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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 1
DOCKET NO. 50-325/LICENSE NO. DPR-71
REQUEST FOR LICENSE AMENDMENT
APPENDIX R ALTERNATE SHUTDOWN CAPABILITY REQUIREMENTS

#### 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), Unit 1.

The proposed change revises instrument tag numbers B21-LI-R604AX and B21-LT-N026A to B21-LI-R604BX and B21-LT-N026B, respectively, on TS Tables 3.3.5.2-1 and 4.3.5.2-1 under Item 2, "Reactor Vessel Water Level." This change is being made due to a plant modification to comply with 10CFR50, Appendix R alternate shutdown capability requirements. A similar change was submitted for BSEP-2 on December 10, 1987 and granted on April 7, 1988 via Amendment 148.

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.

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

Enclosure 5 provides the proposed Technical Specification pages.

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

Recio w/ checks for \$150.00 ca # 976968

411 Fayetteville Street \* P. O. Box 1551 \* Raleigh, N. C. 27602

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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. Stephen D. Floyd at (919) 836-6901.

Yours very truly,

Senior Vice President Operations Support

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#### Enclosures:

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

Mr. Dayne H. Brown

Dr. J. Nelso., Grace

Mr. W. H. Ruland

Mr. E. D. Sylvester

L. W. Fury, 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.

My commission expires: 11/27/89

Ruby R. Mo

# BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1 NRC DOCKET 50-325 OPERATING LICENSE DPR-71 REQUEST FOR LICENSE AMENDMENT

### BASIS FOR CHANGE REQUEST

The remote shutdown monitoring instrumentation provides sufficient instrumentation on the remote shutdown panel for monitoring the status of the reactor and primary containment as well as operation of the reactor core isolation cooling (RCIC) and residual heat removal (RHR) systems. The remote shutdown panel is located in the reactor building. The information provided on the panel is either independent of the main control room instrumentation or is provided with isolation features so that malfunctions or fires in or near the control building will not affect its operation.

Level transmitter loop B21-LT-N026A currently feeds reactor vessel water level indicator B21-LI-R604AX on the remote shutdown panel and, via the remote shutdown panel, indicator B21-LI-R604A on the control panel. Level transmitter loop B21-LT-N026B feeds indicator B21-LI-R604B on the control panel. The proposed change would have transmitter B21-LT-N026B feeding both the control room indicator B21-LI-R604B and the remote shutdown panel indicator B21-LI-R604BX. Level transmitter B21-LT-N026A would feed only indicator B21-LI-R604A in the control room.

These modifications are being made to address alternate shutdown capability requirements associated with 10CFR50, Appendix R, Section III.G. Commitments associated with compliance with this section were submitted to the NRC via the ASCA report in April 1984. To be in compliance with these requirements, the following must be true:

- The Train A systems are controlled from the control room and the Train B systems are controlled from the remote shutdown panel.
- Redundant safe shutdown trains be physically separated such that
  one train of systems necessary to achieve and maintain hot
  shutdown conditions from either the control room or the emergency
  control stations be maintained free of fire damage no matter where
  the fire occurs.
- Redundant train separation be achieved by one of the following:
  - a. Separation by a fire barrier having a three hour fire rating.

- b. Separation by a horizontal distance of 20 feet with no intervening combustibles. In addition, fire detectors and an automatic fire suppression system must be installed in the area.
- c. Enclosure in a fire barrier having a one-hour fire rating. In addition, fire detectors and an automatic fire suppression system must be installed in the area.

Currently, a Train A instrument, B21-LT-N026A, feeds the remote shutdown panel and a Train B instrument, B21-LT-N026B feeds the control room. To satisfy the requirement described in Item 1 above, the modification is being made to make the Train A instrument feed the control room and the Train B instrument feed the remote shutdown panel. The cables are being run through the existing cable runs for Trains A and B. The requirements of Items 2 and 3 will be met by providing appropriate barriers and equipment for the modified cable routes.

Technical Specification Tables 3.3.5.2-1 and 4.3.5.2-1 currently list level indicator B21-LI-R604AX and level transmitter B21-LT-N026A under Item 2, Reactor Vessel Water Level." The proposed change would replace the reference to indicator B21-LI-R604AX with a reference to indicator B21-LI-R604BX, and the reference to level transmitter B21-LT-N026A with a reference to transmitter B21-LT-N026B. Thus, level transmitter B21-LT-N026A would provide a vessel level signal to indica... B21-LI-R604A in the control room. Level transmitter B21-LT-N026B would provide a vessel level signal to indicator B21-LI-R604BX on the remote shutdown panel and, via the remote shutdown panel, indicator B21-LI-R604B in the control room.

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### 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 proposed change is being made to address alternate shutdown capability requirements associated with 10CFR50, Appendix R, Section III.G. Level transmitter B21-LT-N026A, a Train A instrument, currently provides indication on the remote shutdown panel as well as on the control panel in the control room, and level transmitter B21-LT-N026B, a Train B instrument, provides indication only on the control panel. Commitments associated with compliance with 10CFR50, Appendix R, Section 1II.G require that the Train A instrumentation feed the control room and the Train B instrumentation feed the remote shutdown panel. The modification would have level transmitter B21-LT-N026A providing indication to only the control board in the control room, and B21-LT-N026B providing indication on the remote shutdown panel and, via the remote shutdown panel, on the control board. Therefore, the Company would be able to safely shutdown using the Alternate Safe Shutdown Procedures.

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

1. The inscrumentation being rewired provides reactor water level indication as part of the plant monitoring instrumentation required for 10CFR50, Appendix R, Section III.G. It provides no direct protection against any of the accidents identified in Chapter 15 of the Updated Final Safety Analysis Report (UFSAR). By rewiring these instruments, the Train A instrumentation will reed the control room and the Train B instrumentation will feed the remote shutdown panel thereby satisfying the requirements of 10CFR50, Appendix R, Section III.G. The purpose and function of the instrumentation will not change; only the indication point will be exchanged between instrument trains. Therefore, the

proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

- 2. Rewiring of level transmitter loops B21-LT-N026A and B21-LT-N026B will allow the Company to safely shutdown the unit using the Alternate Safe Shutdown Procedures. The possibility of a new or different kind of accident from any accident previously evaluated will not be created because this instrumentation will not be performing any different function from its current function. This modification is being made to address the commitments associated with 10CFR50, Appendix R, Section III.G which require the Train A instrumentation to feed the control room and the Train B instrumentation to feed the remote shutdown panel. The new configuration will ensure consistent indication, i.e., Train A or Train B, in both the control room and at the remote shutdown panel. The necessary indication will be available to the operator at the proper location under fire scenarios which would take out either the Train A or Train B instrumentation.
- 3. The proposed modification will ensure proper indication in the appropriate area in the event of a fire that takes out either the Train A or Train B instrumentation. Currently, transmitter B21-LT-N026A feeds the remote shutdown panel, and transmitter B21-LT-N026B feeds the control room. Commitments associated with compliance with 10CFR50, Appendix R, Section III.G requires that Train A feed the control room and Train B feed the remote shutdown panel. This is to ensure that in the event of a fire that takes out Train A, there will be indication to the remote shutdown panel from Train B, and in a fire that takes out Train B, there will be indication to the control room from Train A. Thus, the proposed amendment does not involve a significant reduction in the margin of safety.

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# INSTRUCTIONS FOR INCORPORATION

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

# UNIT 1

Remove Page	Insert Page
3/4 3-48	3/4 3-48
3/4 3-49	3/4 3-49

# BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1 NRC DOCKET 50-325 OPERATING LICENSE DPR-71 REQUEST FOR LICENSE AMENDMENT

# SUMMARY LIST OF REVISIONS

# UNIT 1

Pages	Description of Changes
3/4 3-48	Replace Instrument Number B21-LI-R604AX with B21-LI-R604BX and B21-LT-N026A with B21-LT-N026B
3/4 3-49	Replace Instrument Number B21-LI-R604AX with B21-LI-R604BX and B21-LT-N026A with B21-LT-N026B

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TECHNICAL SPECIFICATION PAGES