

May 22, 1998

Mr. C.S. Hinnant  
Vice President  
Brunswick Steam Electric Plant  
Carolina Power & Light Company  
Post Office Box 10429  
Southport, North Carolina 28461

SUBJECT: ENVIRONMENTAL ASSESSMENT RELATED TO REQUEST FOR CONVERSION  
TO IMPROVED TECHNICAL SPECIFICATIONS - BRUNSWICK STEAM  
ELECTRIC PLANT, UNITS 1 AND 2, (TAC NOS. M97243 AND M97244)

Dear Mr. Hinnant:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendment dated November 1, 1996, as supplemented by letters dated October 13, 1997, February 26, 1998, March 13, 1998, April 24, 1998, and May 22, 1998. The proposed amendment would authorize conversion to Improved Technical Specifications for the Brunswick Steam Electric Plant, Units 1 and 2.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by:

David C. Trimble, Project Manager  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket Nos. 50-325  
and 50-324

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Carolina Power & Light Company

Brunswick Steam Electric Plant  
Units 1 and 2

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UNITED STATES NUCLEAR REGULATORY COMMISSIONCAROLINA POWER & LIGHT COMPANYDOCKET NO. 50-325 AND 50-324BRUNSWICK STEAM ELECTRIC PLANT, UNITS NO. 1 AND 2ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACTINTRODUCTION

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating License Nos. DPR-71 and DPR-62 issued to the Carolina Power & Light Company (CP&L or the licensee) for operation of the Brunswick Steam Electric Plant, Units No. 1 and 2 (BSEP 1 & 2), respectively, located at the licensee's site in Brunswick County, North Carolina.

ENVIRONMENTAL ASSESSMENTIdentification of the Proposed Action:

This Environmental Assessment has been prepared to address potential environmental issues related to the licensee's application dated November 1, 1996, as supplemented by letters dated October 13, 1997, February 26, 1998, March 13, 1998, April 24, 1998, and May 22, 1998. The proposed amendments will replace the current BSEP 1 & 2 Technical Specifications (CTS) in their entirety with Improved Technical Specifications (ITS) based on Revision 1 to NUREG-1433, "Standard Technical Specifications General Electric Plants BWR/4" dated April 1995, and the CTS for BSEP 1 & 2.

The Need for the Proposed Action:

It has been recognized that nuclear safety in all plants would benefit from improvement and standardization of TS. The Commission's "NRC Interim Policy Statement on Technical

Specification Improvements for Nuclear Power Reactors," (52 Fed. Reg. 3788, February 6, 1987), and later the Commission's "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors," 58 FR 39132 (July 22, 1993), formalized this need. To facilitate the development of individual improved TS, each reactor vendor owners group (OG) and the NRC staff developed standard TS (STS). For General Electric plants, the STS are published as NUREG-1433, and this document was the basis for the new BSEP 1 & 2 TS. The NRC Committee to Review Generic Requirements (CRGR) reviewed the STS and made note of the safety merits of the STS and indicated its support of conversion to the STS by operating plants.

Description of the Proposed Change:

The proposed revision to the TS is based on NUREG-1433 and on guidance provided in the Final Policy Statement. Its objective is to completely rewrite, reformat, and streamline the existing TS. Emphasis is placed on human factors principles to improve clarity and understanding. The Bases section has been significantly expanded to clarify and better explain the purpose and foundation of each specification. In addition to NUREG-1433, portions of the existing TS were also used as the basis for the ITS. Plant-specific issues (unique design features, requirements, and operating practices) were discussed at length with the licensee, and generic matters with the OG.

The proposed changes from the existing TS can be grouped into four general categories, as follows:

1. Non-technical (administrative) changes, which were intended to make the ITS easier to use for plant operations personnel. They are purely editorial in nature or involve the movement or reformatting of requirements without affecting technical content. Every section of the BSEP 1 & 2 TS has undergone these types of changes. In order to

ensure consistency, the NRC staff and the licensee have used NUREG-1433 as guidance to reformat and make other administrative changes.

2. Relocation of requirements, which includes items that were in the existing BSEP 1 & 2 TS. The TS that are being relocated to licensee-controlled documents are not required to be in the TS under 10 CFR 50.36 and do not meet any of the four criteria in the Commission's Final Policy Statement for inclusion in the TS. They are not needed to obviate the possibility that an abnormal situation or event will give rise to an immediate threat to the public health and safety. The NRC staff has concluded that appropriate controls have been established for all of the current specifications, information, and requirements that are being moved to licensee-controlled documents. In general, the proposed relocation of items in the BSEP 1 & 2 TS to the Final Safety Analysis Report (FSAR), appropriate plant-specific programs, procedures and ITS Bases follows the guidance of the General Electric STS (NUREG-1433). Once these items have been relocated by removing them from the TS to licensee-controlled documents, the licensee may revise them under the provisions of 10 CFR 50.59 or other NRC staff-approved control mechanisms, which provide appropriate procedural means to control changes.
3. More restrictive requirements, which consist of proposed BSEP 1 & 2 ITS items that are either more conservative than corresponding requirements in the existing BSEP 1 & 2 TS, or are additional restrictions that are not in the existing BSEP 1 & 2 TS but are contained in NUREG-1433. Examples of more restrictive requirements include: placing a Limiting Condition of Operation (LCO) on plant equipment that is not required by the present TS to be operable; more restrictive requirements to restore inoperable equipment; and more restrictive surveillance requirements.
4. Less restrictive requirements are relaxations of corresponding requirements in the

existing BSEP 1 & 2 TS that provide little or no safety benefit and place unnecessary burdens on the licensee. These relaxations were the result of generic NRC actions or other analyses. They have been justified on a case-by-case basis for BSEP 1 & 2, as will be described in the staff's Safety Evaluation to be issued with the license amendment, which will be noticed in the FEDERAL REGISTER.

In addition to the changes described above, the licensee proposed certain changes to the existing TS that deviated from the STS in NUREG-1433. These additional proposed changes are described in the licensee's application and in the staff's Notice of Consideration of Issuance of Amendment to Facility Operating License and Opportunity for a Hearing (62 FR 3719).

Where these changes represent a change to the current licensing basis for BSEP 1 & 2, they have been justified on a case-by-case basis and will be described in the staff's Safety Evaluation to be issued with the license amendment.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed action and concludes that the proposed TS conversion would not increase the probability or consequences of accidents previously analyzed and would not affect facility radiation levels or facility radiological effluents.

Changes that are administrative in nature would have no effect on the technical content of the TS, and are acceptable. The increased clarity and understanding these changes bring to the TS are expected to improve the operator's control of the plant in normal and accident conditions.

Relocation of requirements to licensee-controlled documents would not change the requirements themselves. Future changes to these requirements may be made by the licensee under 10 CFR 50.59 or other NRC-approved control mechanisms, which ensures continued

maintenance of adequate requirements. All such relocations have been found to be in conformance with the guidelines of NUREG-1433 and the Final Policy Statement, and, therefore, are acceptable.

Changes involving more restrictive requirements would be likely to enhance the safety of plant operations and are acceptable.

Changes involving less restrictive requirements have been reviewed individually. When requirements have been shown to provide little or no safety benefit or to place unnecessary burdens on the licensee, their removal from the TS is justified. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of a generic NRC action, or of agreements reached during discussions with the OG and are acceptable for BSEP 1 & 2. Generic relaxations contained in NUREG-1433 as well as proposed deviations from NUREG-1433 have also been reviewed by the NRC staff and are acceptable for BSEP 1 & 2.

In summary, the proposed revisions to the TS were found to provide control of plant operations such that reasonable assurance will be provided so that the health and safety of the public will be adequately protected.

These TS changes will not increase the probability or consequences of accidents, no changes are being made in the types of any effluent that may be released offsite, and there is no significant increase in the allowable public or occupational radiation exposure.

With regard to potential nonradiological impacts, the proposed action does not affect nonradiological plant effluents and has no other environmental impact.

Accordingly, the Commission concludes that there are no significant environmental impacts associated with the proposed action.

**Alternatives to the Proposed Action:**

Since the Commission has concluded there is no significant environmental impact associated with the proposed amendments, any alternatives with equal or greater environmental impact need not be evaluated. The principal alternative to this action would be to deny the request for the amendment. Such action would not reduce the environmental impacts of plant operations.

**Alternative Use of Resources:**

This action did not involve the use of any resources not previously considered in the Final Environmental Statement related to the operation of the BSEP 1 & 2 Electric Generating Plants.

**Agencies and Persons Consulted:**

In accordance with its stated policy, on May 22, 1998, the staff consulted with the North Carolina State official, Mr. M. Fry, of the North Carolina Department of Environment and Natural Resources, Division of Radiation Protection. The State official had no comments.

**FINDING OF NO SIGNIFICANT IMPACT**

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed amendment.

For further details with respect to this action, see the licensee's letter dated November 1, 1996, as supplemented on October 13, 1997, February 26, 1998, March 13, 1998, April 24, 1998, and May 22, 1998, which are available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington,

DC, and at the local public document room located at the University of North Carolina at  
Wilmington, William Madison Randall Library, 601 College Road, Wilmington, North Carolina  
28403-3297.

Dated at Rockville, Maryland this 22 day of May 1998.

FOR THE NUCLEAR REGULATORY COMMISSION



Gordon E. Edison, Acting Director  
Project Directorate II-1  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation