



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 91 TO FACILITY OPERATING LICENSE NO. DPR-23
CAROLINA POWER AND LIGHT COMPANY
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261

Introduction

By letter dated September 12, 1984, Carolina Power and Light Company (the licensee) proposed to amend its Operating License DPR-23, for the H. B. Robinson Steam Electric Plant Unit No. 2, by submitting revisions to the Technical Specification. The licensee proposed to revise Technical Specification 3.1.2, Heatup and Cooldown with regard to the Steam Generator minimum temperature requirement prior to pressurizing the secondary side above 200 psig. In support of their request the licensee noted that the pressure boundary of the new steam generator lower assemblies, installed at HRB-2 in 1984, had NDT value of 60°F which was higher than the original steam generators NDT of 10°F. Therefore, to provide adequate protection against non-ductile failure, the licensee proposed to increase the secondary side pressurization temperature, in accordance with 10 CFR 50 Appendix G. In addition, the licensee has retained a 60°F margin of safety currently contained in the Technical Specifications.

Evaluation

The licensee replaced the three steam generator (SG) lower assemblies during 1984. The Certified Material Test Reports (CMTRs) for the original steam generators provided records of Charpy V-notch tests performed at +10°F. Acceptable Charpy V-notch tests of +10°F indicate RT_{NDT} is at or below this temperature. The steam generator lower assemblies were replaced in 1984 and the material tests results indicate the highest RT_{NDT} is 60°F or below.

Appendix G to 10 CFR Part 50 provides Fracture Toughness Requirements for pressure-retaining components of the reactor coolant pressure boundary that are made of ferritic materials. Section IV.A of Appendix G requires that the ". . . ferritic materials must meet the requirements of the ASME Code supplemented as follows for fracture toughness during system hydrostatic tests and any condition of normal operation, including anticipated operational occurrences."

8505240526 850514
PDR ADDCK 05000261
P PDR

Item 4 following IV.A requires that the minimum permissible test temperature must be 60°F above the adjusted reference temperature of the reactor vessel material in the region that is controlling. The licensee added this minimum temperature of 60°F to the NDT of 60°F to establish a minimum temperature of 120°F prior to pressurizing the SG secondary side above 200 psig.

We have reviewed the licensee's request and, as discussed above, find the requested change consistent with the requirements of 10 CFR Part 50, Appendix G. Therefore, the staff finds that requested Technical Specification change acceptable.

Environmental Consideration

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 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.

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

Dated: May 14, 1985

Principal Contributor:

G. Requa