

# VERMONT YANKEE NUCLEAR POWER CORPORATION

185 OLD FERRY ROAD, PO BOX 7002, BRATTLEBORO, VT 05302-7002  
(802) 257-5271

March 12, 2001  
BVY 01-24

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

**Subject: Vermont Yankee Nuclear Power Station  
License No. DPR-28 (Docket No. 50-271)  
Supplement to Technical Specification Proposed Change No. 239  
Refueling Interlocks**

On November 30, 2000, Vermont Yankee (VY) submitted to the Staff a Proposed Change to the Technical Specifications<sup>1</sup>. In that submittal, VY proposed to revise the operability requirements for the refueling interlocks contained within TS 3.12.A. Part of that change identified that the interlocks are only required for that equipment associated with the movement of fuel within the reactor vessel. As a result of this change and for consistency purposes, minor changes in text were proposed to TS 3.12.D and 3.12.E.

The Staff has identified that our determination of no significant hazards consideration warrants revision to identify the changes proposed to these sections. Accordingly, attached to this letter is a revised determination of no significant hazards consideration. Revision bars have been added to identify the areas of change.

It is noted that this letter also revises Table 1, Change #1 of the our Safety Assessment by adding the following text; "The proposed change identifies that the interlocks are only required for that equipment associated with the movement of fuel within the reactor vessel. An enhanced discussion on this is contained within the proposed changes to the Bases. As a result of this change and for consistency purposes, minor changes in text are also proposed to TS 3.12.D and 3.12.E to eliminate the need for all interlocks to be operable."

---

<sup>1</sup> Reference Vermont Yankee Nuclear Power Corporation letter to the USNRC, BVY 00-90, "Technical Specification Proposed Change No. 239, Refueling Interlocks," dated November 30, 2000.

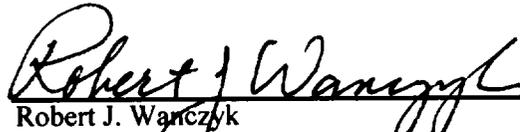
A 001

VERMONT YANKEE NUCLEAR POWER CORPORATION

If you have any questions on this transmittal, please contact Mr. Thomas B. Silko at (802) 258-4146.

Sincerely,

VERMONT YANKEE NUCLEAR POWER CORPORATION

  
Robert J. Wanczyk  
Director of Safety & Regulatory Affairs

STATE OF VERMONT        )  
  )ss  
WINDHAM COUNTY        )

Then personally appeared before me, Robert J. Wanczyk, who, being duly sworn, did state that he is Director of Safety & Regulatory Affairs 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.

  
Thomas B. Silko, Notary Public  
My Commission Expires February 10, 2003

Attachment

- cc: USNRC Region 1 Administrator
- USNRC Resident Inspector - VYNPS
- USNRC Project Manager - VYNPS
- Vermont Department of Public Service

**Attachment**

**Vermont Yankee Nuclear Power Station**

**Supplement to Proposed Technical Specification Change No. 239**

**Refueling Interlocks**

**Revised Determination of No Significant Hazards Consideration**

## **Determination of No Significant Hazards Consideration**

### **Description of amendment request:**

The proposed change would revise the operability requirements for the refueling interlocks contained within TS 3.12.A as well as the surveillance periodicity specified within 4.12.A. Through this change, the refueling equipment interlocks are more concisely defined, redundant interlocks are eliminated, action statements are clearly articulated for inoperable interlocks and the surveillance frequency for refueling interlock testing is extended. In addition, operational flexibility is increased and the existing margins of safety are maintained by acknowledging that the interlocks are only required for the specific equipment associated with the movement of fuel within the reactor vessel. For consistency purposes, the change that identifies that the interlocks are only required for the equipment associated with the movement of fuel is also reflected in TS 3.12.D and 3.12.E.

In addition, TS 3.12.F will be clarified to articulate that there must be a minimum 24 hours of fission product decay prior to fuel handling.

Administrative changes are also proposed for TS 3.12.B to correct grammatical errors.

The proposed change is only applicable to the plant in a cold shutdown or refueling condition.

### **Basis for no significant hazards determination:**

Pursuant to 10CFR50.92, Vermont Yankee (VY) has reviewed the proposed change and concludes that the change does not involve a significant hazards consideration since the proposed change satisfies the criteria in 10CFR50.92(c).

1. **The operation of Vermont Yankee Nuclear Power Station in accordance with the proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.**

The only accident described within the FSAR while the plant is in Cold Shutdown or Refueling is a fuel handling (dropped bundle) accident. The proposed change involves equipment that is not involved in the mitigation or prevention of a fuel handling accident as described in the FSAR. Accordingly, the proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change will not effect the ability of the refueling interlocks to satisfy the safety function which is to prevent reactor criticality during refueling operations. The change only effects those interlocks which are not instrumental in satisfying the safety function of the interlocks.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The operation of Vermont Yankee Nuclear Power Station in accordance with the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change does not involve any physical alteration of plant equipment or to the status of the reactor core during refueling. The specifications will ensure either through the interlocks or the proposed alternative, that control rods are not withdrawn and cannot be inappropriately withdrawn. This will ensure that fuel is not loaded into the core when a control rod is withdrawn.

Therefore, no new failure modes are introduced and the proposed change will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The operation of Vermont Yankee Nuclear Power Station in accordance with the proposed amendment will not involve a significant reduction in a margin of safety.

The proposed change does not involve a significant reduction in a margin of safety since the refueling interlocks will continue to ensure against an inadvertent criticality. This is achieved by physical interlocks or Technical Specification restrictions on refueling operations which will prevent fuel from being loaded into a core cell void of a control rod. This is accomplished by blocking control rod withdrawal whenever fuel is being loaded into the reactor vessel or by preventing fuel from being loaded into the vessel when a control rod is withdrawn.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.