

Carolina Power & Light Company

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DEC 1 0 1987

LYNN W. EURY Senior Vice President Operations Support

SERIAL: NLS-87-278 10CFR50.90 87TSB21

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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 2 DOCKET NO. 50-324/LICENSE NO. DPR-62 REQUEST FOR LICENSE AMENDMENT TAG NUMBER CHANGE

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 (TS) for the Brunswick Steam Electric Plant (BSEP), Unit 2.

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 alternative shutdown capability requirements.

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.

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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 amendment, once approved by the NRC, be issued with an effective date to be no later than 60 days from the issuance of the amendment. Issuance of the amendment is requested by March 1, 1988 to support the upcoming BSEP-2 refueling outage.

Please refer any questions regarding this submittal to Mr. Sherwood R. Zimmerman at (919) 836-6242.

Yours very truly,

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. 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.

My commission expires: 11/27/89

Notary (Seal)

NOTARY

PUBLIC

COUNTY

ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2

NRC DOCKET 50-324

OPERATING LICENSE DPR-62

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 (See Figure 1). 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 (See Figure 2).

These modifications are being made to address alternate shutdown capability requirements associated with 10CFR50, Appendix R. Currently, in an Appendix R fire in the "North" area of the Reactor Building, indication from these level transmitters on both the remote shutdown panel and in the control room would be lost. The "North" area of the Reactor Building is shown on Figures 1 and 2 with crosshatching. With the current configuration, the instrument rack where transmitter B21-LT-N026A is located would be destroyed in a "North" area fire, as would the cabling from the remote shutdown panel to the control room and from transmitter B21-LT-N026B to the control room. Thus, there would be no level indication from either transmitter in either the control room or on the remote shutdown panel.

With the proposed configuration, a fire in the "North" area of the Reactor Building would only disable indication to the control room, while maintaining indication to the remote shutdown panel. This is acceptable, and would allow the Company to safely shutdown the unit using the Alternate Safe Shutdown Procedures since, under most circumstances, a fire in the "North" area of the Unit 2 Reactor Building would require evacuation of the control room. Thus, indication would no longer be necessary in the control room, and the remote shutdown panel would provide the necessary indication.

This modification does not compromise other fire scenarios. For example, a "South" area fire would result in indication being lost to the remote shutdown panel, but maintained in the control room. In this case, the control room would remain habitable, and the area near the remote shutdown panel would become unusable. Thus, indication would be required only in the control room, and would be maintained under the proposed configuration.

By rewiring the level instrumentation loops, the Company will be able to safely shutdown the unit using the Alternate Safe Shutdown Procedures. This modification is being implemented to comply with CP&L's commitments to the NRC relating to Appendix R, Section III.G which were submitted to the NRC via the ASCA report in April 1984.

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 indicator B21-LI-R604AX with B21-LI-R604BX, and level transmitter B21-LT-N026A with B21-LT-N026B. Thus, level transmitter B21-LT-N026A would provide a vessel level signal to indicator 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.

Figure 1 Existing Configuration

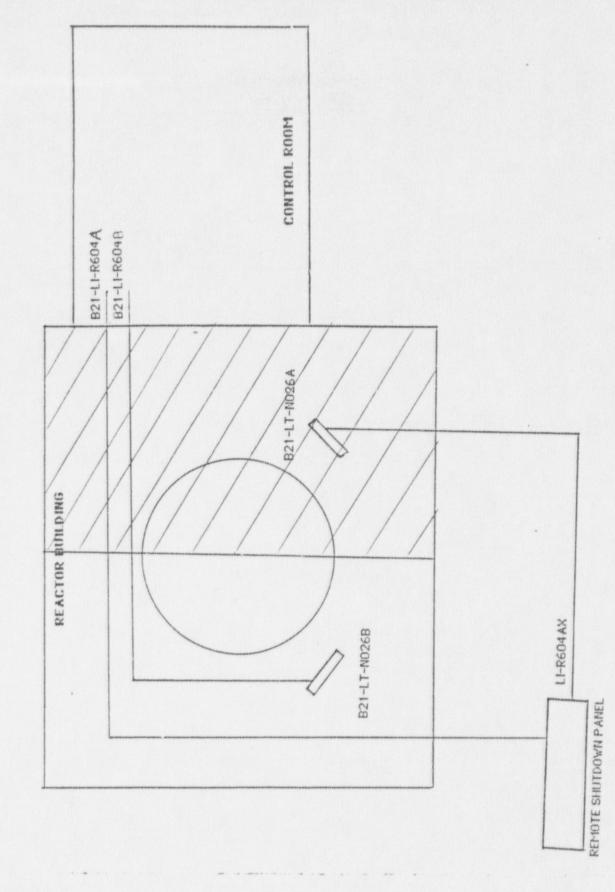
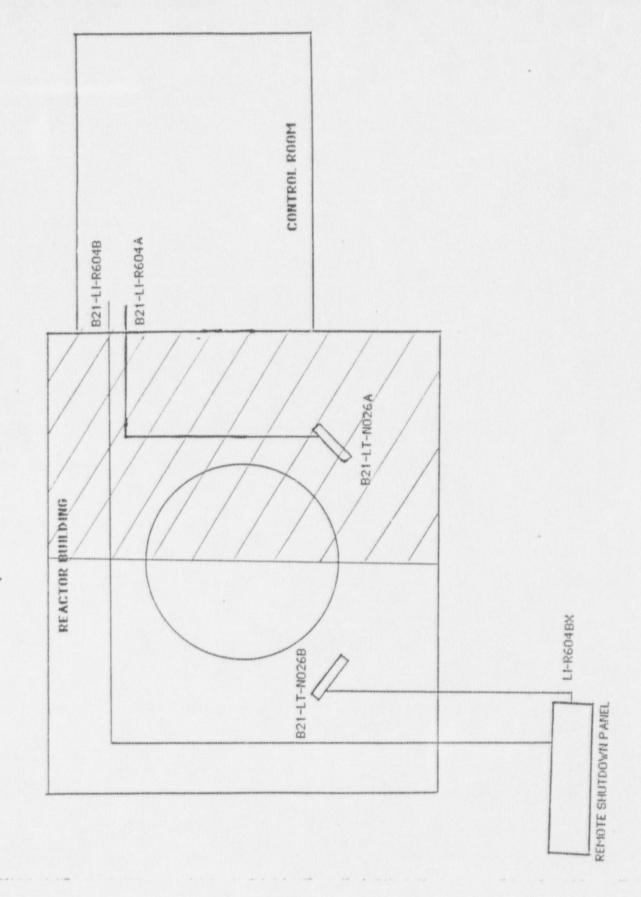


Figure 2 Proposed Configuration



ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2

NRC DOCKET 50-324

OPERATING LICENSE 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 proposed change is being made to address alternate shutdown capability requirements associated with 10CFR50, Appendix R. Level transmitter B21-LT-N026A 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 provides indication only on the control panel. Placement of associated cables is such that indication to both the remote shutdown panel and the control room would be lost if a Reactor Building "North" area fire occurred. 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. This change will permit the remote shutdown panel to maintain level indication from transmitter B21-LT-N026B, since it, and its associated cable, are located only in the "South" area of the Reactor Building. 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:

 The instrumentation being rewired provides reactor water level indication as part of the plant monitoring instrumentation required for 10CFR50, Appendix R. 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, remote indication of reactor water level will be provided on the remote shutdown panel in the event of a fire in the Unit 2 Reactor Building "North" area. Currently, the instrument providing indication to the remote shutdown panel as well as the cabling from the instrument providing indication to the control room would be destroyed in such a fire. Once the modification is complete, a Reactor Building "North" area fire will destroy only indication to the control room, which would more than likely be uninhabitable. Indication to the remote shutdown panel would be maintained. Therefore, the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. Instead, it provides additional capability in the event of a fire in the Unit 2 Reactor Building "North" area.

- 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 enhance the availability of the instrumentation in the event of a fire in the Reactor Building "North" area. As the instrumentation is currently configured, level indication to both the control room and the remote shutdown panel from the two instruments would be lost in such a fire. The new configuration will preclude loss of indication to the remote shutdown panel, thereby fulfilling the intended function of the instruments.
- 3. The proposed modification will ensure remote indication of reactor water level on the remote shutdown panel in the event of a fire in the Unit 2 Reactor Building "North" area. Currently, such a fire would destroy indicator B21-LT-N026A and the cables from indicator B21-LT-N026B and the remote shutdown panel, which are located in the Reactor Building "North" area. Indication to both the remote shutdown panel and the control room would be lost. The modification would preclude loss of indication to the remote shutdown panel. Thus, the proposed amendment does not involve a significant reduction in the margin of safety, rather it provides additional protection in the event of a fire in the Reactor Building "North" area and thereby enhances the margin of safety.