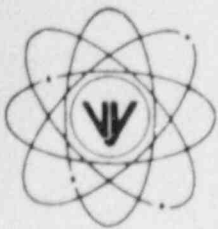


VERMONT YANKEE NUCLEAR POWER CORPORATION



RD 5, Box 169, Ferry Road, Brattleboro, VT 05301

Proposed Change No. 146

FVY 88-99

REPLY TO:
ENGINEERING OFFICE

580 MAIN STREET
BOLTON, MA 01740
(508) 779-6711

November 30, 1988

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

- References:
- (a) License No. DPR-28 (Docket No. 50-271)
 - (b) Letter and SER, USNRC to General Electric Company, dated December 27, 1987
 - (c) NEDO-30060, Vermont Yankee Nuclear Power Station, Single Loop Operation, February 1983

Subject: Proposed Technical Specification Change to Incorporate the 1.04 Fuel Cladding Integrity Safety Limit

Dear Sir:

Pursuant to the Commissions rules and regulations as set forth in 10CFR50.90, Vermont Yankee Nuclear Power Corporation (VYNPC) hereby proposes the following changes to Appendix A of the Vermont Yankee plant operating license (Reference (a)).

Proposed Change

VYNPC will incorporate a revised Fuel Cladding Integrity Safety Limit (FCISL) for use in calculating critical power operating limits in future reload analyses. The NRC has approved the use of a 1.04 FCISL for D-lattice plants with a second successive reload of P8X8R, BP8X8R, GE8X8E, or GE8X8EB fuel types with high bundle R factor (≥ 1.04). VYNPC meets these conditions, therefore, the use of a 1.04 FCISL is appropriate. VYNPC intends to leave the current 1.07 FCISL in the Technical Specifications for situations where fuel types not meeting the conditions for the 1.04 FCISL are used.

Changes in the Technical Specifications are proposed to define and reference the FCISL and to adjust the Minimum Critical Power Ratio (MCPR) Operating Limits. Safety Limit definition 1.1.A is revised to specify that a MCPR equal to or greater than 1.04 (1.05 for single loop operation) for the fuel types and conditions stated above constitutes compliance with the FCISL; otherwise a ≥ 1.07 MCPR constitutes compliance with the FCISL. Table 3.11.2 contains the MCPR Operating Limits. This table is revised to reflect the 1.04 FCISL. The proposed change limits in Table 3.11.2 were derived by subtracting .03 from the current limits since the current limits are based on a 1.07 FCISL.

Reason for Change

Administrative changes are necessary to define 1.04 as a FCISL. Table 3.11.2 is changed to make use of the 1.04 FCISL for future operation of VYNPS.

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Basis for Change

GE has obtained approval to use 1.04 as the FCISL for current GE fuel designs. Reference (b) is quoted as:

"We find Amendment 14 to be acceptable for referencing in license applications to the extent specified and under the limitations delineated in Amendment 14 and the associated NRC technical evaluation. The evaluation defines the basis for acceptance of the amendment.

We do not intend to repeat our review of the matters described in Amendment 14 and found acceptable when the report appears as a reference in license applications, except to assure that the material presented is applicable to the specific plant involved. Our acceptance applies only to the matters described in the Amendment 14."

Amendment 14, as specified above, proposed the upgraded FCISL (1.04) for the loading of current GE fuel designs.

Per Reference (b) the 1.04 FCISL is applicable to the second successive reload core of P8X8R, BP8X8R, GESX8E, or GESX8EB GE fuel types with high R factors (≥ 1.04). In particular, Vermont Yankee currently uses P8X8R and BP8X8R with R factors greater than 1.04. Thus, the use of the 1.04 FCISL is appropriate for Vermont Yankee according to the criteria set forth in Reference (b).

For single loop operation, the FCISL is raised by .01 to 1.05. The increase in FCISL accounts for the additional instrumentation uncertainties under single loop operating conditions as discussed in Reference (c).

Safety Considerations

The proposed change does not constitute an unreviewed safety question as defined in 10CFR50.59(a)(2). The change has been reviewed by the Plant Operations Review Committee and the Nuclear Safety Audit and Review Committee.

No Significant Hazards Considerations Determination

Three standards defined in 10CFR50.92 are used to arrive at a determination that this request for amendment involves no significant hazards considerations. The discussion below addresses these three standards and demonstrates that operating the facility in accordance with this proposed change involves no significant hazards considerations.

1. The proposed change will not involve any significant increase in the probability or consequences of an accident previously evaluated. No changes are being made to the facility or its equipment so there is no increase of the probability of any previously analyzed event.

For the P8X8R, BP8X8R, GESX8E, or GESX8EB with R factors ≥ 1.04 , the 1.04 FCISL provides the same degree of assurance for fuel cladding integrity during an abnormal event as the 1.07 FCISL does for all other core loadings. Since Vermont Yankee uses and will install these GE fuel types in future reloads, the use of the 1.04 FCISL does not increase the consequences of any event previously analyzed.

2. The proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated since the facility is not being changed.
3. The proposed change will not involve a significant reduction in the margin of safety. The use of 1.04 as the MCPR FCISL reflects the utilization of current GE fuel designs and does provide the same margin of safety as 1.07 does with the older GE fuel types as discussed in the SER included with Reference (b).

Fee Determination

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

Schedule of Change

We request that your review and approval of this proposed change be completed by April 1, 1989 in order to ensure that the change is incorporated in the Vermont Yankee Technical Specifications prior to startup of Cycle 14. This change will be incorporated into the Vermont Yankee Technical Specifications as soon as practicable following receipt of your approval.

We trust that the information 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


W. B. Murphy
Vice President and Manager of Operations

WPM/0084u
Enclosure

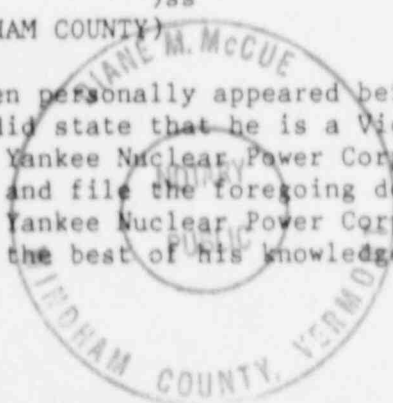
cc: U. S. Nuclear Regulatory Commission
Region I Office
U. S. Nuclear Regulatory Commission
Resident Inspector, VYNPS
Vermont Department of Public Services
120 State Street
Montpelier, Vermont 05602
Attention: Mr. G. Sterzinger, Chairman

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 McCue
Notary Public
My Commission Expires February 10, 1991