



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 171 TO FACILITY OPERATING LICENSE NO. DPR-71
AND AMENDMENT NO. 202 TO FACILITY OPERATING LICENSE NO. DPR-62

CAROLINA POWER & LIGHT COMPANY

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2

DOCKET NOS. 50-325 AND 50-324

1.0 INTRODUCTION

By letter dated April 14, 1994, as supplemented on May 16, 1994, the Carolina Power & Light Company (the licensee) submitted a request for changes to the Brunswick Steam Electric Plant, Units 1 and 2 (BSEP), Technical Specifications (TS). The requested changes would modify the requirements of TS 3.3.1, TS 3.3.2, and TS 3.3.3 and relocate Tables 3.3-2 and 3.3-5, which provide the response time limits for the reactor protection system (RPS), the isolation actuation instrumentation (IAI), and the emergency core cooling actuation system (ECCS) instruments, from the TS to the Updated Final Safety Analysis Report (UFSAR). The licensee has stated that the next update of the UFSAR will include these tables. The NRC provided guidance to all holders of operating licenses or construction permits for nuclear power reactors on the proposed TS changes in Generic Letter 93-08, "Relocation of Technical Specification Tables of Instrument Response Time Limits," dated December 29, 1993.

The May 16, 1994, letter provided clarifying information that did not change the initial no significant hazards consideration determination.

2.0 EVALUATION

Section 50.36 of Title 10 of the Code of Federal Regulations established the regulatory requirements related to the content of technical specifications (TS). The rule requires that the TS include items in specific categories, including safety limits, limiting conditions for operation, and surveillance requirements; however, the rule does not specify the particular requirements to be included in a plant's TS. The NRC developed criteria, as described in the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (58 FR 39132), hereinafter Final Policy Statement, to determine which of the design conditions and associated surveillances need to be located in the TS. The Final Policy Statement adopted the subjective

statement of the Atomic Safety and Licensing Appeal Board, ALAB-531, 9 NRC 263 (1979) (Trojan Nuclear Plant), as the basis for the criteria. The Appeal Board stated,

[T]here is neither a statutory nor a regulatory requirement that every operational detail set forth in an applicant's safety analysis report (or equivalent) be subject to a technical specification, to be included in the license as an absolute condition of operation which is legally binding upon the licensee unless and until changed with specific Commission approval. Rather, as best we can discern it, the contemplation of both the Act and the regulations is that the technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an event giving rise to an immediate threat to the public health and safety. (ALAB-531 at 273; footnote omitted)

Briefly, the criteria provided by the Final Policy Statement involve (1) detection of abnormal degradation of the reactor coolant pressure boundary, (2) boundary conditions for design basis accidents and transients, (3) primary success paths to prevent or mitigate design basis accidents and transients, and (4) functions determined to be important to risk or operating experience. The Commission's Final Policy Statement acknowledged that its implementation may result in the relocation of existing TS requirements to licensee controlled documents and programs.

The licensee has proposed changes to TS 3.3.1, TS 3.3.2, and TS 3.3.3 that remove the references to Tables 3.3.1-2, 3.3.2-3 and 3.3.3-3, and that delete these tables from the TS. The licensee committed to relocate the tables on response time limits to the UFSAR in the next periodic update.

Tables 3.3.1-2, 3.3.2-3, and 3.3.3-3 contain the values of the response time limits for the RPS, IAI, and ECCS instruments, respectively. The limiting conditions for operation for the RPS, IAI, and ECCS instrumentation specify these systems shall be operable with the response times as specified in these tables. These limits are the acceptance criteria for the response time tests performed to satisfy the surveillance requirements of TS 4.3.1.3, TS 4.3.2.3, and TS 4.3.3.3 for each applicable RPS, IAI, and ECCS trip function. These surveillance ensure that the response times of the RPS, IAI, and ECCS instruments are consistent with the assumptions of the safety analyses performed for design basis accidents and transients. The changes associated with the implementation of Generic Letter 93-08 involve only the relocation of the RPS, IAI, and ECCS response time tables, but retain the surveillance requirement to perform response time testing. The UFSAR will now contain the acceptance criteria for the required RPS, IAI, and ECCS response time surveillance. Because it does not alter the TS requirements to ensure that the response times of the RPS, IAI, and ECCS instruments are within their limits, the staff has concluded that relocation of these response time limit tables from the TS to UFSAR is acceptable.

The staff's review of the proposed change determined that the relocation of the specific instrument response time tables does not eliminate the

requirements for the licensee to ensure that the RPS, IAI, and ECCS are capable of performing their safety functions. Although the specific instrument response time tables are relocated from the technical specifications to the UFSAR, the licensee must evaluate any changes to response time requirements in accordance with 10 CFR 50.59. Should the licensee's determination conclude that an unreviewed safety question is involved, due to either (1) an increase in the probability or consequences of accidents or malfunctions of equipment important to safety, (2) the creation of a possibility for an accident or malfunction of a different type than any evaluated previously, or (3) a reduction in the margin of safety, NRC approval and a license amendment would be required prior to implementation of the change. NRC inspection and enforcement programs also enable the staff to monitor facility changes and licensee adherence to UFSAR commitments and to take any remedial action that may be appropriate.

The staff's review concluded that 10 CFR 50.36 does not require the specific instrument response time tables to be retained in technical specifications. Requirements related to the operability, applicability, and surveillance requirements, including performance of testing to ensure operability of the RPS, IAI, and ECCS is retained due to the these system's importance in mitigating the consequences of an accident. However, the staff determined that the inclusion of specific instrument response time tables for the various instrumentation channels addressed by Generic Letter 93-08 are an operational detail related to the licensee's safety analyses which are adequately controlled by the requirements of 10 CFR 50.59. Therefore, the continued processing of license amendments related to revisions of the affected instrument response time tables, where the revisions to those requirements do not involve an unreviewed safety question under 10 CFR 50.59, would afford no significant benefit with regard to protecting the public health and safety. Further, the response time requirements do not constitute a condition or limitation on operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety, in that the ability of the RPS, IAI, and ECCS to perform their safety functions are not adversely impacted by the relocation of the response time tables from the TS to the UFSAR.

In addition to removing the response times from the TS, the licensee has stated that the plant procedures for response time testing include acceptance criteria that reflect the RPS, IAI, and ECCS response time limits in the tables being relocated to the UFSAR. These changes are acceptable in that they merely constitute administrative changes required to implement the TS change discussed above.

The staff has concluded, therefore, that relocation of specific instrument response time tables for BSEP, Units 1 and 2, is acceptable because (1) their inclusion in TS is not specifically required by 10 CFR 50.36, or other regulations, (2) the instrument response time tables have been relocated to the UFSAR, and are adequately controlled by 10 CFR 50.59, and their inclusion in the TS is not required to avert an immediate threat to the public health and safety, and (3) changes that are deemed to involve an unreviewed safety question will require prior NRC approval in accordance with 10 CFR 50.59(c).

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the State of North Carolina official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change the Surveillance Requirements. The NRC staff has determined that the amendments involve 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding (59 FR 21785). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 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 the amendments.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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