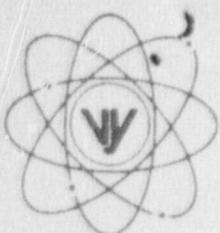


VERMONT YANKEE NUCLEAR POWER CORPORATION



Ferry Road, Brattleboro, VT 05301-7002

BVY 89-49

REPLY TO:

ENGINEERING OFFICE

580 MAIN STREET

BOLTON, MA 01740

(508) 779-6711

June 8, 1989

Proposed Change No. 85
Supplement 2

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

- References:
- (a) License No. DPR-28 (Docket No. 50-271)
 - (b) Letter, VYNPC to USNRC, "Surveillance Testing of ECCS and SLC Equipment; Supplement 1 to Proposed Change No. 85," FVY 87-112, dated December 7, 1987
 - (c) Letter, USNRC to VYNPC, "Request for Additional Information - Surveillance Testing of ECCS and SLC Equipment (TAC No. 66873)," NVY 88-077, dated May 9, 1988
 - (d) Letter, VYNPC to USNRC, "Vermont Yankee Response to USNRC Request for Additional Information - Surveillance Testing of ECCS and SLC Equipment (TAC No. 66873)," FVY 88-58, dated July 15, 1988

Subject: Surveillance Testing of ECCS and SLC Equipment: Supplement 2
to Proposed Change No. 85

Dear Sir:

Pursuant to Section 50.90 of the Commission's Rules and Regulations, Vermont Yankee hereby proposes the following changes to Appendix A of the Operating License.

Proposed Change

This supplemental proposed change revises the surveillance/alternate testing requirements of certain engineered safeguards equipment presently specified in the Vermont Yankee Technical Specifications. Revised Pages 80, 83, 86-94, 99, 100, 104, 131, 131a, 176, and 177 reflect this change and are provided as Attachment 1 to this submittal.

It is intended that this submittal and the attached revised Technical Specification pages supersede Proposed Change No. 85, Supplement No. 1 (Reference (b)) in its entirety.

Reason for Change

In the event that certain engineered safeguards systems, subsystems, or components are out of service, Vermont Yankee Technical Specifications presently require the remaining subsystem (train) of that system as well as other core/containment cooling systems, and their emergency power sources, to be tested immediately and daily thereafter. The applicable systems are those

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of the Emergency Core Cooling Systems (ECCS) and the Standby Liquid Control (SLC) System. On December 7, 1987, Vermont Yankee submitted a supplemental proposed change (Reference (b)) to modify these testing requirements.

On January 26, 1988, the USNRC published a notice in the Federal Register (53FR2114) entitled, "Amendment to Facility Operating License and Opportunity for Prior Hearing" pertaining to the supplemental proposed change (Proposed Change No. 85, Supplement 1). In response to this notice and subsequent petitions for leave to intervene and requests for a hearing, an Atomic Safety and Licensing Board (ASLB) was established to preside over the matter. Following discussions with the intervening parties in the above proceeding, Proposed Change No. 85, Supplement 1 was revised to further modify the alternate testing requirements as follows. When one train of an ECCS System is inoperable, the redundant train of that system will be tested. When a SLC component is inoperable, its redundant component will be tested. This testing is required within 24 hours, but is not required if the inoperable train is made operable before 24 hours. A single test within 24 hours will give assurances that time-related unavailability mechanisms (failure mechanisms such as accumulation of dirt or corrosion which may have accumulated since the last test or operation) have not rendered the tested item unavailable.

As a result of this additional modification, Proposed Change No. 85, Supplement 2 is accordingly submitted for review and approval in place of Supplement 1 (Reference (b)).

Basis for Change

The basis for the current alternate testing requirement is to assure operability of alternate systems and subsystems when one subsystem is inoperable. Based on our review of BWR Standard Technical Specifications, licensing actions involving other utilities, and the applicable regulations of 10CFR Part 50.55a, the alternate testing specified in the current Vermont Yankee Technical Specifications is not required to assure operability of systems. Title 10CFR 50.55a states that operational readiness of pumps and valves whose function is required for safety is demonstrated by in-service examinations conducted in accordance with ASME Section XI. The Vermont Yankee In-Service Testing Program is based on the codes and standards of ASME Section XI.

Thus, the current alternate testing requirements are not required by the applicable regulations. In addition, as discussed below, the proposed modification in alternate testing requirements will result in a measurable plant safety enhancement.

Safety Considerations

A study was performed to quantify the safety impact of alternate testing on component and system availability. This study, Reference (d), was provided in response to an NRC request for information (Reference (c)).

This study involved a detailed analysis of component, subsystem, and system availabilities for the Core Spray and Diesel Generator Systems. The analysis accounted for unavailability to perform the system safety function on demand due to both demand-related and time-related (standby) failures. The analysis also accounts for unavailability during repair of demand-related, time-related, and test-related failures.

The results show that daily testing results in a higher unavailability than testing performed at the normal monthly surveillance interval, due to the increased number of demand-related and test-related failures. Sensitivity studies show that these results are valid over a wide range of reasonable input data. All other systems involved in the alternate testing requirements were reviewed in the context of the results obtained for the Core Spray System and Diesel Generator System. This review concluded that the trend for these other systems was the same, i.e., daily testing produces higher unavailability than monthly testing. The overall conclusion of this study is that reducing the frequency of alternate testing, as proposed here, will result in the affected systems being more available to accomplish their safety functions.

Based on the above, it is concluded that this proposed change does not involve an unreviewed safety question as described in 10CFR50.59.

This change has been reviewed by the Vermont Yankee Nuclear Safety and Audit Review Committee.

Significant Hazards Consideration

The standards used to arrive at a determination that a request for amendment involves no significant hazards consideration are included in the Commission's regulations (10CFR50.92) which state that the operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. In addition, the Commission has provided guidance in the practical application of these criteria in 51FR7751, dated March 6, 1986.

The discussion below addresses each of these three criteria and demonstrates that the proposed amendment involves no significant hazards considerations:

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated. This change does not alter any of the ECCS or SLC systems themselves. It only changes testing requirements for these systems when a system/subsystem is inoperable. The ECCS and SLC systems are provided to limit the probability and consequences of certain accidents. The proposed change will improve the availability of these systems to perform their intended safety function, hence the probability or consequences of any accident previously evaluated is not increased.
2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated. No physical change is being made to any of the subject systems, and no new testing techniques or procedures are being proposed. Only the test frequency is being changed. Thus, the proposed amendment will only change the frequency of certain testing, and will not create the possibility of a new or different kind of accident from any accident previously evaluated.

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- 31 The proposed amendment will not involve a significant reduction in a margin of safety. The proposed change relies on in-service testing to assure system operability. The In-Service Testing Program is based on ASME, Section XI, hence the proposed change satisfies the applicable regulatory criteria as specified in Title 10CFR50.55a. In addition, the proposed modifications to the alternate testing requirements will result in increased availability of the systems involved. This greater availability increases plant safety by providing more assurance that these systems will be available to perform their intended safety function. Thus, this proposed change does not reduce a margin of safety.

Based on the above, we have determined that this change does not constitute a significant hazards consideration as defined in 10CFR50.92(c).

Schedule of Change

The revised pages will be incorporated into the Technical Specifications as soon as possible following receipt of NRC approval.

We trust this submittal is acceptable; however, should you have any questions, please contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Warren P. Murphy
Warren P. Murphy
Vice President and Manager

Warren P. Murphy

Vice President and Manager of Operations

WPM/dhm/0215u

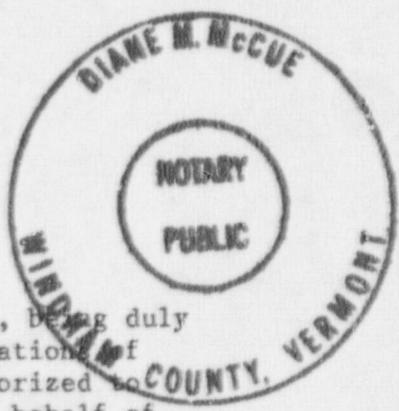
Enclosures

cc: Vermont Department of Public Services
120 State Street
Montpelier, Vermont 05602
Attention: Mr. G. Sterzinger, Chairman

U.S. Nuclear Regulatory Commission
Region I Office
U.S. Nuclear Regulatory Commission
Resident Inspector - VYNPS

STATE OF VERMONT)
)ss
OF WINDHAM COUNTY)

Then personally appeared before me, Warren P. Murphy, who, being duly sworn, did state that he is Vice President and Manager of Operations of Vermont Yankee Nuclear Power Corporation, that he is duly authorized to execute and file the foregoing document in the name and on the behalf of Vermont Yankee Nuclear Power Corporation and that the statements therein are true to the best of his knowledge and belief.



Diane M. McCue
My Commission

Diane M. McCue

Notary Public

My Commission Expires February 10, 1991