



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 41 TO FACILITY OPERATING LICENSE NO. DPR-3

YANKEE ATOMIC ELECTRIC COMPANY

YANKEE NUCLEAR POWER STATION (YANKEE-ROWE)

DOCKET NO. 50-29

Introduction

By application dated July 5, 1977, Yankee Atomic Electric Company (the licensee) requested an amendment to its Facility Operating License No. DPR-3 for the Yankee-Rowe reactor. The amendment would modify the facility Technical Specifications relating to shock suppressors (snubbers).

Discussion and Evaluation

Yankee-Rowe has eight hydraulic shock suppressors (snubbers) located on the pressurizer relief lines. The purpose of those snubbers is to restrain pipe motion under dynamic loads as might occur during severe transients while allowing normal thermal movement of the pressurizer relief lines during startup and shutdown of the reactor.

Presently, the Technical Specifications include surveillance requirements in Section 3.4.7.9 "Shock Suppressors (Snubbers)" which were specifically developed for hydraulic snubbers. Our safety evaluation supporting issuance of Amendment No. 29 to DPR-3, dated July 22, 1976, discusses past experience with degradation of seal materials in hydraulic snubbers, and presents an evaluation of acceptability of the present Technical Specifications with respect to providing additional assurance of satisfactory performance and reliability of hydraulic snubbers at Yankee-Rowe.

During the present outage for refueling with Core XIII the licensee proposes to replace the hydraulic snubbers with Pacific Scientific PSA-3 type mechanical snubbers. Due to the design (no sealing materials and no hydraulic actuating system) the mechanical snubbers are more reliable since they are not subject to potential degradation of seal material, loss of fluid and other factors affecting functional performances, as are the hydraulic snubbers.

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To accommodate the proposed changeover from hydraulic snubbers to mechanical snubbers at this time requires changes to the Technical Specifications in Section 3.4.7.9 prior to startup of Yankee-Rowe with Core XIII. Accordingly for these mechanical snubbers, the licensee has proposed in its July 5, 1977, application, to delete the surveillance requirements that are solely applicable to hydraulic snubbers, and to include instead requirements for periodic visual inspections to verify proper snubber orientation and proper attachment of linkage connections to the piping and anchors. The limiting conditions for snubber operability and the surveillance frequency would remain unchanged.

We have concluded that the proposed change from hydraulic to mechanical snubbers and the associated accommodating changes in the Technical Specifications, do not decrease the degree of confidence in the continued successful performance of these snubbers and we therefore, find these changes to be acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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.

Date: August 18, 1977