



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 90 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 a letter dated September 19, 1984, Carolina Power and Light Company (CP&L) requested a revision to the technical specification (TS) for the H. B. Robinson Steam Electric Plant Unit No. 2 (HBR 2) concerning station batteries. The proposed TS change requires that the equalizing charge be performed annually rather than monthly. As a result, the present surveillance requirement 4.6.3.2 on station batteries is to be modified from "each battery is subjected to a 24-hour equalizing charge monthly" to "each battery is subjected to a 24-hour equalizing charge annually."

The licensee stated that their request is based on the manufacturer's recommended interval which reduces unnecessary overcharging of cells and also prevents degradation of the overall battery life. Furthermore, the decreased frequency of the equalizing charge reduces the potential for excessive voltage which, in turn, shortens the expected coil life of the Nbfd relays in the reactor protection system.

Evaluation

An equalizing charge is a special charge placed on a battery when a nonuniformity in voltage or specific gravity has developed between cells. Its purpose is to restore all cells to a fully charged condition and to equalize voltage and specific gravity between cells using a charging voltage higher than the normal floating voltage for a specified number of hours. The requirements and recommendations for maintenance, testing, and replacement of station batteries are outlined in IEEE-Std-450-1975 which recommends that an equalizing charge should be given:

- 1) if the specific gravity of an individual cell is more than 0.01 below the average installation value
- 2) if any cell voltage is below 2.13V
- 3) if not required by 1) and 2) above, an equalizing charge should be given at least once each 18 months.

The licensee's proposed annual equalizing charge is consistent with the guidelines stated in the IEE-Std-450-1975, therefore, we conclude that the proposed changes are acceptable.

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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 13, 1985

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