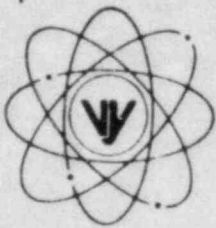


# VERMONT YANKEE NUCLEAR POWER CORPORATION

PROPOSED CHANGE NO. 111



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

2.C.15.1  
FVY 83-11

REPLY TO:

## ENGINEERING OFFICE

1671 WORCESTER ROAD  
FRAMINGHAM, MASSACHUSETTS 01701  
TELEPHONE 617-872-8100

February 22, 1983

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

Attention: Office of Nuclear Reactor Regulation  
Reference: (a) License No. DPR-28 (Docket No. 50-271)  
Subject: Proposed Change to Reactor Protection System Instrument  
Requirements

Dear Sir:

Pursuant to Section 50.59 of the Commissions Rules and Regulations, Vermont Yankee Nuclear Power Corporation hereby proposes the following modifications to Appendix A of the Operating License.

### PROPOSED CHANGE

Replace pages 5b, 14a, 19, 21, 21a, 29, and 30 with the attached revised pages 5b, 14a, 19, 21, 21a, 29, and 30. These pages replace Table 3.1.1, Table 3.1.1 notes, and test with new sections which allow placing the reactor mode switch in Startup with the LPRMs disconnected during refueling outage testing.

### REASON FOR CHANGE

During refueling outages, the LPRM electrical connections have frequently suffered damage as a result of other under vessel work. This has contributed to LPRM failure, has necessitated extensive maintenance, and has resulted in increased personnel radiation exposure. Allowing disconnection of the LPRMs during refueling outage work and testing would preclude such damage and exposure without being detrimental to any safety margin. Table 3.1.1 of the existing Technical Specifications allows for LPRM disconnection when the reactor mode switch is in Shutdown or Refuel (subject to the restrictions in Note 1), but requires APRM operability when the mode switch is in Startup. This requirement is unnecessarily cumbersome during outages when the mode switch is placed in Startup solely for refueling interlock checks.

8302250403 830222  
PDR ADDCK 05000271  
PDR

*Approved w/check \$4,000*

### SAFETY CONSIDERATIONS

The greatest reactivity additions available when the reactor vessel head is off and the temperature is less than 212°F are from fuel installation into the reactor and control rod withdrawal. Administrative limits provide protection against power level increases during fuel addition and control rod withdrawal is limited to two rods when in the Refuel mode. This Proposed Change governs outage testing in the Startup mode with the reduced APRM scram inoperable under similar conditions to those stated above. Under such circumstances, a 15% power APRM scram capability is overly conservative since operability of both the high flux IRM scram and the high flux SRM scram would meet the criteria set forth in the basis to Section 2.1 of the Technical Specifications for adequate thermal margin between their scram setpoints and the safety limit (25% of rated thermal power). They would also meet the criterion set forth in the basis to Section 3.1 for preserving the effectiveness of the Reactor Protection System to tolerate a single failure and still perform its intended function of scrambling the reactor. With full range on the SRMs at approximately .0001% power and the IRM scram in range 1 at approximately .001% power, the APRM reduced flux scram point would never be reached.

Limiting the exemption from APRM operability to evolutions involving movement of not more than two control rods insures that the intent of the criterion for rate of power rise stated in the basis to Section 2.1 is met and adds assurance that a significant power level increase will not occur.

Vermont Yankee will implement administrative controls to assure that, for the purpose of refueling interlock checks, no more than two control rods can be withdrawn (provided they are not face adjacent or diagonally adjacent) and that the SRM, IRM, and mode switch scrams are functional, when the mode switch is in Startup with the LPRMs disconnected.

Based on the above, we have concluded that the probability of previously evaluated accidents would not be increased by this change. The possibility of a different type of accident is not created nor are the margins of safety as defined in the bases of the Technical Specifications reduced by this Proposed Change. Therefore, this change does not constitute an unreviewed safety question as defined in 10CFR50.59(a)(2).

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

### FEE DETERMINATION

This Proposed Change requires an approval that involves a single safety issue and is deemed not to involve a significant hazard consideration. For these reasons, Vermont Yankee Nuclear Power Corporation proposes this as a Class III Amendment. A payment of \$4,000.00 is enclosed.

February 22, 1983  
Page 3

This change is requested to support our scheduled refueling outage. We therefore request that the NRC approve this change by March 1, 1983.

VERMONT YANKEE NUCLEAR POWER CORPORATION

L. H. Heider

L. H. Heider  
Vice President

COMMONWEALTH OF MASSACHUSETTS )  
 ) ss  
MIDDLESEX COUNTY )

Then personally appeared before me, L. H. Heider, who, being duly sworn, did state that he is a Vice President of Vermont Yankee Nuclear Power Corporation, that he is duly authorized to execute and file the foregoing request 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.

J. B. Sinclair  
J. B. Sinclair

I. B. Sinclair Notary Public  
My Commission Expires June 1, 1984

