



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 37 TO FACILITY LICENSE NO. DPR-71 AND
AMENDMENT NO. 58 TO FACILITY LICENSE NO. DPR-62
CAROLINA POWER & LIGHT COMPANY
BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 and 50-324

I. INTRODUCTION

By letter dated April 17, 1981, Carolina Power & Light Company (the Licensee) proposed revisions to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. The revisions incorporate operability dates for the modified Augmented Off-Gas System and hydrogen recombiners as proposed in the Licensee's letter of March 23, 1981. The revisions also incorporate required submittal dates for proposed Technical Specifications that will invoke effluent release limits reflecting required operation of the Augmented Off-Gas System.

II. BACKGROUND INFORMATION

On July 12, 1976, the Licensee submitted information, in accordance with 10 CFR Part 50, Appendix I, Section VB.1, necessary for us to evaluate the means employed at BSEP Units 1 and 2 for keeping levels of radioactivity in effluents "As Low As Is Reasonably Achievable" (ALARA) and within the design objectives of Appendix I. In that submittal, the Licensee committed to the operation of the Augmented Off-Gas System (AOG) as part of the gaseous rad-waste effluent treatment system to maintain radioactivity in effluents ALARA. The AOG, however, has never been in continuous operation because of engineering difficulties.

In response to our concern about the continued inoperability of the AOG, the Licensee stated, in a letter dated May 18, 1978, that a major AOG modification was necessary. The Licensee further provided, in that letter, an estimated AOG operability date for both BSEP Units 1 and 2 of December 31, 1981. To ensure that annual gaseous release limits were not exceeded during the interim period until AOG operability, we issued, on February 9, 1979, License Amendments for both BSEP Unit Nos. 1 and 2 that revised the Technical Specifications to limit the annual gaseous release to the 10 CFR Part 50, Appendix I design objectives.

Subsequently, by letter dated March 23, 1981, the Licensee informed us that, based on further evaluation of AOG operating experience, the Licensee had decided not to modify the existing cryogenic distillation type AOG, but to replace it with a charcoal adsorber type AOG. This changeout will delay the AOG operability date to May 31, 1983 for BSEP Unit 1 and to December 31, 1983 for BSEP Unit 2.

To preclude future AOG operability schedule slippages, the Licensee has proposed, at our request, the Facility Operating License Amendments appraised by this Safety Evaluation.

III. EVALUATION

The license conditions proposed by the Licensee are consistent with the objectives of ALARA in that they: (1) establish specific dates for AOG operability for both BSEP Unit Nos. 1 and 2, and (2) establish a requirement for the Licensee to submit proposed Technical Specifications that will invoke effluent release limits reflecting required operation of the AOG. Further, the proposed license conditions do not alter the existing Technical Specification requirements that limit the amount of annual gaseous release to the 10 CFR Part 50, Appendix I design objectives.

We find that the Licensees proposed license conditions for AOG System Modifications are in keeping with our request and are acceptable.

Inasmuch as the Licensee will be installing a charcoal adsorber system in lieu of the cryogenic distillation system that we have previously evaluated, the Licensee should submit sufficient information to show (1) that the charcoal adsorber system conforms with 10 CFR Parts 20, 50.34, 50.34a, 50.36, and 50.36a, and 10 CFR Part 50, Appendix A, General Design Criteria 60 and 64, (2) that releases will meet the requirements of 10 CFR Part 50, Appendix I, and (3) that the modification meets the acceptance criteria of the Standard Review Plans in NUREG-0800. This information should be submitted concurrent with submission of the proposed Technical Specifications.

IV. ENVIRONMENTAL CONSIDERATION

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR Section 51.5(d)(4) that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of the amendments.

V. CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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.

Dated: June 3, 1981