 14, 1990 [Reference (c)]. New Hampshire Yankee is providing this submittal to address concerns raised by NRC reviewers regarding the use of asterisks in the Technical Specifications. NHY believes that the revised page 3/4 5-10 utilizes the asterisk in a more effective manner with regard to human factors considerations in the technical specifications. The BASES have been revised to be consistent with the wording of the Technical Specification.

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The proposed changes affect the following Technical Specification and Bases:

- Technical Specification 3.5.3.2, "ECCS Subsystem - T_{avg} Equal To Or Less Than 200°F", Page 3/4 5-10

The current Technical Specification does not allow a Safety Injection (SI) pump to be OPERABLE and to discharge to the Reactor Coolant System (RCS) in MODE 5 and MODE 6 with the reactor vessel head on. The change to this Technical Specification allows one SI pump to be OPERABLE and to discharge to the RCS when the RCS has a vent area equal to or greater than 18 square inches. This change addresses programmed enhancement (3b) of NRC Generic Letter 88-17 and provides an additional means of adding inventory to the RCS. The use of the SI pump provides a diverse and redundant means to makeup RCS inventory in the event that the Residual Heat Removal System and the Centrifugal Charging Pump become unavailable while the plant is operating in a reduced inventory condition. The operation of an SI pump under these conditions also allows testing of flow paths and filling of the accumulator to be performed. The 18 square inch vent is specified to ensure that the reactor vessel pressure limits of 10CFR50, Appendix G are not exceeded during a mass addition transient.

This Specification was reformatted to minimize the use of asterisks and to more clearly state under what conditions an SI pump may be made OPERABLE in MODE 5 and MODE 6. Additionally, the page sub-title was revised to eliminate the heading "ECCS Subsystems-T_{avg} Equal To or Less Than 350°F". This specification is applicable in MODE 5 and MODE 6 and therefore only applies when T_{avg} is equal to or less than 200°F.

- Technical Specification 3.4.9.3, "Overpressure Protection Systems", Pages 3/4 4-34 and 3/4 4-35

This specification was revised to establish, within a single specification, the requirements for overpressure protection in MODES 4, 5 and 6. The specification establishes the overpressure protection requirements in plant configuration 1) In MODE 4 when the temperature of any RCS cold leg is less than or equal to 329°F; and in MODE 5 and MODE 6 with all Safety Injection pumps inoperable; and 2) in MODE 5 and MODE 6 with all Safety Injection pumps except one inoperable. The Action statements have been revised to be consistent with the Limiting Condition for Operation.

Additionally, Surveillance Requirement 4.4.9.3.3 was revised to allow a valve or device to be locked, sealed or secured in the open position to provide the required vent pathway.

- Technical Specification Bases 3/4.4.9, "Pressure/Temperature Limits", Page B 3/4 4-15

The change to this Bases section is a clarification of the wording dealing with the reasoning behind the assumption that there will be no single failure of a PORV in conjunction with an inadvertent actuation of a single ESF train. The existing sentence is not clear. The proposed change rewrites the sentence and inserts the appropriate words to make the sentence complete. This change is just a wording clarification of an existing aspect of the BASES.

- Technical Specification Bases 3/4.4.9, "Pressure/Temperature Limits", Page B 3/4 4-16

The change to this Bases section is consistent with the Technical Specification changes proposed herein and specifies that one Safety Injection pump is allowed to be operable in MODE 5 and MODE 6. The Bases also states that the overpressure protection is provided by the mechanical opening in the RCS that provides a vent area equal to or greater than 18 square inches.


- Technical Specification Bases 3/4.5.3, "ECCS Subsystems", Page B 3/4 5-1

The change to this Bases section is consistent with the Technical Specification changes proposed herein. These changes clarify that when a Safety Injection pump is made OPERABLE in MODE 5 or MODE 6 the cold overpressure protection and the ability to relieve a mass addition transient is provided by the RCS vent area equal to or greater than 18 square inches. Additionally, the bases includes the surveillance requirement to verify the presence of the RCS vent area when a Safety Injection pump is OPERABLE in MODE 5 or MODE 6.

New Hampshire Yankee has reviewed the proposed changes in accordance with the criteria specified in 10 CFR 50.92 and has determined that the proposed changes would not involve a Significant Hazards Consideration pursuant to 10 CFR 50.92. The basis for this determination is provided in Enclosure 3, which includes a description and evaluation of the proposed changes.

New Hampshire Yankee requests approval of these proposed changes by May 30, 1991. If you have any questions, please contact Mr. Terry L. Harpster, NHY Director of Licensing Services, at (603) 474-9521, extension 2765.

Very truly yours,


Ted C. Feigenbaum

TCF:JMP/act/ssl

Enclosures

United States Nuclear Regulatory Commission
Attention: Document Control Desk

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