



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 89 TO FACILITY OPERATING LICENSE NPF-9
AND AMENDMENT NO. 70 TO FACILITY OPERATING LICENSE NPF-17

DUKE POWER COMPANY

DOCKET NOS. 50-369 AND 50-370

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

1.0 INTRODUCTION

By letter dated May 6, 1988, Duke Power Company (the licensee) proposed amendments to delete a footnote "NOTE 1" from Technical Specification (TS) 4.4.5.4 associated with steam generator tube plugging acceptance criteria. Note 1 states that "The application of F* expires at the end of the fifth fuel cycle for each respective unit." Removal of this footnote, in effect, would authorize the application of F* for the life of the units. The licensee also proposed that the NRC addressee for receipt of a report on the results of inspections of F* tubes be deleted from TS 4.4.5.5c.

2.0 EVALUATION

On August 19, 1986, by previous Amendments 59 (Unit 1) and 40 (Unit 2), the Commission revised the McGuire TSS to incorporate a distance, designated F* and identified as the F-star criterion, below the top of the steam generator tubesheet below which tube degradation of any extent does not necessitate plugging. In the SER for Amendments 59 and 40, the Commission concluded that tubes can safely be left in-service with degradation located below the F* distance. This represented the initial approval by the Commission for a plant to operate using F* criterion. Accordingly, the Commission concluded at that time that until behavior of F* tubes had been confirmed by actual operation, approval of these amendments should be limited to about two cycles of operation for each McGuire unit. The Commission has subsequently approved use of F* criteria on other nuclear plants which, like McGuire, use Westinghouse Model D steam generators (e.g., Catawba 1 and 2, V. C. Summer).

By application dated May 6, 1988, the licensee provided results of operating experience (328 tubes left in service) at McGuire 1 and 2 using F* criterion. The McGuire results demonstrate that the use of the F* criterion has had no adverse impact on any aspect of steam generator operability; no significant change in primary-to-secondary coolant leak rates and no degradation of tubesheet material have occurred. The experiences at other nuclear plants using F* criterion have also been favorable. The F* criterion is also noted to have had a positive impact on the reduction of personnel radiation exposure.

Because the subsequent operating experience at McGuire and elsewhere has met all criteria for continued operation and demonstrates no adverse effects or trends, we conclude that the limitation of F* to the end of the fifth fuel cycle is no longer needed and that the F* criterion may be extended for the life of the McGuire units. Accordingly, removal of the footnote is acceptable.

TS 4.4.5.5c presently specifies that the results of inspections of F* tubes are to be reported "to the Director, ONRR." This is inconsistent with instructions for mailings to the NRC as specified by recent changes in regulation (10 CFR 50.4). The proposed change to remove the specified NRC addressee for receipt of the report provides for submittal consistent with the regulation. We find this part of the proposed amendments to be purely administrative and acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve changes to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has determined that the amendments involve 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 exposure. The NRC staff has made a determination that the amendments involve no significant hazards consideration, and there has been no public comment on such finding. Accordingly, the amendments meet 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 these amendments.

4.0 CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (53 FR 22400) on June 15, 1988. The Commission consulted with the state of North Carolina. No public comments were received, and the state of North Carolina did not have any comments.

We have 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: July 19, 1988