

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20655

SAFETY EVALUATION REPORT

RELATED TO AMENDMENT NO. 41 TO FACILITY OPERATING LICENSE NPF-9

AND TO AMENDMENT NO. 22 TO FACILITY OPERATING LICENSE NPF-17

DUKE POWER COMPANY

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

INTRODUCTION

By letter dated September 28, 1984, the licensee proposed amendments to license Nos. NPF-9 and NPF-17 which would change the Technical Specifications by deleting the surveillance requirements for four Steam Generator Blowdown Valves (BB140, BB141, BB142, BB143) listed in Specification Table 3.6-2, Containment Isolation Valves. The licensee is making modifications to the plant which will make it acceptable to eliminate these valves and replace them with spool pieces.

II. EVALUATION

The purpose of the Steam Generator Blowdown Recycle System (referred to by the licensee as the BB system) is to maintain acceptable steam generator shell-side chemistry and to conserve the blowdown water through recycling. Each steam generator has one BB line exiting the containment and entering the Auxiliary Building, resulting in four containment penetrations for each unit. Each of these containment penetrations has containment isolation capability provided by valves F31 through BB4 on the Auxiliary Building side and valves BB5 through BB8 on the Containment side. These eight valves are included in the leak test program pursuant to Appendix J to 10 CFR 50.

Steam generator blowdown valves BB140 through BB143, which are located inside containment near the steam generators, were originally installed to permit pipe class changes from licensee's Class B to F, which were necessary to accommodate non-safety related BB subcooling heat exchangers in the lines between the steam generators and the containment wall. The licensee's Class B piping is ASME Class 2 or Quality Group B, while their Class F is not safety grade. In order for the Main Steam System (steam generators, main steam lines, etc.) to be considered a closed system inside containment as required by General Design Criterion 57, the non-safety grade heat exchangers and their Class F piping had to be isolated from the rest of the Main Steam System by valves BB140 through BB143. However, the licensee has removed the heat exchangers. The piping spools that replaced the heat exchangers and the remaining Class F piping are being upgraded to Class B. Thus, all the BB system inside containment (and that portion to and including valves BB1 through BB4 outside containment) will be Class B. Therefore, the whole Main Steam System qualifies as a closed system inside containment, and the four

valves, BB140 through BB143, are no longer necessary to serve the safety (isolation) function for which they were originally installed. They are being removed from the lines and, consequently, must be deleted from the table to maintain consistency between the design and the Technical Specifications.

Based on our review, we conclude that because of the plant modifications discussed above, valves BB140, BB141, BB142, and BB143 are no longer necessary to serve their earlier safety (isolation) function (i.e., the modified Steam Generator Blowdown Recycle System is such that the Main Steam System will satisfy the requirements of General Design Criterion 57 and Appendix J to 10 CFR 50 without these four valves), and their deletion from Specification Table 3.6-2, Containment Isolation Valves, is therefore acceptable.

III. ENVIRONMENTAL CONSIDERATION

These amendments involve a change in use of facility components located within the restricted area as defined in 10 CFR Part 20 and change a surveillance requirement. 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 radiation exposure. The Commission has previously issued a proposed finding that these 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 Section 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.

IV. CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (49 FR 50802) on December 31, 1984, and 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: March 18, 1985