Progress Energy

10 CFR 50.55a(a)(3)(i)

OCT 0 3 2005

SERIAL: BSEP 05-0123

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Docket Nos. 50-325 and 50-324/License Nos. DPR-71 and DPR-62
Relief Request RR-37, Duties of the Authorized Nuclear Inservice Inspector

Ladies and Gentlemen:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc. (PEC), hereby requests NRC approval of a relief request for the third 10-year interval Inservice Inspection Program for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. The relief request involves an alternative to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, IWA-2110(a) and IWA-2110(c), to perform a multi-layered review of the Inservice Testing (IST) Program by plant personnel in lieu of an Authorized Nuclear Inservice Inspector.

The details of Relief Request RR-37 are enclosed. Approval of Relief Request RR-37 is requested by March 1, 2006.

No regulatory commitments are contained in this submittal. Please refer any questions regarding this submittal to Mr. Leonard R. Beller, Supervisor - Licensing/Regulatory Programs, at (910) 457-2073.

Sincerely,

Edward T. O'Neil
Manager - Support Services
Brunswick Steam Electric Plant

A047

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WRM/wrm

Enclosure: 10 CFR 50.55a Request Number RR-37

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10 CFR 50.55a Request Number RR-37

Proposed Alternative In Accordance with 10 CFR 50.55a(a)(3)(i)

- Alternative Provides Acceptable Level of Quality and Safety -

1. ASME Code Components Affected

Code Class:	Class 1, 2, and 3
Examination Category:	Not applicable.
System:	Not applicable.
Component Numbers:	ASME Code, Section XI, Class 1, 2, and 3 pumps and valves
Item Numbers:	Not applicable.

2. Applicable Code Edition and Addenda

The Code of Record for the third 10-year inservice inspection and testing interval at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2, is the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 1989 Edition, with no addenda.

The third 10-year inservice inspection interval began May 11, 1998, and will conclude on May 10, 2008.

3. Applicable Code Requirement

The ASME Code, Section XI, IWA-2110(a), requires the Inspector to review the inspection plan for inservice test quantities and submit a report to the Owner documenting this review. Subparagraph IWA-2110(c) requires the Inspector to verify that the inservice tests required on pumps and valves have been completed and the results recorded.

4. Reason for Request

The inservice testing (IST) related reviews and verifications conducted by the Authorized Nuclear Inservice Inspector have not provided an increase in quality and safety commensurate with the level of effort required to perform these tasks. In addition, the level of expertise of the Authorized Nuclear Inservice Inspector is generally associated with inservice inspection, rather than IST, activities. As a result, the 1999 Addenda to the 1998 Edition of the ASME Section XI Code removed the requirement for the Authorized Nuclear

Inservice Inspector to verify that the IST required on pumps and valves has been completed and the results recorded.

5. **Proposed Alternative and Basis for Use**

Proposed Alternative

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc. (PEC), proposes to perform a multi-layered review of the IST Program by plant personnel in lieu of the Inspector's activities specified in subparagraph IWA-2110.

Basis for Use

In accordance with 10 CFR 50.55a(a)(3)(i), PEC proposes for plant personnel to perform a multi-layered review of the IST Program as an alternative to the IST activities performed by the Inspector under subparagraph IWA-2110. The proposed alternative provides an acceptable level of quality and safety compared to that of the applicable Code requirement.

IWA-2110 requires that IST activities be reviewed and verified by an Authorized Nuclear Inservice Inspector. Subparagraph IWA-2110(a) specifies that the duties of the Inspector relative to the inservice tests performed for pumps and valves are to review that inservice test quantities are included in the Inspection Plan and submit a report to the Owner documenting this review. The Inspector's review of the IST Program, as outlined in IWA-2110, is less comprehensive than the review required for the inservice inspection activities. Subparagraph IWA-2110(c) specifies that the duties of the Inspector are to verify that the pump and valve testing has been performed and the results recorded. Consequently, the Inspector's involvement in the IST Program provides no compensating increase in quality and safety.

The level of expertise of the Inspector is generally associated with inservice inspection, rather than IST, activities. As a result, many on-site inspectors do not have the training or background experience to make determinations about component safety functions in order to verify program scope, or to assess the operational readiness of components based on test results. Thus, there is no quality-related benefit in the Inspector duplicating the reviews performed by experienced plant personnel. For these reasons, the 1999 Addenda to the 1998 Edition of the ASME Section XI Code removed the requirement for the Authorized Nuclear Inservice Inspector to verify that the IST required on pumps and valves has been completed and the results recorded.

PEC has evaluated the Code-required duties of the Inspector and determined that they provide no compensating increase in quality and safety. PEC has a plant procedure in place which outlines the process for reviewing changes to the IST Program to assure compliance to the Code and regulatory commitments. These reviews are performed by qualified personnel

who have experience in the Code-required testing of pumps and valves. A multi-layered review process is also in place to verify test completions and recording of test results. This process includes having a qualified IST engineer review completed surveillances to ensure requirements have been met, ensure corrective actions are initiated in the event of unsatisfactory test results, and monitor component performance for identification of adverse trends. For these reasons, PEC proposes to perform a multi-layered review of the IST Program by plant personnel in lieu of the Inspector's activities as specified in subparagraph IWA-2110.

The IST Program is also subject to PEC's Quality Assurance Program. Therefore, there is no quality-related benefit in the Inspector duplicating the review efforts performed by plant personnel.

6. Duration of Proposed Alternative

Use of the alternative is proposed for the remainder of the current 10-year inservice inspection interval.

7. Precedents

This proposed alternative is identical to relief requests submitted by and approved for the following facilities:

H. B. Robinson Plant Unit No. 2 in a letter dated August 24, 2001 (i.e., ADAMS Accession Number ML012420065), as supplemented by letter dated February 20, 2002 (i.e., ADAMS Accession Number ML020570285), and as approved by letter dated June 27, 2002 (i.e., ADAMS Accession Number ML040700790)

Surry Power Station in a letter dated January 2, 2002 (i.e., ADAMS Accession Number ML020090100), as approved by NRC letter dated May 22, 2002 (i.e., ADAMS Accession Number ML0214200095)

Comanche Peak Station in a letter dated July 11, 2002 (i.e., ADAMS Accession Number ML022000392), as approved by NRC letter dated August 28, 2002 (i.e., ADAMS Accession Number ML022210105)

8. References

1. ASME Code, Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components, 1989 Edition (no Addenda).

2. Title 10 of the Code of Federal Regulations, Part 50, Section 55a, Codes and Standards (i.e., 10 CFR 50.55a).