UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON D C 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 130 TO FACILITY OPERATING LICENSE NPF-9

AND AMENDMENT NO. 112TO FACILITY OPERATING LICENSE NPF-17

DUKE POWER COMPANY

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-369 AND 50-370

1.0 INTRODUCTION

By letter dated December 18, 1991, the Duke Power Company (the licensee or DPC) submitted a request for changes to the McGuire Nuclear Station, Units 1 and 2, Technical Specifications (TS). The requested changes revise the McGuire Unit 2 TS to be identical to the current McGuire Unit 1 TS and are in support of the McGuire Unit 2 Cycle 8 fuel reload. Both the reload methodology and the accident analyses used to support the current McGuire Unit 2 fuel reload are identical to that used to support the previous McGuire Unit 1 TS amendment.

2.0 EVALUATION

Beginning with fuel cycle 8 for both McGuire Units, the fuel being reloaded into McGuire Nuclear Station is manufactured by the B&W Fuel Company (BWFC). McGuire Unit 1 began reloading with B&W fuel during the most recent refueling outage that ended in December 1991. McGuire Unit 2 began reloading with B&W fuel during the refueling outage which began in January 1992. The analytical methodology used to support reloading with B&W fuel has been developed by BWFC and DPC. More importantly, the reload analytical methodology has been reviewed and approved by the NRC staff in response to a series of BWFC and DPC topical reports made in support of the previous McGuire Unit 1 Cycle 8 reload. As a result of the Unit 1 TS amendment, it was necessary to have two separate TSs for each McGuire Unit during the interim period until Unit 2 transitioned to BWFC fuel. The licensee's current submittal is therefore making both McGuire Unit TSs identical by making the previously approved Unit 1 TS changes applicable to both McGuire Units.

The reload methodology which forms the basis for both the previous Unit 1 reload submittal and the current Unit 2 reload TS submittal is based primarily on DPC topicals identified below.

The methods and results for analyses of the Steam System Piping Failure, Rod Ejection, and Dropped RCCA/RCCA Bank transients are documented in DPC-NE-3001. The analysis of other transients than the three identified above are described

in DPC-NE-3000. The basis for choosing the initial conditions and assumptions used in each of the analyzed transients is found in DPC-NE-3002. The NRC staff has reviewed and approved the above three topical reports and found them acceptable for referencing in both Catawba and McGuire Nuclear Station licensing submittals.

The loss-of-coolant analysis for both McGuire Units is documented in BAW-10174. This topical has been reviewed and approved by the NRC staff and is acceptable for referencing in licensing submittals for McGuire Nuclear Station.

The core physics parameters for McGuire Cycle 8 were generated using the methodology in approved Topical Report DPC-NE-2010. The reactor protection system limits were verified using the methodology in approved Topical Report DPC-NE-2011.

The hydraulic compatibility of Mark BW and Westinghouse OFA fuel is addressed in approved topical report BAW-10173.

The staff reviewed in detail the application of the methodology identified above to McGuire Unit 1 following the licensee's submittals dated June 26, September 16, and November 7, 1991. The staff reviewed the TS changes that stem from the new methodology and found those TS changes to be acceptable in its SER supporting TS amendments 128 (Unit 1) and 110 (Unit 2). The TS changes that support the current McGuire Unit 2 Cycle 8 reload TS application basically revise Unit 2 to be identical with the previously found acceptable Unit 1 TS pages.

The licensee states in their current submittal that the McGuire Unit 2 Cycle 8 reload TS amendment is an administrative TS change. The staff concurs with the licensee in this assessment, since the analysis, methodology, inputs, and assumptions used to support the previously approved McGuire Unit 1 reload are conservatively bounding for both McGuire Units and have been reviewed and approved by the NRC staff. As a result the staff concludes that the TS changes proposed in the licensee's submittal are acceptable and these changes will return both McGuire Units to an identical set of Technical Specifications.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the North Carolina State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (57 FR 4486). 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 the amendments.

5.0 CONCLUSION

The Commission 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Date: March 6, 1992