



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 165 TO FACILITY OPERATING LICENSE NO. DPR-28

VERMONT YANKEE NUCLEAR POWER CORPORATION

VERMONT YANKEE NUCLEAR POWER STATION

DOCKET NO. 50-271

1.0 INTRODUCTION

The Vermont Yankee Nuclear Power Station is a boiling water reactor (BWR), model BWR-4, with a Mark I containment. By letter dated December 11, 1998, the Vermont Yankee Nuclear Power Corporation, the licensee for the Vermont Yankee Nuclear Power Station, submitted for Nuclear Regulatory Commission (NRC) staff review a proposed change to the technical specifications (TS). This change adds a note to allow manual containment isolation valves to be opened intermittently under administrative controls. The licensee also proposed to add the administrative controls to the TS Bases.

Specifically, the changes proposed are as follows:

- 1) T.S. Section 1.0 Definitions - Add a note to definition N. "Primary Containment Integrity," indicating that manual containment isolation valves may be opened intermittently under administrative controls.
- 2) T.S. Bases 3.7 - Add the following: Manual primary containment isolation valves that are required to be closed by the definition of Primary Containment Integrity may be opened intermittently under administrative controls. These controls consist of stationing a dedicated operator, with whom Control Room communication is immediately available, in the immediate vicinity of the valve controls. In this way, the penetration can be rapidly isolated when a need for primary containment integrity is indicated.

2.0 EVALUATION

The primary containment system is designed to limit leakage during and following a postulated loss-of-coolant accident to values lower than those which would result in off-site dose levels allowed by 10 CFR 100. The system also provides the capability for rapid isolation of all pipes or ducts which penetrate the primary containment by means which provide a containment barrier as effective as is required to maintain leakage within permissible limits.

The licensee stated that opening of manual primary containment isolation valves is necessary during normal plant operation to perform routine evolutions such as surveillances, sampling, and venting/draining of plant systems. It was recently concluded that the existing TS consider the primary containment inoperable when these manual valves are not closed. This inoperable status requires entering into a limiting condition for operation (LCO) which states "an orderly shutdown shall be initiated immediately and the reactor shall be in a cold shutdown condition within 24 hours." The licensee stated that industry practice supports the ability to manipulate these manual valves in support of plant operation (as indicated by the TS for other facilities and the BWR/4 standard).

The licensee proposed to allow intermittent opening of these manual primary containment isolation valves under administrative controls. These controls consist of stationing a dedicated operator, with whom Control Room communication is immediately available, in the immediate vicinity of the valve controls.

The staff agrees that intermittent opening of manual primary containment isolation valves is necessary to perform certain plant operations and entry into the shutdown LCO should not be required. Allowing intermittent opening under administrative controls will ensure that the valve penetration can be rapidly isolated when a need for primary containment is indicated. This will maintain containment leakage within permissible limits. Therefore, the staff finds the proposed change acceptable. In addition, the staff notes that the proposed change is consistent with the intent of the BWR/4 standard TS.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Vermont State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (63 FR 70168). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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Date: January 19, 1999