



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 38 TO FACILITY LICENSE NO. DPR-71

AND

AMENDMENT NO. 60 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

1.0 Introduction

By letter dated June 11, 1981 Carolina Power and Light Company (the licensee) forwarded proposed changes to the Technical Specifications for the Brunswick Steam Electric Plant (BSEP) Unit Nos. 1 and 2. The proposed changes to the BSEP Unit No. 1 Technical Specifications (1) establish revised vessel level setpoints that are consistent with a new common instrument zero level, (2) include the previously omitted Low Level #1 instrument into the Automatic Depressurization System (ADS) instrument tables, and (3) incorporate instrument number designation changes resulting from replacement of certain digital instrumentation with analog loops.

The proposed changes to the BSEP Unit No. 2 Technical Specifications include the Low Level #1 instrument in the ADS tables. (The revised vessel level setpoints were previously included in the BSEP Unit No. 2 Technical Specifications by License Amendment No. 56.) Additional changes proposed by the staff that are acceptable to the licensee have also been included in the Unit No. 2 amendment. These changes correct the listed Reactor Vessel Shroud Level instrumentation setpoints and change level setpoint terminology to be consistent with Unit No. 1 terminology.

2.0 Evaluation

2.1 Revised Vessel Level Setpoints for BSEP Unit No. 1

The proposed Technical Specification change establishes revised vessel level setpoints that are consistent with a new common instrument zero level. The proposed common instrument level is 367" above the vessel bottom. This is identical to the common level already implemented for BSEP Unit No. 2. A common zero level for all reactor vessel level instrumentation is called for in TMI Action Item II.K.3.27 in NUREG-0737.

We have reviewed each of the proposed revised setpoints and find them to be consistent with the previously established safety settings. We have considered the potential for operator error given the change in level setpoints for Unit 1. Since the proposed revisions will bring the Unit No. 1 setpoints into conformance with the setpoints of Unit No. 2, and since the licensee has committed, by letter dated March 18, 1981, to train all operators on the new level setpoints, we find that the proposed revised setpoints do not create an increased potential for operator error, and are acceptable from a human engineering standpoint. In addition, the proposed Technical Specification revisions do not involve a change in actual water level for any function and no instrumentation is being changed.

For these reasons we find the proposed vessel level setpoint Technical Specification revisions acceptable for use.

2.2 Inclusion of Low Level #1 Instrument for BSEP Unit Nos. 1 and 2

Through administrative oversight the Low Level #1 instrument (B21--N042--) has not previously been included in the Automatic Depressurization System (ADS) instrumentation tables. This instrument does provide an input signal to ADS and, therefore, it should be included in the ADS instrumentation tables.

2.3 Instrument Number Designation Changes for Unit No. 1

On November 19, 1979 the licensee submitted a request for Technical Specification changes to replace certain digital instrumentation with analog equipment. In response, the staff issued License Amendment Nos. 26 and 50 on March 14, 1980. The accompanying Safety Evaluation Report (SER) found the proposed modifications to be technically acceptable and established a procedure whereby the licensee would periodically submit administrative Technical Specification changes to revise instrument designations for those systems that had been modified. The licensee is proposing certain instrument designation Technical Specification changes in accordance with the previously issued SER. Therefore, we find the proposed designation changes to be acceptable.

2.4 Reactor Vessel Shroud Level Instrumentation Setpoint for BSEP Unit No. 2

License Amendment No. 56 for BSEP Unit No. 2 revised the Technical Specifications to reflect new vessel level setpoints as required by TMI Action Item II.K.3.27 of NUREG-0737. The Reactor Vessel Shroud Level instrumentation setpoints were unintentionally omitted from that amendment. Therefore, the staff has requested, and the licensee has agreed, that the subject setpoints should be changed to reflect the common reference level.

2.5 Level Setpoint Terminology Change for BSEP Unit No. 2

The Technical Specification changes issued under License Amendment No. 56 were worded such that the setpoints were based on the number of inches above or below instrument zero (e.g. Reactor Vessel Low Water Level is +162.5 inches above instrument zero). The proposed Technical Specifications accompanying the licensee's corresponding submittal for Unit 1 were worded such that the setpoints were based on the number of inches above or below the top fuel guide (e.g. Reactor Vessel Low Water level is +162.5 inches above top fuel guide). Since the referenced top fuel guide and instrument zero heights are both 367" above the vessel bottom, there is no technical question involved. However, the staff has requested, and the licensee has agreed that, to maintain conformity, the Unit No. 2 Technical Specifications should be revised to state "inches above top fuel guide," where appropriate.

3.0 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 §51.5(d)(4) that an environmental impact statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the issuance of the amendments.

4.0 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 25, 1981