



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION:  
SUPPORTING AMENDMENT NO. 67 TO FACILITY OPERATING LICENSE NO. DPR-3  
YANKEE NUCLEAR POWER STATION (YANKEE-ROWE)  
YANKEE ATOMIC ELECTRIC COMPANY  
DOCKET NO. 50-29

1.0 INTRODUCTION

By letter dated April 13, 1981, Yankee Atomic Electric Company (the licensee) requested a change to the Technical Specifications appended to Facility Operating License No. DPR-3 for the Yankee Nuclear Power Station (Yankee-Rowe). This change would allow extension of the Cycle XIV LOCA limits to 16,300 MWD/MTU core average burnup from 16,000 MWD/MTU.

2.0 DISCUSSION AND EVALUATION

The Core XIV LOCA limits implemented through Technical Specification (TS) Figure 3.2.1 are currently valid to a cycle average burnup of 16,000 MWD/MTU. Due to a longer coastdown than normal, an end of cycle burnup of 16,200 MWD/MTU is anticipated at Core XIV shutdown presently scheduled for May 2, 1981. Extension of TS Figure 3.2.1 slightly beyond the anticipated end of cycle burnup is required to permit plant coastdown beyond the 16,000 MWD/MTU cycle average burnup.

The LOCA analysis, to show compliance with the criteria of 10 CFR 50.46, assumed burnups of 27,883 MWD/MTU and 32,703 MWD/MTU for the fresh and high powered exposed individual hot rods. Using these values a conservative cycle average burnup TS was developed to a 16,000 MWD/MTU cycle end point. This is Figure 3.2.1, "Core XIV Allowable Peak Rod LHGR versus Cycle Burnup. The actual anticipated burnups of these rods at 16,300 MWD/MTU cycle average burnup are expected to be about 23,900 MWD/MTU for the fresh fuel and about 27,700 MWD/MTU for the high powered exposed fuel which is still below the assumed burnups in the safety analysis.

We therefore conclude that there is reasonable assurance that operation of Yankee-Rowe consistent with the proposed Technical Specifications will not endanger the health and safety of the public, and that the proposed Technical Specifications are acceptable.

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### 3.0 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.

### 4.0 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: April 22, 1981