



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. TO FACILITY OPERATING LICENSE NO. DPR-3

YANKEE ATOMIC ELECTRIC COMPANY

YANKEE NUCLEAR POWER STATION

DOCKET NO. 50-29

1.0 INTRODUCTION

By letter dated April 17, 1984, Proposed Change 183, as revised April 5, 1985, the Yankee Atomic Electric Company (YAEC or the licensee) requested an amendment to the Appendix A Technical Specifications (TS) appended to Facility Operating License No. DPR-3 for the Yankee Nuclear Power Station (Yankee or the facility).

The proposed amendment revised the TS for (1) the capacity of the pressurizer code safety valves and (2) the snubbers associated with the pressurizer code safety valves, and incorporates new TS for (1) the reactor coolant system (PCS) vents, and (2) the degraded grid voltage protection system. Additional proposed changes are being evaluated separately by the NRC staff under other licensee submittals.

A Notice of Consideration of Issuance of Amendment to License and Proposed — No Significant Hazards Consideration Determination and Opportunity for Hearing related to the requested action was published in the Federal Register on May 14, 1984 (49 FR 20391). No comments or requests for hearing were received.

2.0 PRESSURIZER CODE SAFETY VALVES

2.1 Introduction

In response to NUREG-0737, Item II.D.1, the licensee replaced the two pressurizer code safety valves, PR-SV-181 and PR-SV-182 with valves whose design is traceable to valves tested by the PWR Industry Safety and Relief Valve Test Program.

2.2. Evaluation

Proposed Change 183, Item 1.(1): The change requested revision of the BASES section 3/4.4.2 and 3/4.4.3 to reflect a recalculation of the pressurizer code safety valves' capacities. The recalculation was performed by the valve manufacturer using the current code for calculating safety valve flow rate. The relief capacity has been revised from 92,000 lbm/hr each to 125,000 lbm/hr and 130,000 lbm/hr, respectively. This increase in the calculated relief capacity affects the BASES section only, and does not affect the limiting conditions for operation or surveillance requirements of the TS.

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Proposed Change 183, Item 1 (2): The change requested deletion of four pressurizer safety valve snubbers from Table 3.7-4. The safety valves themselves were replaced in the Spring 1985 refueling outage and, as a result of the valve replacement program, four pressurizer safety valve snubbers were removed. The proposed TS change requests that these four snubbers be administratively removed from the TS. Based on the information submitted by the licensee in its April 17, 1984 letter from L. H. Heider to H. R. Denton, the staff found the removal of the snubbers from the physical system and the TS acceptable. The staff review is documented in a memorandum from J. P. Knight to G. C. Lainas dated August 3, 1984.

3.0 Reactor Coolant System Vents

Proposed Change 183, Item 4, requests the incorporation of TS for RCS vents. System modifications were previously made to the RCS in response to NUREG-0737 Item II.B.1 to provide for RCS venting. The change adds limiting conditions for operation and surveillance requirements that did not previously exist in the TS.

The NRC staff has reviewed the proposed TS, and found them consistent with the guidance contained in Generic Letter 83-37. The change involves additional limitations, restrictions or controls not presently included in the TS. Based on these considerations, the NRC staff finds this change acceptable.

4.0 Degraded Grid Voltage Protection

Proposed Change 183, Item 2, requests the incorporation of TS for the degraded grid voltage protection system. Installation of a second-level (degraded voltage) Undervoltage Protection System has been completed. The change adds limiting conditions for operation and surveillance requirements for the second level undervoltage protection system that do not currently exist in the TS.

The NRC staff has reviewed the proposed TS. The proposed change is acceptable for the second level system, with the following exception. The proposed TS provides for surveillance of the second level undervoltage protection system once per refueling outage. The June 3, 1977 Generic Letter model TS call for surveillance testing of this system once per month. The licensee stated in a letter dated August 7, 1984 that design modifications to allow for monthly testing would be installed during the 1985 refueling outage. Prior to the installation of the design modification, the current design does not allow for monthly testing. Deferring testing until the design modification is installed during the 1985 refueling outage is acceptable to the NRC staff. The proposed TS will be issued requiring testing once per refueling outage through the end of the 1985 refueling outage only. Prior to startup from the 1985 refueling outage, this TS must be modified to require monthly testing of the second level undervoltage protection device.

This proposed change involves additional limitations, restrictions, or controls not currently in the TS. Based on the above considerations, the NRC staff finds this change acceptable.

Additional TS changes are also necessary to address the first level undervoltage protection system, as discussed in the NPC staff's January 4, 1985 Safety Evaluation.

5.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. The 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this 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 this amendment.

6.0 CONCLUSION

The staff 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

7.0 ACKNOWLEDGEMENT

This Safety Evaluation has been prepared by H. Shaw, C. Patel, H. Emani, and J. Clifford.

Dated: October 1, 1985