April 23, 2001

Mr. David A. Christian
Senior Vice President and
Chief Nuclear Officer
Innsbrook Technical Center-2SW
5000 Dominion Blvd.
Glen Allen, Virginia 23060-6711

SUBJECT: NORTH ANNA POWER STATION, UNITS 1 AND 2: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING SECTIONS 3.4 AND 3.6 OF THE IMPROVED TECHNICAL SPECIFICATIONS (ITS) FOR NORTH ANNA POWER STATION, UNITS 1 AND 2 (TAC NOS. MB0799 AND MB0800)

Dear Mr. Christian:

The NRC staff reviewed your application dated December 11, 2000, to change the format and content of the Current Technical Specifications to be consistent with NUREG-1431, "Standard Technical Specifications - Westinghouse Plants," Revision 1, and certain generic changes to the NUREG.

On the basis of our review of the proposed changes for ITS Sections 3.4 and 3.6, we find that additional information identified in the enclosure is needed. This inquiry was discussed with Ms. Regina Borsh of your licensing staff on April 18, 2001, who agreed to provide the staff with a response within 60 days of the date of this letter.

Sincerely,

/RA/

Stephen R. Monarque, Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosure: Request for Additional Information

cc w/encl: See next page

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Mr. David A. Christian
Virginia Electric and Power Company

North Anna Power Station
Units 1 and 2

cc:
Mr. C. Lee Lintecum
County Administrator
Louisa County
P.O. Box 160
Louisa, Virginia 23093

Mr. David A. Heacock
Site Vice President
North Anna Power Station
P.O. Box 402
Mineral, Virginia 23117-0402

Mr. Donald P. Irwin, Esquire
Hunton and Williams
Riverfront Plaza, East Tower
951 E. Byrd Street
Richmond, Virginia 23219

Mr. Richard H. Blount, II
Site Vice President
Surry Power Station
Virginia Electric and Power Company
5570 Hog Island Road
Surry, Virginia 23883-0315

Dr. W. T. Lough
Virginia State Corporation
Commission
Division of Energy Regulation
P.O. Box 1197
Richmond, Virginia 23209

Robert B. Strobe, M.D., M.P.H.
State Health Commissioner
Office of the Commissioner
Virginia Department of Health
P. O. Box 2448
Richmond, Virginia 23218

Old Dominion Electric Cooperative
4201 Dominion Blvd.
Glen Allen, Virginia 23060

Mr. William R. Matthews
Vice President - Nuclear Operations
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, Virginia 23060-6711

Mr. Stephen P. Sarver, Director
Nuclear Licensing & Operations Support
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Blvd.
Glen Allen, Virginia 23060-6711

Office of the Attorney General
Commonwealth of Virginia
900 East Main Street
Richmond, Virginia 23219

Senior Resident Inspector
North Anna Power Station
U.S. Nuclear Regulatory Commission
1024 Haley Drive
Mineral, Virginia 23117

REQUEST FOR ADDITIONAL INFORMATION
NORTH ANNA POWER STATION, UNITS 1 AND 2
NORTH ANNA IMPROVED TECHNICAL SPECIFICATIONS (ITS)

ITS SECTION 3.4, REACTOR COOLANT SYSTEM

1. ITS (SR) 3.4.1.4
   Standard Technical Specification (STS) SR 3.4.1.4 Note
   Current Technical Specification (CTS) SR 4.2.5.2
   Justification for Deviation (JFD) 2

STS (SR) 3.4.1.4 has a note that states that the surveillance is not required to be performed until 24 hours after greater than or equal to 90 percent Rated Thermal Power (RTP). This note allows entrance into the APPLICABILITY statement of the Limiting Condition for Operation (LCO) (i.e., Mode 1) without the performance of the surveillance. JFD 2 states that it is not necessary to specify a frequency beyond 18 months. **Comment:** STS SR 3.4.1.4 note should be incorporated into ITS SR 3.4.1.4.

2. ITS 3.4.2
   JFD 2

JFD 2 for ITS 3.4.2 states that editorial changes were made for enhanced clarity or to be consistent with the Improved Standard Technical Specification (ISTS) Writers Guide. The markup copy of ITS 3.4.2 does not have “2" listed. **Comment:** Provide revised markup with appropriate placement of “2."

3. ITS SR 3.4.5.3
   STS SR 3.4.5.3
   CTS SR 4.4.1.2.1
   JFD 3
   Technical Specifications Task Force (TSTF)-265, Rev. 2

STS SR 3.4.5.3 requires the licensee to verify correct breaker alignment and indicated power are available to each required pump. This wording was approved via TSTF-265, Rev. 2. ITS SR 3.4.5.3 did not adopt TSTF-265, Rev. 2 in its entirety. ITS SR 3.4.5.3 would verify correct breaker alignment and indicated power to the required pump not in operation. The TSTF revised the SR to clarify that the surveillance is applicable to each required pump regardless of its operating status, since both pumps may be operating. **Comment:** TSTF-265, Rev. 2 should be adopted in its entirety.

4. ITS SR 3.4.6.3
   STS SR 3.4.6.3
   CTS SR 4.4.1.3.2
   JFD 2
   TSTF-265, Rev. 2

STS SR 3.4.6.3 requires the licensee to verify correct breaker alignment and indicated power are available to each required pump. This wording was approved via TSTF-265, Rev. 2. ITS SR 3.4.6.3 did not adopt TSTF-265, Rev. 2 in its entirety. ITS SR 3.4.6.3 would verify correct

breaker alignment and indicated power to the required pump not in operation. The TSTF revised the SR to clarify that the surveillance is applicable to each required pump regardless of its operating status, since both pumps may be operating. **Comment:** TSTF-265, Rev. 2 should be adopted in its entirety.

5. ITS SR 3.4.7.3
STS SR 3.4.7.3
CTS SR 4.4.1.3.2
JFD 4
TSTF-265, Rev. 2

STS SR 3.4.7.3 requires the licensee to verify correct breaker alignment and indicated power are available to each required pump. This wording was approved via TSTF-265, Rev. 2. ITS SR 3.4.7.3 did not adopt TSTF-265, Rev. 2 in its entirety. ITS SR 3.4.7.3 would verify correct breaker alignment and indicated power to the required pump not in operation. The TSTF revised the SR to clarify that the surveillance is applicable to each required pump regardless of its operating status, since both pumps may be operating. **Comment:** TSTF-265, Rev. 2 should be adopted in its entirety.

6. ITS SR 3.4.8.2
STS SR 3.4.8.2
CTS SR 4.4.1.3.2
JFD 2
TSTF-265, Rev. 2

STS SR 3.4.8.2 requires the licensee to verify correct breaker alignment and indicated power are available to each required pump. This wording was approved via TSTF-265, Rev. 2. ITS SR 3.4.8.2 did not adopt TSTF-265, Rev. 2 in its entirety. ITS SR 3.4.8.2 would verify correct breaker alignment and indicated power to the required pump not in operation. The TSTF revised the SR to clarify that the surveillance is applicable to each required pump regardless of its operating status, since both pumps may be operating. **Comment:** TSTF-265, Rev. 2 should be adopted in its entirety.

7. ITS 3.4.11, ACTIONS F1 & F2
STS 3.4.11, ACTIONS E1 & E2
CTS 3.4.3.2, ACTION A5
JFD 4

STS 3.4.11, ACTIONS E1 and E2, require that the associated block valve be closed and power removed from the associated block valve if two power operated relief valves (PORVs) are inoperable and not capable of being manually cycled. ITS 3.4.11 did not incorporate these action items. JFD stated that ACTIONS E1 and E2 are not incorporated since they are duplicate actions to ACTIONS C1 and C2. However, CTS 3.4.3.2, ACTION A5 has the same STS 3.4.11, ACTIONS E1 and E2 requirements. **Comment:** STS 3.4.11, ACTIONS E1 and E2 should be incorporated into ITS 3.4.11.

8. ITS SR 3.4.11.4
STS SR 3.4.11.3
CTS SR 4.4.3.2.1.b.2

STS SR 3.4.11.3 specifies the performance of a complete cycle of each solenoid air control valve and check valve on the air accumulators in PORV control systems. This wording is consistent with CTS SR 4.4.3.2.1.b.2. ITS SR 3.4.11.4 removes the word "air" from the SR. **Comment:** Provide justification for removal of word "air" in SR or make the ITS consistent with the STS and CTS. These changes also affect the ITS SR 3.4.11.4 Bases.

9. ITS 3.4.12, Note 2
STS 3.4.12, Note 2
CTS LCO 3.4.9.3
JFD 6
TSTF-285, Rev. 1

ITS 3.4.12, Note 2 does not incorporate the changes made by TSTF-285, Rev. 1. Specifically, TSTF-285, Rev. 1 revised the note to state that the accumulator may be unisolated when accumulator pressure is less than the maximum reactor coolant system (RCS) pressure. JFD 6 did not address why TSTF-285, Rev. 1 was not incorporated. Attachment 3 of the North Anna submittal indicates that TSTF-285, Rev. 1 was incorporated. **Comment:** Provide justification for not incorporating TSTF-285, Rev. 1 in its entirety, or incorporate TSTF-285, Rev. 1 into ITS 3.4.12, Note 2.

10. ITS 3.4.12, ACTION C
STS 3.4.12, ACTION C
CTS 3.4.9.3
JFD 6
Beyond Scope Item

JFD 6 states that the North Anna low-temperature overpressure protection (LTOP) design assumes that an accumulator does not inject into the RCS while in the LTOP regime. ITS 3.4.12, ACTION C has been modified to reflect the North Anna LTOP design. However, CTS 3.4.9.3 does not provide restrictions on the accumulator during LTOP applicability. Updated Final Safety Analysis Report (UFSAR) Section 5.2.2.2 does not discuss this assumption. **Comment:** Provide more information on the North Anna LTOP design assumptions and analyses.

11. ITS SR 3.4.12.3
STS SR 3.4.12.3
CTS 3.4.9.3
JFD 6

JFD 6 states that the North Anna LTOP design assumes that an accumulator does not inject into the RCS while in the LTOP regime. ITS SR 3.4.12.3 has been modified by a note to reflect the North Anna LTOP design. However, CTS 3.4.9.3 does not provide restrictions on the accumulator during LTOP applicability. UFSAR Section 5.2.2.2 does not discuss this assumption. **Comment:** Provide more information on the North Anna LTOP design assumptions and analyses.

12. ITS LCO 3.4.12
STS LCO 3.4.12
CTS LCO 3.4.9.3
JFD 7
TSTF-280, Rev. 1

JFD 7 notes that TSTF-280, Rev. 1 was not fully adopted due to changes made to the LCO to reflect the North Anna analysis and design. However, the only apparent TSTF-280, Rev. 1 change not adopted is "one of the following pressure relief capabilities:" which replaces "either a or b below." Attachment 3 of the North Anna submittal indicates that TSTF-280, Rev. 1 was incorporated. **Comment:** TSTF-280, Rev. 1 should be incorporated in its entirety.

13. ITS SR 3.4.17.1 and SR 3.4.17.2
STS SR 3.4.17.1
CTS SR 4.4.1.2
JFD 1

ITS SR 3.4.17.1 and SR 3.4.17.2 propose to split STS SR 3.4 17.1 into two SRs. This change appears to be generic in nature. **Comment:** A TSTF traveler should be submitted to generically change the STS to split SR 3.4.17.1 into two SRs. These changes also affect the ITS SR 3.4.17.1 Bases.

14. ITS LCO 3.4.1 BASES
STS LCO 3.4.1 BASES
JFD 1

JFD 1 proposes to not include two paragraphs from the STS LCO 3.4.1 BASES. These paragraphs provide plant-specific information on measurement error on RCS flow rate and fouling. The JFD did not provide adequate information as to why these two paragraphs were not included into the ITS LCO 3.4.1 BASES. **Comment:** Provide justification for not including these two paragraphs or incorporate into ITS BASES.

15. ITS SR 3.4.1.4 BASES
STS SR 3.4.1.4 BASES
JFD 5

ITS SR 3.4.1.4 BASES do not include the discussion about the SR NOTE. This note was not incorporated into ITS SR 3.4.1.4. As stated in question 3.4-01, this note should be incorporated into ITS SR 3.4.1.4. **Comment:** Incorporate discussion of SR NOTE into ITS SR 3.4.1.4 BASES.

16. ITS SR 3.4.2.1 BASES

Insert for ITS SR 3.4.2.1 BASES is missing an 's' on Surveillance. The sentence should read "... and is consistent with other routine Surveillances which are typically performed once per shift." **Comment:** Add 's' to Surveillance.

17. ITS 3.4.5, ACTIONS C1, C2, and C3 BASES

The BASES for ITS 3.4.5, ACTIONS C1, C2, and C3 were modified to delete the words "must be suspended." With this deletion, the BASES are not consistent with the ITS ACTIONS and STS BASES. **Comment:** The words "must be suspended" need to be reinserted into the ITS 3.4.5, ACTIONS C1, C2, and C3 BASES.

18. ITS SR 3.4.5.3 BASES
TSTF-265, Rev. 2

STS SR 3.4.5.3 requires the licensee to verify correct breaker alignment and indicated power are available to each required pump. This wording was approved via TSTF-265, Rev. 2. ITS SR 3.4.5.3 BASES did not adopt TSTF-265, Rev. 2 in its entirety. ITS SR 3.4.5.3 would verify correct breaker alignment and indicated power to the required pump not in operation. The TSTF revised the SR to clarify that the surveillance is applicable to each required pump regardless of its operating status, since both pumps may be operating. **Comment:** TSTF-265, Rev. 2 should be adopted in its entirety.

19. ITS 3.4.6 APPLICABILITY BASES

ITS 3.4.6 APPLICABILITY BASES proposed to change the BASES wording from "meet single failure considerations" to "provide redundancy for heat removal." The JFD number beside the proposed change is 6. However, JFD 6 does not exist for this section. **Comment:** Provide JFD for proposed change.

20. ITS 3.4.6, ACTIONS B1 and B2 BASES
TSTF-263, Rev. 3

ITS 3.4.6, ACTIONS B1 and B2 BASES proposed word changes to the BASES. It is stated that the proposed changes are consistent with TSTF-263. Some of the proposed changes are not consistent with TSTF-263 and no JFD was provided. **Comment:** TSTF-263 wording should be retained; otherwise, provide justification for proposed changes. If the proposed changes are generic, then a TSTF traveler should be proposed.

21. ITS SR 3.4.6.3 BASES
TSTF-265, Rev. 2

STS SR 3.4.6.3 requires the licensee to verify correct breaker alignment and indicated power are available to each required pump. This wording was approved via TSTF-265, Rev. 2. ITS SR 3.4.6.3 BASES did not adopt TSTF-265, Rev. 2 in its entirety. ITS SR 3.4.6.3 would verify correct breaker alignment and indicated power to the required pump not in operation. The TSTF revised the SR to clarify that the surveillance is applicable to each required pump regardless of its operating status, since both pumps may be operating. **Comment:** TSTF-265, Rev. 2 should be adopted in its entirety.

22. ITS 3.4.7 ACTIONS C1 and C2 BASES
TSTF-263, Rev. 3

ITS 3.4.7, ACTIONS C1 and C2 BASES proposed word changes to the BASES. It is stated that the proposed changes are consistent with TSTF-263. However, not all of the changes as described in TSTF-263, Rev. 3 were incorporated. Specifically, the first part of the first sentence should state “If a required RHR loop is not in operation,...” ITS BASES state “If no required RHR loop is in operation,...” **Comment:** TSTF-263, Rev. 3 wording should be retained; otherwise, provide justification for proposed changes.

23. ITS 3.4.7, ACTIONS C1 and C2
TSTF-263, Rev. 3

ITS 3.4.7, ACTIONS C1 and C2 BASES proposed word changes to the BASES. It is stated that the proposed changes are consistent with TSTF-263. Some of the proposed changes are not consistent with TSTF-263. The JFD (JFD 4) that was provided was not sufficient to justify the proposed changes. **Comment:** TSTF-265 wording should be retained; otherwise, provide justification for proposed changes. If the proposed changes are generic, then a TSTF traveler should be proposed.

24. ITS SR 3.4.7.3 BASES
TSTF-265, Rev. 2

STS SR 3.4.7.3 requires the licensee to verify correct breaker alignment and indicated power are available to each required pump. This wording was approved via TSTF-265, Rev. 2. ITS SR 3.4.7.3 BASES did not adopt TSTF-265, Rev. 2 in its entirety. ITS SR 3.4.7.3 would verify correct breaker alignment and indicated power to the required pump not in operation. The TSTF revised the SR to clarify that the surveillance is applicable to each required pump regardless of its operating status, since both pumps may be operating. **Comment:** TSTF-265, Rev. 2 should be adopted in its entirety.

25. ITS 3.4.8, ACTIONS B1 and B2 BASES
TSTF-263, Rev. 3

ITS 3.4.8, ACTIONS B1 and B2 BASES proposed word changes to the BASES. It is stated that the proposed changes are consistent with TSTF-263. Some of the proposed changes are not consistent with TSTF-263 and no JFD was provided. **Comment:** TSTF-263 wording should be retained; otherwise, provide justification for proposed changes. If the proposed changes are generic, then a TSTF traveler should be proposed.

26. ITS SR 3.4.8.2 BASES
TSTF-285, Rev. 2

STS SR 3.4.8.2 requires the licensee to verify correct breaker alignment and indicated power are available to each required pump. This wording was approved via TSTF-265, Rev. 2. ITS SR 3.4.8.2 BASES did not adopt TSTF-265, Rev. 2 in its entirety. ITS SR 3.4.8.2 would verify correct breaker alignment and indicated power to the required pump not in operation. The TSTF revised the SR to clarify that the surveillance is applicable to each required pump regardless of its operating status, since both pumps may be operating. **Comment:** TSTF-265, Rev. 2 should be adopted in its entirety.

27. ITS 3.4.11, ACTIONS D1 and D2 BASES
STS 3.4.11, ACTIONS C1 and C2 BASES

The proposed wording changes to the ITS 3.4.11, ACTIONS D1 and D2 BASES (mark up copy) is not consistent with the STS and ITS BASES. The markup copy of ITS states "... 72 hours, the PORV may be returned to manual control." The STS BASES states "... 72 hours, the power will be restored to the PORV." The clean copy of the ITS BASES states "... 72 hours, the PORV may be returned to automatic control." No JFD was provided for the changes. **Comment:** Provide justification for the correct proposed change or retain the STS BASES.

28. ITS 3.4.11, ACTIONS E1 and E2 BASES
STS 3.4.11, ACTIONS E1 and E2 BASES

STS 3.4.11, ACTIONS E1 and E2 require that the associated block valve be closed and power removed from the associated block valve if two PORVs are inoperable and not capable of being manually cycled. ITS 3.4.11 did not incorporate these action items. CTS 3.4.3.2, ACTION A5 has the same STS 3.4.11, ACTIONS E1 and E2 requirements. **Comment:** STS 3.4.11, ACTIONS E1 and E2 BASES should be incorporated into ITS 3.4.11 BASES.

29. ITS SR 3.4.15.2 BASES

ITS SR 3.4.15.2 BASES proposed to change the wording of the last sentence, which differs from the STS. The proposed wording states that "the Frequency is based on the staff recommendation for increasing the availability of radiation monitors according to NUREG-1366 (Ref. 3)." **Comment:** A TSTF traveler should be submitted to generically change the STS BASES in SR 3.4.15.2.

30. ITS 3.4.16 BASES JFDs

The list of JFDs for the ITS 3.4.16 BASES lists JFD 5 and JFD 6. However, these JFDs do not appear in the ITS 3.4.16 BASES markup. **Comment:** Specify where these changes occur.

31. CTS LCO 3.4.6.1
ITS LCO 3.4.15
ITS 3.4.15 BACKGROUND BASES

CTS requires three diverse methods of leakage detection to be operable in Modes 1, 2, 3, and 4. ITS LCO 3.4.15 only requires two diverse methods of leakage detection. The proposed insert 1 to ITS 3.4.15 BASES states that the "UFSAR Chapter 3 (Ref. 1) requires compliance with Regulatory Guide 1.45." However, the regulatory position of Regulatory Guide (RG) 1.45 states that "at least three separate detection methods should be employed." The proposed change from CTS LCO 3.4.6.1 to ITS LCO 3.4.15 is not consistent with the guidance in RG 1.45 or the proposed ITS BASES. **Comment:** The current licensing basis as specified in the CTS should be maintained.

ITS SECTION 3.6, CONTAINMENT SYSTEMS

3.6.1 Containment

1. Discussion of Changes (DOC) A.8 (CTS 1.0)
CTS 1.6
CTS 3/4.6
ITS 3.6.1, 3.6.2, 3.6.3, and Associated Bases

CTS 1.6 defines CONTAINMENT INTEGRITY. A markup of CTS 1.6 is provided in the CTS markup of CTS 1.0, but not in the markup of CTS 3.6. DOC A.8 (CTS 1.0) states that the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. This is not entirely correct. The DOC is incorrect in that the definition is not deleted but is relocated to various Bases in ITS 3.6, which is a Less Restrictive (LA) change. In addition, there are Administrative changes associated with CTS 1.6, which deal with the requirements of the definition being used as the basis for certain SRs in ITS 3.6.1, 3.6.2 and 3.6.3. CTS 1.6, Item 1.6.1 is the basis for ITS SRs 3.6.3.1, 3.6.3.2, 3.6.3.3,and 3.6.3.4; Item 1.6.3 is the basis for ITS 3.6.2, and Item 1.6.4 is the basis for ITS SRs 3.6.1.1 and 3.6.1.2. Refer to Comment Numbers 3.6.1-2 and 3.6.1-3. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications for these Administrative and Less Restrictive (LA) changes.

2. DOC A.8 (CTS 1.0)
CTS 1.6.2
ITS B3.6.1 Bases - BACKGROUND

CTS 1.6 defines CONTAINMENT INTEGRITY. A markup of CTS 1.6 is provided in the CTS markup of CTS 1.0, but not in the markup of CTS 3.6. DOC A.8 (CTS 1.0) states that the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. This justification is incorrect. CTS 1.6.2 states that “All equipment hatches are closed and sealed.” ITS B3.6.1 Bases - BACKGROUND states the following: “To maintain this leak tight barrier:. All equipment hatches are closed.” The requirement for sealing the equipment hatches has been deleted. No justification is provided for this Less Restrictive (L) change. **Comment:** Provide a discussion and justification for this Less Restrictive (L) change.

3. DOC A.8 (CTS 1.0)
Bases JFD 2
CTS 1.6.5
STS B3.6.1 Bases - BACKGROUND
ITS B3.6.1 Bases - BACKGROUND

CTS 1.6 defines CONTAINMENT INTEGRITY. A markup of CTS 1.6 is provided in the CTS markup of CTS 1.0, but not in the markup of CTS 3.6. DOC A.8 (CTS 1.0) states that the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. DOC A.8 is incorrect. CTS 1.6.5 states that “The sealing mechanism associated with each penetration (e.g., welds, bellows, or O-rings) is OPERABLE.” STS B3.6.1.1 Bases - BACKGROUND has a similar statement defining the leaktight barrier. ITS B3.6.1.1 Bases - BACKGROUND deletes this statement based on changes made to the ISTS (Bases JFD 2). Since CTS 1.6.5 is contained in the CTS and no changes to the ISTS were made with regards to this item, it needs to be

included in ITS B3.6.1.1 Bases - BACKGROUND. **Comment:** Revise ITS B3.6.1.1 Bases - BACKGROUND to include CTS 1.6.5 or provide additional discussion and justification for its deletion based on system design, operational constraints, or current licensing basis.

4. DOC A.1
Bases JFD 3
CTS 4.6.1.1.c
CTS 4.6.1.1.d
CTS 3/4.6.1.2
ITS SR 3.6.1.1 and Associated Bases

CTS 4.6.1.1.c, 4.6.1.1.d, and 4.6.1.2 require leak rate testing in accordance with the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Appendix J, Option B. STS SR 3.6.1.1 requires the visual examination and leakage rate testing be performed in accordance with 10 CFR 50 Appendix J as modified by approved exemptions. ITS SR 3.6.1.1 modifies STS SR 3.6.1.1 to conform to CTS 4.6.1.2 as modified in the CTS markup. The STS is based on Appendix J, Option A while the CTS and ITS are based on Appendix J, Option B. Changes to the STS with regards to Option A versus Option B are covered by TSTF-52, Rev. 3. The changes to ITS 3.6.2 are in conformance with TSTF-52-Rev.3; however, ITS 3.6.1, 3.6.3, and the Bases for ITS 3.6.1 and 3.6.3 may not be in conformance with TSTF-52. Refer to Comment Numbers 3.6.1-5, 3.6.1-6, 3.6.2.7 and 3.6.3-2. **Comment:** Licensee should revise its submittal to conform to TSTF-52, Rev. 3.

5. DOC A.1
DOC A.26 (CTS 6.0)
Bases JFD 3
CTS 4.6.1.1.c
CTS 4.6.1.1.d
STS SR 3.6.1.1, SR 3.6.2.1 and SR 3.6.3.7
ITS 3.6.1 and 3.6.3 and Associated Bases
ITS 5.5.15

CTS 4.6.1.1.c and 4.6.1.1.d require specific leak rate tests for the containment equipment hatch and the butterfly isolation valves in the containment purge and the containment vacuum ejector lines. The CTS markup of CTS 4.6.1.1.c and 4.6.1.1.d in CTS 3.6 refers the reviewer to ITS 5.5.15 for changes associated with these specifications. The CTS markup for ITS 5.5.15 relocates these two specifications out of the ITS to the Containment Leakage Rate Testing Program. This change is justified by DOC A.26 (CTS 6.0). This change is incorrect. ITS 5.5.15 does not contain the specifics of these two specifications; the specifics are contained in the body of the program, which is outside of TS. Thus the change, if acceptable, would be a Less Restrictive (LA) change. However, the staff concludes that these two specifications may need to be retained in the North Anna ITS. Amendment 196 and 177 to the North Anna Unit 1 and Unit 2 TS respectively, dated February 9, 1996, implemented 10 CFR 50 Appendix J, Option B. The amendment change approved a Containment Leakage Rate Testing Program based on 10 CFR 50 Appendix J, Option B that was outside of the CTS and did not include these two specifications in that program, but retained them in CTS 4.6.1.1. Since these specifications contain specific testing requirements not contained in 10 CFR 50 Appendix J, Option B, they probably should be retained in the ITS as SRs in ITS 3.6.1 and 3.6.3. Since the

STS does not contain a specific SR for equipment hatch leakage other than what may be implied by STS SR 3.6.1.1 and SR 3.6.2.1, it may be possible to provide a justification to relocate CTS 4.6.1.1.c out of the ITS. However, this change would be considered as a beyond scope of review item for this conversion. As for CTS 4.6.1.1.d, the STS does contain a SR on purge valve leakage. TSTF-52 Rev. 3 did not remove or relocate the purge valve leakage SR (STS SR 3.6.3.7). Refer to Comment Number 3.6.3-2 for justification for including this specification in the ITS. Also, refer to Comment Numbers 3.6.1-4 and 3.6.1-6. **Comment:** Revise the CTS/ITS markup to retain these two specifications. Provide the appropriate discussions and justifications for any changes made in converting to the ITS.

6. Bases JFD 3
   STS B3.6.1 Bases - LCO and SR 3.6.1.1
   ITS B3.6.1 Bases - LCO and SR 3.6.1.1

STS B3.6.1 Bases - LCO and SR 3.6.1.1 contain references to containment purge valve leak rate testing. ITS B3.6.1 Bases - LCO and SR 3.6.1.1 delete these references. In light of the discussions in Comment Numbers 3.6.1-4, 3.6.1-5 and 3.6.3-2, these references should be retained in the ITS. **Comment:** Revise the ITS markup to retain the purge valve references.

3.6.2 Containment Air Locks

7. DOC A.8 (CTS 1.0)
   CTS 1.6.3
   ITS 3.6.2 and Associated Bases

Comment: Refer to Comment Number 3.6.1-1.

8. DOC A.7
   DOC L.2
   DOC L.3
   CTS 3.6.1.3 ACTIONS
   ITS 3.6.2 Conditions A, B and Associated Bases

The markup of CTS 3.6.1.3 ACTIONS is modified by the addition of several of ITS notes. DOCs A.7 and L.3 discuss the addition of Required Actions A and B, Note 1 and Required Actions A and B Note 2 respectively. The CTS markup for North Anna Unit 1 shows this addition as applicable to any ITS 3.6.2 Condition while the markup for Unit 2 shows this addition as applicable to Condition A only. In addition, DOC L.2 discusses the addition of ITS 3.6.2 Action B to CTS 3.6.1.3 ACTIONS, which would imply that the notes associated with ACTION B would be covered by this DOC. Thus the CTS markup for Unit 1 should be the same as the Unit 2 markup, and DOC A.7 and L.3 should be revised to reflect this. Refer to Comment Numbers 3.6.2-3, 3.6.2-4, and 3.6.2-6 for additional concerns with regards to the addition of ITS 3.6.2 Condition B and its associated notes, and Comment Number 3.6.2-5 for additional concerns with regards to ITS 3.6.2 Required Action A Note 2. **Comment:** Revise the CTS markup as discussed above and revise the discussions and justifications appropriately.

9. DOC L.2
CTS 3.6.1.3 ACTION b
ITS 3.6.2 ACTION B and Associated Bases

DOC L.2 states the following: "CTS 3.6.1.3 does not contain a specific Action addressing an inoperable air lock interlock mechanism." This is an incorrect statement. For an inoperable air lock interlock mechanism, CTS 3.6.1.3 ACTION b is entered, which requires that the air lock be restored to OPERABLE status within 24 hours or the plant is shut down. In converting CTS 3.6.1.3 ACTION b to ITS 3.6.2 ACTION B, all the changes made, including the addition of the associated notes, would still be a Less Restrictive (L) change. Refer to Comment Numbers 3.6.2-2 and 3.6.2-6. **Comment:** Revise DOC L.2 to correct the erroneous statement.

10. DOC L.2
DOC L.4
CTS 3.6.1.3 ACTIONS
ITS 3.6.2 Required Actions A.3 and B.3 Note and Associated Bases

DOC L.4 discusses the addition of ITS 3.6.2 Required Actions A.3 and B.3 Note to CTS 3.6.1.3 ACTIONS. However, the CTS markup only shows the addition of ITS 3.6.2 Required Action A.3 Note. DOC L.2 discusses the addition of ITS 3.6.2 Action B to CTS 3.6.1.3 ACTIONS, which would imply that the notes associated with ACTION B would be covered by this DOC. Refer to Comment Number 3.6.2-2 for a similar type of concern. **Comment:** Revise the CTS markup and DOCs to reflect this change correctly.

11. DOC L.3
JFD 2
Bases JFD 7
CTS 3.6.1.3 ACTIONS
STS 3.6.2 Required Action A Note 2
ITS 3.6.2 Action Note 1, Required Action A Note 2 and Associated Bases

DOC L.3 states the following: "CTS 3.6.1.3 does not provide an allowance for entry or exit through an air lock except for repair to the inner air lock door, if inoperable." STS 3.6.2 Required Action A Note 2 states, 'Entry and exit is permissible for 7 days under administrative controls if both air locks are inoperable.'" The Note 2 wording in the DOC is the same as the wording for STS 3.6.2 Required Action A Note 2. However, the ITS markup for ITS 3.6.2 Required Action A Note 2 deletes the following STS/DOC L.3 words: "if both air locks are inoperable." The Bases is modified to reflect this change. This change is unacceptable and changes the intent of the note. The STS Note only limits entry and exit when both air locks are inoperable; otherwise, ITS 3.6.2 ACTION Note 1 applies. The proposed ITS markup change would limit entry and exit whether one airlock or both airlocks are inoperable. **Comment:** Revise the ITS markup to retain the STS wording.

12. DOC L.3
CTS 3.6.1.3 ACTIONS
ITS 3.6.2 Required Actions A and B Note 2 and Associated Bases

DOC L.3 states the following: "CTS 3.6.1.3 does not provide an allowance for entry or exit through an air lock except for repair to the inner air lock door, if inoperable... ITS 3.6.2 Required Action B Note 2 states, 'Entry and exit of containment is permissible under the control of a dedicated individual.' This changes CTS by allowing entry and exit of containment under specified criteria for any reason if both air locks are inoperable." This last sentence is not entirely correct. While it is a true statement with regards to ITS 3.6.2 Required Action A Note 2 as modified by Comment Number 3.6.2-5, it is not true for ITS 3.6.2 Required Action B Note 2. ITS 3.6.2 Required Action B Note 2 and its associated Bases do not limit the Note's applicability to only both air locks with inoperable interlock mechanisms. The note also applies if one air lock interlock mechanism is inoperable. **Comment:** Revise DOC L.3 to correct this error.

13. DOC L.5
CTS 4.6.1.3.a
ITS 5.5.15.f

CTS 4.6.1.3.a states that "The provisions of specification 4.0.2 are not applicable." The CTS markup of CTS 4.6.1.3.a shows this statement as being deleted by DOC L.5. DOC L.5 states this change allows ITS SR 3.0.2 to be applied to ITS SR 3.6.2.1. This is incorrect. The surveillance frequency for CTS 4.6.1.3.a and its corresponding ITS SR 3.6.2.1 are governed by the requirements of the Containment Leakage Rate Testing Program and 10 CFR 50 Appendix J, Option B. Thus the provisions of CTS 4.0.2/ITS SR 3.0.2 are not applicable. This is specified in ITS 5.5.15.f, which states that "Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50 Appendix J." This ITS statement and the CTS statement in CTS 4.6.1.3.a are the equivalent as agreed to in the development of TSTF-52 Rev. 3. Thus the change would be an Administrative change in moving the statement from CTS 4.6.1.3.a to ITS 5.5.15.f. **Comment:** Revise the CTS markup and provide a discussion and justification for this Administrative change.

14. Bases JFD 8
STS B3.6.2 Bases - LCO
ITS B3.6.2 Bases - LCO

The fourth sentence in the second paragraph of STS B3.6.2 Bases - LCO states the following: "This provision ensures that...." The ITS markup of ITS B3.6.2 Bases - LCO modifies this sentence by substituting Insert 2 for "This," adding an "s" to "provision" and deleting the "s" in "ensures." However, insert 2 states "Operation of .... These provisions." Thus the markup ends with two "provisions" back-to-back, which results in the sentence not making sense. **Comment:** Correct this discrepancy.

15. STS SR 3.6.2.2
ITS SR 3.6.2.2 and Associated Bases

STS SR 3.6.2.2 requires verifying only one door in the air lock will open at a time at a 6-month interval. The interval is modified in ITS SR 3.6.2.2 from 6 months to 24 months. This modification is in accordance with TSTF-17 Rev. 2; however, the Bases changes are not in accordance with TSTF-17 Rev. 2. **Comment:** Revise the ITS Bases to be in accordance with TSTF-17 Rev. 2 or justify the deviations.

16. CTS 4.6.1.3.a
ITS SR 3.6.2.1 Notes and Associated Bases

ITS SR 3.6.2.1 contains two notes. CTS 4.6.1.3.a does not contain these notes, and the CTS markup does not show their addition. **Comment:** Revise the CTS markup and provide the appropriate discussions and justification for the addition of ITS SR 3.6.2.1 Notes 1 and 2.

3.6.3 Containment Isolation Valves

17. DOC A.8 (CTS 1.0)
CTS 1.6.1
ITS SRs 3.6.3.1, 3.6.3.2, 3.6.3.3, 3.6.3.4 and Associated Bases

Refer to Comment Number 3.6.1-1.

18. DOC A.1
JFD 3
Bases JFD 2
CTS 4.6.1.1.d
STS 3.6.3, ACTIONS A, B, D, and E, SR 3.6.3.7 and Associated Bases
ITS 3.6.3, ACTIONS A, and B and Associated Bases

CTS 4.6.1.1.d requires specific leak rate tests for the butterfly isolation valves in the containment purge and the containment vacuum ejector lines. The CTS markup of CTS 4.6.1.1.d in CTS 3.6 refers the reviewer to ITS 5.5.15 for changes associated with this specification. The CTS markup for ITS 5.5.15 relocates this specification out of the ITS to the Containment Leakage Rate Testing Program. This change is justified by DOC A.26 (CTS 6.0). This change is incorrect. ITS 5.5.15 does not contain the specifics of this specification; the specifics are contained in the body of the program, which is outside of TS. Thus the change, if acceptable, would be a Less Restrictive (LA) change. However, the staff concludes that this specification needs to be retained in the North Anna ITS. Amendments 196 and 177 to the North Anna Unit 1 and Unit 2 TS respectively, dated February 9, 1996, implemented 10 CFR 50 Appendix J, Option B. The amendment change approved a Containment Leakage Rate Testing Program based on 10 CFR 50 Appendix J, Option B that was outside of the CTS, and did not include this specification in that program, but retained it in CTS 4.6.1.1.d. Since this specification contained specific testing requirements not contained in 10 CFR 50 Appendix J, Option B, it should be retained in the ITS as an SR in ITS 3.6.3. The STS does contain an SR on purge valve leakage. TSTF 52 Rev. 3 did not remove or relocate the purge valve leakage SR (STS SR 3.6.3.7). In fact, STS SR 3.6.3.7 was retained because the testing requirements

went beyond the test requirements of 10 CFR 50 Appendix J. This STS SR deals with leakage testing of purge valves with resilient seals. It would seem that CTS 4.6.1.1.d was retained because the valves had resilient seals, but this is not stated in CTS 4.6.1.1.d, the Bases for ITS 3.6.3, or in the DOCs and JFDs. If these valves do have resilient seals, then CTS 4.6.1.1.d needs to be retained in the ITS. Even if they do not have resilient seals, the specification needs to be retained because of the special testing requirements which go beyond the requirements of 10 CFR 50 Appendix J. Thus, STS SR 3.6.3.7 needs to be used or modified to reflect plant-specific testing requirements. Since this STS SR is being added to the ITS, an appropriate ACTION needs to be provided for when the SR is not met. This ACTION would be STS 3.6.3 ACTION D or E as modified by TSTF-207 Rev. 5 and any plant-specific requirements. This may result in modifications/changes to CTS 3.6.1.1 ACTION. In addition, ITS 3.6.3 Conditions A and B will need to be revised to conform to TSTF-207, Rev. 5. **Comment:** Revise the CTS/ITS markup to retain CTS 4.6.1.1.d and provide the appropriate discussions and justifications for all the changes associated with this SR retention.

19. DOC A.2
DOC A.3
CTS 3.6.1.1 ACTIONS
CTS 4.6.1.1.a
ITS 3.6.1.3, ACTIONS, SR 3.6.3.1, 3.6.3.2 and Associated Bases

CTS 4.6.1.1.a verifies that all penetrations not capable of being closed by OPERABLE automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions. The corresponding ITS SRs for this CTS surveillance are ITS SR 3.6.3.1 for valves outside containment and ITS SR 3.6.3.2 for valves inside containment. If CTS 4.6.1.1.a cannot be met, the ACTIONS of CTS 3.6.1.1 are entered, which require restoration of valve OPERABILITY within 1 hour or shutdown within the following 36 hours. If ITS SR 3.6.3.1 or ITS SR 3.6.3.2 cannot be met, the ACTIONS of ITS 3.6.3 are entered, which allow for one valve inoperable between 4 hours and 72 hours depending on the type of penetration to restore valve OPERABILITY before shutdown commences. This Less Restrictive (L) change, along with the addition of ITS 3.6.3 Action Notes 3 and 4, to the CTS is not justified. Refer to Comment Number 3.6.3-6 for ACTION Note 2. **Comment:** Revise the CTS markup to show this Less Restrictive (L) change and provide the appropriate discussions and justifications.

20. DOC A.3
JFD 6
Bases JFD 5
CTS 3.6.3.1 ACTIONS
CTS 3.6.5.1 ACTION
STS 3.6.3 ACTION Note 4 and Associated Bases
ITS 3.6.3 ACTION Note 4 and Associated Bases

CTS 3.6.3.1 ACTIONS and 3.6.5.1 ACTION have been modified in the CTS markup by the addition of ITS 3.6.3 ACTION Note 4. STS 3.6.3 ACTION Note 4 states the following: “Enter applicable Conditions...when isolation valve leakage results in exceeding....” ITS 3.6.3 ACTION Note 4 modifies the STS wording by deleting “isolation valve” and adding “for a penetration flow path” between “leakage” and “results”. The justification for this change (JFD 6) states that it is

a clarification of the intent of the note. The staff concludes that the change is generic, as well as the associated Bases change, which does not conform to Edit 17, and is beyond the scope of review for this conversion. **Comment:** Delete this generic change.

21. DOC A.5
CTS 3.6.3.1 ACTIONS
CTS 3.6.5.1 ACTION
ITS 3.6.3 ACTION B and Associated Bases

DOC A.5 states the following: "CTS 3.6.3.1 and CTS 3.6.5.1 do not include any Conditions and Required Actions for one or more penetration flow paths with two containment isolation valves inoperable. CTS 3.0.3 would be entered for this Condition." This is the basis for considering the addition of ITS 3.6.3 ACTION B as an Administrative change. While the staff agrees that the addition of ITS 3.6.3 ACTION B to CTS 3.6.5.1 ACTIONS is an Administrative change as justified in DOC A.5, it does not agree that the addition of ITS 3.6.3 ACTION B to CTS 3.6.3.1 ACTIONS is an Administrative change, but is a Less Restrictive (L) change. CTS 3.6.3.1 ACTIONS state "With one or more of the isolation valves inoperable, maintain at least one isolation valve OPERABLE in the affected penetration that is open." For penetrations with two isolation valves inoperable, one cannot maintain at least one isolation valve OPERABLE, thus the default condition is CTS 3.6.3.1 ACTION d, an immediate shutdown. Thus the change to CTS 3.6.3.1 ACTIONS of adding ITS 3.6.3 ACTION B is a Less Restrictive (L) change (0 hour to 1 hour to isolate). **Comment:** Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

22. DOC A.8
CTS 3.6.1.1 ACTION
CTS 3.6.3.1 ACTIONS
CTS 3.6.5.1 ACTION
ITS 3.6.3, ACTIONS NOTE 2

CTS 3.6.3.1 ACTIONS and CTS 3.6.5.1 ACTION are modified by the addition of ITS 3.6.1.3 ACTIONS Note 2. This change is characterized as an Administrative change (DOC A.8). While this change is acceptable for CTS 3.6.3.1 and 3.6.5.1, it still needs to be addressed for the changes imposed on CTS 3.6.1.1 as a result of Comment Number 3.6.3-3. For that change, the addition of ITS 3.6.3 ACTIONS Note 2 becomes a Less Restrictive (L) change, because nothing in the ACTION statement of 3.6.1.1 implies separate condition entry. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications for this Less Restrictive (L) change. Refer to Comment Number 3.6.3-3.

23. DOC A.9
CTS 4.6.5 1.1
ITS SR 3.6.3.1

DOC A.9 discusses and justifies the changes to CTS 4.6.5.1.1 in converting this CTS SR to ITS SR 3.6.3.1. DOC A.9 states in the second sentence: "ITS SR 3.6.5.1 does not...." ITS SR 3.6.5.1 deals with containment air temperature, not containment isolation valves. **Comment:** Correct this discrepancy.

24. DOC L.5
CTS 4.6.5.1.1
CTS 4.6.5.1.2
ITS SR 3.6.3.1, SR 3.6.3.2 and Associated Bases

CTS 4.6.5.1.1 and 4.6.5.1.2 verify that the steam jet air ejector suction line isolation valves are closed. The corresponding ITS SRs based on the assumption that these valves are manual valves (Refer to Comment Number 3.6.3-8) are ITS SR 3.6.3.1 and 3.6.3.2, respectively. Both of these ITS SRs contain a note which allow valves in high radiation areas to be verified closed administratively. The CTS markup of CTS 4.6.5.1.1 and 4.6.5.1.2 does not show the addition of this note. **Comment:** Revise the CTS markup to show the addition of this SR Note and provide a discussion and justification for this Less Restrictive (L) change.

25. DOC L.6
CTS 4.6.1.1.a and Associated* Footnote
ITS SR 3.6.3.2 and Associated Bases

CTS 4.6.1.1.a verifies that all primary containment penetrations not capable of being closed by OPERABLE automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their closed position on a 31-day frequency except valves that are locked, sealed or otherwise secured in the closed position and are inside containment. These valves are verified during COLD SHUTDOWN except such verification need not be performed more often than once every 92 days. The corresponding ITS SR for this CTS surveillance (valves inside containment) is ITS SR 3.6.3.2. DOC L.6 justifies adding the “locked, sealed...” or otherwise secured requirement to CTS 4.6.1.1.a, but does not discuss or justify changing the associated *Footnote requirement from verifying the locked, sealed, or otherwise secured valves closed to not locked, sealed or otherwise secured and the change in frequency from 31 days for valves inside containment that are not locked, sealed or otherwise secured in the closed position to the CTS/ITS frequency of “prior to entering MODE 2...previous 92 days.” This change is a less Restrictive (L) change. **Comment:** Provide additional discussion and justification for this Less Restrictive (L) change.

26. DOC L.6
CTS 4.6.1.1.a
CTS 4.6.5.1.2
ITS SR 3.6.3.2 and Associated Bases

CTS 4.6.5.1.2 verifies that the steam jet air ejector suction line isolation valves inside containment are closed prior to increasing the RCS temperature above 200°F. The corresponding ITS SR based on the assumption that these valves are manual valves (Refer to Comment Number 3.6.3-8) is ITS SR 3.6.3.2. ITS SR 3.6.3.2 verifies that manual containment isolation valves inside containment that are required to be closed are closed prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days except for valves that locked, sealed or otherwise secured. The CTS markup does not modify CTS 4.6.5.1.2 to show the Less Restrictive (L) changes to the frequency (Prior to entering MODE 4 from MODE 5 to prior to entering MODE 4 from MODE 5 if not performed within previous 92 days) and exempting locked, sealed or otherwise secured valves. DOC L.6 provides some of this discussion and justification but only for CTS 4.6.1.1.a. Refer to Comment Number 3.6.3-10.

Comment: Revise the CTS markup and provide the appropriate discussions and justifications for these Less Restrictive (L) changes.

27. JFD 3
Bases JFD 2
CTS 4.6.3.1.2.c
CTS 4.6.3.1.2.d
STS SR 3.6.3.1, SR 3.6.3.2 and Associated Bases
ITS 3.6.3 ACTION Note 1, SR 3.6.3.1, SR 3.6.3.2, SR 3.6.3.5 and Associated Bases

STS SR 3.6.3.1 and SR 3.6.3.2 verify that the containment purge valves are either sealed closed or closed, respectively, and allowed to be opened under specific conditions. The ITS markup of ITS 3.6.3 does not include these two STS SRs. The justification used to delete these SRs (JFD 3) states that the purge valves are not opened in MODES 1, 2, 3, or 4, "and the CTS treats the purge valves in the same manner as other containment isolation valves." The staff concludes that some form of STS SR 3.6.3.1 or SR 3.6.3.2 needs to be included in ITS 3.6.3. This is based on a number of items. The staff cannot determine from the CTS, the ITS Bases, or the JFD discussions if all the containment purge valves are automatic, power-operated or manual. Based on CTS 4.6.3.1.2.c and CTS 4.6.3.1.2.d, and ITS B3.6.3 Bases - LCO, one could conclude that the 36-inch purge valves and the 18-inch containment vacuum breaking valves are considered automatic valves. Refer to Comment Number 3.6.3-13 for concerns with regards to check valves and spring load check valves. It is not clear for the 8-inch purge bypass valves. If the purge valves are manual, then ITS SR 3.6.3.1 and SR 3.6.3.2 will verify closure. If they are automatic there is no verification of valve closure. ITS SR 3.6.3.5 only verifies that the vacuum breaking valves open and close on pressure differential on an 18-month basis and does not verify closure during operation. In addition, ITS 3.6.3 ACTIONS Note 1 allows containment penetrations to be unisolated intermittently under administrative controls except for the 36-inch purge and exhaust valves, 18-inch containment vacuum breaking valves, and the 8-inch purge bypass valve. The ITS note as written and without the appropriate SRs would allow these valves to be opened indefinitely. Thus, the staff requires the SRs be proposed to verify valve closure for these valves. Depending on the resolution of Comment Number 3.6.3-8, this concern will also apply to the steam jet air ejector suction line valves. **Comment:** Revise the CTS/ITS markups to include STS SR 3.6.3.1, SR 3.6.3.2 or a modification of these SRs to reflect plant-specific criteria and provide the appropriate discussions and justifications for these changes.

28. JFD 4
Bases JFD 2
Bases JFD 7
STS SR 3.6.3.8 and Associated Bases
ITS SR 3.6.3.4 and Associated Bases

STS SR 3.6.3.8 verifies that each automatic containment isolation valve (CIV) that is not locked, sealed or otherwise secured in position actuates to its isolation position. ITS SR 3.6.3.4 modifies STS SR 3.6.3.8 by adding "power operated" between "automatic" and "containment." The justification used for this change (JFD 4) states that the change is to clarify that only power-operated CIVs are considered automatic. The implication of this change is that check valves are not considered as automatic valves. This reasoning is carried over to changes made

to ITS B3.6.3 Bases - BACKGROUND and the associated Bases JFD 7. STS B3.6.3 - BACKGROUND states the following: “Check valves, or other automatic valves...” ITS B3.6.3 Bases - BACKGROUND deletes the words “Check valves, or other” by Bases JFD 7. The justification states that check valves are not considered active devices. The staff’s position is that check valves, when used as CIVs, are considered as automatic valves and thus are active devices. STS 3.6.3 Bases - BACKGROUND states this position and the discussion in STS B3.6.3 Bases - LCO reaffirms it when it differentiates between automatic power-operated isolation valves and check valves. The Bases for this position can be found in 10 CFR 50 Appendix A, General Design Criteria 55, 56, and 57, which state that check valves may not be used as one of the automatic isolation valves for certain types of penetrations. Thus the staff finds these changes unacceptable. In addition, the change made in ITS SR 3.6.3.4 is considered generic and beyond the scope of review for this conversion. **Comment:** Delete these changes.

29. Bases JFD 1
STS B3.6.3 Bases - LCO
ITS B3.6.3 Bases - LCO and References

The third paragraph of STS B3.6.3 Bases - LCO deals with those CIVs that are required to be closed during an accident and are in the closed position during normal operation. The last sentence in this paragraph states that these passive isolation valves/devices are listed in a plant-specific document(s). This sentence has been deleted from ITS B3.6.3 Bases - LCO. ITS changes to the STS Bases were made based on changes to the STS, on plant-specific system design, on current licensing basis as specified in the CTS, or for editorial reasons; the deletion does not seem to fall into any of these categories. This statement directs the operator/inspector to those documents that list these passive devices similar to the document that lists the automatic valves. The staff requires that this statement be retained. **Comment:** Revise the ITS markup to retain this statement modified to include specific plant documents containing the listing of the passive isolation valves/devices or if the listing of the documents is extensive, a general description of the type of documents.

30. Bases JFD 6
STS 3.6.3 ACTIONS A, B, C and Associated Bases
ITS 3.6.3 ACTIONS A, B, C and Associated Bases

The fourth sentence of STS B3.6.3 Bases - C.1 and C.2 states the following: “A check valve may not be used to isolate the affected penetration flow path.” ITS B3.6.3 Bases - C.1 and C.2 deletes this sentence based on Bases JFD 6, which justifies the deletion on an UFSAR statement that check valves may be used to isolate specified penetration flow paths. This justification does not provide sufficient information to determine if the change is acceptable. ITS 3.6.3 ACTION C applies to those penetrations with a single isolation valve and a closed system. The staff agrees that most penetrations can be isolated by a check valve as one of the containment isolation valves. This is stated in 10 CFR 50 Appendix A, General Design Criteria (GDC) 55, and 56. It is also allowed in STS/ITS 3.6.3 Required Action A.1. Refer to Comment Number 3.6.3-19. However, it is not allowed by the Required Action wording for STS/ITS 3.6.3 Required Action B.1 and STS/ITS 3.6.3 Required Action C.1. In the former Required Action, the associated Bases states the reason that check valves are not used: the penetration must be isolated using a device that cannot be adversely affected by a single active failure. A check

valve by its design would not meet this criteria. In the latter case 10 CFR 50 Appendix A GDC 57 applies, which states that a check valve cannot be used as the automatic isolation device for penetrations with a single valve and a closed system. The reasoning would be the same as given above. Unless the staff approved the use of check valves to isolate GDC 57 type penetrations, the STS statement needs to be retained. Refer to Comment Number 3.6.3-18. **Comment:** Delete this change.

31. CTS 3.6.3.1 and Associated *Footnote
CTS 3.6.5.1
ITS 3.6.3 ACTIONS, Note 1 and Associated Bases

The *Footnote associated with CTS 3.6.3.1 allows locked or sealed closed valves to be opened intermittently under administrative controls. The corresponding ITS note is ITS 3.6.3 ACTION Note 1. The ITS Note allows any closed valve (manual, automatic, locked, not locked, etc.) to be opened intermittently. It also allows valves closed by the ACTIONS to be opened. The CTS only limits valve opening to locked or sealed valves, and does not apply to the ACTION statement. These Less Restrictive (L) changes have not been justified. **Comment:** Revise the CTS markup and provide a discussion and justification for these Less Restrictive (L) changes.

32. CTS 3.6.3.1 ACTION
ITS 3.6.3 ACTIONS and Associated Bases

CTS 3.6.3.1 requires that with one or more valves inoperable that one “maintain at least one isolation valve OPERABLE in each affected penetration that is open.” The ITS 3.6.3 ACTIONS do not contain this statement. The CTS shows this requirement as being retained. Even though the ITS does not contain this statement, it is implied in actions associated with ITS 3.6.3 ACTIONS A and C. **Comment:** Revise the CTS markup and provide a discussion and justification for this Administrative change.

33. CTS 3.6.3.1 ACTIONS
ITS 3.6.3 ACTIONS A, C and Associated Bases

CTS 3.6.3.1 ACTIONS do not differentiate between the types of penetrations. ITS 3.6.3 ACTIONS A and C apply to different types of penetrations as can be seen by the Condition note. The CTS markup does not show or justify this breakup of the CTS and the addition of the Condition Notes. **Comment:** Revise the CTS markup and provide a discussion and justification for this Administrative change.

34. CTS 3.6.3.1 ACTIONS
ITS 3.6.3 Required Action A.1 and Associated Bases

CTS 3.6.3.1 ACTIONS b and c specify how to isolate each affected penetration with an inoperable containment isolation valve; i.e., a closed deactivated automatic valve, a closed manual valve, or a blind flange. ITS 3.6.3 Required Action A.1 also used these methods, but it also allows a “check valve with flow through the valve secured.” The CTS markup does not show or justify this Less Restrictive (L) change. **Comment:** Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

35. CTS 4.6.3.1.2.a
CTS 4.6.3.1.2.b
ITS SR 3.6.3.4 and Associated Bases

CTS 4.6.3.1.2.a and CTS 4.6.3.1.2.b verify that all automatic containment isolation valves actuate to the isolation position on a test signal. The corresponding ITS SR is ITS SR 3.6.3.4, which verifies only those automatic CIVs that are not locked, sealed or otherwise secured in position actuate to the isolation position. The ITS SR is less restrictive than the CTS in that not all valves are tested. The CTS markup does not show or justify this Less Restrictive (L) change. **Comment:** Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

36. CTS 4.6.3.1.2.a
CTS 4.6.3.1.2.b
ITS SR 3.6.3.4 and Associated Bases

CTS 4.6.3.1.2.a and CTS 4.6.3.1.2.b verify that all automatic CIVs actuate to the isolation position on either a Phase A or Phase B containment isolation test signal. The corresponding ITS SR is ITS SR 3.6.3.4, which verifies only those automatic CIVs that are not locked sealed or otherwise secured in position actuate to the isolation position on an actual or simulated test signal. The ITS SR does not specify the specific actuation signal (Phase A or B) and allows an actual signal where the CTS specifies a test signal that is considered a simulated signal. The specific actuation signal specified in the CTS is discussed in the Bases for ITS 3.6.3. The CTS markup does not show or justify these Less Restrictive (LA and L respectively) changes. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications for these Less Restrictive (LA and L) changes.

37. CTS 4.6.3.1.3
STS 3.6.3.5 and Associated Bases
ITS SR 3.6.3.3 and Associated Bases

CTS 4.6.3.1.3 verifies the isolation time of each power-operated or automatic CIV. The corresponding ITS SR is ITS SR 3.6.3.3, which is based on STS SR 3.6.3.5 as modified by TSTF-46. While the CTS tests all power-operated or automatic CIVs, the STS/ITS only verifies the isolation time of the automatic power-operated valves. The CTS markup does not show or justify this Less Restrictive (L) change. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications for this Less Restrictive (L) change.

3.6.5 Containment Air Temperature

38. DOC LA.1
CTS 4.6.1.5.1
ITS B3.6.5 Bases - SR 3.6.5.1

CTS 4.6.1.5.1 includes specific locations where containment temperatures are to be measured and describes how the temperature used for the LCO is calculated. The CTS is modified by DOC LA.1 to relocate this information to the UFSAR. This is not entirely correct. Part of this information has been relocated to ITS B3.6.5 Bases - SR 3.6.5.1. The part that has been relocated deals with how the containment temperature is calculated - "weighted average of at least the minimum number of temperatures." **Comment:** Revise DOC LA.1 to reflect that how the temperature is calculated is also relocated to the Bases.

3.6.7 Recirculation Spray (RS) System

39. DOC A.4
CTS 3.0.1
CTS 3.0.3
CTS 3.6.2.2 ACTIONS

CTS 3.6.2.2 does not contain an ACTION for various RS system inoperabilities. DOC A.4 stated that for these conditions "CTS 3.0.1 would be entered." This is an incorrect citation since the balance of DOC A.4 discusses entry in CTS 3.0.3/ITS LCO 3.0.3 for these conditions.

40. DOC L.2
CTS 3.6.2.2 ACTION b
CTS 3.6.2.2 ACTION c
ITS 3.6.7 Required Action E.2
ITS 3.6.7 Action F

CTS 3.6.2.2 ACTIONS b and c have been modified in the CTS markup to allow a Completion Time of 84 hours to reach MODE 5 from MODE 3. This change is discussed in DOC L.2. DOC L.2 does not provide a discussion and justification for this change as it applies to CTS 3.6.2.2 ACTION c. In addition, DOC L.2 states that the corresponding ITS Required Action is ITS 3.6.7 Required Action F.2. ITS 3.6.7 ACTION F does not contain a Required Action F.2. Also refer to Comment Number 3.6.7-3 for concern on wording of Insert 2, which makes this change. **Comment:** Revise DOC L.2 to correct the Required Action discrepancy and provide a discussion and justification for this change to CTS 3.6.2.2 ACTION c.

41. DOC L.2
CTS 3.6.2.2 ACTION a
CTS 3.6.2.2 ACTION b
CTS 3.6.2.2 ACTION c
ITS 3.6.7 Required Action E.2 and Associated Bases

CTS 3.6.2.2 ACTION a requires that after HOT STANDBY (MODE 3) is reached, the action is to "restore the inoperable subsystem to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the next 30 hours." CTS 3.6.2.2 ACTIONS b and c have been modified in the CTS markup by a similar statement. This modification is Insert 2 and justified by

DOC L.2. The corresponding ITS ACTION is ITS 3.6.7 Required Action E.2, which requires the plant to be in MODE 5 within 84 hours. Even though the overall time to complete the CTS and ITS ACTIONS of 84 hours does not change (CTS 6to MODE 3 +48 + 30 = 84 hours), there is a change in converting the CTS to the ITS. This change relates to when the commencement of shutting down to MODE 5 begins or is declared. In the CTS it officially starts immediately after the 48-hour allowed outage time to restore the subsystem to OPERABLE status is completed. In the ITS it beings immediately after MODE 3 is reached. This change is not indicated or justified in the CTS markup for CTS 3.6.2.2 ACTION a, and Insert 2 is incorrect for CTS 3.6.2.2 ACTIONS b and c. The change associated with CTS 3.6.2.2 ACTION a is a More Restrictive change (Time for commencement of shutdown to MODE 5 declared earlier in ITS versus CTS). The change associated with CTS 3.6.2.2 ACTIONS b and c is still Less (L) Restrictive, but Insert 2 should be deleted, and the 30 hours changed to 84 hours, with the appropriate justification. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications for these More Restrictive and Less Restrictive (L) changes.

42. Bases JFD 6
STS B3.6.6E Bases - E.1
ITS B3.6.7 Bases - D.1

The last sentence in STS B3.6.6E Bases - E.1 states the following: "The 72 hour Completion Time was chosen based on the same reasons as given in Required Action B.1." The ITS markup of ITS B3.6.7 Bases - D.1 deletes this sentence and replaces it with sentences on casing cooling tank and RS pump OPERABILITY. These new sentences do not provide a justification for the 72-hour Completion Time as does the STS statement. **Comment:** Revise the ITS markup to either retain the STS wording or provide plant-specific wording justifying the 72-hour Completion Time for ITS 3.6.7 Required Action D.1 and provide the appropriate discussions and justifications as necessary.

3.6.8 Chemical Addition System

43. Bases JFD 3
STS B3.6.7 Bases - A.1
ITS B3.6.8 Bases - A.1

The second sentence in STS B3.6.7 Bases - A.1 states that "The pH adjustment of the Containment Spray System flow for corrosion protection and iodine removal enhancement is reduced in this condition." The ITS modifies this statement in ITS B3.6.8 Bases - A.1 by replacing "Containment" with "Quench" and deleting "corrosion protection and." The deletion is justified by Bases JFD 3. Bases JFD 3 deals with relocating CTS requirements/information to the ITS. The staff believes that the justification is incorrect for this ITS change. In addition, the staff cannot find in the CTS markup any reference with regards to corrosion protection. **Comment:** Provide an appropriate discussion and justification for this deletion.

44. Bases JFD 7

The section on Justifications For Deviations for ITS 3.6.8 Bases, Chemical Addition Systems, contains a Bases JFD 7, which discusses RS System response times. The staff cannot find a Bases JFD 7 in the ITS markup of ITS B3.6.8 Bases.

45. CTS 3.6.2.3 ACTION
ITS 3.6.8 Required Action B.2 and Associated Bases

CTS 3.6.2.3 ACTION requires that after HOT STANDBY (MODE 3) is reached, the action is to "restore the spray addition system to OPERABLE status within the next 48 hours or be in COLD SHUTDOWN within the next 30 hours." The corresponding ITS ACTION is ITS 3.6.8 Required Action B.2, which requires the plant to be in MODE 5 within 84 hours. Even though the overall time to complete the CTS and ITS ACTIONS of 84 hours does not change (CTS 6 to MODE 3 + 48 + 30 = 84 hours), there is a change in converting the CTS to the ITS. The change relates to when the commencement of shutting down to MODE 5 begins or is declared. In the CTS it officially starts immediately after the 48-hour allowed outage time to restore the system to OPERABLE status is completed. In the ITS it begins immediately after MODE 3 is reached. This change is not indicated or justified in the CTS markup for CTS 3.6.2.3 ACTION. The change associated with CTS 3.6.2.3 ACTION is a More Restrictive change (Time for commencement of shutdown to MODE 5 declared earlier in ITS versus CTS). **Comment:** Revise the CTS markup and provide a discussion and justification for this More Restrictive change.

3.6.9 Hydrogen Recombiners

46. DOC L.2
JFD 2
Bases JFD 2
Bases JFD 4
Bases JFD 9
CTS 3.6.4.2 ACTIONS
STS 3.6.8 ACTION B and Associated Bases
ITS 3.6.9 ACTION B and Associated Bases

CTS 3.6.4.2 ACTION a only permits one hydrogen recombiner to be inoperable. If two hydrogen recombiners are inoperable, CTS 3.0.3 is entered. CTS 3.6.4.2 ACTION has been modified to incorporate STS 3.6.8 ACTION B, which allows two hydrogen recombiners to be inoperable for up to 7 days. The use of STS 3.6.8 ACTION B is allowed, as specified in a Bases Reviewer's note, provided that the alternate hydrogen control system is found to be acceptable to the staff. DOC L.2 and Bases JFD 9 do not contain any evidence that the staff has approved an alternate hydrogen control system(s). There is no other LCO-controlled hydrogen control system(s) in the ITS such as specified in the NUREGs. JFD Bases 9 refers to the containment purge blowers of the Atmosphere Cleanup System as the alternate hydrogen control system and there is, in ITS B3.6.4.2 Bases Applicable Safety Analyses and B.1 and B.2, a reference to the Containment Atmosphere Cleanup System purge blowers, which is not an LCO-controlled system. There is no discussion or justification to show that the Containment Atmosphere Cleanup System and its associated purge blowers has been approved by the staff as a alternate means of hydrogen control. **Comment:** Provide additional discussion and justification to show that the staff has found this alternate hydrogen control system acceptable.