



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

JUN 10 2008

SERIAL: BSEP 08-0067

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  
Revision of Proposed Alternative for the Fourth 10-Year Inservice  
Inspection Interval

Reference: Letter from Randy C. Ivey (CP&L), Relief Requests Associated With the  
Fourth 10-Year Inservice Inspection Interval, dated February 6, 2008,  
ADAMS Accession Number ML080450249

Ladies and Gentlemen:

By letter dated February 6, 2008, Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., requested approval of several 10 CFR 50.55a requests applicable to the fourth 10-year inservice inspection interval for the Brunswick Steam Electric Plant (BSEP), Units 1 and 2. On April 29, 2008, a telephone conference call was held with the NRC to discuss the 10 CFR 50.55a request designated as ISI-01. Based on these discussions, Request ISI-01 has been revised to discuss American Society of Mechanical Engineers (ASME) Code Case N-686, Revision 1, rather than ASME Code Case N-686, Revision 0. A copy of the revised 10 CFR 50.55a request is enclosed.

No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Gene Atkinson, Supervisor - Licensing/Regulatory Programs (Acting), at (910) 457-2056.

Sincerely,

A handwritten signature in black ink that reads "Randy C. Ivey".

Randy C. Ivey  
Manager - Support Services  
Brunswick Steam Electric Plant

Progress Energy Carolinas, Inc.  
Brunswick Nuclear Plant  
PO Box 10429  
Southport, NC 28461

A047

NRB

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WRM/wrm

Enclosure: 10 CFR 50.55a Request Number ISI-01

cc (with enclosure):

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**10 CFR 50.55a Request Number ISI-01**

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

- Acceptable Level of Quality and Safety -

**1. ASME Code Components Affected**

Code Class: Class 1, 2, and 3  
Category: Not Applicable  
Systems: See Attachment 1  
Affected Components: See Attachment 1

**2. Applicable Code Edition and Addenda**

The Code of Record for the fourth 10-year inservice inspection 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, 2001 Edition with 2003 Addenda.

The fourth 10-year inservice inspection interval began May 11, 2008, and will conclude on May 10, 2018.

**3. Applicable Code Requirement**

The Special Erratum to the 2003 Addenda restored paragraphs IWA-2210 through IWA-2216 to their 2002 Addenda version. The affected paragraphs address requirements associated with the performance of VT-1, VT-2, and VT-3 visual examinations.

**4. Reason for Request**

ASME Code Case N-686-1 provides acceptable alternative requirements for performing VT-1, VT-2, and VT-3 visual examinations; however, Code Case N-686-1 has not been incorporated into Regulatory Guide (RG) 1.147.

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

Proposed Alternative

Use of the acceptable alternative requirements specified in Case N-686-1 for performing VT-1, VT-2, and VT-3 visual examinations.

Basis for Use

Code Case N-686 provides acceptable alternative to the requirements of IWA-2210 (Visual Examinations) and Table IWA-2210-1 (Visual Examinations). These alternative requirements were approved by ASME on February 14, 2003. In October 2007, this Case was incorporated into Revision 15 of RG 1.147 with no limitations.

Although approved in RG 1.147, Revision 0 of Code Case N-686 cannot be used during the fourth inspection interval since its applicability does not include the 2001 Edition with 2003 Addenda. For this reason, this request is to use Revision 1 (i.e., N-686-1) that was revised to extend the applicability to the 2004 Edition.

With the exception of administrative changes discussed below, the technical requirements associated with Code Case N-686, Revision 1 are the same as those specified in the original Case (i.e., N-686). Code Case N-686, Revision 1 was approved by the ASME staff on January 10, 2007.

1. The applicability of Code Case N-686 ended with the 2000 Addenda. It was limited to this Addenda because the Section V references were only applicable through the 2000 Addenda. Since the requirements of the Code Case were not incorporated into Section XI until the 2005 Addenda, the applicability was changed to the 2004 Edition in Revision 1. This change allowed users, implementing the 2001 Edition with 2003 Addenda, to use this Code Case. Changing the applicability to the 2004 Edition in Code Case N-686, Revision 1, did not affect any of the specified technical requirements.
2. The 2001 Edition of Section V was added to paragraph (a). The reference of the 2001 Edition was added to break the tie to the corresponding Editions and Addenda in the original Code Case, and allow the applicability to be extended to the 2004 Edition. The requirements, for complying with Article 9, T-941 for written procedure, and T-990 for reporting of examination results, were not affected. Thus, no technical requirements were altered with the additional of this reference.
3. In Table 1, Visual Examination, metric standard references (i.e., 550 lux) were added to the minimum illumination column. Since adding these metric standard references did not change the minimum illumination foot-candle (fc) requirement, the technical contents of this Code Case was not affected.

4. In the last sentence of paragraph (7), the word "requirements" was removed. Revision 0 read "...the colors applicable to the requirements component examinations being conducted." The sentence now reads "...the colors applicable to the component examinations being conducted." Deleting this editorial error does not alter the technical content of this Code Case.

Since the technical requirements of Code Case N-686 has been approved for use in RG 1.147 and the issuance of Code Case N-686, Revision 1 did not affect these requirements, Carolina Power & Light Company (CP&L) has concluded that the implementation of the proposed alternative will provide an acceptance level of quality and safety pursuant to 10 CFR 50.55a(a)(3)(i).

**6. Duration of Proposed Alternative**

Use of the alternative is proposed for the fourth 10-year inservice inspection interval which began on May 11, 2008, and will conclude on May 10, 2018.

**7. Precedents**

None.

**8. References**

1. Title 10 of the Code of Federal Regulations, Part 50, Section 55a, "Codes and Standards," (i.e., 10 CFR 50.55a).
2. ASME Code Case N-686, Revision 1, "Alternative Requirements for Visual Examinations, VT-1, VT-2, and VT-3"
3. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 2001 Edition with 2003 Addenda.

Attachment 1			
System (System Number)	Components		
	ISI Class 1	ISI Class 2	ISI Class 3
Containment Isolation:			
Containment Atmosphere Control (2070)		✓	
Drywell Drains (6235 and 6240)		✓	
Hydrogen Monitoring (2070)		✓	
Instrument Air Supply (6135)		✓	
Post Accident Sampling (2117)		✓	
Reactor Building Sampling (2115)	✓	✓	
Torus Drain (2190)		✓	
Traversing Incore Probe (1050)		✓	
Control Rod Drive Hydraulic (1070)	✓	✓	
Core Spray (2035)	✓	✓	
Nuclear Steam Supply (1005)	✓		
Fuel Pool Cooling (7110)		✓	
High Pressure Coolant Injection (2095)	✓	✓	
Reactor Building Close Cooling Water (4070)		✓	
Reactor Coolant Recirculation (2020)	✓	✓	
Reactor Core Isolation Cooling (2100)	✓	✓	
Reactor Water Cleanup (2010)	✓		
Residual Heat Removal (2045)	✓	✓	✓
Standby Gas Treatment (7071)		✓	
Standby Liquid Control (2040)	✓	✓	
Service Water (4060)			✓