



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 34 TO FACILITY LICENSE NO. DPR-71 AND
AMENDMENT NO. 55 TO FACILITY LICENSE NO. DPR-52
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 September 16, 1980, the Carolina Power & Light Company (the licensee) proposed changes to the Technical Specifications (TSs) appended to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2. The changes involve the incorporation of certain of the TMI-2 Lessons Learned Category "A" requirements. The licensee's request is in direct response to the NRC staff's letter dated July 2, 1980.

II. BACKGROUND INFORMATION

By our letter dated September 13, 1979, we issued to all operating nuclear power plants requirements established as a result of our review of the Three Mile Island Unit 2 accident. Certain of these requirements, designated Lessons Learned Category "A" requirements, were to have been completed by the licensee prior to any operation subsequent to January 1, 1980. Our evaluation of the licensee's compliance with these Category "A" items was attached to our letter to CP&L dated April 1, 1980.

In order to provide reasonable assurance that operating reactor facilities are maintained within the limits determined acceptable following the implementation of the TMI-2 Lessons Learned Category "A" items, we requested that licensees amend their TSs to incorporate additional Limiting Conditions of Operation and Surveillance Requirements, as appropriate. This request was transmitted to all licensees on July 2, 1980. Included therein were model specifications that we had determined to be acceptable. The licensee's application is in direct response to our request. Each of the issues identified by the NRC staff and the licensee's response is discussed in the evaluation below.

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III. EVALUATION

1. Emergency Power Supply/Inadequate Core Cooling

As applicable to Boiling Water Reactors (BWRs), we indicated that water level instrumentation is important to post-accident monitoring and that surveillance of this instrumentation should be performed. The licensee's response to this request stated that the existing TSs for the BSEP Units adequately address this subject and no changes were proposed.

We have reviewed the current specifications (Tables 3.3.5.3-1 and 4.3.5.3-1 for BSEP 1 & 2) and determined that water level instrumentation is included. The specifications provide ACTION statements for inoperable instrument channels. Surveillance requirements for instrument checks and calibration are also included. The frequency of surveillance meets or exceeds our guidelines. Based on this review, we conclude that no changes are required to satisfy our request.

2. Valve Position Indication

Our requirements for installation of a reliable position indicating system for relief and safety valves was based on the need to provide the operator with a diagnostic aid to reduce the ambiguity between indications that might indicate either an open relief/safety valve or a small line break. Such a system did not need to be safety grade provided that backup methods of determining valve position are available.

The licensee's request would add both the primary indicating system (sonic sensors) and the secondary indicating system (downstream temperature detectors) to the specifications. Actions have been specified for the condition of an inoperable channel and for inoperability of both primary and backup detector channels. Additionally, surveillance requirements have been included. Based on our review, we find the licensee's recommended changes satisfy our guidelines and are acceptable.

3. Containment Isolation

Our request indicated that the specifications should include a Table of Containment Isolation Valves which reflect the diverse isolation signal requirements of this Lessons Learned issue.

The licensee's response stated that TSs consistent with the reevaluation of the Containment Isolation Valve ISI Program would be submitted by the end of 1980. This date was subsequently revised to April 1981 in a letter submitted December 15, 1980. In subsequent discussions with the staff on this topic, the licensee stated that the current TSs meet the minimum requirement for this issue.

We have reviewed the current specifications (Tables 3.3.2-1, 3.3.2-2, 3.3.2-3, 4.3.2-1, and 3.6.3-1 for BSEP 1&2). These tables include a listing of automatic valves, actuation signals and surveillance requirements. Based on this review, we have determined that the current specifications satisfy our request and that no changes are necessary.

4. Shift Technical Advisor (STA)

Our request indicated that the TSs related to minimum shift manning should be revised to reflect the augmentation of an STA. The STA function includes both accident and operating experience assessment.

The licensee proposed the addition of an STA to the minimum shift crew composition and the specific qualifications of this individual. These qualifications state that the STA shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents.

The licensee's proposal is consistent with our request. We find the changes to include the STA in the minimum shift manning acceptable.

5. Integrity of Systems Outside Containment

Our letter dated July 2, 1980, indicated that the license should be amended by adding a license condition related to a Systems Integrity Measurements Program. Such a condition would require the licensee to effect an appropriate program to eliminate or prevent the release of significant amounts of radioactivity to the environment via leakage from engineered safety systems and auxiliary systems, which are located outside reactor containment.

The licensee's proposed license condition for Systems Integrity is acceptable.

6. Iodine Monitoring

Our letter dated July 2, 1980, indicated that the license should be amended by adding a license condition related to iodine monitoring. Such a condition would require the licensee to effect a program which would ensure the capability to determine the airborne iodine concentration in areas requiring personnel access under accident conditions.

The licensee's proposed license condition for Iodine Monitoring is acceptable.

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 § 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.

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: March 16, 1981