



**Nebraska Public Power District**  
*Nebraska's Energy Leader*

NLS2000006  
February 9, 2000

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

Gentlemen:

**Subject:** Proposed Change to CNS Technical Specifications  
Implementation of Option B to 10CFR50, Appendix J; Withdrawal of Exemptions  
Cooper Nuclear Station, NRC Docket 50-298, DPR-46, Supplemental Information  
to NLS990082

**Reference:** Letter No. NLS990082 to USNRC Document Control Desk from John H. Swailes  
dated October 6, 1999, "Proposed Change to CNS Technical Specifications;  
Implementation of Option B to 10CFR50, Appendix J; Withdrawal of  
Exemptions"

On October 6, 1999, the Nebraska Public Power District (District) requested an amendment to Operating License DPR-46 to change the Cooper Nuclear Station (CNS) Technical Specifications (TS). This proposed TS change would revise the CNS TS to adopt the implementation requirements of 10CFR50, Appendix J, Option B for the performance of Type A, B and C containment leakage rate testing.

During a January 19, 2000 telephone conference between the NRC and Cooper Nuclear Station (CNS) Staff, CNS was requested to provide supplemental information regarding the October 6, 1999 request. Attachment 1 contains the NRC questions and District responses. Based on the NRC questions and the CNS Staff responses, the District has determined that some of the information provided in the October 6, 1999 request should be modified. Attachment 1 discusses these modifications. These modifications do not significantly affect the actual request by the District, although some TS page change requests are being resubmitted. Since no substantive modifications are being sought to the October 6, 1999 submittal, the District believes that the previously submitted (and noticed in the Federal Register) No Significant Hazard review still applies. Attachment 1 contains a summary of the basis for this conclusion. Attachment 2 contains the affected CNS TS pages in marked-up form, and Attachment 3 contains the affected CNS TS pages in type-written form.

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By copy of this letter and its attachments, the appropriate State of Nebraska official is notified in accordance with 10 CFR 50.91 (b) (1). Copies to the NRC Region IV office and the CNS Resident Inspector are being provided in accordance with 10 CFR 50.4 (b) (2).

Should you have any questions regarding this matter, please contact Sharon Mahler at (402) 825-5236.

Sincerely,



John H. Swailes  
Vice President of Nuclear Energy

/dnm/rbm  
Attachments

cc: Regional Administrator w/attachments  
USNRC - Region IV

Senior Project Manager w/ attachments  
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector w/ attachments  
USNRC

Environmental Health Division - Program Manager w/ attachments  
Nebraska Department of Health

NPG Distribution w/o attachments

Correspondence No: NLS2000006

The following table identifies those actions committed to by the District in this document. Any other actions discussed in the submittal represent intended or planned actions by the District. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the NL&S Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITTED DATE OR OUTAGE
None	N/A

**COOPER NUCLEAR STATION TECHNICAL SPECIFICATIONS**  
**Implementation of Option B to 10CFR50, Appendix J, Withdrawal of Exemptions**  
**Supplemental Information to NLS990082**

**1.0 Introduction**

NLS990082 contained the CNS request to revise the CNS TS 1.0, "Use and Application," 3.6, "Containment Systems," Bases 3.0, "Limiting Condition for Operation (LCO) Applicability," Bases 3.6, "Containment Systems," and 5.5, "Programs and Manuals," to adopt the implementation requirements of 10CFR50, Appendix J, Option B for the performance of Type A, B and C containment leakage rate testing.

On January 19, 2000 a telephone conference was conducted between the NRC and Cooper Nuclear Station (CNS) Staff to discuss questions regarding the NLS990082 submittal. The information discussed in the telephone conference is as reflected in Section 2.0, Questions and Responses.

The intent of the proposed change presented in NLS990082 as amended by the supplemental information provided in NLS2000006 remains unchanged.

**2.0 Questions and Responses**

The following are the individual questions asked by the NRC of the District and the CNS Staff response. Attachment 2 reflects changes to the marked-up technical specification pages and Attachment 3 reflects changes to the typed technical specification pages provided originally in NLS990082.

**Question 1** TS 5.5.12 should note that 3.0.2 is not applicable.

**Response** Added the following wording to TS 5.5.12, Primary Containment Leakage Rate Testing Program as requested by the NRC:

"The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Primary Containment Leakage Rate Testing Program."

This change will ensure that any extension of test intervals will be only as acceptable per the regulations. SR 3.0.2 would permit an extension greater than that allowed by the regulations. See Attachment 2, page 5.0-17 and Attachment 3, page 5.0-17.

**Question 2** On page 5.0-17 (5.5.12.d.2.a): is 0.05La equivalent to 12 scfh (as in current TS)?

**Response** No. The 0.05La is equal to 15.87 scfh. The 0.05La value was presented in TSTF-52 and requires justification for implementation as identified by the value being enclosed in brackets [ ]. The comment was made by the NRC that there was not sufficient justification in NLS990082 to support the change from the Current Licensing Basis (CLB) of 12 scfh. In response to this comment, CNS Staff agrees to maintain the CLB value of 12 scfh.

See Attachment 2, page 5.0-17 and Attachment 3, page 5.0-17.

**Question 3** Change to Bases re: 3.0.2 contains words that NRC rejected as part of TSTF 52 Rev 1

**Response** The CNS Staff agrees to incorporate the following wording from TSTF-52 Rev 2.

“An example of where SR 3.0.2 does not apply is in the Containment Leakage Rate Testing Program. This program establishes testing requirements and Frequencies in accordance with the requirements of the regulations. The TS cannot in and of themselves extend a test interval specified in the regulations.”

See Attachment 2, Bases SR 3.0.2 Insert 1 and Attachment 3, page B 3.0-12.

**Question 4** Page 3.6-2 (Bases for LCO 3.6.1.1 Applicable Safety Analyses - 4th paragraph): Why are you deleting the words “...or .46% by weight...[to end of sentence]”? It doesn't appear that you should be.

**Response** Testing at  $P_t$  is not permissible under Option B to 10CFR50 Appendix J. Deletion of the words “...or .45% by weight...[to end of sentence]” is appropriate.

**Question 5** Same page/LCO section: proposing generic change and it doesn't conform with approved TSTF 52 standard wording.

**Response** TSTF-52, Revision 2 does not include the deletion of the following wording from B 3.6.1.1. LCO: "Individual leakage rates specified for the primary containment air lock are addressed in LCO 3.6.1.2."

CNS Staff agrees to reinstate to B 3.6.1.1 LCO the following wording: "Individual leakage rates specified for the primary containment air lock are addressed in LCO 3.6.1.2." This represents a return to the original TS wording as shown on TS page B 3.6-3, Revision 0.

Remove from NLS990082 Attachment 4 page B 3.6-3 and Attachment 5 page B 3.6-3.

**Question 6** SR 3.6.1.1.1 bases insert 2: this appears to be a reviewers note - no need to include.

**Response** CNS Staff agrees to remove SR 3.6.1.1.1 Insert 2 which added the following wording: "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." Reference NLS990082 Attachment 4 page B 3.6-4 and Attachment 5 page B 3.6-4.

Remove Insert 2 from NLS990082 Attachment 2 page B 3.6-4 and Attachment 3 page B 3.6-4.

**Question 7** Did not submit LCO bases for air lock: unable to tell if any changes will conform with approved TSTF 52 standard.

**Response** Question was withdrawn by NRC.

**Question 8** Why didn't you make TSTF 269 changes to ITS 3.6.4.2 Actions?

**Response** CNS Staff agrees that it would be advantageous for the District to incorporate TSTF-269 Rev 2 changes to TS LCO 3.6.4.2 and TS B LCO 3.6.4.2. TSTF-269 Rev 2 simply incorporates changes to the LCO 3.6.4.2 (SCIVs), similar to the LCO 3.6.1.3 (PCIV) changes included in TSTF-269 Rev 1.

The incorporation of these changes are shown on Attachments 2 and 3, pages 3.6-35 and B 3.6-75.

3.0 Changes to NLS990082 in response to NLS2000006

The following is a listing of page changes to NLS990082 Attachments 4 and 5 in response to the supplemental information provided herein:

- 3.1 Add NLS2000006 Attachment 2 page 3.6-35 to NLS990082 Attachment 4 following page 3.6-14.
- 3.2 Replace NLS990082 Attachment 4 page 5.0-17 with NLS2000006 Attachment 2 page 5.0-17.
- 3.3 Replace NLS990082 Attachment 4 Bases SR 3.0.2 Insert 1 (follows page B 3.0-12) with NLS2000006 Attachment 2 Bases SR 3.0.2 Insert 1.
- 3.4 Remove from NLS990082 Attachment 4, page B 3.6-3 and do not replace.
- 3.5 Replace NLS990082 Attachment 4 page B 3.6-4 with NLS2000006 Attachment 2 page B 3.6-4.
- 3.6 Replace NLS990082 Attachment 4 Bases SR 3.6.1.1.1 Insert 1 and Insert 2 (follows page B 3.6-4) with NLS2000006 Attachment 2 Bases SR 3.6.1.1.1 Insert 1.
- 3.7 Add NLS2000006 Attachment 2 page B 3.6-75 to NLS990082 Attachment 4 following page B 3.6-73.
- 3.8 Add NLS2000006 Attachment 2, B 3.6.4.2 Action A.1 and A.2 (continued) Insert 1 to NLS990082 Attachment 4 following page B 3.6-75.
- 3.9 Add NLS2000006 Attachment 3 page 3.6-35 to NLS990082 Attachment 5 following page 3.6-14.
- 3.10 Replace NLS990082 Attachment 5 page 5.0-17 with NLS2000006 Attachment 3 page 5.0-17.
- 3.11 Replace NLS990082 Attachment 5 page B 3.0-12 with NLS2000006 Attachment 3 page B 3.0-12.
- 3.12 Remove from NLS990082 Attachment 5, page B 3.6-3 and do not replace.
- 3.13 Replace NLS990082 Attachment 5 page B 3.6-4 with NLS2000006 Attachment 3 page B 3.6-4.

- 3.14 Add NLS2000006 Attachment 3 page B 3.6-75 to NLS990082 Attachment 5 following page B 3.6-73.
- 3.15 Add NLS2000006 Attachment 3 page B 3.6-76 to NLS990082 Attachment 5 following page B 3.6-76.

#### 4.0 Significant Hazard Determination Review

Nebraska Public Power District in NLS990082 proposed to change the current CNS Technical Specifications (TS) to adopt the implementation requirements of 10CFR50, Appendix J, Option B and line-item changes for TS requirements addressing containment airlock interlocks, primary and secondary containment isolation valves and power operated automatic valves. 10 CFR 50.91 (a) (1) requires that licensee requests for operating license amendments be accompanied by an evaluation of significant hazards posed by the issuance of an amendment. This evaluation was performed with respect to the criteria given in 10 CFR 50.92 © in accordance with the requirements of 10 CFR 50.91 (a) (1) as originally documented in NLS990082 Attachment 1 Section 4.0, Significant Hazard Determination.

The District has evaluated the proposed modifications to the license amendment request described herein against the Significant Hazard Determination provided in NLS990082. The District has evaluated the proposed modifications to the license amendment request described herein against the Significant Hazard Determination provided in NLS990082. The District has concluded that the conclusions recorded in the Significant Hazard Determination assessment and the substantive facts supporting those conclusions remain valid. Therefore, there is no need nor requirement for re-noting in the Federal Register or to modify the existing Significant Hazard Determination as presented in NLS990082. Therefore, the District requests NRC approval of the proposed change presented in NLS990082 as amended by the supplemental information provided in NLS2000006.

Attachment 2  
NLS2000006  
Page 1 of 8

**Affected CNS Technical Specification Pages**  
**In**  
**Marked-up Form**

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. (continued)</p> <p>2. Isolation devices that are locked, sealed, or otherwise secured MAY be verified by use of ADMINISTRATIVE MEANS.</p>	<p>A.2 -----NOTE-----            1. Isolation devices in high radiation areas may be verified by use of administrative means.            -----            Verify the affected penetration flow path is isolated.</p>	<p>Once per 31 days</p>
<p>B. -----NOTE-----            Only applicable to penetration flow paths with two isolation valves.            -----            One or more penetration flow paths with two SCIVs inoperable.</p>	<p>B.1 Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange.</p>	<p>4 hours</p>
<p>C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, or 3.</p>	<p>C.1 Be in MODE 3.  <u>AND</u>            C.2 Be in MODE 4.</p>	<p>12 hours             36 hours</p>

(continued)

## 5.5 Programs and Manuals

### 5.5.12 Primary Containment Leakage Rate Testing Program

- 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. Exemption from Appendix J to 10CFR Part 50 to allow reverse direction local leak rate testing of four containment isolation valves at Cooper Nuclear Station (TAC NO. M89769) (July 22, 1994).
  2. Exemption from Appendix J to 10CFR Part 50 to allow MSIV testing at 29 psig and expansion bellows testing at 5 psig between the plies (Sept. 16, 1977).
- b. The peak calculated containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is 58.0 psig. The containment design pressure is 56.0 psig.
- c. The maximum allowable containment leakage rate,  $L_a$ , at  $P_a$ , shall be 0.635 % 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  $\leq 0.75 L_a$  for Type A tests.
  2. Air lock testing acceptance criteria are:
    - a. Overall air lock leakage rate is  $\leq 12$  scfh when tested at  $\geq P_a$ .
    - b. Overall air lock leakage rate is  $\leq 0.23$  scfh when tested at  $\geq 3.0$  psig.
- e. The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Primary Containment Leakage Rate Testing Program.
- f. The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.

BASES

SR 3.0.2 Insert 1

An example of where SR 3.0.2 does not apply is in the Containment Leakage Rate Testing Program. This program establishes testing requirements and frequencies in accordance with the requirements of the regulations. The TS cannot in and of themselves extend a test interval specified in the regulations.

3

BASES (continued)

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 ~~10 CFR 50, Appendix J, Option A~~ (Ref. 3), as modified by approved exemptions. Failure to meet the air lock leakage limit (SR 3.6.1.2.1) or the main steam isolation valve leakage limit (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 ~~10 CFR 50, Appendix J, Option A~~ as modified by approved exemptions (Ref. 3).

SR 3.6.1.1.1 Insert 1

As left leakage prior to the first startup after performing a required ~~10 CFR 50, Appendix J, Option A~~ leakage test is required to be  $< 0.6 L_a$  for combined Type B and C leakage, and  $< 0.75 L_a$  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 ~~10 CFR 50, Appendix J, Option A~~ (Ref. 3), as modified by approved exemptions. Thus, ~~SR 3.0.2 (which allows Frequency extensions) does not apply.~~

SR 3.6.1.1.2

Maintaining the pressure suppression function of primary containment requires limiting the leakage from the drywell to the suppression chamber. Thus, if an event were to occur that pressurized the drywell, the steam would be directed through the downcomers into the suppression pool. This SR is a leak test that confirms that the bypass area between the drywell and the suppression chamber is less than a one inch diameter hole. This ensures that the leakage paths that would bypass the suppression pool are within allowable limits.

Satisfactory performance of this SR can be achieved by establishing a known differential pressure between the drywell and the suppression chamber and verifying that the pressure in either the suppression chamber or the drywell

(continued)

BASES

SR 3.6.1.1.1 Insert 1

Primary Containment Leakage Rate Testing Program

BASES

ACTIONS

A.1 and A.2 (continued)

isolate the penetration, and the probability of a DBA, which requires the SCIVs to close, occurring during this short time is very low.

For affected penetrations that have been isolated in accordance with Required Action A.1, the affected penetration must be verified to be isolated on a periodic basis. This is necessary to ensure that [secondary] containment penetrations required to be isolated following an accident, but no longer capable or being automatically isolated, will be in the isolation position should an event occur. The Completion Time of once per 31 days is appropriate because the isolation devices are operated under administrative controls and the probability of their misalignment is low. This Required Action does not require any testing or device manipulation. Rather, it involves verification that the affected penetration remains isolated.

Required Action A.2 is modified by <sup>two</sup> ~~2~~ <sup>S</sup> ~~that~~ <sup>Note 1</sup> ~~applies~~ to devices located in high radiation areas and allows them to be verified closed by use of administrative controls. Allowing verification by administrative controls is considered acceptable, since access to these areas is typically restricted. Therefore, the probability of misalignment, once they have been verified to be in the proper position, is low.

INSERT 1

B.1

With two SCIVs in one or more penetration flow paths inoperable, the affected penetration flow path must be isolated within 4 hours. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, and a blind flange. The 4 hour Completion Time is reasonable considering the time required to isolate the penetration and the probability of a DBA, which requires the SCIVs to close, occurring during this short time, is very low.

The Condition has been modified by a Note stating that Condition B is only applicable to penetration flow paths

(continued)

**B 3.6.4.2**  
**Action A.1 and A.2 (continued)**

**Insert 1**

**Note 2 applies to isolation devices that are locked, sealed, or otherwise secured in position and allows these devices to be verified closed by use of administrative means. Allowing verification by administrative means is considered acceptable, since the function of locking, sealing, or securing components is to ensure that these devices are not inadvertently repositioned.**

**Affected CNS Technical Specification Pages**  
**In**  
**Type Written Form**

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. (continued)</p>	<p>A.2 <del>NOTES</del></p> <p>1. Isolation devices in high radiation areas may be verified by use of administrative means.</p> <p>2. Isolation devices that are locked, sealed, or otherwise secured may be verified by use of administrative means.</p> <hr/> <p>Verify the affected penetration flow path is isolated.</p>	<p>Once per 31 days</p>
<p>B. <del>NOTE</del></p> <p>Only applicable to penetration flow paths with two isolation valves.</p> <hr/> <p>One or more penetration flow paths with two SCIVs inoperable.</p>	<p>B.1 Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, or blind flange.</p>	<p>4 hours</p>
<p>C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, or 3.</p>	<p>C.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>C.2 Be in MODE 4.</p>	<p>12 hours</p> <p>36 hours</p>

(continued)

## 5.5 Programs and Manuals

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

- 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  $\leq 0.75 L_a$  for Type A tests.
    - 2. Air lock testing acceptance criteria are:
      - a. Overall air lock leakage rate is  $\leq 12$  scfh when tested at  $\geq P_a$ .
      - b. Overall air lock leakage rate is  $\leq 0.23$  scfh when tested at  $\geq 3.0$  psig.
  - e. The provisions of SR 3.0.2 do not apply to the test frequencies specified in the Primary Containment Leakage Rate Testing Program.
  - f. The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.
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**BASES**

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**SR 3.0.2  
(continued)**

The 25% extension does not significantly degrade the reliability that results from performing the Surveillance at its specified Frequency. This is based on the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the SRs. The exceptions to SR 3.0.2 are those Surveillances for which the 25% extension of the interval specified in the Frequency does not apply. These exceptions are stated in the individual Specifications. The requirements of regulations take precedence over the TS. An example of where SR 3.0.2 does not apply is in the Containment Leakage Rate Testing Program. This program establishes testing requirements and Frequencies in accordance with the requirements of the regulations. The TS cannot in and of themselves extend a test interval specified in the regulations.

As stated in SR 3.0.2, the 25% extension also does not apply to the initial portion of a periodic Completion Time that requires performance on a "once per..." basis. The 25% extension applies to each performance after the initial performance. The initial performance of the Required Action, whether it is a particular Surveillance or some other remedial action, is considered a single action with a single Completion Time. One reason for not allowing the 25% extension to this Completion Time is that such an action usually verifies that no loss of function has occurred by checking the status of redundant or diverse components or accomplishes the function of the inoperable equipment in an alternative manner.

The provisions of SR 3.0.2 are not intended to be used repeatedly merely as an operational convenience to extend Surveillance intervals (other than those consistent with refueling intervals) or periodic Completion Time intervals beyond those specified.

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**SR 3.0.3**

SR 3.0.3 establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a Surveillance has not been completed within the specified Frequency. A delay period of up to 24 hours or up to the limit of the specified Frequency, whichever is less, applies from the point in time that it is discovered that the Surveillance has not been

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BASES (continued)

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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. Failure to meet the air lock leakage limit (SR 3.6.1.2.1) or the main steam isolation valve leakage limit (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  $\leq 0.75 L_a$  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 3.6.1.1.2**

Maintaining the pressure suppression function of primary containment requires limiting the leakage from the drywell to the suppression chamber. Thus, if an event were to occur that pressurized the drywell, the steam would be directed through the downcomers into the suppression pool. This SR is a leak test that confirms that the bypass area between the drywell and the suppression chamber is less than a one inch diameter hole. This ensures that the leakage paths that would bypass the suppression pool are within allowable limits.

Satisfactory performance of this SR can be achieved by establishing a known differential pressure between the drywell and the suppression chamber and verifying that the pressure in either the suppression chamber or the drywell

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BASES

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ACTIONS

A.1 and A.2 (continued)

isolate the penetration, and the probability of a DBA, which requires the SCIVs to close, occurring during this short time is very low.

For affected penetrations that have been isolated in accordance with Required Action A.1, the affected penetration must be verified to be isolated on a periodic basis. This is necessary to ensure that [secondary] containment penetrations required to be isolated following an accident, but no longer capable of being automatically isolated, will be in the isolation position should an event occur. The Completion Time of once per 31 days is appropriate because the isolation devices are operated under administrative controls and the probability of their misalignment is low. This Required Action does not require any testing or device manipulation. Rather, it involves verification that the affected penetration remains isolated.

Required Action A.2 is modified by two Notes. Note 1 applies to devices located in high radiation areas and allows them to be verified closed by use of administrative controls. Allowing verification by administrative controls is considered acceptable, since access to these areas is typically restricted. Note 2 applies to isolation devices that are locked, sealed, or otherwise secured in position and allows these devices to be verified closed by use of administrative means. Allowing verification by administrative means is considered acceptable, since the function of locking, sealing, or securing components is to ensure that these devices are not inadvertently repositioned. Therefore, the probability of misalignment, once they have been verified to be in the proper position, is low.

B.1

With two SCIVs in one or more penetration flow paths inoperable, the affected penetration flow path must be isolated within 4 hours. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and de-activated automatic valve, a closed manual valve, and a blind flange. The 4 hour Completion Time is reasonable considering the time required to isolate the penetration and the probability of a DBA, which requires the SCIVs to close, occurring during this short time, is very low.

(continued)

BASES

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**ACTIONS B.1 (continued)**

The Condition has been modified by a Note stating that Condition B is only applicable to penetration flow paths with two isolation valves. This clarifies that only Condition A is entered if one SCIV is inoperable in multiple penetrations.

**C.1 and C.2**

If any Required Action and associated Completion Time cannot be met, 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.

**D.1, D.2, and D.3**

If any Required Action and associated Completion Time are not met, the plant must be placed in a condition in which the LCO does not apply. If applicable, CORE ALTERATIONS and the movement of irradiated fuel assemblies in the secondary containment must be immediately suspended. Suspension of these activities shall not preclude completion of movement of a component to a safe position. Also, if applicable, actions must be immediately initiated to suspend OPDRVs in order to minimize the probability of a vessel draindown and the subsequent potential for fission product release. Actions must continue until OPDRVs are suspended.

LCO 3.0.3 is not applicable while in MODE 4 or 5. However, since irradiated fuel assembly movement can occur in MODE 1, 2, or 3, Required Action D.1 has been modified by a Note stating that LCO 3.0.3 is not applicable. If moving irradiated fuel assemblies while in MODE 4 or 5, LCO 3.0.3 would not specify any action. If moving fuel while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, in either case, inability to suspend movement of irradiated fuel assemblies would not be a sufficient reason to require a reactor shutdown.

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