UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-29

YANKEE ATOMIC ELECTRIC COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commision) has issued Amendment No. 43 to Facility Operating License No. DPR-3, issued to Yankee Atomic Electric Company (the licensee), which revised Technical Specifications for operation of the Yankee Nuclear Power Station (Yankee-Rowe) (the facility) located in Rowe, Franklin County, Massachusetts. The amendment is effective as of its date of issuance.

The amendment incorporates provisions in the Technical Specifications required for operating with the refueled Core XIII, with an active ECCS accumulator subsystem, and with modified ECCS piping, based on an ECCS performance analysis utilizing certain modeling changes. The amendment also includes provisions restricting operation with Cycle XIII to the 4-loop mode and to 225 effective full power days.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Notice of Proposed Issuance of Amendment to Facility Operating License in connection

with changes to the Technical Specifications resulting from the Yankee-Rowe Core XIII reload analysis facility ECCS modifications, and a conceptual change to the ECCS analytical model was published in the FEDERAL REGISTER on June 6, 1977 (42 FR 28946). No request for a hearing or petition for leave to intervene was filed following notice of the proposed action. Prior public notice of other items associated with this amendment was not required since they do not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any signficant environmental impact and that pursuant to 10 CFR 51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated January 6, 1977, as supplemented March 11; April 13; May 2; June 30; July 7, 14 and 15; August 1, 4, 5, 8, 9 and 22, 1977, (2) Amendment No. 43 to License No. DPR-3, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. 20555 and at the Greenfield Public Library, 422 Main Street, Greenfield, Massachusetts 01581. A copy of items (2) and (3) may be obtained upon request

addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 25th day of August 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

PRELIMINARY DETERMINATION

NOTICING OF PROPOSED LICENSING AMENDMENT

LICENSEE: Yankee Atomic Electric Company (Yankee-Rowe)

REQUEST FOR: Authorization to implement Technical Specification changes resulting from the Yankee-Rowe Core XIII reload analysis, facility ECCS modifications, and a conceptual change to the ECCS analytical model.

REQUEST DATE: April 13, 1977

PROPOSED ACTION:
- (X) Pre-notice Recommended
- ( ) Post-notice Recommended
- ( ) Determination delayed pending completion of Safety Evaluation

BASIS FOR DECISION: The Yankee-Rowe reload analysis incorporates the benefits derived from modifying the Accumulator Injection System and redefining the "End of Bypass Time" definition used in the ECCS analytical model.

Accumulator Injection System

Hardware modifications have been proposed which would convert the accumulator injection system from a passive system to an active system. This modification would delay the Post LOCA injection feature an additional 6 seconds (from 19 seconds to 26 seconds) thus resulting in an increased blowdown and higher peak clad temperatures at the time ECCS is initiated. The core reflood time will be reduced however, by initiating the injection at a higher accumulator pressure (515 psia, unmodified 385).

Although the postulated net result of the accumulator injection system modifications would be to improve the performance capability of the ECCS for operation with Core XIII, the postulated increase in peak clad temperatures at the time of ECCS initiation involves a significant hazards consideration.

End of Bypass Time Redefinition

The redefinition of "End of Bypass" for the Core XIII loss of coolant accident analysis constitutes a change from the presently approved ECCS model for Yankee-Rowe and therefore involves a significant hazards consideration.

Conclusion

Since we find that the proposed licensing action involves a significant hazards consideration, as discussed above, we conclude that this action should be pre-noticed.

Proposed NEPA Action:

( ) EIS Required

( ) Negative Declaration (ND) and Environmental Impact Appraisal (EIA) Required

(X) No EIS, ND or EIA Required

( ) Determination delayed pending completion of EIA

BASIS FOR DECISION: The proposed amendment does not constitutes a change in licensed power level, nor does it increase the amounts or types of effluents from the facility and will not adversely effect the environment or the health and safety of the public.

CONCURRENCES; DATE:

1. P. DiBenedetto Benedetto 5-11-77
2. A. Schwencer 5-11-77
3. K. R. Goller KRG 5-11-77
4. OELD S SEHINAL for 5/26/77