



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 125 TO FACILITY LICENSE NO. DPR-71 AND
AMENDMENT NO. 63 TO FACILITY LICENSE NO. DPR-62
CAROLINA POWER & LIGHT COMPANY
BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
DOCKET NOS. 50-325 AND 50-324

1.0 INTRODUCTION

By letter dated August 12, 1985, the Carolina Power & Light Company (CP&L, the licensee) submitted proposed changes to the Technical Specifications (TS) appended to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant, Units 1 and 2.

The proposed changes modify the surveillance requirements in TS Section 3/4 6.2.2 related to the testing of the Residual Heat Removal (RHR) System in the suppression pool cooling mode.

2.0 DISCUSSION AND EVALUATION

The surveillance requirements for the suppression pool cooling mode of the RHR system, TS 4.6.2.2.b, currently require verification "that each RHR pump can be started from the control room and develops a flow of at least 10,300 gpm against a system head corresponding to a reactor pressure of greater than or equal to 20 psig on recirculation flow."

The current surveillance requirement is modeled after an In-Service Inspection requirement for a full-flow test. The system is tested during normal plant operation by taking suction from the suppression pool and returning the water to the pool through a test line. Each pump must develop a flow of 10,300 gpm to satisfy the test requirement. The RHR heat exchanger must be bypassed during this test as flow through the RHR heat exchanger is limited to 7,700 gpm to prevent damage to the heat exchanger tubing.

To more accurately verify the operability of the RHR pumps in the suppression pool cooling mode, the licensee has proposed to change the surveillance requirements to require flow through the RHR heat exchanger. The test flow path would then be from the torus, through the RHR heat exchanger, and then back to the torus as in actual operation. The proposed TS requires that each RHR pump produces a recirculation flow of at least 7,700 gpm through the RHR heat

8604080198 860327
PDR ADOCK 05000324
PDR

exchanger to the suppression pool. RHR pump operability at higher flow rates would continue to be verified quarterly under existing TS 4.5.3.2b which requires a flow rate of 17,700 gpm per loop to be attained by two RHR pumps in the low pressure coolant injection (LPCI) mode of operation.

We have reviewed the licensee's application and agree that the proposed TS would provide a more accurate verification of the operability of the RHR Pumps in the suppression pool cooling mode of operation. The existing TS 4.5.3.2b provides an adequate test of the RHR pumps at the higher flow rates. Based on our review we find the proposed changes acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

The amendments involve 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 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. 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.

4.0 CONCLUSION

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

Principal Contributor: A. Gilbert

Dated: March 27, 1986