VERMONT YANKEE
NUCLEAR POWER CORPORATION

Proposed Change No. 135

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REPLY TO:
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August 28, 1986
FVY 86-78

United States Nuclear Regulatory Commission
Washington, DC 20555

Attention: Office of Nuclear Reactor Regulation
Mr. H. R. Denton, Director

References:
(a) License No. DPR-28 (Docket No. 50-271)
(b) NRC IE Information Notice No. 86-39, dated May 20, 1986, "Failures of RHR Pump Motors and Pump Internals"
(c) Letter, VYNPC to USNRC, FVY 86-62, dated July 11, 1986, "RHR Pump Impeller Wear Rings"
(d) Letter, USNRC to VYNPC, "NRC Guidelines for Excluding Exercising (Cycling) Tests for Certain Valves During Plant Operations," dated November 17, 1976
(e) BWR Standardized Technical Specifications

Subject: Changes to Technical Specifications For the 1986/1987 Operating Cycle Inspection/Repair of the RHR Pump Impeller Wear Rings

Dear Sir:

Pursuant to Section 50.59 of the Commission's Rules and Regulations, Vermont Yankee Nuclear Power Corporation hereby proposes the following change to Appendix A of the operating license.

Proposed Change

Replace Page 86 of the Vermont Yankee Technical Specifications with the attached revised Page 86. This page proposes an addition to Sections 3.5.A.3 and 4.5.A.3 for Limiting Conditions of Operation and Surveillance Requirements to address the RHR pump impeller wear ring inspection/repair to be conducted during the 1986-1987 operating cycle.

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Reason for Change

Recently, the NRC [Reference (b)] identified a potential generic problem with Bingham-Willamette Model 16 x 18 x 26 CVIC pump wear rings. By letter dated July 11, 1986 [Reference (c)], Vermont Yankee outlined its enhanced Monitoring Program for the four RHR pumps, including a plan to inspect/repair these pumps during the 1986-1987 operating cycle. Vermont Yankee had planned to perform this work during the 1987 refueling outage; however, in response to NRC concerns, this schedule was accelerated to commence during the 1986-1987 operating cycle. Due to the scope of the work associated with the on-line inspection/repair, it is anticipated that a pump could be inoperable for more than the seven days currently allowed by Technical Specifications. Therefore, an extension of the current Limiting Condition of Operation period of seven days and Surveillance Requirement is required.

Basis for Change

In our letter of July 11, 1986 [Reference (c)], Vermont Yankee committed to a program to address the long-term concern identified with respect to the potential for IGSCC in Bingham-Willamete RHR pump impeller wear rings. In addition to our established Enhanced RHR Pump Monitoring Program, we are planning the disassembly of the pumps, one at a time, to inspect and, if necessary, replace the wear rings or impellers. We currently estimate this effort to take approximately two weeks for each pump. Because Sections 3.5.A.3 and 4.5.A.3 of the Vermont Yankee Technical Specifications presently permit seven days of pump inoperability, a change to the Technical Specification is proposed.

Vermont Yankee's proposed extension of the allowable out-of-service period for each pump will not degrade the ability of the redundant LPCI System in a manner other than those already analyzed in the Vermont Yankee FSAR. Thus, the extension of the Limiting Conditions of Operation from a seven to fourteen day period is both necessary and justified.

The elimination of alternate testing in accordance with Technical Specification 4.5.A.3, Paragraph 1, is consistent with the BWR Standardized Technical Specifications [Reference (e)] for ECCS Surveillance Testing. While a LPCI System, subsystem, or component has been declared out of service, realignment of valves to perform surveillance testing would require that the remaining subsystems or components be out of service for the test period. If the test requirement is left intact, this would provide daily challenges to the system for up to 14 days. This would, in effect, reduce the margin of safety for these systems. This approach is consistent with the conclusions of the NRC Guidelines for Excluding Exercising (Cycling) Tests of Certain Valves During Plant Operations [Reference (d)], which states that when one train of a redundant system is inoperable, non redundant valves in the remaining train should not be cycled since their failure while undergoing, or as the result of, increased testing could cause the loss of total system function.

For these reasons, this change proposes that no alternate testing be required. The remaining active components will be tested monthly, and demonstrated operable in accordance with Technical Specifications 4.5.A.1

and 4.10.A.1. Since these changes are consistent with the BWR Standardized Technical Specifications and the referenced NRC Guidelines, this change is acceptable and justified.

Safety Considerations

This proposed change provides a Technical Specification change for the 1986-1987 operating cycle for RHR pump inspection/repair. Over the lifetime of Vermont Yankee's LPCI System operation, a high degree of reliability has been demonstrated by this system. Regular testing, in accordance with Technical Specification 4.5.A.1 of the other active components associated with the LPCI System will ensure operability of the system during the extended out-of-service period. Operator awareness will be ensured through the preplanning currently underway in support of this Inspection/Repair Program. The preplanning will also evaluate and control other required surveillance and maintenance activities in order to maximize the availability of the ECCS Systems. This change is not considered to constitute an unreviewed safety question, as defined in 10CFR50.59(a)(2).

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

Significant Hazards Consideration

The standards used to arrive at a determination that a request for amendment requires 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. The discussion below addresses each of these three criteria and demonstrates that the proposed amendment involves no significant hazards considerations.

The Vermont Yankee FSAR addresses the consequences and mitigation of any postulated accidents with one LPCI pump unavailable. Therefore, this proposed change does not significantly increase the probability or consequences of a previously evaluated accident, or create the possibility of a new or different kind of accident. During normal operation, these pumps do not run. They are used solely for accident mitigation, and remain in standby. The pumps and other active components of the system are tested monthly in accordance with Technical Specification 4.5.A.1. Through the elimination of alternate testing, the possibility of a loss of total system function due to a failure during, or as the result of, testing, and the system out-of-service period during testing, will be eliminated. Therefore, this proposed charge presents no reduction in a margin of safety.

Therefore, we conclude that these proposed changes do not constitute a significant hazard consideration, as defined in 10CFR50.92.

Fee Determination

In accordance with the provisions of 10CFR170.12, an application fee of $150.00 is enclosed.

Schedule of Change

In order to commence the inspection effort on a timely schedule, we request that your review and approval of this proposed change be completed no later than November 1, 1986. This change to the Vermont Yankee Technical Specifications will be implemented as soon as practicable following receipt of your approval.

We trust that the information provided above adequately supports our request; however, should you have any questions in this matter, please contact us.

Very truly yours,

VERMONT YANKEE NUCLEAR POWER CORPORATION

Warren P. Murphy
Vice President and Manager of Operations

CJN/jgl
Enclosure

cc: U.S. Nuclear Regulatory Commission
Document Control Desk (40 copies)

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

STATE OF VERMONT)
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OF WINDHAM COUNTY)

Then personally appeared before me, Warren P. Murphy, who, being duly sworn, did state that he is a 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
NOTARY
PUBLIC
WINDHAM COUNTY, VERMONT

Diane M. McCue
Diane McCue Notary Public
My Commission Expires.....