



Carolina Power & Light Company
P.O. Box 10429
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October 28, 1998

10 CFR 50.55a(a)(3)
10 CFR 50.55a(g)(5)

SERIAL: BSEP 98-0199

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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
REQUEST TO USE ALTERNATIVES TO THE ASME BOILER AND PRESSURE VESSEL
CODE, SECTION XI FOR CONTAINMENT INSPECTION

Gentlemen:

In accordance with 10 CFR 50.55a(a)(3)(i), 10 CFR 50.55a(a)(3)(ii), and 10 CFR 50.55a(g)(5)(iii), Carolina Power & Light (CP&L) Company requests approval for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, to use alternatives to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code requirements for examination of containments.

In the *Federal Register* dated August 8, 1996 (i.e., 61 FR 41303), the NRC announced an amendment to 10 CFR 50.55a, "Codes and standards." The effective date for the amended regulation was September 9, 1998. The amended regulation incorporated, by reference, the 1992 Edition of the ASME Code with the 1992 Addenda of Subsection IWE, "Requirements for Class MC and Metallic Liners of Class CC Components of Light-Water Cooled Power Plants," and Subsection IWL, "Requirements for Class CC Concrete Components of Light-Water Cooled Power Plants" of the ASME Code, with specific modifications and a limitation. The amended regulation also required licensees to incorporate Subsection IWE and Subsection IWL into their inservice inspection program and to complete expedited implementation of containment inspections within five years of the effective date of the amended regulation. The purpose of the amended regulation is to assure that critical areas of containments are routinely inspected to detect and take corrective action for defects which could compromise structural integrity.

Subsection IWE of the ASME Code provides rules for inservice inspection, repair, and replacement of pressure retaining components classified as Class MC (e.g., the metallic liner of the drywell and suppression chamber, vent system) and their integral attachments. The inservice inspection of Class MC components is based on visual examination and testing on a prescribed schedule throughout a plant's lifetime.

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Subsection IWL of the ASME Code provides rules for inservice inspection and repair of the reinforced concrete and the post-tensioning systems of Class CC components. The inservice inspection of Class CC components is based on periodic inspections of accessible concrete surfaces for evidence of conditions that may be indicative of damage or degradation. This inspection is to be performed every five years following the baseline inspection, under the direction of a Professional Engineer.

To assure compliance with 10 CFR 50.55a and the applicable requirements of the ASME Code, Section XI, Subsections IWE and IWL, a Containment Inspection Program (CIP) has been developed for BSEP, Unit Nos. 1 and 2. 10 CFR 50.55a(g)(6)(ii)(B)(1) and 10 CFR 50.55a(g)(6)(ii)(B)(2) specify that expedited examinations be performed in accordance with Subsections IWE and IWL of the ASME Code, 1992 Edition with the 1992 Addenda and in conjunction with the modifications specified in 10 CFR 50.55a(b)(2)(ix). These expedited examinations must be completed within five years of the effective date of the regulation (i.e., by September 9, 2001). To comply with this requirement, CP&L must begin performing containment examinations during BSEP, Unit 1 Refueling Outage 12 (i.e., B113R1), which is scheduled to begin in February 2000.

To support implementation of the Containment Inspection Program, CP&L has identified eighteen proposed relief requests involving examination requirements specified by Subsection IWE and Subsection IWL of the ASME Code. CP&L is requesting relief from those ASME Code, Section XI requirements that are impractical, result in hardship, or result in unusual difficulty, or for which proposed alternatives will provide an acceptable level of quality and safety as provided by 10 CFR 55a(a)(3).

A list summarizing the relief requests is provided in Enclosure 1 of this letter. Relief requests CIP-01 through CIP-18 are provided in Enclosure 2, and include a description of the affected components, the applicable ASME Code requirement, description of the relief requested, justification for the requested relief, and the proposed alternative examination. These relief requests will be incorporated into the Containment Inspection Program following approval by the NRC.

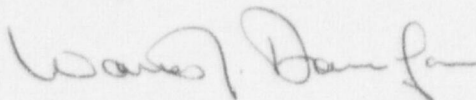
Periodically, the ASME Code Committee approves Code Cases that provide alternatives to the requirements of the ASME Code, Section XI. Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability ASME Section XI Division 1," Revision 11, October 1994, identifies those ASME Code Cases that the NRC has approved for use by licensees. CP&L is including relief requests CIP-08, CIP-09, and CIP-10 for several ASME Code Cases that are not yet identified in Regulatory Guide 1.147.

Timely NRC review and approval of the enclosed relief requests is needed to support implementation of the Containment Inspection Program. Therefore, CP&L requests NRC approval of the enclosed relief requests no later than June 1, 1999, in order to allow sufficient time to amend the Containment Inspection Program prior to the BSEP, Unit 1 Refueling Outage 12 examinations.

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Please refer any questions regarding this submittal to Mr. Warren J. Dorman, Supervisor - Licensing, at (910) 457-2068.

Sincerely,

A handwritten signature in cursive script, appearing to read "Keith R. Jury".

Keith R. Jury
Manager - Regulatory Affairs
Brunswick Steam Electric Plant

WRM/wrm

Enclosures:

1. List of Relief Requests
2. Relief Requests

cc (with enclosures):

U. S. Nuclear Regulatory Commission, Region II
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ATTN: Mr. Charles A. Patterson, NRC Senior Resident Inspector
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U. S. Nuclear Regulatory Commission
ATTN: Mr. David C. Trimble, Jr. (Mail Stop OWFN 14H22)
11555 Rockville Pike
Rockville, MD 20852-2738

Ms. Jo A. Sanford
Chair - North Carolina Utilities Commission
P.O. Box 29510
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Division of Boiler and Pressure Vessel
North Carolina Department of Labor
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4 West Edenton Street
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ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
REQUEST TO USE ALTERNATIVES TO THE ASME BOILER AND PRESSURE VESSEL
CODE, SECTION XI FOR CONTAINMENT INSPECTION

LIST OF RELIEF REQUESTS

**CONTAINMENT INSPECTION PROGRAM RELIEF REQUESTS
BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2**

Request Number	Title	ASME Code Class		Remarks
		MC	CC	
CIP-01 (Rev. 0)	Visual Examination of Moisture Barriers	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i).
CIP-02 (Rev. 0)	Acceptance Standard for Pressure Retaining Bolting	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i).
CIP-03 (Rev. 0)	Accessibility for Examination of Single-Welded Butt Joints	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(ii).
CIP-04 (Rev. 0)	Visual Examination of Seals and Gaskets	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(ii). This relief is similar to relief request RR-E1 for the Davis-Besse Nuclear Power Station, which was approved by an NRC letter dated June 30, 1998.
CIP-05 (Rev. 0)	Successive Examinations Following A Repair	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(ii). This relief is similar to relief request RR-E6 for the Davis-Besse Nuclear Power Station, which was approved by an NRC letter dated June 30, 1998.
CIP-06 (Rev. 0)	Visual Examination of Pressure Retaining Bolting	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i).

Request Number	Title	ASME Code Class		Remarks
		MC	CC	
CIP-07 (Rev. 0)	Torque/Tension Test of Pressure Retaining Bolting	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(ii). This relief is similar to relief request RR-E7 for the Davis-Besse Nuclear Power Station, which was approved by an NRC letter dated June 30, 1998.
CIP-08 (Rev. 0)	Documentation Requirements for Inservice Inspection, Repair, and Replacement Activities (Code Case N-532)	✓	✓	This relief request to use Code Case N-532 is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i). This Code Case was approved for use during the Second Inspection Interval and resubmitted with the Third Interval Inservice Inspection Program for Class 1, 2 and 3 components (Reference: CP&L letter dated April 23, 1998, Serial No. BSEP 98-0087).
CIP-09 (Rev. 0)	Transfer of Procedure Qualification Records (Code Case N-573)	✓		This relief request to use Code Case N-573 is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i). This Code Case was also submitted with the Third Interval Inspection Program for Class 1, 2 and 3 components (Reference: CP&L letter dated April 23, 1998, Serial No. BSEP 98-0087).

Request Number	Title	ASME Code Class		Remarks
		MC	CC	
CIP-10 (Rev. 0)	VT-2 Examination Personnel Qualifications (Code Case N-546)	✓		This relief request to use Code Case N-546 is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(ii). This Code Case was also submitted with the Third Interval Inspection Program for Class 1, 2 and 3 components (Reference: CP&L letter dated April 23, 1998, Serial No. BSEP 98-0087).
CIP-11 (Rev. 0)	Visual Examination of Accessible Surface Areas of the Containment Vessel and Vent System	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i).
CIP-12 (Rev. 0)	Preservice Examination of Paints and Coatings	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i). This relief is similar to relief request RR-E3 for the Davis-Besse Nuclear Power Station, which was approved by an NRC letter dated June 30, 1998.
CIP-13 (Rev. 0)	Examination of Paints and Coatings Prior to Removal	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i). This relief is similar to relief request RR-E4 for the Davis-Besse Nuclear Power Station, which was approved by an NRC letter dated June 30, 1998.
CIP-14 (Rev. 0)	Visual Examination of Accessible Concrete Surface Areas		✓	This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i).
CIP-15 (Rev. 0)	Inservice Inspection Schedule for Successive Concrete Examinations		✓	This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i).

Request Number	Title	ASME Code Class		Remarks
		MC	CC	
CIP-16 (Rev. 0)	Examination Method for Surface Areas Requiring Augmented Examination	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(ii).
CIP-17 (Rev. 0)	Visual (VT-2) Examination of Surface Areas Not Accessible During the Performance of the Leakage Test	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(ii).
CIP-18 (Rev. 0)	Inservice Inspection Schedule (IWA-2430)	✓		This relief request is being submitted for approval in accordance with 10 CFR 50.55a(a)(3)(i).

ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
REQUEST TO USE ALTERNATIVES TO THE ASME BOILER AND PRESSURE VESSEL
CODE, SECTION XI FOR CONTAINMENT INSPECTION

RELIEF REQUESTS

RELIEF REQUEST: CIP-01 (Rev. 0)

TITLE: VISUAL EXAMINATION OF MOISTURE BARRIERS

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to containment moisture barriers subject to examination per Table IWE-2500-1, Examination Category E-D (Item No. E5.30) at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Table IWE-2500-1, Examination Category E-D (Item No. E5.30) requires a VT-3 visual examination of 100% of each containment moisture barrier during the Inspection Interval.

REQUESTED RELIEF:

Relief is requested from performing the VT-3 visual examination of the containment moisture barriers subject to examination per Table IWE-2500-1, Examination Category E-D (Item No. E5.30).

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative examination method and frequency to those specified in Table 2500-1, Examination Category E-D (Item No. E5.30). CP&L proposes to perform a general visual examination of the containment moisture barriers once each Inspection Period.

This proposed alternative examination method and frequency has been evaluated by CP&L, and CP&L has determined that the implementation of the alternative requirement will provide an acceptable level of quality and safety for the following reasons:

1. CP&L will examine the containment moisture barriers once each Inspection Period (i.e., three examinations in a ten year period). Performing the general visual examination of the containment moisture barriers at this frequency will detect and correct potential degradation prior to failure and is considered an enhancement to the current ASME Code, Section XI requirement. The ASME Code, Section XI only requires a visual examination to be performed once during this same time period.
2. The purpose of the containment moisture barriers is to prevent intrusion of moisture against inaccessible areas of the containment liner. To allow moisture intrusion of the inaccessible areas of the containment liner, a failure of the seal would have to occur. Since CP&L does not consider the general visual examination as a cursory look, degradation of the containment moisture barrier would be detected. The general visual examination performed by CP&L is a thorough examination of the accessible surface areas and is performed by qualified and properly trained examiners. If an area is determined to be suspect, CP&L will perform a more detailed visual examination to ensure the suspect area is properly characterized for evaluation.
3. The general visual examination will be performed in accordance with a CP&L approved procedure. The examination methods outlined in this procedure will be written to be consistent with the methods approved in the rewrite of Subsection IWE (1998 Edition) and will be approved by a Registered Professional Engineer. These approved methods will delineate the necessary controls for ensuring these examinations are performed in a manner sufficient to detect evidence of degradation. When evidence of degradation is

TITLE: VISUAL EXAMINATION OF MOISTURE BARRIERS

detected by the examiner, a detailed visual examination will be performed to ensure the suspect area is properly characterized for evaluation. If a detailed visual examination cannot be performed (e.g., access limitations), the suspect area will be evaluated and approved by a Registered Professional Engineer.

4. The general and/or detailed visual examination will be performed by qualified and properly trained personnel. Personnel performing these visual examinations will be certified as ANSI/ASME N45.2.6 examiners in accordance with a CP&L procedure. This level of qualification will ensure that the capability and visual acuity of the examiners is sufficient to detect evidence of potential degradation of the containment moisture barrier. In addition to the requirements of ANSI/ASME N45.2.6, the examiners will also be required to successfully complete CP&L approved training (i.e., training developed by the Electric Power Research Institute (EPRI) or equivalent) on the proper techniques for examining items subject to the requirements of Subsection IWE. Successful completion of this training will ensure the examiners have a basic working knowledge of the item being examined and the types of degradation to be detected prior to performing any examinations.
5. The more stringent requirements outlined for a VT-3 visual examination are not appropriate for the examination of containment moisture barriers. The VT-3 visual examination requirements, outlined in IWA-2210, were written primarily for detecting flaws in metallic components (e.g., welds, supports). As defined in IWA-2213, a VT-3 visual examination is conducted to determine the general mechanical and structural condition of components and their supports. This examination is accomplished by verifying parameters such as clearances, settings, and physical displacement; and detecting discontinuities and imperfections (e.g., loss of integrity at bolted or welded connections). The containment moisture barriers, installed at BSEP, are made of a high density silicone elastomer material and do not perform a pressure retaining or load bearing function. Because of its non-metallic composition, this material is not subject to the same degradation mechanisms as an item made of a metallic material. Therefore, a VT-3 visual examination of the containment moisture barriers is not warranted nor would it provide a compensating increase in quality and safety.
6. The ASME Main Committee and the Board of Nuclear Codes and Standards have also determined that a VT-3 visual examination of the containment moisture barriers is not warranted. Both organizations have approved the rewrite of Subsection IWE which eliminated the requirement for performing a VT-3 visual examination of these items. This rewrite of Subsection IWE was published in the 1998 Edition of the ASME Code, Section XI. The alternative examination method and frequency proposed by CP&L is consistent with the approved rewrite of Subsection IWE.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will perform a general visual examination of the accessible surfaces of the containment moisture barrier once per Inspection Period. If an area is determined to be suspect during the general visual examination, CP&L will perform a detailed visual examination to determine the magnitude and extent of the degradation.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.

RELIEF REQUEST: CIP-01 (Rev. 0)

TITLE: VISUAL EXAMINATION OF MOISTURE BARRIERS

2. ANSI/ASME N45.2.6, "Qualification of Inspection, Examination, and Testing Personnel for Nuclear Power Plants."
3. NUA-NGGC-1532, "Certification of Quality Control Inspectors."

RELIEF REQUEST: CIP-02 (Rev. 0)

TITLE: ACCEPTANCE STANDARD FOR PRESSURE RETAINING BOLTING

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to pressure retaining bolting subject to examination per Table IWE-2500-1, Examination Category E-G (Item No. E8.10). This request for relief will apply to the pressure retaining bolting at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

The acceptance standard outlined in IWE-3515.1 requires that bolting materials be examined in accordance with the material specification for defect that may cause the bolted connection to violate either their leak-tightness or structural integrity.

REQUESTED RELIEF:

Relief is requested from using the acceptance standard outlined in IWE-3515.1.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative acceptance standard to those specified in IWE-3515.1. CP&L proposes the following acceptance standards:

Pressure retaining bolting shall be examined for conditions which may cause the bolted connection to violate either the containment leak-tightness or structural integrity. Examples of such conditions are: (1) bent, twisted, fractured, or deformed bolts, studs, nuts, or washers; (2) missing or loose bolts, studs, nuts, or washers; and (3) degraded coating on bolting surfaces accompanied by damage or degradation of the bolting material. Conditions identified during the examination will be evaluated. Those conditions that cause the bolted connection to violate either the containment's leak-tightness or structural integrity will be corrected by a repair/replacement activity prior to returning the component to service.

This proposed alternative acceptance standard has been evaluated by CP&L, and CP&L has determined that the implementation of the alternative requirement will provide an acceptable level of quality and safety for the following reasons:

1. Paragraph IWE-3515.1 refers the user back to the applicable material specification for the examination and acceptance standard for bolting materials. For the bolting used at BSEP, the applicable material specifications (i.e., SA-193, SA-194, SA-320) do not specify examination standards or acceptance standards for bolting that have been in service. These material specifications only provide manufacturing standards (e.g., chemical composition, heat analysis, mechanical requirement, finish and workmanship requirements) for new bolting.
2. The bolted connections associated with the primary containment structure have been in service for over twenty years. Applying manufacturing standards for new bolting to these bolted connections is not warranted, nor does it provide a compensating increase in quality and safety. The alternative requirement proposed by CP&L will provide the appropriate standard for the examination and acceptance of bolting that has been in service. Applying this alternative standard will ensure the bolting is examined for defects that may cause the

TITLE: ACCEPTANCE STANDARD FOR PRESSURE RETAINING BOLTING

bolted connection to violate either the containment's leak-tightness or structural integrity. The proposed alternative also provides examples of conditions which may cause the bolted connection to violate either the containment's leak-tightness or structural integrity.

3. The alternative acceptance standard requires that conditions identified during the examination be evaluated to determine if the conditions would cause the bolting to be unacceptable. The proposed alternative also requires corrective actions (i.e., repair/replacement activity) to be taken when a condition is determined to cause the bolting to violate either the containment leak-tightness or structural integrity. Both of these actions will ensure identified conditions are properly evaluated and/or corrective action taken prior to returning the component to service.
4. The ASME Main Committee and the Board of Nuclear Codes and Standards have also determined that referring the user back to the material specification was not appropriate and has approved the rewrite of Subsection IWE which eliminated the requirement for examining bolting materials in accordance with the material specification. This rewrite of Subsection IWE was published in the 1998 Edition of the ASME Code, Section XI. The alternative acceptance standard proposed by CP&L is consistent with the approved rewrite of Subsection IWE.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will use the following acceptance standard for the examination of bolting:

Pressure retaining bolting will be examined for conditions which may cause the bolted connection to violate either the containment's leak-tightness or structural integrity. Examples of such conditions are: (1) bent, twisted, fractured, or deformed bolts, studs, nuts, or washers; (2) missing or loose bolts, studs, nuts, or washers; and (3) degraded coating on bolting surfaces accompanied by damage or degradation of the bolting material. Conditions identified during the examination will be evaluated. Those conditions that cause the bolted connection to violate either the containment's leak-tightness or structural integrity will be corrected by a repair/replacement activity prior to returning the component to service.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.
2. SA-193, "Specification for Alloy Steel and Stainless Steel Bolting Material for High-Temperature Service."
3. SA-194, "Specification for Carbon and Alloy Steel Nuts for Bolts for High-Pressure and High-Temperature Service."
4. SA-320, "Specification for Alloy Steel Bolting Material for Low-Temperature Service."

TITLE: ACCESSIBILITY FOR EXAMINATION OF SINGLE-WELDED BUTT JOINTS

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to single-welded butt joints subject to the requirements of IWE-1231(a)(3). This request for relief will apply to single-welded butt joints at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Paragraph IWE-1231(a)(3) requires that single-welded butt joints remain accessible for either direct or remote visual examination, from at least one side of the vessel, for the life of the plant.

REQUESTED RELIEF:

Relief is requested from the requirement of paragraph IWE-1231(a)(3) to have single-welded butt joints remain accessible for either direct or remote visual examination, from at least one side of the vessel, for the life of the plant.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(ii), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative to the requirement specified in paragraph IWE-1231(a)(3). As an acceptance alternative, CP&L will ensure that single-weld butt joints are included in the requirement to maintain at least 80% of the pressure retaining boundary, as defined in Table IWE-2500-1, Examination Category E-A, accessible for examination for the life of the plant.

This acceptable alternative has been evaluated by CP&L, and CP&L has determined that implementing this alternative requirement will provide an acceptable level of quality and safety for the following reasons:

1. The requirement to maintain single-welded butt joints accessible from at least one side for the life of the plant, to allow for the examination of pressure retaining welds, is no longer warranted. As originally published in 1981, the rules and requirements of Subsection IWE focused on the examination of welds. This weld-based examination philosophy was established in the 1970s as plants were being constructed. This examination philosophy was based on the premise that the welds in pressure vessels and piping were the areas of greatest concern. Thus, the requirement of IWE-1231(a)(3) was established to assure the examination specified in Examination Category E-B and E-F could be met.

As clarified in the amended to 10 CFR 50.55a (i.e., 61 FR 41303), degradation of base metal, rather than welds, has been found to be the issue of concern as containments have aged. Thus, the NRC concluded that requiring the examinations specified by Examination Category E-B and E-F was not appropriate. For this reason, the amendment to 10 CFR 50.55a provided a modification (10 CFR 50.55a(b)(2)(x)(C)) to make the examination of welds per these examination categories optional. Since there is no requirement to examine welds per Examination Category E-B or E-F, the requirement specified in IWE-1231(a)(3) is no longer warranted.

RELIEF REQUEST: CIP-03 (Rev. 0)

TITLE: ACCESSIBILITY FOR EXAMINATION OF SINGLE-WELDED BUTT JOINTS

2. The containment vessels at BSEP contain single-welded butt joints, and those portions that contain these welds are backed up by reinforced concrete. Thus, one side of the butt joint is inaccessible. Mandating this requirement could prevent CP&L from installing a safety-related modification that would make these welds inaccessible. Thus, implementation of this requirement would create a hardship for CP&L without a compensating increase in quality and safety.
3. The examination of ASME Class MC components is a requirement of subarticle IWE-2500. As required by Examination Category E-A, accessible surface areas, which includes welds and base metal, are to be examined periodically. Although the requirement of paragraph IWE-1231(a)(3) to maintain single-welded butt joint accessible can be deleted, these welds are considered part of the pressure retaining boundary and are required to be examined in accordance with Examination Category E-A. For this reason, CP&L must include these welds into the 80% of the surface area required to be maintained accessible for examination in accordance with paragraph IWE-1231(a)(4).
4. The ASME Main Committee and the Board of Nuclear Codes and Standards have also determined that the requirement to maintain single-welded butt joints accessible from at least one side for the life of the plant is no longer warranted. Both organizations have approved a rewrite of Subsection IWE which eliminated this requirement. This rewrite of Subsection IWE was published in the 1998 Edition of the ASME Code, Section XI.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will include the accessible surface areas of single-weld butt joints into the applicable requirement of paragraph IWE-1231(a)(4). Thus, CP&L will maintain at least 80% of the pressure retaining boundary accessible for either direct or remote visual examination for the life of the plant.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.
2. Part 50.55a, "Codes and Standards," of Title 10 of the Code of Federal Regulation (10 CFR 50.55a).
3. Federal Register, 61 FR 41303, Dated: August 8, 1996.

RELIEF REQUEST: CIP-04 (Rev. 0)

TITLE: VISUAL EXAMINATION OF SEALS AND GASKETS

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to seals and gaskets subject to examination per Table IWE 2500-1, Examination Category E-D (Item Nos. E5.10 and E5.20). This request for relief will apply to the seals and gaskets at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Table IWE-2500-1, Examination Category E-D (Item Nos. E5.10 and E5.20) requires a VT-3 visual examination of seals and gaskets during the Inspection Interval.

REQUESTED RELIEF:

Relief is requested from performing the VT-3 visual examination of the seals and gaskets subject to examination per Table IWE-2500-1, Examination Category E-D (Item Nos. E5.10 and E5.20).

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(ii), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative to the requirement of Table IWE-2500-1, Examination Category E-D (Item Nos. E5.10 and E5.20). CP&L proposes to verify the leak-tightness of these seals and gaskets in accordance with the testing requirements specified in 10 CFR 50, Appendix J.

The proposed alternative for assuring the leak-tight integrity of primary containment has been evaluated by CP&L, and CP&L has determined that the implementation of the alternative requirement will provide an acceptable level of quality and safety for the following reasons:

1. Seals and gaskets, subject to examination per the ASME Code, Section XI, are those used on penetrations (e.g., airlocks, hatches) that are required to assure containment leak-tight integrity. As required by 10 CFR 50, Appendix J, these same seals and gaskets are required to be leak rate tested (i.e., Type B test). The purpose of the Type B test is to detect local leaks at containment peak accident pressure and to measure leakage across the leakage-limiting boundary of containment penetrations whose design incorporates resilient seals, gaskets, sealant compounds, and electrical penetrations fitted with flexible metal seal assemblies. When compared to a visual examination, CP&L considers a leak rate test at containment peak accident pressure a superior and proven method for identifying degradation that may cause containment leakage. If unacceptable leakage is identified during the test, corrective measures would be taken and the connection retested. The performance of a visual examination, in addition to this leak test, would provide no compensating increase in quality and safety.
2. For those penetrations (e.g., Drywell Head, Torus Access Hatches, Equipment Hatch) that are routinely disassembled during a refueling outage, a Type B test is required upon final assembly and prior to start-up. The mechanical connection associated with these penetrations employs a tongue and groove or ring joint configuration. Thus, the seals or gaskets are not accessible for examination when the connection is assembled. For this reason, a VT-3 examination of the seal or gasket would have to be performed prior to final assembly. Since potential damage to the seal or gasket would most likely occur during the

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final assembly of the connection, the visual examination provides no compensating increase in quality and safety. Failure of the seal or gasket would be identified during the Type B test.

3. Performance of the visual examination of the seals or gaskets would require disassembly and re-assembly of the mechanical connection for those penetrations (e.g., Personnel Airlock-to-Drywell, Drywell Head Access Hatch) that are not routinely disassembled during a refueling outage. The seals or gaskets associated with these penetrations are also not accessible for examination when the connection is assembled. For this reason, the connection would require disassembly for the sole purpose of performing the visual examination. Since these connections are periodically Type B tested in accordance with 10 CFR 50, Appendix J to verify their leak-tight integrity, CP&L considers the physical wear of the components and the possibility of component damage that could be associated with the disassembly and re-assembly activity unwarranted and a hardship without a compensating increase in quality and safety.
4. The more stringent requirements outlined for a VT-3 visual examination are not appropriate for the examination of seal and gaskets. The VT-3 visual examination requirements outlined in IWA-2210 were written primarily for detecting flaws in metallic components (e.g., welds, supports). As defined in IWA-2213, a VT-3 visual examination is conducted to determine the general mechanical and structural condition of components and their support. This examination is accomplished by verifying parameters such as clearances, settings, and physical displacement; and provides detection of discontinuities and imperfections (e.g., loss of integrity at bolted or welded connections). The seals and gaskets at BSEP are made of a non-metallic material and are not subject to the same degradation mechanisms as a component made of a metallic material. Therefore, a VT-3 visual examination of seals and gaskets is not warranted nor would it provide a compensating increase in quality and safety.
5. Option B of 10 CFR 50, Appendix J has been implemented at BSEP. During the implementation of Option B, a review of those penetrations containing seals and gaskets was performed. The review of corrective action work orders and "as-found" test results identified no service induced anomalies. Since these penetrations are in a static environment during normal operation and are periodically tested per Appendix J, disassembly of a penetration for the sole purpose of visual examination would be a hardship with no compensating increase in quality and safety.
6. Upon implementation of 10 CFR 50, Appendix J, Option B, the Type B test frequency for those penetrations not routinely disassembled each refueling outage was extended from once every 24 months to once every three refuel cycles. For the containment personnel airlock seals, the test frequency was extended to at least once every 30 months. Based on the performance history of BSEP's containments, the Type A test frequency was also extended to at least once per 10 years. Since these penetrations are Type B tested and also tested during the performance of the Type A test, their leak-tight integrity will be verified at least twice during the First Containment Inspection Interval. The VT-3 examination per Table IWE-2500-1, Examination Category E-D (Item Nos. E5.10 and E5.20) of these same seals and gaskets would only be performed once during this same time period. CP&L considers verification of the leak-tight integrity of these seals and gaskets at least twice during the Inspection Interval appropriate. Performance of a visual examination, in addition to these leak rate tests, will provide no compensating increase in quality and safety.

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7. The ASME Main Committee and the Board of Nuclear Codes and Standards have also determined that a VT-3 visual examination of the seals and gaskets are no longer warranted. Both organizations have approved the rewrite of Subsection IWE that deleted the requirement for performing a VT-3 visual examination of these items. This rewrite of Subsection IWE was published in the 1998 Edition of the ASME Code, Section XI. The alternative proposed by CP&L is consistent with the approved rewrite of Subsection IWE.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will verify the leak-tight integrity of seals and gaskets, utilized on penetrations (e.g., airlocks, hatches) that are required to assure containment leak-tight integrity, in accordance with the applicable requirements of 10 CFR 50, Appendix J.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.
2. Part 50 of Title 10 of the Code of Federal Regulation (10 CFR 50), Appendix J, "Primary Reactor Containment Leakage Testing of Water-Cooled Power Reactors."

TITLE: SUCCESSIVE EXAMINATIONS FOLLOWING A REPAIR

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to all components classified as Class MC and subject to the requirements of paragraphs IWE-2420(b) and (c). This request for relief will apply to Class MC components at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Paragraph IWE-2420(b) requires successive examinations for components whose examination results require evaluation of flaws, areas of degradation, or repairs in accordance with IWE-3000. Paragraph IWE-2420(c) states that if the flaws, areas of degradation, or repairs remain essentially unchanged for three consecutive inspection periods, the component no longer requires augmented examination per Examination Category E-C.

REQUESTED RELIEF:

Relief is requested from the requirement of paragraphs IWE-2420(b) and (c) to perform successive examinations of repaired areas in accordance with Examination Category E-C.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(ii), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative to the requirement specified in paragraphs IWE-2420(b) and (c) to perform successive examinations of repaired areas. As an acceptable alternative, CP&L will perform the repair of degraded areas in accordance with an approved Repair/Replacement Program.

This acceptable alternative has been evaluated by CP&L, and CP&L has determined that the implementation of this alternative requirement will provide an acceptable level of quality and safety for the following reasons:

1. Article IWE-3000 allows acceptance by repair for those components whose examination results reveal flaws or areas of degradation exceeding the acceptance standards listed in Table IWE-2500-1. Paragraph IWE-3124 requires that the repair comply with the requirements of Article IWA-4000, "Repair and Replacement." Paragraph IWA-4150 requires CP&L to conduct an evaluation of the suitability of the repair including the consideration of the cause of failure. Thus, the purpose of the repair is to restore the component to an acceptable condition for continued service and prevent recurrence.

Following the repair, preservice examination is performed in accordance with IWE-2000. Acceptance of this preservice examination will confirm the absence of the unacceptable condition or reveal that the condition no longer exceeds the established acceptance standards. In both cases, this examination verifies that the repair has restored the component to an acceptable condition and can be returned to service. Once the repair has been verified as acceptable, successive examinations of the repaired area per Examination Category E-C is not warranted and would create a hardship for CP&L without a compensating increase in quality and safety.

TITLE: SUCCESSIVE EXAMINATIONS FOLLOWING A REPAIR

2. The requirement for successive examinations of repaired areas of Class MC components is not consistent with the requirements for Class 1, 2 and 3 components. Neither paragraphs IWB-2420, IWC-2420, or IWD-2420 requires a repaired area to be subject to successive examinations. A repair to a Class MC component is subject to the same general requirements as the Class 1, 2, or 3 components. If a repair to the reactor coolant pressure boundary is acceptable without the performance of successive examinations, a repair to a Class MC component is also acceptable without the performance of successive examinations.
3. In Attachment 6, Resolution of Public Comment, of SECY-96-080, the response to comment 3.3 states "The purpose of IWE-2420(b) is to manage components found to be acceptable for continued service (meaning no repair or replacement at this time) as a Examination Category E-C component... If the component had been repaired or replaced, then a more frequent examination would not be needed." CP&L agrees with this conclusion. The requirement to perform successive examinations is impractical and would create a hardship for CP&L without a compensating increase in quality and safety.
4. The ASME Main Committee and the Board of Nuclear Codes and Standards have also determined that the requirement to perform successive examinations of repaired areas per Examination Category E-C to be no longer warranted. Both organizations have approved the rewrite of Subsection IWE which eliminated this requirement. This rewrite of Subsection IWE was published in the 1998 Edition of the ASME Code, Section XI.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will perform the repair of degraded areas in accordance with an approved Repair/Replacement Program. For degraded areas that are accepted by engineering evaluation, the applicable successive inspection requirements specified in paragraph IWE 2420 will be met.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.
2. SECY 96-080, "Issuance of Final Amendment to 10 CFR 50.55a to Incorporate by Reference the ASME Boiler and Pressure Vessel Code, Section XI, Division 1, Subsection IWE and Subsection IWL."

RELIEF REQUEST: CIP-06 (Rev. 0)

TITLE: VISUAL EXAMINATION OF PRESSURE RETAINING BOLTING

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to pressure retaining bolting subject to examination per Table IWE-2500-1, Examination Category E-G (Item No. E8.10). This request for relief will apply to the pressure retaining bolting at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Table IWE-2500-1, Examination Category E-G (Item No. E8.10) requires a VT-1 visual examination of 100% of each bolted connection during the Inspection Interval.

REQUESTED RELIEF:

Relief is requested from performing the VT-1 visual examination of the pressure retaining bolting subject to examination per Table IWE-2500-1, Examination Category E-G (Item No. E8.10).

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative examination method and frequency to those specified in Table 2500-1, Examination Category E-G (Item E8.10). CP&L proposes to perform a general visual examination of the pressure retaining bolted connections once each Inspection Period.

This proposed alternative examination method and frequency has been evaluated by CP&L, and CP&L has determined that the implementation of the alternative requirement will provide an acceptable level of quality and safety for the following reasons:

1. CP&L will perform a general visual examination of each pressure retaining bolted connection, including its bolts, studs, nuts, washers, etc., once each Inspection Period (i.e., three examinations in a ten year period). Performing the general visual examination at this frequency would detect and correct potential degradation prior to failure and is considered an enhancement to the current ASME Code, Section XI requirement. The ASME Code, Section XI only requires a visual examination to be performed once during this same time period.
2. The general visual examination is an acceptable examination method for detecting potential degradation of pressure retaining bolting. The general visual examination is not a cursory look at the pressure retaining bolting, but a thorough examination of the exposed surface areas and is performed by qualified and properly trained examiners. If an area is determined to be suspect, CP&L will perform a more detailed visual examination to determine the magnitude and extent of the suspect areas.
3. Both the general and/or detailed visual examination will be performed in accordance with a procedure that will delineate the controls for ensuring sufficient illumination and resolution for detecting degradation are maintained. The procedure outlining these controls and other requirements associated with the performance of these examinations will be reviewed and approved by a Registered Professional Engineer.

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4. The general and/or detailed visual examination will be performed by certified and properly trained personnel. Personnel performing these visual examinations will be certified as ANSI/ASME N45.2.6 examiners in accordance with a CP&L procedure. This level of certification will ensure the capability and visual acuity of the examiners is sufficient to detect evidence of potential degradation of the pressure retaining bolting. The examiners will also be required to successfully complete CP&L approved training (i.e., training developed by the Electric Power Research Institute (EPRI) or equivalent) on the proper techniques for examining Code Class MC items. Successful completion of this training will ensure the examiners have a basic working knowledge of the component and the types of degradation to be detected prior to performing the examinations.
5. The level of quality and safety will not be decreased by the performance of the general visual examination of the accessible surface areas in place of the VT-1 visual examination. As clarified in paragraph IWA-2211, VT-1 visual examinations are conducted to detect discontinuities and imperfections on the surface of components, including such conditions as cracks, wear, corrosion, and erosion. The VT-1 visual examination requirements were primarily written for the examination of components and items within the reactor coolant pressure boundary (a VT-1 examination is not required for Class 2 and 3 component). The bolted connections associated with primary containment are not subject to the same service conditions (e.g., pressure, temperature, loading) as the bolting within the reactor coolant pressure boundary. These bolted connections, along with their bolting, are also not subject to conditions that could cause accelerated degradation or aging. For these reasons, a VT-1 examination is not warranted.
6. The level of quality and safety will not be decreased by not disassembling the bolted connection and performing of the general visual examination of the accessible surface areas. The bolted connections associated with primary containment are also subject to testing in accordance with 10 CFR 50, Appendix J. Appendix J requires that each of these bolted connections be tested on a routine basis. The purpose of the Appendix J test is to ensure the leak-tight integrity of the primary containment structure. Thus, the visual examination only needs to be performed to evaluate any inservice environmental effects that could adversely affect the performance of the bolted connection that have been adequately assembled and tested. For these reasons, the bolted connection need not be disassembled for the purpose of examination, and only those portions of bolting that are exposed to environmental conditions require examination.
7. The ASME Main Committee and the Board of Nuclear Codes and Standards have also determined that the VT-1 examination of pressure retaining bolting was not appropriate and have approved the rewrite of Subsection IWE which eliminated this requirement. This rewrite of Subsection IWE was published in the 1998 Edition of the ASME Code, Section XI. The alternative examination method and frequency proposed by CP&L is consistent with the approved rewrite of Subsection IWE.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will perform a general visual examination of each pressure retaining bolted connection once per Inspection Period. The bolted connection will be examined in their "as-found" condition and will not be disassembled for the sole purpose of performing the general visual examination. If an area is determined to be suspect during the general visual examination, CP&L will perform a detailed visual examination

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TITLE: VISUAL EXAMINATION OF PRESSURE RETAINING BOLTING

to determine the magnitude and extent of the suspect areas. If required, CP&L will disassemble the bolted connection to support the performance of the detailed visual examination.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.
2. 10 CFR 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactor."
3. NUA-NGGC-1532, "Certification of Quality Control Inspectors."
4. ANSI/ASME N45.2.6, "Qualification of Inspection, Examination, and Testing Personnel for Nuclear Power Plants."

TITLE: TORQUE/TENSION TEST OF PRESSURE RETAINING BOLTING

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to pressure retaining bolting subject to torque or tension test per Table IWE-2500-1, Examination Category E-G (Item No. E8.20). This request for relief will apply to the pressure retaining bolting at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Table IWE-2500-1, Examination Category E-G (Item No. E8.20) requires a torque or tension test of bolted connections that have not been disassembled and reassembled during the Inspection Interval.

REQUESTED RELIEF:

Relief is requested from performing the torque or tension test per Table IWE-2500-1, Examination Category E-G (Item No. E8.20).

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(ii), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative to the requirement specified in Table 2500-1, Examination Category E-G (Item E8.20). As an acceptable alternative, CP&L will verify the integrity of bolted connections in accordance with the applicable requirements of 10 CFR 50, Appendix J.

This proposed alternative has been evaluated by CP&L, and CP&L has determined that the implementation of this alternative requirement will provide an acceptable level of quality and safety for the following reasons:

1. The bolted connections, subject to torque or tension test, are those that are required to assure containment leak-tight integrity. As required by 10 CFR 50, Appendix J, these same bolted connections are required to be leak rate tested (i.e., Type B test). The purpose of the Type B test is to detect local leaks at containment peak accident pressure and to measure leakage across the leakage-limiting boundary of containment penetrations whose design incorporates resilient seals, gaskets, sealant compounds, and electrical penetrations fitted with flexible metal seal assemblies. When compared to a torque or tension test, CP&L considers a leak rate test at containment peak accident pressure a superior and proven method for identifying degradation that may cause containment leakage. If unacceptable leakage is identified during the test, corrective measures would be taken and the connection re-tested.
2. The torque or tension test is only required for those bolted connections that are not disassembled and reassembled during the Inspection Interval. To accomplish this test, CP&L would be required to un-torque the bolts and then re-torque or re-tension them. Thus, this task would be required for the sole purpose of performing this test. Since the integrity of the bolted connections are verified by 10 CFR 50, Appendix J testing and, if acceptable, demonstrates that the bolt torque or tension is adequate, CP&L considered this task a hardship without a compensating increase in quality and safety.

TITLE: TORQUE/TENSION TEST OF PRESSURE RETAINING BOLTING

3. The bolted connections associated with the containment were designed and constructed to withstand the peak accident pressure and temperature without loss of their leak-tight integrity and no yielding of the bolting would occur.
4. Option B of 10 CFR 50, Appendix J has been implemented at BSEP. During the implementation of Option B, a review of bolted connections subject to the requirements of Appendix J was performed. This review of corrective action work orders and "as-found" test results identified no service induced anomalies. Since these bolted connections are in a static environment during normal operation and are periodically tested per 10 CFR 50, Appendix J, performing an additional torque or tension test would be a hardship with no compensating increase in quality and safety.
5. Upon implementation of Option B, the Type B test frequency was extended from once every 24 months to once every three refuel cycles. Based on the performance history of BSEP's containment, the Type A test frequency was also extended (i.e., at least once every 10 years). Since these bolted connections are Type B tested and also tested during the performance of the Type A test, their leak-tight integrity will be verified at least twice during the First Containment Inspection Interval. The torque or tension tests of these same bolted connections would only be performed once during this same time period. CP&L considers verification of the leak-tight integrity of these connections at least twice during the Inspection Interval appropriate. Performance of a torque or tension test, in addition to these leak rate tests, will provide no compensating increase in quality and safety.
6. The ASME Main Committee and the Board of Nuclear Codes and Standards have also determined that the torque or tension test of bolting was not appropriate and has approved the rewrite of Subsection IWE which eliminated this requirement. This rewrite of Subsection IWE was published in the 1998 Edition of the ASME Code, Section XI.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will verify the leak-tight integrity of bolted connections that are required to assure containment leak-tight integrity in accordance with the applicable requirements of 10 CFR 50, Appendix J.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.
2. Part 50 of Title 10 of the Code of Federal Regulation (10 CFR 50), Appendix J, "Primary Reactor Containment Leakage Testing of Water-Cooled Power Reactors."
3. BSEP Updated Final Safety Analysis Report, Section 3.8.2.4.1.

RELIEF REQUEST: CIP-08 (Rev. 0)

TITLE: DOCUMENTATION REQUIREMENTS FOR INSERVICE INSPECTION, REPAIR, AND REPLACEMENT ACTIVITIES (CODE CASE N-532)

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to the documentation requirements for inservice inspection, repair, and replacement activities for Class MC and/or CC components. This request for relief will apply to the documentation requirements at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Article IWA-6000 requires the owner to prepare and submit the Owners Report for Inservice Inspection, Form NIS-1, and the Owners Report for Repair or Replacements, Form NIS-2.

REQUESTED RELIEF:

Relief is requested from the requirements to prepare and submit the Owners Report for Inservice Inspection, Form NIS-1, and/or the Owners Report for Repair or Replacements, Form NIS-2 as required by Article IWA-6000.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power and Light (CP&L) Company is requesting approval to implement alternative requirements to those specified in Article IWA-6000, "Records and Reports." CP&L proposes to implement the alternative requirements outlined in ASME Code Case N-532, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000."

The alternative requirements outlined in ASME Code Case N-532 have been evaluated by CP&L, and CP&L has determined that implementation of these requirements will provide an acceptable level of quality and safety for the following reasons:

1. ASME Code Case N-532 provides alternative requirements for the documentation of inservice inspection, repair, and replacement activities for components that are classified Class MC and CC. Implementation of this ASME Code Case will still require the reviews and approvals by the Authorized Nuclear Inservice Inspection (ANII).
2. The alternative requirements of ASME Code Case N-532 simplifies reporting, particularly for repair and replacement activities, and reduces the frequency of summary reports from once per outage to once per Inspection Period. The implementation of this ASME Code Case will significantly reduce man-hours being spent after each outage without jeopardizing the quality or availability of records. CP&L considers the alternative requirements of this ASME Code Case an improvement over the reports required by the 1992 Edition, with 1992 Addenda, of the ASME Code, Section XI.
3. ASME Code Case N-532 was approved by the ASME's Main Committee and the Board of Nuclear Codes and Standards on December 12, 1994. This approval signifies the requirements outlined in this ASME Code Case will provide an acceptable level of quality and safety for nuclear power plants.
4. ASME Code Case N-532 was approved by the NRC for implementation during the Second Inspection Interval. As specified in the Safety Evaluation Report, the implementation of this

RELIEF REQUEST: CIP-08 (Rev. 0)

TITLE: DOCUMENTATION REQUIREMENTS FOR INSERVICE INSPECTION, REPAIR, AND REPLACEMENT ACTIVITIES (CODE CASE N-532)

ASME Code Case would provide an acceptable level of quality and safety at BSEP, Units 1 and 2. The alternative requirements evaluated by the NRC for use during the Second Inspection Interval for Class 1, 2, and 3 components have not changed.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will implement the alternative requirements of ASME Code Case N-532. Accordingly, CP&L will prepare and submit the Owners Activity Report for Inservice Inspection, Form OAR-1 and the Repair/ Replacement Certification Record, Form NIS-2A in accordance with the alternative requirements of ASME Code Case N-532. The other applicable requirements of Article IWA-6000 of the ASME Code, Section XI will be met.

REFERENCES:

1. ASME Code Case N-532, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000," (Approved Date: December 12, 1994).
2. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda.
3. NRC Letter to CP&L, Subject: "Approval of Code Case N-532 as an Alternative to the Required Inservice Inspection Report Requirements (TAC NOS. M94200 and M94201)."

RELIEF REQUEST: CIP-09 (Rev. 0)

TITLE: TRANSFER OF PROCEDURE QUALIFICATION RECORDS (CODE CASE N-573)

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to the welding procedure qualification records for Class MC components (including their integral attachments) at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Paragraph IWA-4220(a) requires welding, including brazing, to be performed in accordance with Welding Procedure Specifications (WPS) that have been qualified by the owner or repair organization in accordance with the requirement of the codes in the Repair Program specified by paragraph IWA-4140.

REQUESTED RELIEF:

Relief is requested from the requirements specified in paragraph IWA-4220(a).

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power and Light (CP&L) Company is requesting approval to implement alternative requirements to those specified in paragraph IWA-4220(a). CP&L proposes to implement the alternative requirements outlined in ASME Code Case N-573, "Transfer of Procedure Qualification Records Between Owners."

The alternative requirements outlined in ASME Code Case N-573 have been evaluated by CP&L, and CP&L has determined that implementation of these requirements will provide an acceptable level of quality and safety for the following reasons:

1. The alternative requirements of ASME Code Case N-573 allows the transfer of a procedure qualification record (PQR) qualified by one owner to another owner. ASME Code Case N-573 requires the owner to certify that the testing was performed in accordance with the ASME Code, Section IX, and the procedure qualification was conducted in accordance with a Quality Assurance Program that satisfies the requirements of paragraph IWA-1400. CP&L has evaluated the alternative requirements specified for the owner qualifying the PQR and determined them acceptable for assuring quality and safety at BSEP.
2. The alternative requirements of ASME Code Case N-573 specify an acceptable level of controls for the owner accepting a PQR. For example, CP&L would be required to (1) review and accept the responsibility of the PQR and (2) demonstrate technical competence in application of the received PQR by completing a performance qualification test using the parameters of a resulting WPS. These actions will ensure the acceptability of the PQR prior to it being used at BSEP.
3. ASME Code Case N-573 was approved by the ASME's Main Committee and the Board of Nuclear Codes and Standards on March 12, 1997. This approval signifies the requirements outlined in this ASME Code Case will provide an acceptable level of quality and safety for nuclear power plants. CP&L agrees that implementation of this ASME Code Case will provide an acceptable level of quality and safety.

RELIEF REQUEST: CIP-09 (Rev. 0)

TITLE: TRANSFER OF PROCEDURE QUALIFICATION RECORDS (CODE CASE N-573)

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will implement the alternative requirements of ASME Code Case N-573.

REFERENCES:

1. ASME Code Case N-573, "Transfer of Procedure Qualification Records Between Owners," (Approved Date: March 12, 1997).
2. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda.

RELIEF REQUEST: CIP-10 (Rev. 0)

TITLE: VT-2 EXAMINATION PERSONNEL QUALIFICATIONS (CODE CASE N-546)

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to the qualification of personnel performing visual (VT-2) examination of Class MC components at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Subarticle IWA-2300 provides the qualifications of nondestructive examination (NDE) personnel.

REQUESTED RELIEF:

Relief is requested from the applicable qualification requirements for personnel performing visual (VT-2) examination of Class MC components specified in subarticle IWA-2300.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(ii), Carolina Power and Light (CP&L) Company is requesting approval to use alternative requirements for the qualification of visual (VT-2) examination personnel to those specified in paragraph IWA-2300. CP&L proposes to implement the alternative requirements outlined in ASME Code Case N-546, "Alternative Requirements for Qualification of VT-2 Examination Personnel."

ASME Code Case N-546 has been evaluated by CP&L, and CP&L has determined that implementation of this ASME Code Case for the visual (VT-2) examination of Class MC components will provide an acceptable level of quality and safety for the following reasons:

1. The purpose of a visual (VT-2) examination is to locate evidence of leakage from pressure retaining components during the conduct of a system pressure test. Unlike other visual examinations (i.e., VT-1 or VT-3), personnel locating evidence of leakage do not require the same level of qualification requirements needed to determine the mechanical and structural condition of components. The plant experience, training, and visual acuity requirements specified in this ASME Code Case provide adequate qualification for personnel performing visual (VT-2) examinations at BSEP.
2. This ASME Code Case allows the visual (VT-2) examination to be performed by properly trained personnel that are already present during the performance of a system pressure test (i.e., Engineering personnel). Implementation of this ASME Code Case would eliminate requiring personnel, such as Quality Control personnel, who only perform the VT-2 examination to enter a radiation field. This reduction in number of personnel involved in the pressure test will reduce excessive personnel exposure at BSEP. Therefore, the imposition of the qualification requirements for personnel performing visual (VT-2) examination specified in paragraph IWA 2300 of the ASME Code, Section XI constitutes a hardship to BSEP without a compensating increase in quality and safety.
3. To ensure proper implementation of this Code Case, CP&L will develop procedural guidelines for performing consistent and quality leakage examinations. CP&L will also document and maintain records to verify the qualification of personnel performing these examinations.

RELIEF REQUEST: CIP-10 (Rev. 0)

TITLE: VT-2 EXAMINATION PERSONNEL QUALIFICATIONS (CODE CASE N-546)

4. ASME Code Case N-546 was approved by the ASME's Main Committee and the Board of Nuclear Codes and Standards on August 24, 1995. This approval signifies the requirements outlined in this ASME Code Case will provide an acceptable level of quality and safety for nuclear power plants.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will implement the alternative requirements of ASME Code Case N-546. If required, corrective measures will be performed in accordance with the applicable requirements of paragraph IWE-5250.

REFERENCES:

1. ASME Code Case N-546, "Alternative Requirements for Qualification of VT-2 Examination Personnel," (Approved Date: August 24, 1995).
2. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda.

RELIEF REQUEST: CIP-11 (Rev. 0)

**TITLE: VISUAL EXAMINATION OF ACCESSIBLE SURFACE AREAS OF THE
CONTAINMENT VESSEL AND VENT SYSTEM**

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to accessible surface areas subject to examination per Table IWE-2500-1, Examination Category E-A (Item Nos. E1.12 and E1.20) at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Table IWE-2500-1, Examination Category E-A (Item Nos. E1.12 and E1.20) requires a visual (VT-3) examination of the accessible surface areas during the Inspection Interval.

REQUESTED RELIEF:

Relief is requested from performing the visual (VT-3) examination of the accessible surface areas subject to examination per Table IWE-2500-1, Examination Category E-A (Item Nos. E1.12 and E1.20).

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative examination method to the one specified in Table 2500-1, Examination Category E-A (Item Nos. E1.12 and E1.20). CP&L proposes to perform a general visual examination of the accessible surface areas. For the Vent System, CP&L proposes to perform a general visual examination of the accessible surface areas once per Inspection Period

This proposed alternative examination method has been evaluated by CP&L, and CP&L has determined that the implementation of the alternative requirement will provide an acceptable level of quality and safety for the following reasons:

1. CP&L will examine the accessible surface areas of the Vent System (Item No. E1.20) once each Inspection Period (i.e., three examinations in a ten year period). Performing a general visual examination of the accessible surface areas at this frequency would detect and correct potential degradation prior to failure and is considered an enhancement to the requirements specified in the ASME Code, Section XI, 1992 Edition with 1992 Addenda. The ASME Code, Section XI only requires a visual examination to be performed once during this same time period.
2. The visual (VT-3) examination specified in Examination Category E-A requires that the visual examination and qualification of the examiners meet the applicable requirements of Subarticles IWA-2200 and IWA-2300, respectively. The requirements specified in these subarticles were developed for detecting flaws in metal components and, for this reason, are more stringent than those that would be required for the detection of degradation such as corrosion. Since corrosion of the base metal is the primary issue of concern at BSEP, CP&L has established controls for the performance of a general visual examination that will detect age related mechanisms that may affect the structural integrity and/or leak-tightness of the containment. Thus, the general visual examination performed by CP&L will be a thorough examination of the accessible surface areas and will be performed by certified and properly trained examiners. If an area is determined to be suspect during the general visual

**TITLE: VISUAL EXAMINATION OF ACCESSIBLE SURFACE AREAS OF THE
CONTAINMENT VESSEL AND VENT SYSTEM**

examination, CP&L will take additional actions to ensure the suspect area is properly characterized for evaluation.

3. The general visual examination will be performed in accordance with a CP&L approved procedure. The examination methods outlined in this procedure will be consistent with the methods approved in the rewrite of Subsection IWE, 1998 Edition and will be approved by a Registered Professional Engineer. These approved methods will delineate the necessary controls for ensuring these examinations are performed in a manner sufficient to detect evidence of degradation. To assure these methods are sufficient to detect evidence of degradation, a Registered Professional Engineer will periodically witness the performance of these examinations.
4. When evidence of degradation is detected by the examiner, CP&L will perform a detailed visual examination to ensure the suspect area is properly characterized for evaluation. If the detailed visual examination cannot be performed (e.g., access limitation), CP&L will evaluate the acceptability of the suspect area. This engineering evaluation will assume the suspect area is inaccessible and will address the requirements outlined in 10 CFR 50.55a(b)(2)(x)(A). This engineering evaluation will be approved by a Registered Professional Engineer.
5. The general and/or detailed visual examination will be performed by certified and properly trained personnel. Personnel performing these visual examinations will be certified in accordance with ANSI/ASME N45.2.6 and a CP&L procedure. This level of certification will ensure the capability and visual acuity of the examiners is sufficient to detect evidence of potential degradation of the containment's accessible surface areas. Prior to performing the examinations, the examiners will also be required to successfully complete CP&L approved training (i.e., training developed by the Electric Power Research Institute (EPRI) or equivalent) on the proper techniques for examining components and items subject to the requirements of Subsection IWE. In addition, the examiners will receive site specific training regarding the methods outlined in the approved plant procedure. The site specific training will be conducted under the direction of a Registered Professional Engineer and will be held at the beginning of each subsequent inservice inspection used to satisfy the applicable requirements of Subsection IWE. Successful completion of the above training will ensure the examiners have a basic working knowledge of the components being examined and the types of degradation to be detected.
6. The more stringent requirements outlined for a VT-3 visual examination are not necessary for the examination of accessible surface areas of the containment vessel. The VT-3 visual examination requirements, outlined in IWA-2210, were written primarily for detecting flaws in metallic components (e.g., welds, supports). As defined in IWA-2213, a VT-3 visual examination is conducted to determine the general mechanical and structural condition of components and their supports. This examination is accomplished by verifying parameters such as clearances, settings, and physical displacement; and to detect discontinuities and imperfections (e.g., loss of integrity at bolted or welded connections). Since the surface areas of the containment are not subject to conditions that require the more stringent requirements outlined in Subarticles IWA-2200 and IWA-2300, a visual (VT-3) examination is not warranted nor would it provide a compensating increase in quality and safety. Degradation mechanisms, such as corrosion, can easily be detected by a general visual examination program. The program developed by CP&L will detect these types of mechanisms. To ensure the controls and techniques meet this expectation, the procedure

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**TITLE: VISUAL EXAMINATION OF ACCESSIBLE SURFACE AREAS OF THE
CONTAINMENT VESSEL AND VENT SYSTEM**

governing the general visual examination methods will be reviewed and approved by a Registered Professional Engineer.

7. The ASME Main Committee and the Board of Nuclear Codes and Standards have also determined that a VT-3 visual examination of the containment's accessible surface areas is not warranted. Both organizations have approved the rewrite of Subsection IWE which eliminated the requirement for performing a VT-3 visual examination of these items. This rewrite of Subsection IWE was published in the 1998 Edition of the ASME Code, Section XI. The alternative examination method proposed by CP&L is consistent with the approved rewrite of Subsection IWE and will provide an acceptable level of quality and safety.

PROPOSED ALTERNATIVE:

To satisfy the requirements of Examination Category E-A (Item Nos. E1.12 and E1.20), CP&L will perform a general visual examination of the accessible surface areas of the containment during the First Containment Inspection Interval. When evidence of degradation is detected by the examiners, CP&L will perform a detailed visual examination. If a detailed visual examination cannot be performed, an engineering evaluation approved by a Registered Professional Engineer will be provided which will evaluate the suspect area. To ensure the controls and techniques are adequate for detecting evidence of degradation, a Registered Professional Engineer will periodically witness the performance of these examinations. In addition, CP&L will examine the accessible surface areas of the Vent System once per Inspection Period.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.
2. ANSI/ASME N45.2.6, "Qualification of Inspection, Examination, and Testing Personnel for Nuclear Power Plants."
3. NUA-NGGC-1532, "Qualification of Quality Control Inspectors."

TITLE: PRESERVICE EXAMINATION OF PAINTS AND COATINGS

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to components classified as Class MC and subject to the requirements of IWE-2200(g). This request for relief will apply to Class MC components at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

IWE-2200(g) requires when paint or coatings are reapplied, the condition of the new paint or coating will be documented in the preservice examination record.

REQUESTED RELIEF:

Relief is requested from the requirement of IWE-2200(g).

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative to the documentation requirements specified in IWE-2200(g). CP&L proposes to inspect and document the reapplied coatings (including paints) in accordance with the BSEP's Protective Coatings Program.

This proposed alternative to inspect and document the reapplied coatings, including paints, in accordance with the BSEP's Protective Coatings Program has been evaluated by CP&L, and CP&L has determined that the implementation of the alternative method will provide an acceptable level of quality and safety for the following reasons:

1. The critical requirement of the protective coating (including paint) used within Primary Containment (i.e., Service Level I) is to not jeopardize the normal operation of the plant's Engineered Safety Systems in the event of a design basis accident or other postulated event. The primary function of the protective coating is to provide a means of mitigating corrosion. In both cases, controls must be in place to assure coatings remain adherent under both normal and accident conditions. CP&L has established the appropriate controls for the coating applications associated with the interior and exterior surfaces of the Primary Containment structure. These controls are outlined in an approved plant procedure and addresses materials to be used, application methods, inspection, personnel qualification, repair, and documentation. The approved plant procedure is written to comply with the applicable requirements of Regulatory Guide 1.54, ANSI N5.12, ANSI N101.2, and ANSI N101.4.
2. Properly trained and qualified coating inspectors are required per the approved plant procedure. The coating inspectors are part of the Quality Control staff and are certified in accordance with a CP&L procedure. Hold points for these inspectors have been established procedurally throughout the application process to assure the coating has been properly applied. Verification and acceptance by the coating inspector is documented on a Coating Inspection Report.
3. The Coating Inspection Report is required to be completed per the approved plant procedure for Service Level I coating application. The Coating Inspection Report documents the coating process (e.g., surface preparation, coating data, inspection

TITLE: PRESERVICE EXAMINATION OF PAINTS AND COATINGS

equipment) and is considered a plant document upon the final acceptance by the coating inspector.

4. The primary purpose of performing the preservice examination requirements of IWE 2200 is to assure the structural integrity of the component being repaired or replaced. Although the protective coating is relevant to the component's functional integrity, documenting the condition of the new paint or coating on the preservice examination record required by IWE-2200 in addition to the inspection documentation required by the approved coating procedure is not warranted and does not provide a compensating increase in quality and safety. As stated above, the Protective Coatings Program at BSEP has established the appropriate controls to assure coatings are properly applied and documented. These controls will provide an acceptable level of quality and safety.
5. The ASME Main Committee and the Board of Nuclear Codes and Standards has also determined that the documentation of the reapplied coatings required by IWE-2200(g) is not warranted. Both organizations have approved the rewrite of Subsection IWE that eliminated the provision of IWE-2200(g). This rewrite of Subsection IWE was issued in the 1998 Edition of the ASME Code, Section XI.

PROPOSED ALTERNATIVE:

When paint or coatings are reapplied during the First Containment Inspection Interval, CP&L will perform the applicable inspections and document the condition of the new paint or coating in accordance with BSEP's Protective Coatings Program.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.
2. Plant procedure, 0CMP-003, Protective Coating Installation in Service Level I
3. ANSI N5.12, "Protective Coating (Paints) for the Nuclear Industry," 1974.
4. ANSI N101.2, "Protective Coating (Paints) for Light Water Reactor Containment Facilities," 1972.
5. ANSI N101.4, "Quality Assurance for Protective Coating Applied to Nuclear Facilities," 1972.
6. Regulatory Guide 1.54, "Quality Assurance Requirements for Protective Coatings Applied to Water-Cooled Nuclear Power Plants," June 1973.
7. NUA-NGGC-1532, "Qualification of Quality Control Inspectors."

TITLE: EXAMINATION OF PAINTS AND COATINGS PRIOR TO REMOVAL

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to components classified as Class MC and subject to the requirements of IWE-2500(b). This request for relief will apply to Class MC components at the Brunswick Steam Electric Plant (BSEP), Units No. 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

IWE-2500(b) requires when paint or coatings are to be removed, the paint or coatings will be visually examined in accordance with Table IWE-2500-1 prior to removal.

REQUESTED RELIEF:

Relief is requested from the requirement of IWE-2500(b).

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative to the visual examination specified per IWE-2500(b). CP&L proposes to inspect the coatings, including paints, in accordance with the BSEP's Protective Coating Program.

This proposed alternative to inspect the coatings, including paints, in accordance with the BSEP's Protective Coating Program has been evaluated by CP&L, and CP&L has determined that the implementation of the alternative method will provide an acceptable level of quality and safety for the following reasons:

1. The purpose of performing the visual examination per IWE-2500(b) is to identify any signs of base metal degradation prior to the removal of the coating or paint. Distress of the coating or paint may indicate degradation of the base metal. Since Examination Category E-A requires a visual examination of the accessible surfaces once per Inspection Period, any distress that may indicate degradation of the base metal will be identified and properly evaluated. As required by IWE 2600(a), this examination is to be performed without the removal of the paint or coating.
2. The critical requirement of the protective coating, including paint, used within Primary Containment (i.e., Service Level I) is to not jeopardize the normal operation of the plant's Engineered Safety Systems in the event of a design basis accident or other postulated event. The primary function of the protective coating is to provide a means of mitigating corrosion. In both cases, controls must be in place to assure coatings remain adherent under both normal and accident conditions. CP&L has established the appropriate controls for the coating applications associated with the interior and exterior surfaces of the Primary Containment structure. These controls are outlined in an approved plant procedure and addresses materials to be used, application methods, inspection, personnel qualification, repair, and documentation. The approved plant procedure is written to comply with the applicable requirements of Regulatory Guide 1.54, ANSI N5.12, ANSI N101.2, and ANSI N101.4.
3. Properly trained and qualified coating inspectors are required per the approved plant procedure. The coating inspectors are part of the Quality Control staff and are certified in

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accordance with a CP&L written practice. Hold points for these inspectors have been established procedurally throughout the application process to assure the coating has been properly applied. One of these hold points is to verify the condition of the base metal prior to the application of the new paint or coating. Degradation of the base metal would be identified at that time and CP&L would take appropriate corrective actions prior to the reapplication of the coating or paint. Verification and acceptance by the coating inspector is required per the plant procedure and is documented on a Coating Inspection Report.

4. The Coating Inspection Report is required to be completed per the approved plant procedure for Service Level I coating application. The Coating Inspection Report documents the coating process (e.g., surface preparation, coating data, inspection equipment, etc.) and is considered a plant document upon the final acceptance by the coating inspector.
5. The periodic examination of Examination Category E-A will ensure the structural integrity or leak tightness of the Class MC component. The controls established per BSEP's Protective Coating Program will ensure protective coatings or paints are properly applied and maintained. Per BSEP's Protective Coating Program, the condition of the base metal would be verified prior to the reapplication of the coating or paint by a qualified coating inspector. If the condition required a repair or replacement, this activity would be performed in accordance with an approved Repair/Replacement Program. The performance of the visual examination of IWE-2500(b), in addition to the periodic examination of Examination Category E-A and the inspections required by BSEP's Protective Coating Program, is not warranted and does not provide a compensating increase in quality and safety.
6. The ASME Main Committee and the Board of Nuclear Codes and Standards has also determined that the visual examination required by IWE-2500(b) is not warranted. Both organizations have approved the rewrite of Subsection IWE that eliminated the provision of IWE-2500(b). This rewrite of Subsection IWE was issued in the 1998 Edition of the ASME Code, Section XI.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will perform the applicable inspections of coatings and paints in accordance with the BSEP's Protective Coating Program. If a condition is identified during the inspection of the coating or paint, CP&L will take the appropriate corrective actions. If the condition requires a repair or replacement, this activity will be performed in accordance with BSEP's Repair/Replacement Program.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1998 Edition.
2. Plant procedure, 0CMP-003, "Protective Coating Installation in Service Level I."
3. Plant Program, 0PLP-08, "Repair/Replacement Program."
4. ANSI N5.12, "Protective Coating (Paints) for the Nuclear Industry," 1974.
5. ANSI N101.2, "Protective Coating (Paints) for Light Water Reactor Containment Facilities," 1972.

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TITLE: EXAMINATION OF PAINTS AND COATINGS PRIOR TO REMOVAL

6. ANSI N101.4, "Quality Assurance for Protective Coating Applied to Nuclear Facilities," 1972.
7. Regulatory Guide 1.54, "Quality Assurance Requirements for Protective Coatings Applied to Water-Cooled Nuclear Power Plants," June 1973.

TITLE: VISUAL EXAMINATION OF ACCESSIBLE CONCRETE SURFACE AREAS

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to accessible concrete surface areas subject to examination per Table IWL-2500-1, Examination Category L-A (Item Nos. L1.11 and L1.12) at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Table IWL-2500-1, Examination Category L-A (Item Nos. L1.11 and L1.12), IWL-2310, and IWL-2510 requires a visual (VT-3C) examination of the accessible areas and a visual (VT-1C) examination of suspect areas.

REQUESTED RELIEF:

Relief is requested from performing the visual (VT-3C) examination of the accessible areas and a visual (VT-1C) of suspect areas per Table IWL-2500-1, Examination Category L-A (Item Nos. L1.11 and L1.12), IWL-2310, and IWL-2510.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light (CP&L) Company is requesting approval to implement alternative examination methods to those specified in Table IWL-2500-1, Examination Category L-A (Item Nos. L1.11 and L1.12), IWL-2310, and IWL-2510. CP&L proposes to perform a general visual examination of the accessible areas and a detailed visual examination of those areas determined to be suspect.

The proposed alternative examination methods have been evaluated by CP&L, and CP&L has determined that the implementation of the alternative methods will provide an acceptable level of quality and safety for the following reasons:

1. The visual examination methods (VT-1C & VT-3C) specified in Examination Category L-A requires that the visual examination and qualification of the examiners meet the applicable requirements of IWA-2210 and IWA-2300. The requirements specified in these ASME Code, Section XI provisions were developed for detecting flaws in metal components and for this reason, are more stringent than those that would be required for the detection of degradation on a concrete structures. The requirements of IWA-2210 and IWA-2300 were first introduced in Subsection IWL in the 1992 Addenda. Until the issuance of this Addenda to Subsection IWL, Examination Category L-A only required visual examination performed by or under direction of a Registered Professional Engineer. As stated in the NRC's response to public comment 2.3 in SECY-96-080 (i.e., Attachment 6, Part III), "Comments received from ASME members on the containment committee indicate that the newer more stringent requirements of IWA-2210 were not intended to be used for the examination of containments and were inadvertently included in Subsection IWL." In the 1997 Addenda, the requirements of IWA-2210 and IWA-2300 were removed. In evaluating the requirements of these ASME Code, Section XI provisions, CP&L concluded that these requirements are not warranted for the examination of concrete surfaces and would not provide a compensating increase in quality and safety.
2. Degradation mechanisms for a concrete structure are different from the degradation mechanisms of Class 1, 2, and 3 components to which the applicable requirements of IWA-2210 and IWA-2300 were developed. Concrete deterioration and distress, as defined

TITLE: VISUAL EXAMINATION OF ACCESSIBLE CONCRETE SURFACE AREAS

in ACI 201.1, can be effectively identified by the performance of a general visual examination. As such, CP&L has established controls for the performance of a general visual examination of the concrete structure. The general visual examination performed by CP&L will be a thorough examination of the accessible areas and will be performed by certified and properly trained examiners. If an area is determined to be suspect during the general visual examination, CP&L will take additional actions to ensure the magnitude and extent of deterioration and/or distress is properly characterized for evaluation. To ensure the controls and techniques meet this expectation, a Registered Professional Engineer will periodically witness the performance of these examinations.

3. The general visual examination of the concrete surfaces will be performed in accordance with a CP&L approved procedure. The examination methods outlined in this procedure were written to be consistent with the methods approved in the rewrite of Subsection IWL (1997 Addenda) and have been approved by a Registered Professional Engineer. These approved methods will delineate the necessary controls for ensuring these examinations are performed in a manner sufficient to detect evidence of degradation. When evidence of degradation is detected by the examiner, the procedure also requires a detailed visual examination to be performed and compared to established reporting and acceptance criteria. The reporting criteria, along with acceptance criteria, was approved by a Registered Professional Engineer and is consistent with the guidance outlined in the American Concrete Institute (ACI) standard 349.3R-96, Evaluation of Existing Nuclear Safety-Related Concrete Structure. If the detailed visual examination cannot be performed for some reason (e.g., access limitation), CP&L will evaluate the acceptability of the suspect area. This engineering evaluation will assume the suspect area is inaccessible and will address the requirements outlined in 10 CFR 50.55a(b)(2)(ix)(E). The engineering evaluation will be approved by a Registered Professional Engineer.
4. The general and/or detailed visual examination will be performed by certified and properly trained personnel. Personnel performing these visual examinations will be certified in accordance with ANSI/ASME N45.2.6 and a CP&L procedure. This level of certification will ensure the capability and visual acuity of the examiners is sufficient to detect evidence of degradation of the concrete structure. Prior to performing the examinations, the examiners will be required to successfully complete CP&L approved training (i.e., training developed by the Electric Power Research Institute (EPRI) or equivalent) on the proper techniques for examining components subject to the requirements of Subsection IWL. In addition, the examiners will receive site specific training regarding the methods outlined in the approved plant procedure. The site specific training will be conducted under the direction of a Registered Professional Engineer and will be held at the beginning of each subsequent inservice inspection used to satisfy the applicable requirements of IWL-2410. Successful completion of the above training will ensure the examiners have a basic working knowledge of the components being examined and the types of degradation to be detected.
5. The ASME Main Committee and the Board of Nuclear Codes and Standards have also determined that Code provisions outlined in IWA-2210 and IWA-2300 were not warranted for the visual examination of concrete surfaces. Both organizations have approved the rewrite of Subsection IWL that eliminated the requirement of IWA-2210 and IWA-2300. This rewrite of Subsection IWL was published in the 1997 Addenda of the ASME Code, Section XI. The alternative examination methods proposed by CP&L is consistent with the approved rewrite of Subsection IWL and will provide an acceptable level of quality and safety.

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PROPOSED ALTERNATIVE:

To satisfy the requirements of Examination Category L-A (Item Nos. L1.11 and L1.12), CP&L will perform a general visual examination of the accessible concrete surfaces during the First Containment Inspection Interval. When evidence of degradation is detected by the examiners, CP&L will perform a detailed visual examination. If a detailed visual examination cannot be performed, an engineering evaluation approved by a Registered Professional Engineer will be provided which will evaluate the suspect area. To ensure the controls and techniques are adequate for detecting evidence of degradation, a Registered Professional Engineer will periodically witness the performance of these examination. In addition, each examiner will successfully complete CP&L approved training, including site specific, to ensure they have a basic working knowledge of the components being examined and the types of degradation to be detected

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda and 1995 Edition with 1997 Addenda.
2. ACI 201.1R-68, "Guide for Making a Condition Survey of Concrete in Service."
3. ACI 349.3R-96, "Evaluation of Existing Nuclear Safety-Related Concrete Structures."
4. SECY 96-080, "Issuance of Final Amendment to 10 CFR 50.55a to Incorporate by Reference the ASME Boiler and Pressure Vessel Code, Section XI, Division 1, Subsection IWE and Subsection IWL."
5. ANSI/ASME N45.2.6, "Qualification of Inspection, Examination, and Testing Personnel for Nuclear Power Plants."
6. NUA-NGGC-1532, "Qualification of Quality Control Inspectors."

RELIEF REQUEST: CIP-15 (Rev. 0)

TITLE: INSERVICE INSPECTION SCHEDULE FOR SUCCESSIVE CONCRETE EXAMINATIONS

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to reinforced concrete components that are subject to the requirements of IWL-2410(a). This request for relief will apply to reinforced concrete components classified as Class CC at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

IWL-2410(a) states "Concrete shall be examined in accordance with IWL-2510 at 1, 3, and 5 years following the completion of the containment Structural Integrity Test CC-6000 and every 5 years thereafter."

REQUESTED RELIEF:

Relief is requested from the requirements of IWL-2410(a) to schedule the successive five year examinations based on the completion date of the containment Structural Integrity Test CC-6000.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative to the inspection schedule for successive examinations specified in IWL-2410(a). CP&L proposes to schedule the successive five year examinations based on the completion date of the baseline examination performed to satisfy the expedited examination requirement outlined in 10 CFR 50.55a(g)(6)(ii)(B)(2).

This proposed alternative schedule for successive examinations has been evaluated by CP&L, and CP&L has determined that the implementation of the alternative schedule will provide an acceptable level of quality and safety for the following reasons:

1. Section 50.55a(g)(6)(ii)(B)(2) of 10 CFR states "Licensees of all operating nuclear power plants shall implement the inservice examinations which correspond to the number of years of operation which are specified in Subsection IWL of the 1992 Edition with the 1992 Addenda in conjunction with the modifications specified in 10 CFR 50.55a(b)(2)(ix) by September 9, 2001. The first examination performed shall serve the same purpose for operating plants as the preservice examination specified for plants not yet in operation." As clarified by the Nuclear Regulatory Commission (reference: Letter to Mr. Robert F. Sammataro, Proto-Power Corporation, Dated July 10, 1997, from Mr. Lawrence C. Shao, Director, Division of Engineering Technology, Office of Nuclear Regulatory Research), 10 CFR 50.55a(g)(6)(ii)(B)(2) governs the nature of the examination and the schedule. Plants that are operating would be performing the examination of concrete under the requirements of Subsection IWL for the first time. Because they are operating, a preservice examination per the requirements of the ASME Code, Section XI cannot be performed. Therefore, the first concrete examination is to be an inservice examination which will serve as the baseline (i.e., the same purpose for operating plants as the preservice examination specified for plants not yet in operation), and there is no tie to Subsection IWL-2410 or the Structural Integrity Test. The first examination of concrete (i.e., baseline examination) may be performed at any time between September 9, 1996 and September 9, 2001.

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TITLE: INSERVICE INSPECTION SCHEDULE FOR SUCCESSIVE CONCRETE EXAMINATIONS

2. Unit 2 and Unit 1 were placed in commercial operation in November 1975 and March 1977, respectively. The portions of the containment vessels that are not backed up by reinforced concrete were constructed in accordance with the applicable requirements of Specification 9527-01-015-001, ASME Code, Section III, Subsection B, 1968 Edition with Summer 1968 Addenda, Code Cases 1330-1, and 1177-5. The portions (e.g. metallic liner) that are backed up by reinforced concrete were constructed in accordance with the applicable requirements of Specification 9527-01-015-001 and the ASME Code, Section VIII, 1968 Edition with Summer 1968 Addenda. The concrete reinforcing the metallic liner was constructed to the applicable requirements of ACI 318, 1963 and 1971 Edition. Thus, the examination and testing, including the Structural Integrity Test, for both units were performed prior to the establishment of the requirements of Subsection CC, Article CC-6000, "Structural Integrity Test of Concrete Containment Structures."
3. The 1992 Edition with 1992 Addenda of the Subsection IWL was written assuming concrete containments were constructed to the requirements of Subsection CC, ASME Section III Code. Thus, the successive inspections outlined in IWL-2410(a) are tied to the completion of the Structural Integrity Test per Article CC-6000 of Subsection CC. Since the concrete containments at BSEP were constructed prior to establishment of Subsection CC, literal compliance to this code provision cannot be met. As an acceptable alternative to the requirement of IWL-2410(a), CP&L will use the completion date of the baseline examination to establish the specified dates for the five year successive examinations. Pursuant to 10 CFR 50.55a(g)(6)(ii)(B)(2), CP&L will perform the baseline examination per Subsection IWL prior to September 9, 2001. Performance of the successive examinations once every five years following the completion of the baseline examination will provide an acceptable level of quality and safety.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will perform successive examinations of concrete components classified as Class CC at least once every five years. The five year schedule for successive examinations will be based on the completion date of the baseline examination and will meet the applicable requirements of IWL-2410(c). CP&L will perform the baseline examination prior to September 9, 2001, as required by 10 CFR 50.55a(g)(6)(ii)(B)(2).

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda.
2. Letter to Mr. Robert F. Sammataro, Proto-Power Corporation, Dated July 10, 1997, from Mr. Lawrence C. Shao, Director, Division of Engineering Technology, Office of Nuclear Regulatory Research.
3. ASME Code, Section III, "Rules of Construction of Nuclear Power Plant Components" and "Code for Concrete Reactor Vessels and Containments," Division 2, Subsection CC, "Concrete Containment (Prestressed or Reinforced)," 1968 Edition with Summer 1968 Addenda and 1986 Edition
4. ASME Code, Section VIII, "Pressure Vessels," 1968 Edition with Summer 1968 Addenda
5. ACI 318, "Building Code Requirements for Reinforced Concrete."
6. Specification 9527-01-015-001, "Specification for Containment Structural Steel Liners."

RELIEF REQUEST: CIP-16 (Rev. 0)

TITLE: EXAMINATION METHOD FOR SURFACE AREAS REQUIRING AUGMENTED EXAMINATION

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to containment surface areas requiring augmented examination per paragraphs IWE-1240 and IWE-2420 at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

Paragraph IWE-2500(c) and Table IWE-2500-1, Examination Category E-C specifies the examination requirement for containment surface areas requiring augmented examination per IWE-1240 and IWE-2420. In summary, surface areas accessible from both sides are to be visually examined using a VT-1 visual examination method. Surface areas accessible from one side only are to be examined for wall thinning using an ultrasonic thickness measurement method in accordance with the ASME Code, Section V, T-544.

REQUESTED RELIEF:

Relief is requested from performing a visual (VT-1) examination in accordance with IWE-2500(c)(1) from both sides when only one side is subject to conditions that warrant augmented examination. Relief is also requested from performing ultrasonic thickness measurements in accordance with IWE-2500(c)(2) when the surface area subject to conditions that warrant augmented examination is accessible for visual (VT-1) examination and the inaccessible surface area is not subject to conditions that warrant augmented examination.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(ii), Carolina Power & Light (CP&L) Company is requesting approval to implement alternative examination methods to those specified in paragraph IWE-2500(c). CP&L proposes to perform a visual (VT-1) examination on accessible interior and/or exterior surface areas requiring augmented examination per IWE-1242 and/or IWE-2420. If the surface area is not accessible (e.g., backed up by reinforced concrete) for visual examination, CP&L will perform ultrasonic thickness measurements in accordance with the applicable requirements of IWE-2500(c).

The proposed alternative examination methods described above have been evaluated by CP&L, and CP&L has determined that the implementation of these alternative methods will provide an acceptable level of quality and safety for the following reasons:

1. The containments at BSEP are concrete reinforced and for this reason, the majority of the exterior surfaces of the metallic liner are inaccessible for examination. Pursuant to IWE-2500(c)(2), surface areas subject to augmented examination and accessible from one side only shall be examined for wall thinning using an ultrasonic thickness measurement method. To perform these wall thinning measurements, a grid system (i.e., one foot square grids) is required per IWE-2500(c)(3). When only the accessible side is subject to conditions that warrant augmented examination per IWE-1240 and/or IWE-2420, CP&L considered the personnel exposure associated with the performance of the ultrasonic thickness measurements unwarranted and a hardship without a compensating increase in quality and safety. CP&L proposes to perform a visual (VT-1) examination of these

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accessible areas. A visual (VT-1) examination is a proven method for detecting degradation and will provide an acceptable level of quality and safety.

2. IWE-2500(c)(1) requires that surface areas accessible from both sides be visually examined using a visual (VT-1) examination method. This Code provision implies that both sides of the affected surface area require a visual examination. When only one side is subject to augmented examination per IWE-1240 and/or IWE-2420, CP&L considered the personnel exposure associated with visual examination of the unaffected surface area unwarranted and a hardship without a compensating increase in quality and safety. A visual examination of both sides should only be performed when both sides are subject to conditions that warrant augmented examination.
3. As required by IWE-1240, CP&L has evaluated containment surface areas to determine if they were likely to experience accelerated degradation and aging. This evaluation included both inaccessible and accessible surfaces. If a surface is subject to augmented examination and not accessible for visual (VT-1) examination, CP&L will perform ultrasonic thickness measurements in accordance with the applicable requirements of IWE-2500(c)(2). If this evaluation concluded that only the accessible surface is subject to augmented examination, performance of ultrasonic thickness measurements is unwarranted and CP&L will only perform a visual (VT-1) examination. The performance of the ultrasonic thickness measurements on inaccessible surfaces (e.g., backed up by reinforced concrete) and a visual (VT-1) examination of interior and/or exterior accessible surfaces will provide an acceptable level of quality and safety.
4. As required by IWE-2420, surface areas that require an engineering evaluation or repair for continued service are also subject to the requirements of IWE-2500(c). Although the degradation was detected by a visual examination, IWE-2500(c) would mandate ultrasonic thickness measurements for wall thinning when the surface area is only accessible from one side. As stated earlier, CP&L considers this ASME Code, Section XI provision unwarranted if the inaccessible side has been evaluated and determined to not be subject to the same conditions as the affected side. As specified by 10 CFR 50.55a(b)(2)(x)(A), CP&L is required to evaluate the acceptability of inaccessible areas when conditions exist in accessible areas that could indicate the presence of or results in degradation to such inaccessible areas. If the inaccessible surface is determined to be subject to the same condition, ultrasonic thickness measurements are warranted and CP&L will perform this examination. If the evaluation determined the inaccessible surface is not affected, CP&L will only perform a visual (VT-1) examination. Performing the same examination method (i.e., visual) that detected the original degradation during successive examinations is consistent with other sections (e.g., Subsections IWB and IWC) of the ASME Code, Section XI and will provide an acceptable level of quality and safety. If degradation is detected during the successive examinations, supplemental examinations in accordance with IWE-3200 will be performed.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will perform a visual (VT-1) examination on accessible interior and/or exterior surface areas requiring augmented examination per IWE-1242 and/or IWE-2420. If the surface areas is not accessible (e.g., backed up by

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reinforced concrete) for visual examination, CP&L will perform ultrasonic thickness measurements in accordance with the applicable requirements of IWE-2500(c).

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda.

RELIEF REQUEST: CIP-17 (Rev. 0)

TITLE: VISUAL (VT-2) EXAMINATION OF SURFACE AREAS NOT ACCESSIBLE DURING THE PERFORMANCE OF THE LEAKAGE TEST

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to components classified as Class MC and subject to the requirements of IWE-5240 at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

IWE-5240 states "The requirements of IWA-5246 [Note: The reference IWA-5246 is a typographical error and actually refers to IWA-5240.] for visual examination are applicable." IWA-5240 requires visual examination of accessible exposed surfaces of pressure retaining components.

REQUESTED RELIEF:

Relief is requested from the requirement of IWE-5240 to perform a visual (VT-2) examination of those surface areas that are not accessible during the performance of the pneumatic leakage test per 10 CFR 50, Appendix J.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(ii), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative to the requirement for performing a visual (VT-2) examination of surface areas that are not accessible during the performance of the pneumatic leakage test per 10 CFR 50, Appendix J. As an acceptable alternative, CP&L will perform the required examinations and testing of these affected surfaces in accordance with the applicable requirements specified in the Construction Code, Design Specification, ASME Code, Section XI, and 10 CFR 50, Appendix J. For those affected surface areas that are accessible during the performance of pneumatic leakage test, CP&L will comply with the applicable requirements of IWE-5240.

This proposed alternative has been evaluated by CP&L, and CP&L has determined that the implementation of this alternative requirement will provide an acceptable level of quality and safety for the following reasons:

1. The containments (i.e., Drywell and Suppression Chamber) at BSEP are concrete reinforced. For this reason, the majority of the exterior surfaces of the metallic liner and penetration sleeves are embedded in concrete and inaccessible for examination. If a repair or replacement activity was performed on the concrete reinforced component, the activity would be performed on the interior surface and would be subject to a pneumatic leakage test per Examination Category E-P and 10 CFR 50, Appendix J. In addition to the leakage test, IWE-5240 and IWA-5240 would require a visual (VT-2) examination on the external surfaces for evidence of leakage during the performance of the test. CP&L considers this requirement impractical for those surfaces not accessible during the performance of the leakage test. For example, the affected containment surface area would be pressurized to peak accident pressure, P_a , during the performance of the leakage test. Thus, the repaired or replaced surface area of the component reinforced with concrete would not be accessible by the examiner. Although the requirements of 10 CFR 50, Appendix J and IWE-5221 would be met, literal compliance to the requirement of IWE-5240 could not be met. The 10 CFR 50, Appendix J leak rate test at peak accident pressure is considered by CP&L as a superior and proven method for assuring the structural integrity and leak-tightness of

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Primary Containment. In this case, not performing the visual (VT-2) examination of these surfaces areas would not decrease the level of quality and safety at BSEP.

2. Repairs and/or replacements of components classified as Class MC will be performed in accordance with an approved Repair/Replacement Program and the applicable requirements of the ASME Code, Section XI, 1992 Edition with 1992 Addenda. Thus, the repair or replacement activity would meet the applicable inspection requirements of the Construction Code and Design Specification in addition to those requirements specified in the ASME Code, Section XI. For those welded repairs and/or replacements affecting the structural integrity or leak tightness of the containment, the Construction Code and/or Design Specification would require an examination (e.g., surface examination, volumetric examination) following the completion of the activity. This examination would be in addition to the preservice visual examination required by IWE-2200 and the leakage test required by 10 CFR 50, Appendix J. CP&L considers the examination required by the Construction Code and/or Design Specification, the preservice visual examination required by IWE-2200, and the 10 CFR 50, Appendix J leak rate test at peak accident pressure adequate for assuring the structural integrity and leak-tightness of Primary Containment. The satisfactory performance of these examinations and the leakage test would provide an acceptable level of quality and safety of the affected surfaces.
3. As required by 10 CFR 50, Appendix J and IWE-5250, CP&L will take the necessary corrective actions to locate and correct the source of leakage if the leakage test does not meet the established acceptance criteria. If additional repairs are required, CP&L will perform them in accordance with an approved Repair/Replacement Program and the applicable requirements of the ASME Code, Section XI, 1992 Edition with 1992 Addenda. The required leakage test will be performed in accordance with the applicable requirements of 10 CFR 50, Appendix J and IWE-5250 prior to returning the component to service.
4. For those surface areas affected by a repair and/or replacement activity and accessible during the performance of pneumatic leakage test, CP&L will comply with the applicable requirements of IWE-5240.

PROPOSED ALTERNATIVE:

During the First Containment Inspection Interval, CP&L will not perform a visual (VT-2) examination of those surface areas affected by a repair and/or replacement activity and not accessible during the performance of the pneumatic leakage test per 10 CFR 50, Appendix J. CP&L will perform the required examinations and testing of these affected surface areas in accordance with the Construction Code and/or Design Specification, ASME Code, Section XI, and 10 CFR 50, Appendix J. For those affected surface areas that are accessible during the performance of pneumatic leakage test, CP&L will comply with the applicable requirements of IWE-5240.

REFERENCE:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda.
2. ASME Code, Section III, "Rules of Construction of Nuclear Power Plant Components," 1968 Edition with Summer 1968 Addenda.
3. ASME Code, Section VIII, "Pressure Vessels," 1968 Edition with Summer 1968 Addenda.

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4. Part 50 of Title 10 of the Code of Federal Regulation (10 CFR 50), Appendix J, "Primary Reactor Containment Leakage Testing of Water-Cooled Power Reactors."
5. Specification 9527-01-015-001, "Specification for Containment Structural Steel Liners."

RELIEF REQUEST: CIP-18 (Rev. 0)

TITLE: INSERVICE INSPECTION SCHEDULE (IWA-2430)

COMPONENTS FOR WHICH RELIEF IS REQUESTED:

This request for relief is applicable to items that are subject to the requirements of Subsection IWE at the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

ASME CODE, SECTION XI REQUIREMENT:

IWA-2430(a) states: "The inspections shall be performed in accordance with the schedule of Inspection Program A of IWA-2431, or optionally, Inspection Program B of IWA-2432."

IWA-2430(b) states: "The inspection interval shall be determined by calendar years following placement of the plant into commercial service."

IWA-2432 states: "The Inspection intervals shall comply with the following, except as modified by IWA-2430(d):

- 1st Inspection Interval* - 10 years following initial start of plant commercial service
- Successive Inspection Interval* - 10 years following the previous inspection interval."

REQUESTED RELIEF:

Relief is requested from the requirements of IWA-2430(a), IWA-2430(b), and IWA-2432 for the First Inspection Interval.

BASIS FOR REQUESTING RELIEF:

In accordance with 10 CFR 50.55a(a)(3)(i), Carolina Power & Light (CP&L) Company is requesting approval to implement an alternative to the start date for the First Inspection Interval specified in IWA-2430(a), IWA-2430(b), and IWA-2432. CP&L proposes to establish May 11, 1998, as the date for the start of the First Containment Inspection Interval. This date will be used to establish the dates for the three successive Inspection Periods.

This proposed alternative inspection schedule has been evaluated by CP&L, and CP&L has determined that the implementation of the alternative will provide an acceptable level of quality and safety for the following reasons:

1. 10 CFR 50.55a(g)(6)(ii)(B)(1) states "Licensees of all operating nuclear power plants shall implement the inservice examinations specified for the first period of the first inspection interval in Subsection IWE of the 1992 Edition with the 1992 Addenda in conjunction with the modifications specified in 10 CFR 50.55a(b)(2)(ix) by September 9, 2001. The examination performed during the first period of the first inspection interval shall serve the same purpose for operating plants as the preservice examination specified for plants not yet in operation."

As clarified in the NRC's letter to the Nuclear Energy Institute (Dated: May 30, 1997; response to question 16), "Recognizing a lack of an adequate containment inspection program, the rule considers the first period's examination (to be completed prior to September 9, 2001) as a starting point for counting the inspection intervals." Based on CP&L's interpretation of these documents, the Containment Inspection Program, the expedited examinations per 10 CFR 50.55a(g)(6)(ii)(B)(1), and the other required inspections will be implemented in accordance with applicable requirements defined for the

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TITLE: INSERVICE INSPECTION SCHEDULE (IWA-2430)

First Inspection Interval. Thus, CP&L has established the effective date for the start of the First Inspection Interval as May 11, 1998. This date coincides with the start of the Third Inspection Interval for Class 1, 2, and 3 components and will ensure the examinations required for the First Inspection Period are completed by September 9, 2001.

2. Although CP&L will meet the rules defined in 10 CFR 50.55a, literal compliance to the provisions outlined in IWA-2430(a), IWA-2430(b), and IWA-2432 can not be met. For this reason, CP&L has proposed an acceptable alternative to these Code provisions. CP&L will establish May 11, 1998, as the start date for the First Inspection Interval (i.e., not base the Inspection interval on the initial start date of plant commercial service). This acceptable alternative will not alter any provisions regarding the repair, replacement, and/or examination of items subject to the applicable requirements of Subsection IWE. Therefore, this proposed alternative will provide an acceptable level of quality and safety.
3. The Inspection Interval schedule for Class 1, 2, and 3 components will not be affected by this request for relief.

PROPOSED ALTERNATIVE:

For the First Containment Inspection Interval, CP&L will establish May 11, 1998, as the effective start date for the First Inspection Interval. The remaining applicable requirements of IWA-2430 will be met during the First Containment Inspection Interval.

REFERENCES:

1. ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," 1992 Edition with 1992 Addenda.
2. Letter to Mr. Alex Marion, Nuclear Energy Institute, Dated May 30, 1997, from Mr. Brian W. Sheron, Director, Division of Engineering, Office of Nuclear Regulatory Research.