

June 29, 2005

TSTF-05-07

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

Mr. Jesse L. Funches  
Chief Financial Officer  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852

**SUBJECT: Submittal and Request for Fee Waiver for Review of TSTF-343, Revision 1,  
"Containment Structural Integrity"**

Dear Sir or Madam:

Enclosed for NRC review is TSTF-343, Revision 1, "Containment Structural Integrity." TSTF-343 is a proposed change to the Standard Technical Specifications (NUREG-1430 through NUREG-1434) and a candidate for adoption by licensees under the Consolidated Line Item Improvement Process (CLIIP).

TSTF-343 proposes to revise the Pre-Stressed Containment Tendon Surveillance Program and the Containment Leakage Rate Program in the Standard Technical Specifications to reflect the changes made to 10 CFR 50.55a in 1996. In 1994 the Nuclear Regulatory Commission (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, Subpart 50.55a(g)(6)(ii)(B) of Title 10 of the Code of Federal Regulations (10 CFR), became effective on September 9, 1996, and requires licensees to implement Subsections IWE and IWL, with specified modifications and limitations, by September 9, 2001. Approval of this Traveler and issuance of a Consolidated Line Item Improvement Program (CLIIP) Notice of Availability will save the NRC and the licensees resources in processing this required change to licensee's technical specifications while improving quality and consistency.

We request that NRC review of TSTF-343 be granted a fee waiver pursuant to the provisions of 10 CFR 170.11. This Traveler meets the exemption requirement in 10 CFR 170.11(a)(1)(iii), in that it is "a means of exchanging information between industry organizations and the NRC for the specific purpose of supporting the NRC's generic regulatory improvements or efforts." In this case, the generic regulatory improvement is the improvement of the NRC's Standard

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G-014

Technical Specifications in NUREGs 1430 through 1434 to reflect the NRC's revision to 10 CFR 50.55a. A related regulatory effort is support of the NRC's Consolidated Line Item Improvement Process (CLIIP). Approval of the proposed Traveler and issuance of a CLIIP Notice of Availability will save substantial NRC resources vice numerous plant specific amendments.

The Owners Groups have not allocated funding for NRC review of this Traveler. If this change is not granted a fee waiver, please inform us so we may consider whether we wish to pursue or withdraw this change.

Should you have any questions, please do not hesitate to contact us.



Wesley Sparkman (WOG)



Michael Crowthers (BWROG)



Brian Woods (WOG/CE)



Paul Infanger (BWOG)

Enclosure

cc: Thomas H. Boyce, Technical Specifications Section, NRC

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**Technical Specification Task Force**  
**Improved Standard Technical Specifications Change Traveler**

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**Containment Structural Integrity**

NUREGs Affected:  1430  1431  1432  1433  1434

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Classification: 1) Technical Change

Recommended for CLIP?: Yes

Correction or Improvement: Correction

NRC Fee Status: Exemption Requested

Benefit: Allows Less Stringent Testing

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Industry Contact: Paul Infanger, (352) 563-4796, paul.infanger@pgnmail.com

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See attached justification.

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**Revision History****OG Revision 0****Revision Status: Closed**

Revision Proposed by: Oconee

Revision Description:  
Original Issue

**Owners Group Review Information**

Date Originated by OG: 02-Apr-98

Owners Group Comments:  
ONS-28

Owners Group Resolution: Approved Date: 02-Apr-98

**TSTF Review Information**

TSTF Received Date: 01-May-98

Date Distributed for Review: 12-Oct-98

OG Review Completed:  BWOOG  WOG  CEOG  BWROG

TSTF Comments:

4/28/99 - Revise to bracket the Surveillance and the Program with a Reviewer's Note stating that the SR and the Program may be deleted by plants that have adopted ASME Section XI, Subsections IWE and IWC. Expand the Containment Bases to discuss structural integrity and reference 10 CFR 50.55a.

TSTF Resolution: Superseded

Date: 20-Nov-98

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**OG Revision 1****Revision Status: Closed**

Revision Proposed by: TSTF

Revision Description:

Complete replacement of Revision 0. Revised to bracket the Surveillance and the Program with a Reviewer's Note stating that the SR and the Program may be deleted by plants that have adopted ASME Section XI, Subsections IWE and IWC. Expand the Containment Bases to discuss structural integrity and reference 10 CFR 50.55a.

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28-Jun-05

**OG Revision 1****Revision Status: Closed****TSTF Review Information**

TSTF Received Date: 02-Jun-99 Date Distributed for Review: 08-Jun-99

OG Review Completed:  BWOOG  WOG  CEOG  BWROG

TSTF Comments:

Change "IWC" to "IWL" in justification and insert.

TSTF Resolution: Approved

Date: 07-Jul-99

**NRC Review Information**

NRC Received Date: 20-Jul-99

NRC Comments:

2/11/00 - NRC provided comments. TSTF to respond.

1/13/00 - Noel spoke to NRC. NRC agrees that the requirements are in the Code, but also wants them in Tech Spec. Further discussion is required.

5/11/2001 - BWOOG chairman to discuss with NRC to identify concerns by 5/31/2001.

Final Resolution: Reviewer Recommends Changes

**TSTF Revision 1****Revision Status: Active**

Revision Proposed by: Wolf Creek

Revision Description:

Complete replacement of Revision 1. Revises ISTS consistent with many approved plant-specific amendments. Modeled closely on the Wolf Creek approved amendment.

**TSTF Review Information**

TSTF Received Date: 05-May-05 Date Distributed for Review: 05-May-05

OG Review Completed:  BWOOG  WOG  CEOG  BWROG

TSTF Comments:

(No Comments)

TSTF Resolution: Approved

Date: 20-Jun-05

**Affected Technical Specifications**

5.5.6	Pre-Stressed Concrete Containment Tendon Surveillance Program	
Ref. 3.6.1 Bases	Containment	NUREG(s)- 1430 1431 1432 Only
SR 3.6.1.1 Bases	Containment	NUREG(s)- 1430 1431 1432 Only
SR 3.6.1.2 Bases	Containment	NUREG(s)- 1430 1431 1432 Only

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5.5.16	Containment Leakage Rate Testing Program	NUREG(s)- 1430 1431 1432 Only
SR 3.6.1.1.1 Bases	Primary Containment	NUREG(s)- 1433 1434 Only
5.5.13	Primary Containment Leakage Rate Testing Program	NUREG(s)- 1433 1434 Only
Ref. 3.6.1.1 Bases	Primary Containment	NUREG(s)- 1434 Only
SR 3.6.1.1.2 Bases	Primary Containment	NUREG(s)- 1434 Only

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28-Jun-05

## 1.0 Description

The proposed Traveler revises Improved Standard Technical Specification (ISTS) "Pre-Stressed Containment Tendon Surveillance Program," the NUREG-1430, NUREG-1431, and NUREG-1432 "Containment Leakage Rate Testing Program," and the NUREG-1433 and NUREG-1434 "Primary Containment Leakage Rate Testing Program," for consistency with the requirements of 10 CFR 50.55a(g)(4) for components classified as Code Class CC. This regulation 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).

The pressurized water reactor (PWR) ISTS NUREGs (NUREG-1430, NUREG-1431, and NUREG-1432) use the term "containment." The boiling water reactor (BWR) ISTS NUREGs (NUREG-1433 and NUREG-1434) use the term "primary containment." For simplicity, the term "containment" is used throughout this document (except for quoted titles) to refer to both PWR and BWR containment structures.

As a result of this Traveler, licensees will be required to perform one less visual inspection of the containment during the ten year interval. However, the requirements for inspection in Subsection IWE and IWL of Section XI are more rigorous than those currently required to be performed.

The proposed changes have been approved by the NRC for plant-specific Technical Specifications several times. See References 3, 4, 5, 6, 7, and 8. This proposed Traveler is nearly identical to the approved amendment for Wolf Creek (Reference 8). The NRC issued changes to 10 CFR 50.55a require that all plants revise their Technical Specifications. Approval of this Traveler and issuance of a Consolidated Line Item Improvement Program (CLIIP) Notice of Availability will save the NRC and the licensees resources in processing this required change to licensee's technical specifications while improving quality and consistency.

## 2.0 Proposed Change

The proposed change will revise:

Technical Specification 5.5.6, "Pre-Stressed Concrete Containment Tendon Surveillance Program," in all ISTS NUREGs

These specifications are revised to indicate that the Containment Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Section XI, Subsection IWL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, except where an alternative, exemption, or relief has been authorized by the NRC. Additionally, the provisions of Surveillance Requirement (SR) 3.0.2 are deleted from these specifications.

Technical Specification 5.5.16, "Containment Leakage Rate Testing Program" in the PWR ISTS NUREGs and Technical Specification 5.5.13, "Primary Containment Leakage Rate Testing Program" in the BWR ISTS NUREGs.

These specifications are revised to add the following exceptions to Regulatory Guide 1.163, "Performance- Based Containment Leak-Testing Program,"

- "1. 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 ASME Section XI Code, Subsection IWL, except where relief has been authorized by the NRC.
2. The visual examination of the steel liner plate inside containment 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 ASME Section XI Code, Subsection IWE, except where relief has been authorized by the NRC."

The TS Bases for SR 3.6.1.1 and SR 3.6.1.2 in the PWR ISTS NUREGs and the BWR ISTS NUREGs TS Bases for SR 3.6.1.1.1 and the NUREG-1434 TS Bases for SR 3.6.1.1.2 are revised for consistency with the requirements of the ASME Code Section XI, Subsection IWL, and applicable addenda as required by 10 CFR 50.55a.

The SR 3.6.1.1 Bases in NUREG-1431 contain a paragraph describing the basis for the Surveillance Frequency. The PWR ISTS NUREG Bases for SR 3.6.1.1, and the BWR ISTS NUREG Bases for SR 3.6.1.1.1 do not contain a description of the basis for the Surveillance Frequency. Such a description is required by the ISTS Writer's Guide. The NUREG-1431 Bases paragraph is added to the other NUREG ISTS Bases for consistency.

### **3.0 Background**

On January 7, 1994, the Nuclear Regulatory Commission (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 Code). The final rule, Subpart 50.55a(g)(6)(ii)(B) of Title 10 of the Code of Federal Regulations (10 CFR), 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 containment consists of a prestressed, reinforced concrete, cylindrical structure with a hemispherical dome. The post-tensioning System used for the shell and dome of the containment employs tendons. Each tendon consists of high strength steel wires and anchoring components. The prestressing load is transferred, by cold formed button heads on the ends of the individual wires through stressing washers, to steel bearing plates

embedded in the structure. The unbonded tendons are installed in tendon ducts and tensioned in a predetermined sequence.

#### **4.0 Technical Analysis**

Technical Specification 5.5.6, "Pre-Stressed Concrete Containment Tendon Surveillance Program," states in part, "The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with [Regulatory Guide 1.35, Revision 3, 1990]." As identified above, 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). The requirements in 10 CFR 50.55a(g)(4) and ASME Code Section XI, Subsection IWL, do not reference Regulatory Guide 1.35, Revision 3. As such, the ISTS 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, licensees will be required to update their plant-specific technical specifications. Licensee's containment inservice inspection programs are required to be in accordance with ASME Code Section XI, Subsection IWL, as modified by 10 CFR 50.55a(b)(2)(viii), except where an exemption or relief has been authorized by the NRC.

Additionally, since the tendon inspection frequencies will be in accordance with ASME Section XI, Subsection IWL, the provisions of SR 3.0.2 are no longer applicable and are deleted from Technical Specification 5.5.6. 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, Subsection 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 liner plate inside 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 period. The visual examinations performed pursuant to Subsection IWL may be performed at any time during power operation or during shutdown, and the visual examinations performed pursuant to Subsection IWE are performed during refueling outages since this is the only time that the liner plate is 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, Subarticle IWE-2320 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, Subarticle-2330 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 shall be 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;
- (e) review of procedures for pressure tests following repair/replacement procedures;
- (f) 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 both the concrete surfaces and the liner plate 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 Analysis**

### **5.1 No Significant Hazards Consideration**

The TSTF has evaluated whether or not a significant hazards consideration is involved with the proposed generic change 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 revises the TS administrative controls programs for consistency with the requirements of 10 CFR 50, paragraph 55a(g)(4) for components classified as Code Class CC.

The revised requirements do not affect the function of the containment post-tensioning system components. The post-tensioning systems are passive components whose failure modes could not act as accident initiators or precursors.

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 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 pursuant to NRC approved ASME Section XI Code requirements (except where relief has been granted by the NRC) to meet the intent of visual examinations required by Regulatory Guide 1.163, without requiring additional visual examinations pursuant to the Regulatory Guide. The intent of early detection of deterioration will continue to be met by the more rigorous 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 does not impact any accident initiators or analyzed events or assumed mitigation of accident or transient events. It does not involve the addition or removal of any equipment, or any design changes to the facility.

Therefore, the proposed change does not involve 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 TS administrative controls programs for consistency with the requirements of 10 CFR 50, paragraph 55a(g)(4) for components classified as Code Class CC.

The function of the containment post-tensioning system components are not altered by this change. The change affects the frequency of visual examinations that will be performed for the concrete surfaces containments. In addition, the proposed change 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 plant (i.e., no new equipment will be installed) or change in the methods governing normal plant operation. The proposed change will not impose any new or different requirements or introduce a new accident initiator, accident precursor, or malfunction mechanism. Additionally, there is no change in the types or increases in the amounts of any effluent that may be released off-site and there is no increase in individual or cumulative occupational exposure.

Therefore, 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 Improved Standard Technical Specification Administrative Controls program requirements for consistency with the requirements of 10 CFR 50, paragraph 55a(g)(4) for components classified as Code Class CC.

The function of the containment post-tensioning system components are not altered by this change. The change affects the frequency of visual examinations that will be performed for the concrete surfaces containments. In addition, the proposed change allows those examinations to be performed during power operation as opposed to during a refueling outage. The safety function of the containment as a fission product barrier will be maintained.

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

## 5.2 Applicable Regulatory Requirements/Criteria

The regulatory basis for PWR ISTS 3.6.1, "Containment," and BWR ISTS 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 100.

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.

This Technical Specification change will not reduce the leak-tightness of the containment. Therefore, based on the considerations discussed above:

- 1) There is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner;
- 2) Such activities will be conducted in compliance with the Commission's regulations; and
- 3) Issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 6.0 Environmental Consideration

A review has determined that the proposed change would change a requirement with respect to installation or use of a facility component located within the restricted areas, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets 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 change.

## 7.0 References

1. 10 CFR 50.55a

2. Regulatory Guide 1.163, "Performance-Based Containment Leak-Testing Program."
3. Letter dated January 18, 2000, to W. R. McCollum, Jr., Duke Energy Corporation, "Oconee Nuclear Station Units 1, 2, and 3 RE: Issuance of Amendments (TAC Nos. MA6568, MA6569, and MA6570)." Amendment Nos. 310
4. Letter dated June 6, 2001, to J. B. Beasley, Jr., Southern Nuclear Operating Company, Inc, "Vogtle Electric Generating Plant, Units 1 and 2 RE: Issuance of Amendments (TAC Nos. MB1097 and MB1098)." Amendment Nos. 122 and 100.
5. Letter dated January 30, 2001, to C. H. Cruse, Constellation Nuclear, "Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2 RE: Containment Tendon Surveillance Program – Amendment (TAC Nos. MB0011 and MB0012)." Amendment Nos. 240 and 214.
6. Letter dated January 31, 2001, to T. F. Plunkett, Florida Power and Light Company, "Turkey Point Units 3 and 4 – Issuance of Amendments Regarding Changes to Containment Structural Integrity Technical Specifications (TAC Nos. MA9047 and MA9048)." Amendment Nos. 210 and 204.
7. Letter to R. R. Overbeck, Arizona Public Service Company, "Palo Verde Nuclear Generating Station, Units 1, 2, and 3 – Issuance of Amendment on Containment Tendon Surveillance Program and Containment Leakage Rate Testing Program (TAC Nos. MC1069, MC1070, and MC1071)." Amendment Nos. 151.
8. Letter dated March 17, 2004, to R. A. Muench, Wolf Creek Nuclear Operating Corporation, "Wolf Creek Generating Station – Issuance of Amendment Re: Containment Tendon Surveillance Program and Containment Leakage Rate Testing Program." Amendment No. 152.

## 5.5 Programs and Manuals

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### 5.5.4 Radioactive Effluent Controls Program (continued)

- j. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

### 5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR, Section [ ], cyclic and transient occurrences to ensure that components are maintained within the design limits.

### 5.5.6 [ Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with [~~Regulatory Guide 1.35, Revision 3, 1990~~] Section XI, Subsection IWL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, except where an alternative, exemption, or relief has been authorized by the NRC.

The provisions of ~~SR 3.0.2~~ and SR 3.0.3 are applicable to the Tendon Surveillance Program inspection frequencies. ]

### 5.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel per the recommendation of Regulatory position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975.

### 5.5.8 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:

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5.5.16 Containment Leakage Rate Testing Program (continued)

- a) Overall air lock leakage rate is  $\leq [0.05 L_a]$  when tested at  $\geq P_a$ .
- b) For each door, leakage rate is  $\leq [0.01 L_a]$  when pressurized to  $[\geq 10 \text{ psig}]$ .
- d. The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.
- e. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

[OPTION B]

- a. A program shall establish the leakage rate testing of the 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, "Performance-Based Containment Leak-Test Program," dated September, 1995, as modified by the following exceptions:

1. 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.

2. The visual examination of the steel liner plate inside containment 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.

3. [REDACTED]

- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is  $[45 \text{ psig}]$ . The containment design pressure is  $[50 \text{ psig}]$ .
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be  $[ ]\%$  of containment air weight per day.
- d. Leakage rate acceptance criteria are:
  - 1. Containment leakage rate acceptance criterion is  $\leq 1.0 L_a$ . During the first unit startup following testing in accordance with this program, the

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5.5.16 Containment Leakage Rate Testing Program (continued)

- e. The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.
- f. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

[OPTION A/B Combined]

- a. A program shall establish the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J. [Type A][Type B and C] test requirements are in accordance with 10 CFR 50, Appendix J, Option A, as modified by approved exemptions. [Type B and C][Type A] test requirements are in accordance with 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. The 10 CFR 50, Appendix J, Option B test requirements shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September, 1995, as modified by the following exceptions:

1. 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.

2. The visual examination of the steel liner plate inside containment 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.

[3.]

- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is [45 psig]. The containment design pressure is [50 psig].
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be [ ]% of containment air weight per day.
- d. Leakage rate acceptance criteria are:
  - 1. 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 the Type B and C



## BASES

SURVEILLANCE  
REQUIREMENTSSR 3.6.1.1

Maintaining the containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of the Containment Leakage Rate Testing Program. The containment concrete visual examinations may be performed during either power operation, e.g., performed concurrently with other containment inspection-related activities such as tendon testing, or during a maintenance or refueling outage. The visual examinations of the steel liner plate inside containment are performed during maintenance or refueling outages since this is the only time the liner plate is fully accessible.

Failure to meet air lock and purge valve with resilient seal leakage limits specified in LCO 3.6.2 and LCO 3.6.3 does not invalidate the acceptability of these overall leakage determinations unless their contribution to overall Type A, B, and C leakage causes that to exceed limits. As left leakage prior to the first startup after performing a required Containment Leakage Rate Testing Program leakage test is required to be  $< 0.6 L_a$  for combined Type B and C leakage, and [ $< 0.75 L_a$  for Option A] [ $\leq 0.75 L_a$  for Option B] for overall Type A leakage. At all other times between required leakage rate tests, the acceptance criteria is based on an overall Type A leakage limit of  $\leq 1.0 L_a$ . At  $\leq 1.0 L_a$  the offsite dose consequences are bounded by the assumptions of the safety analysis. SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

## -----REVIEWER'S NOTE-----

Regulatory Guide 1.163 and NEI 94-01 include acceptance criteria for as-left and as-found Type A leakage rates and combined Type B and C leakage rates, which may be reflected in the Bases.

[ SR 3.6.1.2

For ungrouted, post tensioned tendons, this SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Tendon Surveillance Program. Testing and Frequency are consistent with the recommendations of Regulatory Guide 1.35 in accordance with the ASME code, Section XI Subsection IWL (Ref. 4), and applicable addenda as required by 10 CFR 50.55a.]

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- REFERENCES
1. 10 CFR 50, Appendix J, Option [A][B].
  2. FSAR, Sections [14.1 and 14.2].
  3. FSAR, Section [5.6].
  4. ~~Regulatory Guide 1.35, Revision [1]~~ ASME Code, Section XI, Subsection IWL.
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## 5.5 Programs and Manuals

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### 5.5.4 Radioactive Effluent Controls Program (continued)

- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I, and
- j. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

### 5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR, Section [ ], cyclic and transient occurrences to ensure that components are maintained within the design limits.

### 5.5.6 [ Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with [~~Regulatory Guide 1.35, Revision 3, 1990~~] Section XI, Subsection IWL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, except where an alternative, exemption, or relief has been authorized by the NRC.

The provisions of ~~SR 3.0.2~~ and SR 3.0.3 are applicable to the Tendon Surveillance Program inspection frequencies. ]

### 5.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel per the recommendations of Regulatory Position C.4.b of Regulatory Guide 1.14, Revision 1, August 1975.

In lieu of Position C.4.b(1) and C.4.b(2), a qualified in-place UT examination over the volume from the inner bore of the flywheel to the circle one-half of the outer radius or a surface examination (MT and/or PT) of exposed surfaces of the removed flywheels may be conducted at approximately 10 year intervals coinciding with the Inservice Inspection schedule as required by ASME Section XI.

5.5 Programs and Manuals

5.5.16 Containment Leakage Rate Testing Program (continued)

- a) Overall air lock leakage rate is  $\leq [0.05 L_a]$  when tested at  $\geq P_a$ .
- b) For each door, leakage rate is  $\leq [0.01 L_a]$  when pressurized to  $[\geq 10 \text{ psig}]$ .
- d. The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.
- e. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

[OPTION B]

- a. A program shall establish the leakage rate testing of the 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, "Performance-Based Containment Leak-Test Program," dated September, 1995, as modified by the following exceptions:

1. 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.

2. The visual examination of the steel liner plate inside containment 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.

3. [REDACTED]

- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is  $[45 \text{ psig}]$ . The containment design pressure is  $[50 \text{ psig}]$ .
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be  $[ ]\%$  of containment air weight per day.
- d. Leakage rate acceptance criteria are:
  - 1. Containment leakage rate acceptance criterion is  $1.0 L_a$ . During the first unit startup following testing in accordance with this program, the

5.5 Programs and Manuals

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5.5.16 Containment Leakage Rate Testing Program (continued)

- e. The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.
- f. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

[OPTION A/B Combined]

- a. A program shall establish the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J. [Type A][Type B and C] test requirements are in accordance with 10 CFR 50, Appendix J, Option A, as modified by approved exemptions. [Type B and C][Type A] test requirements are in accordance with 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. The 10 CFR 50, Appendix J, Option B test requirements shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September, 1995-, as modified by the following exceptions:

1. 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.

2. The visual examination of the steel liner plate inside containment 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.

[3. ]

- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$ , [45 psig]. The containment design pressure is [50 psig].
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be [ ]% of containment air weight per day.
- d. Leakage rate acceptance criteria are:
  - 1. 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 the Type B and C tests and [ $< 0.75 L_a$  for Option A Type A tests][ $\leq 0.75 L_a$  for Option B Type A tests].

BASES

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.1.1

Maintaining the containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of the Containment Leakage Rate Testing Program. [The containment concrete visual examinations may be performed during either power operation e.g. performed concurrently with other containment inspection-related activities such as tendon testing, or during a maintenance or refueling outage. The visual examinations of the steel liner plate inside containment are performed during maintenance or refueling outages since this is the only time the liner plate is fully accessible.]

Failure to meet air lock [and purge valve with resilient seal] leakage limits specified in LCO 3.6.2 [and LCO 3.6.3] does not invalidate the acceptability of these overall leakage determinations unless their contribution to overall Type A, B, and C leakage causes that to exceed limits. As left leakage prior to the first startup after performing a required Containment Leakage Rate Testing Program leakage test is required to be  $< 0.6 L_a$  for combined Type B and C leakage, and  $< 0.75 L_a$  for Option A]  $[0.75 L_a$  for Option B] for overall Type A leakage. At all other times between required leakage rate tests, the acceptance criteria is based on an overall Type A leakage limit of  $1.0 L_a$ . At  $1.0 L_a$  the offsite dose consequences are bounded by the assumptions of the safety analysis.

SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

-----REVIEWER'S NOTE-----

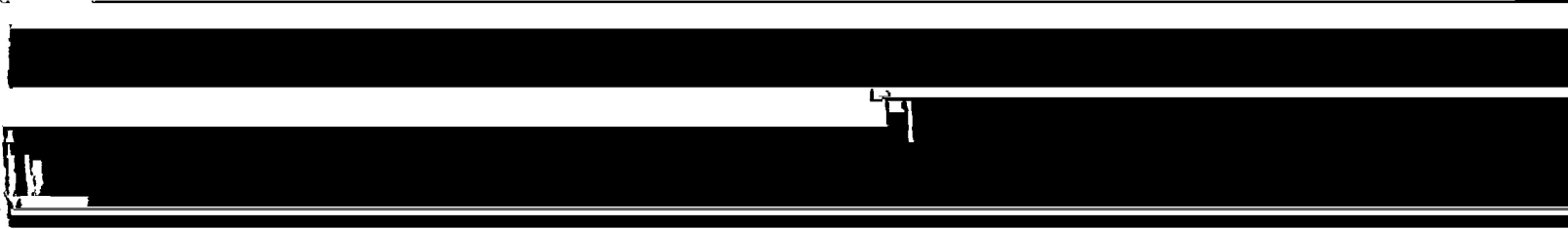
Regulatory Guide 1.163 and NEI 94-01 include acceptance criteria for as-left and as-found Type A leakage rates and combined Type B and C leakage rates, which may be reflected in the Bases.

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[ SR 3.6.1.2

For ungrouted, post tensioned tendons, this SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Tendon Surveillance Program. Testing and Frequency are consistent with the recommendations of Regulatory Guide 1.35 [in accordance with the ASME code Section XI]

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2. FSAR, Chapter [15].
  3. FSAR, Section [6.2].
  4. ~~Regulatory Guide 1.35, Revision [1]~~ ASME Code, Section XI  
Subsection IWL.
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## BASES

SURVEILLANCE  
REQUIREMENTSSR 3.6.1.1

Maintaining the containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of the Containment Leakage Rate Testing Program. The containment concrete visual examinations may be performed during either power operation, e.g., performed concurrently with other containment inspection-related activities such as tendon testing, or during a maintenance or refueling outage. The visual examinations of the steel liner plate inside containment are performed during maintenance or refueling outages since this is the only time the liner plate is fully accessible.

Failure to meet air lock [, secondary containment bypass leakage path and purge valve with resilient seal] leakage limits specified in LCO 3.6.2 [and LCO 3.6.3] does not invalidate the acceptability of these overall leakage determinations unless their contribution to overall Type A, B, and C leakage causes that to exceed limits. As left leakage prior to the first startup after performing a required Containment Leakage Rate Testing Program leakage test is required to be  $< 0.6 L_a$  for combined Type B and C leakage, and [ $< 0.75 L_a$  for Option A][ $\leq 0.75 L_a$  for Option B] for overall Type A leakage. At all other times between required Containment Leakage Rate Testing Program leakage rate tests, the acceptance criteria is based on an overall Type A leakage limit of  $\leq 1.0 L_a$ . At  $\leq 1.0 L_a$  the offsite dose consequences are bounded by the assumptions of the safety analysis.

SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

## -----REVIEWER'S NOTE-----

Regulatory Guide 1.163 and NEI 94-01 include acceptance criteria for as-left and as-found Type A leakage rates and combined Type B and C leakage rates, which may be reflected in the Bases.

[ SR 3.6.1.2

For ungrouted, post tensioned tendons, this SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Tendon Surveillance Program. Testing and Frequency are consistent with the recommendations of Regulatory Guide 1.35 [in accordance with the ASME code, Section XI Subsection IW (Ref. 4), and applicable addenda as required by 10 CFR 50.55a.]



REFERENCES

1. 10 CFR 50, Appendix J, Option [A][B].
  2. FSAR, Chapter [15].
  3. FSAR, Section [6.2].
  4. ~~Regulatory Guide 1.35, Revision [1]~~ ASME Code, Section XI  
Subsection IWL.
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BASES

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.1.1

Maintaining the containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of the Containment Leakage Rate Testing Program. [The containment concrete visual examinations may be performed during either power operation e.g., performed concurrently with other containment inspection-related activities such as tendon testing, or during a maintenance or refueling outage. The visual examinations of the steel liner plate inside containment are performed during maintenance or refueling outages since this is the only time the liner plate is fully accessible.]

Failure to meet air lock [, secondary containment bypass leakage path, and purge valve with resilient seal] leakage limits specified in LCO 3.6.2 [and LCO 3.6.3] does not invalidate the acceptability of these overall leakage determinations unless their contribution to overall Type A, B, and C leakage causes that to exceed limits. As left leakage prior to the first startup after performing a required Containment Leakage Rate Testing Program leakage test is required to be  $< 0.6 L_a$  for combined Type B and C leakage, and [ $< 0.75 L_a$  for Option A] [ $\leq 0.75 L_a$  for Option B] for overall Type A leakage. At all other times between required leakage rate tests, the acceptance criteria is based on an overall Type A leakage limit of  $\leq 1.0 L_a$ . At  $\leq 1.0 L_a$  the offsite dose consequences are bounded by the assumptions of the safety analysis.

SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

-----REVIEWER'S NOTE-----

Regulatory Guide 1.163 and NEI 94-01 include acceptance criteria for as-left and as-found Type A leakage rates and combined Type B and C leakage rates, which may be reflected in the Bases.

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[ SR 3.6.1.2

For ungrouted, post tensioned tendons, this SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Tendon Surveillance Program. Testing and Frequency are consistent with the recommendations of Regulatory Guide 1.35 [in accordance with the ASME code, Section XI, Subsection WL (Ref. 4), and applicable addenda as required by 10 CFR 50.55a.]

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REFERENCES

1. 10 CFR 50, Appendix J, Option [A][B].

2. FSAR, Chapter [15].
  3. FSAR, Section [6.2].
  4. ~~Regulatory Guide 1.35, Revision [1]~~ **ASME Code, Section XI,  
Subsection IWL.**
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BASES

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.1.1

Maintaining the containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of the Containment Leakage Rate Testing Program. The containment concrete visual examinations may be performed during either power operation, e.g., performed concurrently with other containment inspection-related activities such as tendon testing, or during a maintenance or refueling outage. The visual examinations of the steel liner plate inside containment are performed during maintenance or refueling outages since this is the only time the liner plate is fully accessible.

Failure to meet air lock [and purge valve with resilient seal] leakage limits specified in LCO 3.6.2 [and LCO 3.6.3] does not invalidate the acceptability of these overall leakage determinations unless their contribution to overall Type A, B, and C leakage causes that to exceed limits. As left leakage prior to the first startup after performing a required Containment Leakage Rate Testing Program leakage test is required to be  $< 0.6 L_a$  for combined Type B and C leakage, and [ $< 0.75 L_a$  for Option A] [ $\leq 0.75 L_a$  for Option B] for overall Type A leakage. At all other times between required leakage rate tests, the acceptance criteria is based on an overall Type A leakage limit of  $\leq 1.0 L_a$ . At  $\leq 1.0 L_a$  the offsite dose consequences are bounded by the assumptions of the safety analysis.

SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

-----REVIEWER'S NOTE-----

Regulatory Guide 1.163 and NEI 94-01 include acceptance criteria for as-left and as-found Type A leakage rates and combined Type B and C leakage rates, which may be reflected in the Bases.

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[ SR 3.6.1.2

For ungrouted post tensioned tendons, this SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Tendon Surveillance Program. Testing and Frequency are consistent with the recommendations of Regulatory Guide 1.35 [in accordance with the ASME code, Section XI, Subsection WL (Ref. 4), and applicable addenda as required by 10 CFR 50.55a.]

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REFERENCES

1. 10 CFR 50, Appendix J, Option [A][B].
2. FSAR, Chapter [15].

3. FSAR, Section [6.2].
  4. ~~Regulatory Guide 1.35, Revision [1]~~ ASME Code, Section XI,  
Subsection IWL.
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## 5.5 Programs and Manuals

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### 5.5.4 Radioactive Effluent Controls Program (continued)

- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I, and
- j. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

### 5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR, Section [ ], cyclic and transient occurrences to ensure that components are maintained within the design limits.

### 5.5.6 [ Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with [~~Regulatory Guide 1.35, Revision 3, 1990~~] Section XI, Subsection IWL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, except where an alternative, exemption, or relief has been authorized by the NRC.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Tendon Surveillance Program inspection frequencies. ]

### 5.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel per the recommendation of Regulatory position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975.

### 5.5.8 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:

## 5.5 Programs and Manuals

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### 5.5.16 Containment Leakage Rate Testing Program (continued)

1. 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 the Type B and C tests and  $< 0.75 L_a$  for Type A tests.
2. Air lock testing acceptance criteria are:
  - a) Overall air lock leakage rate is  $\leq [0.05 L_a]$  when tested at  $\geq P_a$ .
  - b) For each door, leakage rate is  $\leq [0.01 L_a]$  when pressurized to  $[\geq 10 \text{ psig}]$ .
- d. The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.
- e. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

#### [OPTION B]

- a. A program shall establish the leakage rate testing of the 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, "Performance-Based Containment Leak-Test Program," dated September, 1995 [as modified by the following exceptions:
  1. 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.
  2. The visual examination of the steel liner plate inside containment 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.
  3. [REDACTED]
- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$  is [45 psig]. The containment design pressure is [50 psig].

## 5.5 Programs and Manuals

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### 5.5.16 Containment Leakage Rate Testing Program (continued)

2. Air lock testing acceptance criteria are:
  - a) Overall air lock leakage rate is  $\leq [0.05 L_a]$  when tested at  $\geq P_a$ .
  - b) For each door, leakage rate is  $\leq [0.01 L_a]$  when pressurized to  $[\geq 10 \text{ psig}]$ .

- e. The provisions of SR 3.0.3 are applicable to the Containment Leakage Rate Testing Program.
- f. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

#### [OPTION A/B Combined]

- a. A program shall establish the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J. [Type A][Type B and C] test requirements are in accordance with 10 CFR 50, Appendix J, Option A, as modified by approved exemptions. [Type B and C] [Type A] test requirements are in accordance with 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. The 10 CFR 50, Appendix J, Option B test requirements shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September, 1995 [as modified by the following exceptions:

1. 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.

2. The visual examination of the steel liner plate inside containment 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.

3.

- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$  is  $[45 \text{ psig}]$ . The containment design pressure is  $[50 \text{ psig}]$ .
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be  $[ ]\%$  of containment air weight per day.



BASES

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**APPLICABILITY** In MODES 1, 2, 3, and 4, a DBA could cause a release of radioactive material into containment. In MODES 5 and 6, the probability and consequences of these events are reduced due to the pressure and temperature limitations of these MODES. Therefore, containment is not required to be OPERABLE in MODE 5 to prevent leakage of radioactive material from containment. The requirements for containment during MODE 6 are addressed in LCO 3.9.3, "Containment Penetrations."

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**ACTIONS**

A.1

In the event containment is inoperable, containment must be restored to OPERABLE status within 1 hour. The 1 hour Completion Time provides a period of time to correct the problem commensurate with the importance of maintaining containment during MODES 1, 2, 3, and 4. This time period also ensures that the probability of an accident (requiring containment OPERABILITY) occurring during periods when containment is inoperable is minimal.

B.1 and B.2

If containment cannot be restored to OPERABLE status within the required Completion Time, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 6 hours and to MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

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**SURVEILLANCE  
REQUIREMENTS**

SR 3.6.1.1

Maintaining the containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of the Containment Leakage Rate Testing Program.

The containment concrete visual examinations may be performed during either power operation, e.g., performed concurrently with other containment inspection-related activities such as tendon testing, or during a maintenance or refueling outage. The visual examinations of the steel liner plate inside containment are performed during maintenance or refueling outages since this is the only time the liner plate is fully accessible.

Failure to meet air lock and purge valve with resilient seal leakage limits specified in LCO 3.6.2 and LCO 3.6.3 does not invalidate the acceptability of these overall leakage determinations unless their contribution to overall Type A, B, and C leakage causes that to exceed limits. As left leakage

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BASES

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SURVEILLANCE REQUIREMENTS (continued)

Option B] for overall Type A leakage. At all other times between required leakage rate tests, the acceptance criteria is based on an overall Type A leakage limit of  $\leq 1.0 L_a$ . At  $\leq 1.0 L_a$  the offsite dose consequences are bounded by the assumptions of the safety analysis. SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

-----REVIEWER'S NOTE-----

Regulatory Guide 1.163 and NEI 94-01 include acceptance criteria for as-left and as-found Type A leakage rates and combined Type B and C leakage rates, which may be reflected in the Bases.

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[ SR 3.6.1.2

For ungrouted, post tensioned tendons, this SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Tendon Surveillance Program. Testing and Frequency are consistent with the recommendations of Regulatory Guide 1.35 in accordance with the ASME code, Section XI, Subsection IWL (Ref. 4), and applicable addenda as required by 10 CFR 50.55a.]

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REFERENCES

1. 10 CFR 50, Appendix J, Option [A][B].
  2. FSAR, Section [ ].
  3. FSAR, Section [ ].
  4. Regulatory Guide 1.35, Revision [1] ASME Code, Section XI, Subsection IWL.
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BASES

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.1.1

Maintaining containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of the Containment Leakage Rate Testing Program. The containment concrete visual examinations may be performed during either power operation, e.g., performed concurrently with other containment inspection-related activities such as tendon testing, or during a maintenance or refueling outage. The visual examinations of the steel liner plate inside containment are performed during maintenance or refueling outages since this is the only time the liner plate is fully accessible.

Failure to meet air lock and purge valve with resilient seal specific leakage limits specified in LCO 3.6.2 and LCO 3.6.3 does not invalidate the acceptability of these overall leakage determinations unless their contribution to overall Type A, B, and C leakage causes that to exceed limits. As left leakage prior to the first startup after performing a required Containment Leakage Rate Testing Program leakage test is required to be  $< 0.6 L_a$  for combined Type B and C leakage, and  $[< 0.75 L_a$  for Option A]  $[\leq 0.75 L_a$  for Option B] for overall Type A leakage. At all other times between required leakage rate tests, the acceptance criteria is based on an overall Type A leakage limit of  $\leq 1.0 L_a$ . At  $\leq 1.0 L_a$  the offsite dose consequences are bounded by the assumptions of the safety analysis. SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

SR Frequencies are as required by the Containment Leakage Rate Testing Program. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

-----REVIEWER'S NOTE-----

Regulatory Guide 1.163 and NEI 94-01 include acceptance criteria for as-left and as-found Type A leakage rates and combined Type B and C leakage rates, which may be reflected in the Bases.

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[ SR 3.6.1.2

For ungrouted, post tensioned tendons, this SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Tendon Surveillance Program. Testing and Frequency are consistent with the recommendations of Regulatory Guide 1.35 in accordance with the ASME code, Section XI.

Subsection IWL (Ref. 4), and applicable addenda as required by 10 CFR 50.55a.]

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REFERENCES

1. 10 CFR 50, Appendix J, Option [A][B].
  2. FSAR, Section [ ].
  3. FSAR, Section [ ].
  4. Regulatory Guide 1.35, Revision [1] ASME Code, Section XI, Subsection IWL.
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## 5.5 Programs and Manuals

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### 5.5.4 Radioactive Effluent Controls Program (continued)

- j. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190, and
- k. Limitations on venting and purging of the Mark II containment through the Standby Gas Treatment System to maintain releases as low as reasonably achievable (in BWR/4s with Mark II containments).

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

### 5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR Section [ ], cyclic and transient occurrences to ensure that components are maintained within the design limits.

### 5.5.6 [ Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with [~~Regulatory Guide 1.35, Revision 3, 1990~~] Section XI, Subsection IVL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, except where an alternative, exemption, or relief has been authorized by the NRC.

The provisions of ~~SR 3.0.2 and SR 3.0.3~~ are applicable to the Tendon Surveillance Program inspection frequencies. ]

### 5.5.7 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

## 5.5 Programs and Manuals

### 5.5.13 Primary Containment Leakage Rate Testing Program (continued)

- b. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be [ ]% of containment air weight per day.
- c. Leakage rate acceptance criteria are:
  - 1. 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 the Type B and C tests and  $< 0.75 L_a$  for Type A tests.
  - 2. Air lock testing acceptance criteria are:
    - a) Overall air lock leakage rate is  $\leq [0.05 L_a]$  when tested at  $\geq P_a$ .
    - b) For each door, leakage rate is  $\leq [0.01 L_a]$  when pressurized to  $[\geq 10 \text{ psig}]$ .
- d. The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.
- e. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

#### [OPTION B]

- a. A program shall establish the leakage rate testing of the 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, "Performance-Based Containment Leak-Test Program," dated September, 1995, as modified by the following exceptions:

1. 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.

2. The visual examination of the steel liner plate inside containment 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.

3. [ ]

## 5.5 Programs and Manuals

### 5.5.13 Primary Containment Leakage Rate Testing Program (continued)

1. 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 the Type B and C tests and  $\leq 0.75 L_a$  for Type A tests.
2. Air lock testing acceptance criteria are:
  - a) Overall air lock leakage rate is  $\leq [0.05 L_a]$  when tested at  $\geq P_a$ .
  - b) For each door, leakage rate is  $\leq [0.01 L_a]$  when pressurized to  $[\geq 10 \text{ psig}]$ .
- e. The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.
- f. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

#### [OPTION A/B Combined]

- a. A program shall establish the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J. [Type A][Type B and C] test requirements are in accordance with 10 CFR 50, Appendix J, Option A, as modified by approved exemptions. [Type B and C][Type A] test requirements are in accordance with 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. The 10 CFR 50, Appendix J, Option B test requirements shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September, 1995-, as modified by the following exceptions:

1. 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.

2. The visual examination of the steel liner plate inside containment 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.

3.

## 5.5 Programs and Manuals

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### 5.5.4 Radioactive Effluent Controls Program (continued)

- j. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

### 5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR, Section [ ], cyclic and transient occurrences to ensure that components are maintained within the design limits.

### 5.5.6 [ Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with [~~Regulatory Guide 1.35, Revision 3, 1990~~] Section XI Subsection IWL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, except where an alternative, exemption, or relief has been authorized by the NRC.

The provisions of ~~SR 3.0.2~~ and SR 3.0.3 are applicable to the Tendon Surveillance Program inspection frequencies. ]

### 5.5.7 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:



## 5.5 Programs and Manuals

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### 5.5.13 Primary Containment Leakage Rate Testing Program (continued)

- a) Overall air lock leakage rate is  $\leq [0.05 L_a]$  when tested at  $\geq P_a$ .
- b) For each door, leakage rate is  $\leq [0.01 L_a]$  when pressurized to  $[\geq 10 \text{ psig}]$ .
- d. The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.
- e. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

#### [OPTION B]

- a. A program shall establish the leakage rate testing of the 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, "Performance-Based Containment Leak-Test Program," dated September, 1995, as modified by the following exceptions:

1. 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.

2. The visual examination of the steel liner plate inside containment 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.

3. [REDACTED]

- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is  $[45 \text{ psig}]$ . The containment design pressure is  $[50 \text{ psig}]$ .
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be  $[ ]\%$  of containment air weight per day.
- d. Leakage rate acceptance criteria are:
  - 1. Containment leakage rate acceptance criterion is  $\leq 1.0 L_a$ . During the first unit startup following testing in accordance with this program, the

## 5.5 Programs and Manuals

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### 5.5.13 Primary Containment Leakage Rate Testing Program (continued)

- e. The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.
- f. Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.

#### [OPTION A/B Combined]

- a. A program shall establish the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50, Appendix J. [Type A][Type B and C] test requirements are in accordance with 10 CFR 50, Appendix J, Option A, as modified by approved exemptions. [Type B and C][Type A] test requirements are in accordance with 10 CFR 50, Appendix J, Option B, as modified by approved exemptions. The 10 CFR 50, Appendix J, Option B test requirements shall be in accordance with the guidelines contained in Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September, 1995-, as modified by the following exceptions:

1. 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.

2. The visual examination of the steel liner plate inside containment 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.

3. [REDACTED]

- b. The calculated peak containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is [45 psig]. The containment design pressure is [50 psig].
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be [ ]% of containment air weight per day.
- d. Leakage rate acceptance criteria are:
  - 1. 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 the Type B and C

BASES

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ACTIONS

A.1

In the event that primary containment is inoperable, primary containment must be restored to OPERABLE status within 1 hour. The 1 hour Completion Time provides a period of time to correct the problem that is commensurate with the importance of maintaining primary containment OPERABILITY during MODES 1, 2, and 3. This time period also ensures that the probability of an accident (requiring primary containment OPERABILITY) occurring during periods where primary containment is inoperable is minimal.

B.1 and B.2

If primary containment cannot be restored to OPERABLE status within the associated Completion Time, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.1.1.1

Maintaining the primary containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of the Primary Containment Leakage Rate Testing Program. The primary containment concrete visual examinations may be performed during either power operation, e.g., performed concurrently with other primary containment inspection-related activities such as tendon testing, or during a maintenance or refueling outage. The visual examinations of the steel liner plate inside primary containment are performed during maintenance or refueling outages since this is the only time the liner plate is fully accessible.

Failure to meet air lock leakage testing (SR 3.6.1.2.1 and SR 3.6.1.2.4), [secondary containment bypass leakage (SR 3.6.1.3.9),] resilient seal primary containment purge valve leakage testing (SR 3.6.1.3.6), or main steam isolation valve leakage (SR 3.6.1.3.10) does not necessarily result in a failure of this SR. The impact of the failure to meet these SRs must be evaluated against the Type A, B, and C acceptance criteria of the Primary Containment Leakage Rate Testing Program. As left leakage prior to the first startup after performing a required Primary Containment Leakage Rate Testing Program leakage test is required to be  $< 0.6 L_a$  for combined Type B and C leakage, and [ $< 0.75 L_a$  for Option A] [ $\leq 0.75 L_a$  for Option B] for overall Type A leakage. At all other times between required leakage rate tests, the acceptance criteria is based on an overall

Type A leakage limit of  $\leq 1.0 L_a$ . At  $\leq 1.0 L_a$  the offsite dose consequences are bounded by the assumptions of the safety analysis. The Frequency is required by the Primary Containment Leakage Rate Testing Program.

SR Frequencies are as required by the Primary Containment Leakage Rate Testing Program. These periodic testing requirements verify that the primary containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

BASES

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SURVEILLANCE REQUIREMENTS (continued)

-----REVIEWER'S NOTE-----

Regulatory Guide 1.163 and NEI 94-01 include acceptance criteria for as-left and as-found Type A leakage rates and combined Type B and C leakage rates, which may be reflected in the Bases.

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[ SR 3.6.1.1.2

The structural integrity of the primary containment is ensured by the successful completion of the Primary Containment Tendon Surveillance Program and by associated visual inspections of the steel liner and penetrations for evidence of deterioration or breach of integrity. This ensures that the structural integrity of the primary containment will be maintained in accordance with the provisions of the Primary Containment Tendon Surveillance Program. Testing and Frequency are consistent with the recommendations of Regulatory Guide 1.35 in accordance with the ASME code, Section XI, Subsection IWL (Ref. 5), and applicable addenda as required by 10 CFR 50.55a.]

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REFERENCES

1. FSAR, Section [6.2].
  2. FSAR, Section [15.6.5].
  3. 10 CFR 50, Appendix J, Option [A][B].
  4. FSAR, Section [ ].
  5. Regulatory Guide 1.35, Revision [1] ASME Code, Section XI, Subsection IWL.
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