



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 4 TO FACILITY OPERATING LICENSE NO. NPF-63

CAROLINA POWER & LIGHT COMPANY

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1

POCKET NO. 50-400

1.0 INTRODUCTION

By letter dated November 23, 1987, the Carolina Power & Light Company (the licensee) requested a change to the Shearon Harris, Unit 1, Technical Specifications (TS) (Appendix A to Facility Operating License NPF-63). The proposed change would delete Surveillance Requirement 4.4.11.1, which requires quarterly testing of the reactor coolant system (RCS) vent path block valves. In addition, Surveillance Requirement 4.4.11.2.b would be modified to include the testing of the above cited block valves at least once every 18 month interval.

2.0 DISCUSSION AND EVALUATION

The RCS high point vent system consists of four parallel vent valves, two each for the reactor vessel and the pressurizer, discharging to a common header, followed by two block valves, one of which would vent to the containment atmosphere when required, and the other block valve would vent to the pressurizer relief tank (PRT). The RCS vent system is designed to remove noncondensibles, following a loss of coolant accident, to enhance natural circulation within the PCS. The testing of the block valves on a quarterly basis during power operation makes the RCS vent system more vulnerable to a single active failure because it removes one of the two RCS pressure isolation boundaries. If a failure of any of the upstream valves were to occur while testing the block valves, it would result in the release of reactor coolant to either the containment atmosphere or the PRT. Subsection IWV of Section XI of the ASME Code allows

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flexibility with respect to the test frequency in circumstances where the testing frequency, such as requiring a quarterly test, is judged to be impractical. Testing of these valves during cold shutdown will enhance plant safety. The plant in-service testing program requires testing of these valves when the plant is in a cold shutdown condition. Testing of valves during cold shutdown is allowed by the ASME Code, Section XI, Paragraph IWV-3412, when the valves cannot be exercised during plant operation. Therefore, the proposed change conforms with the code. Thus the staff concludes that the proposed revision to the TS to require testing of the RCS vent system block valves at least once every 18 months is acceptable.

### 3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in surveillance requirements. The staff has determined that the amendment involves 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 this amendment involves no significant hazards consideration. There has been no public comment on the proposed finding. Accordingly, this amendment meets 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 this amendment.

### 4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration, which was published in the FEDERAL REGISTER (52 FR 47780) on December 16, 1987. No public comments or requests for hearing were received prior to issuance of the amendment. The staff consulted with the State of North Carolina, and it had no comments.

The staff 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: A. Masciantonio  
B. Buckley

Dated: February 12, 1988



AMENDMENT NO. 4 SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1  
OPERATING LICENSE NO. NPF-63

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