Progress Energy

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AUG 0 6 2007

SERIAL: BSEP 07-0064
TSC-2007-01

10 CFR 50.90

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

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Docket Nos. 50-325 and 50-324/License Nos. DPR-71 and DPR-62
Request for License Amendments, Technical Specification 5.5.12, "Primary Containment Leakage Rate Testing Program"

Ladies and Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Part 50.90, Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., is requesting a revision to the Technical Specifications for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. The proposed license amendments implement Technical Specification Task Force (TSTF) Change TSTF-343, Revision 1, which allows the performance of visual examinations on the primary containment in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, Subsections IWE and IWL, in lieu of the visual examinations required by Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," and Nuclear Energy Institute (NEI) 94-01, "Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J." An evaluation of the proposed license amendments is provided in Enclosure 1.

CP&L has evaluated the proposed changes in accordance with 10 CFR 50.91(a)(1), using the criteria in 10 CFR 50.92(c), and determined that these changes involve no significant hazards considerations.

CP&L is providing, in accordance with 10 CFR 50.91(b), a copy of the proposed license amendments to the designated representative for the State of North Carolina.

Primary containment visual inspections are planned during the upcoming BSEP, Unit 1 refueling outage, which is currently scheduled to begin March 15, 2008. Therefore, to support use of the ASME Section XI Code requirements for these inspections, CP&L requests approval of the proposed license amendments no later than February 1, 2008. Once approved, the amendments shall be implemented within 30 days following issuance.

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A017
A047
NRR

There are no regulatory commitments associated with this submittal. Please refer any questions regarding this submittal to Mr. Randy C. Ivey, Manager - Support Services, at (910) 457-2447.

I declare, under penalty of perjury, that the foregoing is true and correct. Executed on August 6, 2007.

Sincerely,

James Scarola

James Scarola

WRM/wrm

Enclosures:

1. Description of License Amendment Request
2. Marked-up Technical Specification Pages - Unit 1
3. Marked-up Technical Specification Pages - Unit 2
4. Typed Technical Specification Pages - Unit 1
5. Typed Technical Specification Pages - Unit 2

cc (with enclosures):

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Evaluation of Proposed License Amendment Request

Subject: Request for License Amendments, Revise Technical Specification 5.5.12, "Primary Containment Leakage Rate Testing Program"

1.0 Description

This letter is a request to amend the Technical Specifications (TSs) of Renewed Operating Licenses DPR-71 and DPR-62 for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2.

The proposed license amendments implement Technical Specification Task Force (TSTF) Change TSTF-343, Revision 1, which allows the performance of visual examinations on the primary containment in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, Subsections IWE and IWL, in lieu of the visual examinations required by Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," and Nuclear Energy Institute (NEI) 94-01, "Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J."

2.0 Proposed Changes

The specific wording of the proposed changes follows:

Existing Requirement	Proposed Requirement
5.5.12 Primary Containment Leakage Rate Testing Program A primary containment leakage rate testing program shall establish requirements to implement the leakage rate testing of the primary containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, September 1995, as modified by the following exceptions: a. Not used. b. Following air lock door seal replacement, performance of door seal leakage rate testing with the gap between the door seals pressurized to 10 psig instead of air lock testing at P_a as specified in Nuclear	5.5.12 Primary Containment Leakage Rate Testing Program A primary containment leakage rate testing program shall establish requirements to implement the leakage rate testing of the primary containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, September 1995, as modified by the following exceptions: **a. The visual examination of containment concrete surfaces intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B testing, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI**

Existing Requirement	Proposed Requirement
Energy Institute Guideline 94-01, Revision 0;	**Code, Subsection IWL, except where relief has been authorized by the NRC.**
c. Reduced duration Type A tests may be performed using the criteria and Total Time method specified in Bechtel Topical Report BN-TOP-1, Revision 1.	**b. The visual examination of the metallic shell, penetrations, and appurtenances intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI Code, Subsection IWE, except where relief has been authorized by the NRC.**
d. Performance of Type C leak rate testing of the hydrogen and oxygen monitor isolation valves is not required; and	c. Following air lock door seal replacement, performance of door seal leakage rate testing with the gap between the door seals pressurized to 10 psig instead of air lock testing at P_a as specified in Nuclear Energy Institute Guideline 94-01, Revision 0;
e. Performance of Type C leak rate testing of the main steam isolation valves at a pressure less than P_a instead of leak rate testing at P_a as specified in ANSI/ANS 56.8-1994.	d. Reduced duration Type A tests may be performed using the criteria and Total Time method specified in Bechtel Topical Report BN-TOP-1, Revision 1.
f. NEI 94-01 - 1995, Section 9.2.3: The first Type A test performed after the February 15, 1991, Type A test shall be performed no later than April 15, 2004. *[Unit 1 Paragraph]*	e. Performance of Type C leak rate testing of the hydrogen and oxygen monitor isolation valves is not required; and
f. NEI 94-01 - 1995, Section 9.2.3: The first Type A test performed after the February 15, 1991, Type A test shall be performed no later than April 30, 2005. *[Unit 2 Paragraph]*	f. Performance of Type C leak rate testing of the main steam isolation valves at a pressure less than P_a instead of leak rate testing at P_a as specified in ANSI/ANS 56.8-1994.

TSTF-343, Revision 1, includes changes for Improved Standard TS 5.5.6, "Pre-Stressed Concrete Containment Tendon Surveillance Program." Those changes are not applicable to BSEP, Units 1 and 2, since the BSEP units do not have pre-stressed concrete containments. In addition, TSTF-343 adds new items to TS 5.5.12 for visual examination of primary concrete surfaces (proposed TS 5.5.12, item a) and visual examination of the containment liner (proposed TS 5.5.12, Item b). For TS 5.5.12, proposed item b, CP&L is proposing wording which differs from that contained in TSTF-343, Revision 1. TS 5.5.12 requires the primary containment leakage rate testing program be in accordance with Regulatory Guide 1.163, "Performance-

Based Containment Leak-Test Program," as modified by approved exceptions. Regulatory Guide 1.163, Section C, "Regulatory Position," states that Nuclear Energy Institute (NEI) 94-01, "Industry Guideline for Implementing Performance-Based Option of 10 CFR Part 50, Appendix J," Revision 0, provides acceptable methods for complying with the provisions of Option B in Appendix J to 10 CFR 50. NEI 94-01, Section 9.2, "Type A Test," requires visual examination of accessible interior and exterior surfaces of the containment to identify structural problems which may affect the leakage integrity of the containment. Because NEI 94-01 Section 9.2 requires visual examinations of accessible interior and exterior surfaces of the containment, and not just the steel liner plate inside the containment, CP&L is clarifying the wording of TS 5.5.12, proposed item b by stating these visual examinations should be performed on the containment metallic shell, penetrations, and appurtenances.

In addition to the changes related to TSTF-343, Revision 1, existing TS 5.5.12, Item f for Units 1 and 2 is also being removed. TS 5.5.12, Item f for Units 1 and 2 was incorporated by Amendments 216 and 250, respectively, to establish deadlines for performing the performance-based Type A leakage tests in conjunction with changing, on a one-time basis, the Type A test frequency. The specified Unit 1 Type A test was completed during the Spring 2004 refueling outage (i.e., B115R1), and the specified Unit 2 Type A test was completed during the Spring 2005 refueling outage (i.e., B217R1). Based on completion of the specified Type A tests, TS 5.5.12, Item f can be removed from the Unit 1 and Unit 2 TSs.

For convenience, Enclosures 2 and 3 contain a marked-up version of the TSs for Units 1 and 2, respectively, showing the proposed changes. Enclosures 4 and 5 provide typed versions of the Unit 1 and Unit 2 TSs, respectively. These typed TS pages are to be used for issuance of the proposed amendment.

3.0 Background

On January 7, 1994, the NRC published a proposed amendment to the regulations to incorporate by reference the 1992 Edition, with the 1992 Addenda, of Subsections IWE and IWL of Section XI, Division I of the ASME Boiler and Pressure Vessel Code. The final rule, 10 CFR 50.55a(g)(6)(ii)(B), became effective on September 9, 1996, and requires licensees to implement Subsections IWE and IWL, with specified modifications and limitations, by September 9, 2001.

The first 10-year inservice inspection interval applicable to implementing the requirements of Subsections IWE and IWL began May 11, 1998, and will conclude on May 10, 2008. For containment-related inspections performed to satisfy 10 CFR 50.55a(g)(6) during the first 10-year inservice inspection interval, BSEP Units 1 and 2 have followed 1992 Edition, with the 1992 Addenda, of Subsections IWE and IWL of Section XI, Division I of the ASME Boiler and Pressure Vessel Code. Thus, for the containment inspections required to be performed during next Unit 1 refueling outage (i.e., currently scheduled to begin March 15, 2008), these inspections will be performed in accordance with 1992 Edition, with the 1992 Addenda, of

Subsections IWE and IWL of Section XI, of the ASME Code. However, for the second 10-year inservice inspection interval applicable to implementing the requirements of Subsections IWE and IWL, which will begin May 11, 2008, BSEP Units 1 and 2 will follow the 2001 Edition with 2003 Addenda of Subsections IWE and IWL of Section XI, Division I of the ASME Boiler and Pressure Vessel Code.

4.0 Technical Analysis

10 CFR 50.55a(g)(4) requires licensees to update their containment inservice inspection requirements in accordance with Subsections IWE and IWL of Section XI, Division I of the ASME Boiler and Pressure Vessel Code as limited by 10 CFR 50.55a(b)(2)(vi) and modified by 10 CFR 50.55a(b)(2)(viii) and 10 CFR 50.55a(b)(2)(ix). As such, the BSEP Unit 1 and 2 Improved Standard Technical Specifications are inconsistent with the requirements of 10 CFR 50.55a.

10 CFR 50.55a(g)(5)(ii) states, in part: "If a revised inservice inspection program for a facility conflicts with the technical specification for the facility, the licensee shall apply to the Commission for Amendment of the technical specifications to conform the technical specification to the revised program." Based on the requirements in 10 CFR 50.55a, CP&L must update the BSEP Unit 1 and Unit 2 Technical Specifications. The BSEP Unit 1 and 2 containment inservice inspection programs are required to be in accordance with ASME Code Section XI, Subsections IWE and IWL, as modified by 10 CFR 50.55a(b)(2)(viii) and 10 CFR 50.55a(b)(2)(vi), except where an exemption or relief has been authorized by the NRC.

As discussed in the Technical Specification Bases for SR 3.0.2, the requirements of regulations take precedence over the Technical Specifications. As such, 10 CFR 50.55a requires the implementation of ASME Section XI, Subsections IWE and IWL and specifies the requirements for extending inspection frequencies.

The Technical Specification requirements for the Primary Containment Leakage Rate Testing Program specify that the program shall be in accordance with the guidelines contained in Regulatory Guide 1.163. Regulatory Position C.3 of the regulatory guide states that "Section 9.2.1, 'Pretest Inspection and Test Methodology,' of NEI 94-01 provides guidance for the visual examination of accessible interior and exterior surfaces of the containment system for structural problems. These examinations should be conducted prior to initiating a Type A test, and during two other refueling outages before the next Type A test if the interval for the Type A test has been extended to 10 years, in order to allow for early uncovering of evidence of structural deterioration." There are no specific requirements in NEI 94-01 for the visual examination except that it is to be a general visual examination of accessible interior and exterior surfaces of the primary containment components.

In addition to the requirements of Regulatory Guide 1.163 and NEI 94-01, the concrete surfaces of the containment must be visually examined in accordance with the ASME Section XI Code,

Subsection IWL, and the metallic surfaces of the containment must be visually examined in accordance with Subsection IWE. The frequency of visual examination of the concrete surfaces per Subsection IWL is once every five years, and the frequency of visual examination of the liner plate per Subsection IWE is, in general, three visual examinations over a 10-year interval. The visual examinations performed pursuant to Subsection IWL may be performed at any time during power operation or during shutdown. Visual examinations, performed pursuant to Subsection IWE, of penetrations on the exterior of the containment and appurtenances also may be performed at any time during power operation or during shutdown. Visual examinations of the metallic shell, as well as penetrations on the interior of the containment, performed pursuant to Subsection IWE are performed during refueling outages since this is the only time that these areas are fully accessible.

The visual examinations performed pursuant to Subsections IWL and IWE are more rigorous than those performed pursuant to Regulatory Guide 1.163 and NEI 94-01. For example, Subsection IWE requires the general visual examination to be the responsibility of an individual who is knowledgeable in the requirements for design, inservice inspection, and testing of Class MC and metallic liners of Class CC components. Subsection IWE requires the examination to be performed either directly or remotely, by an examiner with visual acuity sufficient to detect evidence of degradation.

Similarly, Subarticle IWL-2320 states that the Responsible Engineer shall be a Registered Professional Engineer experienced in evaluating the inservice condition of structural concrete. The Responsible Engineer shall have knowledge of the design and Construction Codes and other criteria use in design and construction of concrete containments in nuclear power plants. The Responsible Engineer is responsible for the following:

(a) development of plans and procedures for examination of concrete surfaces;
(b) approval, instruction, and training of concrete examination personnel
(c) evaluation of examination results;
(d) preparation or review of Repair/Replacement Plans and procedures; and
(e) submittal of report to the Owner documenting results of examinations and repairs.

Based on the above, the Responsible Engineer will ensure that a comprehensive visual examination of the concrete is performed in accordance with Code requirements except where relief has been granted by the NRC. Furthermore, with respect to examinations performed pursuant to both Subsections IWL and IWE, visual examinations of the containment structure must be reviewed by an Inspector employed by a State or municipality of the United States or an Inspector regularly employed by an insurance company authorized to write boiler and pressure vessel insurance, in accordance with IWA-2110 and IWA-2120. The combination of the Code requirements for the rigor of the visual examinations, plus the third party review, will more than offset the fact that one fewer visual examination of the concrete will be performed during a 10-year interval. The fact that the concrete visual examination pursuant to Subsection IWL may be performed during power operation as opposed to during a refueling outage will have no effect

on the quality of the examination and will provide flexibility in scheduling of the visual examinations.

5.0 Regulatory Safety Analysis

5.1 No Significant Hazards Consideration

Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., is submitting proposed amendments to revise Technical Specification 5.5.12, "Primary Containment Leakage Rate Testing Program," for consistency with the requirements of 10 CFR 50.55a(g)(4) for components classified as Code Class MC and CC. The proposed amendments also include an administrative change to remove a Type A leakage testing requirement for each unit that has been satisfied. CP&L has evaluated whether or not a significant hazards consideration is involved with the proposed amendments by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No

   The proposed change affects the frequency of visual examinations that will be performed for the concrete surfaces of the containment for the purpose of the Primary Containment Leakage Rate Testing Program. In addition, the proposed change allows those examinations to be performed during power operation as opposed to during a refueling outage. The frequency of visual examinations of the metallic and concrete surfaces of the containment and the mode of operation during which those examinations are performed has no relationship to or adverse impact on the probability of any of the initiating events assumed in the accident analyses. The proposed change would allow visual examinations that are performed in accordance with NRC-approved ASME Section XI Code requirements, except where relief has been granted by the NRC, to meet the intent of visual examinations specified by Regulatory Guide 1.163, without requiring additional visual examinations in accordance with the Regulatory Guide. The intent of early detection of deterioration will continue to be met by the more vigorous requirements of the Code-required visual examinations. As such, the safety function of the containment as a fission product barrier is maintained.

   The proposed change also includes the removal of an item in TS 5.5.12 which was incorporated to establish deadlines for performing the performance-based Type A leakage tests in conjunction with changing, on a one-time basis, the Type A test frequency. The specified Unit 1 and Unit 2 Type A test have been completed. As such, removal of this item is an administrative change.

These proposed change does not impact any accident initiators or analyzed events or assumed mitigation of accident or transient events. The proposed change does not involve the addition or removal of any equipment, or any design changes to the facility. Therefore, based on the above, the proposed change does not represent a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed change revises the Primary Containment Leakage Rate Testing Program in TS 5.5.12 for consistency with the requirements of 10 CFR 50.55a(g)(4) for components classified as Code Class MC and CC. The proposed change affects the frequency of visual examinations that will be performed for the metallic and concrete surfaces of containment and allows those examinations to be performed during power operation as opposed to during a refueling outage.

The proposed change does not involve a modification to the physical configuration of the plants (i.e., no new equipment will be installed), and does not revise the methods governing normal plant operation. Also, the proposed change will not impose any new or different requirements or introduce a new accident initiator, accident precursor, or malfunction mechanism.

The proposed change also includes the removal of an item in TS 5.5.12 which was incorporated to establish deadlines for performing the performance-based Type A leakage tests in conjunction with changing, on a one-time basis, the Type A test frequency. The specified Unit 1 and Unit 2 Type A test have been completed. As such, removal of this item is an administrative change.

As such, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed change revises the Primary Containment Leakage Rate Testing Program in TS 5.5.12 for consistency with the requirements of 10 CFR 50.55a(g)(4) for components classified as Code Class MC and CC. The proposed change allows some of those examinations to be performed during power operation as opposed to during a refueling outage. As previously stated, the proposed change does not involve a modification to the physical configuration of the plants and does not revise the methods governing normal

plant operation. As such, the safety function of the containment as a fission product barrier, will be maintained and is not adversely impacted by the proposed change.

The proposed change also includes the removal of an item in TS 5.5.12 which was incorporated to establish deadlines for performing the performance-based Type A leakage tests in conjunction with changing, on a one-time basis, the Type A test frequency. The specified Unit 1 and Unit 2 Type A test have been completed. As such, removal of this item is an administrative change.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, CP&L concludes that the proposed amendments present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

The regulatory basis for TS 3.6.1.1, "Primary Containment," is to ensure that the containment is capable of remaining leak-tight following a loss-of-coolant accident. This ensures that offsite radiation exposures are maintained within the limits of 10 CFR 50.67.

10 CFR 50, Appendix A, General Design Criterion 16, "Design," requires that reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as the postulated accident conditions require.

6.0 Environmental Considerations

A review has determined that the proposed amendments would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendments do not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendments meet the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendments.

7.0 References

1. Letter from B. T. McKinney (PPL Susquehanna, LLC) to U.S. Nuclear Regulatory Commission Document Control Desk, "Susquehanna Steam Electric Station Proposed Amendment No. 287 to License NPF-14 and Proposed Amendment No. 255 to License NPF-22: Revision to Technical Specifications 5.5.6 and 5.5.12, PLA-6020," dated September 7, 2006, ADAMS Accession Number ML062620136).

2. NRC letter dated March 19, 2007, "Susquehanna Steam Electric Station, Units 1 and 2 – Issuance of Amendment Re: Technical Specification Task Force 343 and 479 (TAC Nos. MD2994 and MD2995)," ADAMS Accession Numbers ML070710224 and ML070810058.

3. Letter from Allen G. Hansen (NRC) to J. S. Keenan (CP&L), "Brunswick Steam Electric Plant, Unit 1 – Issuance of Amendment Regarding Containment Leakage Rate Testing Program (TAC No. MB3470)," March 6, 2002, ADAMS Accession Number ML020670684.

4. Letter from Brenda L. Mozafari (NRC) to J. S. Keenan (CP&L), "Brunswick Steam Electric Plant, Unit 2 – Issuance of Amendment Regarding Containment Leakage Rate Testing Program (TAC No. MB3471)," November 21, 2002, ADAMS Accession Number ML023310270.

Markup of Technical Specification Pages - Unit 1

5.5 Programs and Manuals

5.5.11 Safety Function Determination Program (SFDP) (continued)

2. Provisions for ensuring the plant is maintained in a safe condition if a loss of function condition exists;

3. Provisions to ensure that an inoperable supported system's Completion Time is not inappropriately extended as a result of multiple support system inoperabilities; and

4. Other appropriate limitations and remedial or compensatory actions.

b. A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:

1. A required system redundant to system(s) supported by the inoperable support system is also inoperable; or

2. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable; or

3. A required system redundant to support system(s) for the supported systems described in b.1 and b.2 above is also inoperable.

c. The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.5.12 Primary Containment Leakage Rate Testing Program

A primary containment leakage rate testing program shall establish requirements to implement the leakage rate testing of the primary containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, September 1995, as modified by the following exceptions:

(continued)

5.5 Programs and Manuals

Primary Containment Leakage Rate Testing Program (continued)

a. Not used.

b. Following air lock door seal replacement, performance of door seal leakage rate testing with the gap between the door seals pressurized to 10 psig instead of air lock testing at P_a as specified in Nuclear Energy Institute Guideline 94-01, Revision 0;

c. Reduced duration Type A tests may be performed using the criteria and Total Time method specified in Bechtel Topical Report BN-TOP-1, Revision 1.

d. Performance of Type C leak rate testing of the hydrogen and oxygen monitor isolation valves is not required; and

e. Performance of Type C leak rate testing of the main steam isolation valves at a pressure less than P_a instead of leak rate testing at P_a as specified in ANSI/ANS 56.8-1994.

f. NEI 94-01 - 1995, Section 9.2.3. The first Type A test performed after the February 15, 1991, Type A test shall be performed no later than April 15, 2004.

The peak calculated primary containment internal pressure for the design basis loss of coolant accident, P_a, is 49 psig.

The maximum allowable primary containment leakage rate, L_a, shall be 0.5% of primary containment air weight per day at P_a.

Leakage rate acceptance criteria are:

a. Primary containment leakage rate acceptance criterion is $\leq 1.0\ L_a$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $< 0.60\ L_a$ for Type B and C tests and $\leq 0.75\ L_a$ for Type A tests.

b. Air lock testing acceptance criteria are:

1) Overall air lock leakage rate is $\leq 0.05\ L_a$ when tested at $\geq P_a$.

(continued)

INSERT #1

a. The visual examination of containment concrete surfaces intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B testing, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI Code, Subsection IWL, except where relief has been authorized by the NRC.

INSERT #2

b. The visual examination of the metallic shell, penetrations, and appurtenances intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI Code, Subsection IWE, except where relief has been authorized by the NRC.

FOR INFORMATION ONLY

5.5 Programs and Manuals

Primary Containment Leakage Rate Testing Program (continued)

2) For each air lock door, leakage rate is ≤ 5 scfh when the gap between the door seals is pressurized to ≥ 10 psig.

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program frequencies.

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5.5 Programs and Manuals

5.5.11 Safety Function Determination Program (SFDP) (continued)

2. Provisions for ensuring the plant is maintained in a safe condition if a loss of function condition exists;

3. Provisions to ensure that an inoperable supported system's Completion Time is not inappropriately extended as a result of multiple support system inoperabilities; and

4. Other appropriate limitations and remedial or compensatory actions.

b. A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:

1. A required system redundant to system(s) supported by the inoperable support system is also inoperable; or

2. A required system redundant to system(s) in turn supported by the inoperable supported system is also inoperable; or

3. A required system redundant to support system(s) for the supported systems described in b.1 and b.2 above is also inoperable.

c. The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.5.12 Primary Containment Leakage Rate Testing Program

A primary containment leakage rate testing program shall establish requirements to implement the leakage rate testing of the primary containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J, Option B as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide 1.163, September 1995, as modified by the following exceptions:

(continued)

5.5 Programs and Manuals

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

INSERT #1

a. Not Used.

INSERT #2

b. Following air lock door seal replacement, performance of door seal leakage rate testing with the gap between the door seals pressurized to 10 psig instead of air lock testing at P_a as specified in Nuclear Energy Institute Guideline 94-01, Revision 0;

c. Reduced duration Type A tests may be performed using the criteria and Total Time method specified in Bechtel Topical Report BN-TOP-1, Revision 1.

d. Performance of Type C leak rate testing of the hydrogen and oxygen monitor isolation valves is not required; and

e. Performance of Type C leak rate testing of the main steam isolation valves at a pressure less than P_a instead of leak rate testing at P_a as specified in ANSI/ANS 56.8-1994.

f. NEI 94-01 – 1995, Section 9.2.3: The first Type A test performed after the February 28, 1993, Type A test shall be performed no later than April 30, 2005.

The peak calculated primary containment internal pressure for the design basis loss of coolant accident, P_a, is 49 psig.

The maximum allowable primary containment leakage rate, L_a, shall be 0.5% of primary containment air weight per day at P_a.

Leakage rate acceptance criteria are:

a. Primary containment leakage rate acceptance criterion is $\leq 1.0\ L_a$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $< 0.60\ L_a$ for Type B and C tests and $\leq 0.75\ L_a$ for Type A tests.

b. Air lock testing acceptance criteria are:

1) Overall air lock leakage rate is $\leq 0.05\ L_a$ when tested at $\geq P_a$.

(continued)

INSERT #1

a. The visual examination of containment concrete surfaces intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B testing, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI Code, Subsection IWL, except where relief has been authorized by the NRC.

INSERT #2

b. The visual examination of the metallic shell, penetrations, and appurtenances intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI Code, Subsection IWE, except where relief has been authorized by the NRC.

FOR INFORMATION ONLY

5.5 Programs and Manuals

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

2) For each air lock door, leakage rate is ≤ 5 scfh when the gap between the door seals is pressurized to ≥ 10 psig.

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program frequencies.

Typed Technical Specification Pages - Unit 1

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

a. The visual examination of concrete surfaces intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B testing, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI Code, Subsection IWL, except where relief has been authorized by the NRC.

b. The visual examination of the metallic shell, penetrations, and appurtenances intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI Code, Subsection IWE, except where relief has been authorized by the NRC.

c. Following air lock door seal replacement, performance of door seal leakage rate testing with the gap between the door seals pressurized to 10 psig instead of air lock testing at P_a as specified in Nuclear Energy Institute Guideline 94-01, Revision 0;

d. Reduced duration Type A tests may be performed using the criteria and Total Time method specified in Bechtel Topical Report BN-TOP-1, Revision 1.

e. Performance of Type C leak rate testing of the hydrogen and oxygen monitor isolation valves is not required; and

f. Performance of Type C leak rate testing of the main steam isolation valves at a pressure less than P_a instead of leak rate testing at P_a as specified in ANSI/ANS 56.8-1994.

The peak calculated primary containment internal pressure for the design basis loss of coolant accident, P_a, is 49 psig.

The maximum allowable primary containment leakage rate, L_a, shall be 0.5% of primary containment air weight per day at P_a.

Leakage rate acceptance criteria are:

a. Primary containment leakage rate acceptance criterion is $\leq 1.0\ L_a$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $< 0.60\ L_a$ for Type B and C tests and $\leq 0.75\ L_a$ for Type A tests.

(continued)

5.5 Programs and Manuals

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

b. Air lock testing acceptance criteria are:

1) Overall air lock leakage rate is $\leq 0.05\ L_a$ when tested at $\geq P_a$.

2) For each air lock door, leakage rate is ≤ 5 scfh when the gap between the door seals is pressurized to ≥ 10 psig.

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program frequencies.

Typed Technical Specification Pages - Unit 2

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

a. The visual examination of concrete surfaces intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B testing, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI Code, Subsection IWL, except where relief has been authorized by the NRC.

b. The visual examination of the metallic shell, penetrations, and appurtenances intended to fulfill the requirements of 10 CFR 50, Appendix J, Option B, will be performed in accordance with the requirements of and frequency specified by the ASME Section XI Code, Subsection IWE, except where relief has been authorized by the NRC.

c. Following air lock door seal replacement, performance of door seal leakage rate testing with the gap between the door seals pressurized to 10 psig instead of air lock testing at P_a as specified in Nuclear Energy Institute Guideline 94-01, Revision 0;

d. Reduced duration Type A tests may be performed using the criteria and Total Time method specified in Bechtel Topical Report BN-TOP-1, Revision 1.

e. Performance of Type C leak rate testing of the hydrogen and oxygen monitor isolation valves is not required; and

f. Performance of Type C leak rate testing of the main steam isolation valves at a pressure less than P_a instead of leak rate testing at P_a as specified in ANSI/ANS 56.8-1994.

The peak calculated primary containment internal pressure for the design basis loss of coolant accident, P_a, is 49 psig.

The maximum allowable primary containment leakage rate, L_a, shall be 0.5% of primary containment air weight per day at P_a.

Leakage rate acceptance criteria are:

a. Primary containment leakage rate acceptance criterion is $\leq 1.0\ L_a$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $< 0.60\ L_a$ for Type B and C tests and $\leq 0.75\ L_a$ for Type A tests.

(continued)

5.5.12 Primary Containment Leakage Rate Testing Program (continued)

b. Air lock testing acceptance criteria are:

1) Overall air lock leakage rate is $\leq 0.05\ L_a$ when tested at $\geq P_a$.

2) For each air lock door, leakage rate is ≤ 5 scfh when the gap between the door seals is pressurized to ≥ 10 psig.

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program frequencies.