

CP&L

Carolina Power & Light Company

P. O. Box 1551 • Raleigh, N. C. 27602

FEB 29 1988

LYNN W. EURY
Senior Vice President
Operations Support

SERIAL: NLS-88-050
10CFR50.90
85TSB25

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT
ALTERNATE/NORMAL POWER TESTING

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, Carolina Power & Light Company (CP&L) hereby requests a revision to the Technical Specifications for the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

The proposed change deletes Surveillance Requirement 4.8.1.1.1.b which requires that the on-site Class 1E distribution system be demonstrated operable at least once per 18 months during shutdown by manually transferring unit power supply from the normal circuit to the alternate circuits.

Enclosure 1 provides a detailed description of the proposed changes and the basis for the changes.

Enclosure 2 details the basis for the Company's determination that the proposed changes do not involve a significant hazards consideration.

Enclosure 3 provides instructions for incorporation of the proposed changes into the Technical Specifications for each unit.

Enclosure 4 provides a summary of the proposed Technical Specification changes for each unit on a page by page basis.

Enclosures 5 and 6 provide the proposed Technical Specification pages for each unit.

In accordance with the requirements of 10CFR170.12, a check for \$150 is also enclosed.

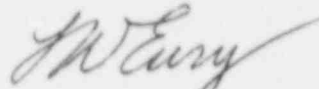
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In order to allow time for procedure revision and orderly incorporation into copies of the Technical Specifications, CP&L requests that the proposed amendments, once approved by the NRC, be issued with an effective date to be no later than 60 days from the issuance of the amendment.

Please refer any questions regarding this submittal to Mr. Leonard I. Loflin at (919) 836-6242.

Yours very truly,



L. W. Eury
Senior Vice President

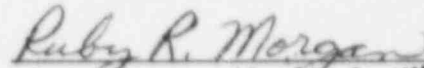
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Enclosures:

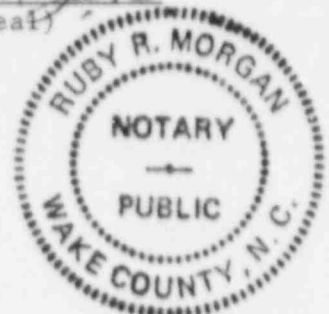
1. Basis for Change Request
2. 10CFR50.92 Evaluation
3. Instructions for Incorporation
4. Summary List of Revisions
5. Unit 1 Technical Specification Pages
6. Unit 2 Technical Specification Pages

cc: Mr. Dayne H. Brown
Dr. J. Nelson Grace
Mr. W. H. Ruland
Mr. E. D. Sylvester

L. W. Eury, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.


Notary (Seal)

My commission expires: 11/27/89



ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT

BASIS FOR CHANGE REQUEST

Proposed Change

Delete Surveillance Requirement 4.8.1.1.1.b, from Page 3/4 8-3 and re-designate Surveillance Requirement 4.8.1.1.1.a as Surveillance Requirement 4.8.1.1.1.

Basis

Technical Specification Surveillance Requirement 4.8.1.1.1.b currently requires that each of the required independent circuits between the offsite transmission network and the on-site Class 1E distribution system be demonstrated operable at least once per 18 months during shutdown. This is to be accomplished by manually transferring unit power supply from the normal circuit to the alternate circuit.

The BSEP offsite power system consists of those facilities necessary to interconnect the two generating units with the remainder of the CP&L system. It provides capability for delivering power from each unit to the system when the unit is generating power, and also provides capability for delivering power from the system to each unit when it is not generating power. Components included in the offsite power system are the generators, the main power transformers, the switchyard, the unit auxiliary transformers, the startup transformers, and the transmission lines from the site to the substations. This system is described in more detail in the Updated Final Safety Analysis Report (UFSAR), Section 8.2.

The on-site power system serves to interconnect the station generators and offsite power supplies with the on-site power supplies and various site loads. These systems provide the capability to interconnect various non-safety and safety-related loads to available power supplies. Additionally, these systems provide necessary power to loads required for accident mitigation and safe shutdown of the plant. The on-site system is described in more detail in the UFSAR, Section 8.3.

The required independent circuits described in the current Specification 4.8.1.1.1.b are the transmission lines. There are eight individual 230 kV transmission lines; four associated with each unit. Each of these lines is continuously energized. Thus, instead of having one normal supply line and one alternate supply line, as implied in the current Technical Specification, each BSEP unit has four normal supply

lines, two of which are required operable by the Technical Specifications, and no alternate supply line.

The system is designed such that there is no potential for either a simultaneous or a consequential loss of both offsite power sources required by the Technical Specifications (i.e., two of the four transmission lines associated with each unit). On August 30, 1984, CP&L submitted a revised voltage drop study titled "Auxiliary Electrical Distribution System Study for the Brunswick Steam Electric Plant Units 1 and 2." The NRC Safety Evaluation Report dated May 29, 1985 issued in response to this study stated, "CP&L has demonstrated that there is no potential for either a simultaneous or a consequential loss of both offsite power sources," thereby demonstrating that the requirements of General Design Criteria 17 have been met.

The intent of Technical Specification 4.8.1.1.1.b is to demonstrate power source operability. This intent is met continuously, since the four lines on each unit are continuously energized. Thus, a surveillance requirement that requires manual switching from a normal power source to an alternate backup source is unnecessary for BSEP. The proposed amendment deletes Surveillance Requirement 4.8.1.1.1.b from the Technical Specifications.

Reference

NRC letter from D. B. Vassallo dated May 29, 1985, "Adequacy of Station Electrical Distribution System Voltages (B-48)"

ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT

10CFR50.92 EVALUATION

The Commission has provided standards in 10CFR50.92(c) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. Carolina Power & Light Company has reviewed this proposed license amendment request and determined that its adoption would not involve a significant hazards consideration. The bases for this determination are as follows:

Proposed Change

Delete Surveillance Requirement 4.8.1.1.1.b, from Page 3/4 8-3 and re-designate Surveillance Requirement 4.8.1.1.1.a as Surveillance Requirement 4.8.1.1.1.

Basis

The proposed change does not involve a significant hazards consideration for the following reasons:

1. The proposed change deletes a Surveillance Requirement that does not apply to the BSEP design. The intent of the surveillance requirement; to demonstrate power source operability, is met on a continuous basis by continually providing four normal offsite power sources for each unit as opposed to a single normal and a single alternate offsite power source. Deletion of this requirement has no impact on the consequences of any accident because the intent of the surveillance requirement is met and verified continuously. The current Technical Specification only requires verification on an 18 month basis. The probability of an accident is likewise unchanged, simply because current practice is more conservative than the existing surveillance requirement.
2. The present electrical distribution system does not physically change as a result of the proposed change; nor does its operation. Manual transfer from a normal to an alternate power source is not possible at BSEP, simply because there is no differentiation between "normal" and "alternate" power sources. Each of the four

transmission lines on each unit are continuously energized. Only two are required to be operable to meet the intent of Technical Specification 3.8.1.1. These four supply lines will continue to provide the offsite power necessary to provide sufficient capacity and capability to automatically start and operate all required safety loads. Based on this reasoning, CP&L has determined that the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. The proposed change deletes a surveillance requirement which is not consistent with the BSEP design basis. The surveillance requirement requires that each of the two independent circuits be demonstrated operable at least once per 18 months by manually transferring unit power supply from the normal circuit to the alternate circuit. At BSEP, there are four independent circuits for each unit (transmission lines) and there is no difference between the alternate and normal power supplies. Manual transfer of the power supply is not necessary because each of the four lines on each unit is normally energized, and therefore verified operable, continuously. Thus, the intent of Technical Specification 3.8.1.1 is met, and the offsite power sources are verified operable more frequently than the current surveillance requires. Thus, there is no decrease in the margin of safety.

ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT

INSTRUCTIONS FOR INCORPORATION

The proposed changes to the Technical Specifications (Appendix A to Operating License DPR-71 and DPR-62) would be incorporated as follows:

UNIT 1

Remove Page

3/4 8-3

Insert Page

3/4 8-3

UNIT 2

Remove Page

3/4 8-3

Insert Page

3/4 8-3

ENCLOSURE 4

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT

SUMMARY LIST OF REVISIONS

UNIT 1

<u>Pages</u>	<u>Description of Changes</u>
3/4 8-3	Delete Surveillance Requirement 4.8.1.1.1.b, from Page 3/4 8-3 and re-designate Surveillance Requirement 4.8.1.1.1.a as Surveillance Requirement 4.8.1.1.1.

UNIT 2

<u>Pages</u>	<u>Description of Changes</u>
3/4 8-3	Delete Surveillance Requirement 4.8.1.1.1.b, from Page 3/4 8-3 and re-designate Surveillance Requirement 4.8.1.1.1.a as Surveillance Requirement 4.8.1.1.1.