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JAFP-00-0078

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555

**Subject: James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
License No. DPR-59**

**Response to Requests for Additional Information Regarding Improved
Technical Specification Sections 3.6 and 3.8**

- References:
1. NRC Letter to J. Knobel (NYPA), Request for Additional Information Regarding Sections 1.0, 3.0, 3.3.5, 3.3.6, 3.3.8, 3.3.9, 3.4, 3.6, 3.8, 3.9, and 5.0 of the Improved Technical Specifications (TAC No. MA5049)
 2. NYPA Letter to NRC, Proposed Technical Specification Change – Conversion to Improved Technical Specifications, JPN-99-008 dated March 31, 1999
 3. NYPA Letter to NRC, Response to Request for Additional Information Regarding Proposed Improved Technical Specifications, JPN-00-004 dated February 11, 2000

Dear Sir:

The NRC requested in Reference 1 additional information regarding certain sections of the James A. FitzPatrick NPP Improved Technical Specification (ITS) submittal (Reference 2). In Reference 3 NYPA committed to respond to those requests for additional information (RAIs) regarding ITS sections 3.6 (Containment Systems) and 3.8 (Electrical Systems) by April 1, 2000. This submittal addresses that commitment.

Attachment 1 to this letter contains the NYPA responses to the ITS section 3.6.RAIs and attachment 2 contains the responses to the ITS section 3.8 RAIs.

Attachment 3 contains the list of commitments contained in attachments 1 and 2.

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**Subject: Response to Requests for Additional Information Regarding
Improved Technical Specification Sections 3.6 and 3.8**

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If you have any questions regarding this matter, please contact Mr. George Tasick at 315-349-6572.

Very truly yours,



Michael J. Colomb
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MJC:WVC:las
Attachments as stated

Cc:

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Response to ITS Section 3.6 Requests for Additional Information

(72 RAIs and Responses)

Attachment 1

Response to ITS Section 3.6 RAIs

James A. FitzPatrick Nuclear Power Plant
Improved TS Review Comments
ITS Section 3.6, Containment Systems

3.6.1.1 Containment

3.6.1.1-1 DOC A2
 DOC LA 1
 CTS 1.0.M
 ITS B.3.6.1 Bases - BACKGROUND .

CTS 1.0.M defines PRIMARY CONTAINMENT INTEGRITY. A markup of CTS 1.0.M shows that only the requirements that the drywell and suppression chamber are intact and that the manways are closed are relocated to ITS B3.3.6.1 Bases and the relocation is justified by DOC LA1. The rest of CTS 1.0.M is covered by DOC A2. DOC A2 states that portions of CTS 1.0.M are covered or relocated to other LCOs in ITS 3.6 and that PRIMARY CONTAINMENT INTEGRITY is changed to containment shall be OPERABLE. DOC A2 also states that this definition is deleted. While the former statements are correct and acceptable, the latter statement is incorrect. The definition is not deleted but is relocated to ITS B3.6.1 Bases - BACKGROUND which makes this portion of the change a Less Restrictive (LA) change.

Comment: Revise the CTS markup and the discussions and justifications associated with DOC LA1 to include the rest of CTS 1.0.M. Modify DOC A2 accordingly.

NYP&A Response:

1. It appears that the reviewer may have misread or misinterpreted the CTS markup as indicated below:
 - a. DOC A2 indicates that the CTS reference to the phrase "Primary Containment Integrity" has been deleted. DOC A2 does not state that the definition is deleted.
 - b. On CTS markup page 1 of 8, the only reference to DOC A2 is the change of the word "Integrity" to "OPERABLE" (two places).

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Response to ITS Section 3.6 RAIs

- c. The change marked A2 on CTS markup page 1 of 8 concerning the revision of the phrase "Primary containment integrity shall be..." is consistent with the phrase "Primary containment shall be OPERABLE" in the markup of CTS 3.7.A.2 on CTS markup page 3 of 8.
 - d. The changes marked A2 on CTS markup pages 1 of 8 and 3 of 8 (as discussed in b and c above) result in deletion of the phrase "Primary Containment Integrity" as discussed in DOC A2.
 - e. The remainder of CTS Definition 1.0.M has been incorporated into ITS 3.6.1.1, 3.6.1.2, and 3.6.1.3 as discussed in DOC A2 except for the relocation of certain details to the Bases as discussed in DOC LA1 (see CTS markup page 2 of 8 at CTS 1.0.M.4.)
2. Considering the above, it appears to NYPA that the CTS markup and associated DOCs concerning this RAI are correct as submitted.

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3.6.1.1-2 DOC LA 2
 CTS 4.7.A.1
 ITS SR 3.6.1.1.1 and Associated Bases

CTS 4.7.A.1 specifies that the accessible interior surfaces of the drywell and above the water line of the torus shall be inspected once per 24 months for evidence of deterioration. The corresponding ITS SR is SR 3.6.1.1.1. The CTS markup and DOC LA2 indicate that the details and frequency are proposed to be relocated to the Primary Containment Leakage Testing Program. Since the program implements 10 CFR 50 Appendix J, Option B, the frequencies for performing the various surveillances and tests can be changed based on previous satisfactory test performance. Nothing in DOC LA2 nor the SE associated with Amendment 234, dated October 4, 1996, which implements 10 CFR 50 Appendix J Option B at the James A. Fitzpatrick Nuclear Power Plant (JAFNPP) would allow the frequency of CTS 4.7.A.1 to change from once per 24 months, to almost anything which would be allowed by the Primary Containment Leakage Testing Program. See Comment Number 3.6.1.1-4 for additional concerns with regards to 10 CFR 50 Appendix J Option B changes to the ITS. The staff recognizes that 10 CFR 50 Appendix J, Section V.A requires that a visual inspection of the accessible interior and exterior surfaces of the containment structures and components be performed prior to any Type A test (i.e., every 40 months), for some reason the visual examination of the drywell and torus at JAFNPP is required to be done every 24 months and this surveillance was not modified by Amendment 234. The staff considers the relocation of this requirement with the associated allowance for a performance based surveillance frequency to be a beyond scope of review item for this conversion and the surveillance should be retained.

Comment: Revise the CTS/ITS markups to show the retention of this surveillance and provide any appropriate discussion and justification for this change. See Comment Number 3.6.1.1-4.

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NYPA Response:

1. NYPA will revise DOC LA2 by indicating that the CTS 4.7.A.1 inspection requirement will be relocated to the UFSAR.
2. Note that CTS 4.7.A.1 has been a part of the Fitzpatrick CTS since initial licensing of the plant in 1974. It also appears to have been a common feature of the "custom" TS of other BWR/4 plants of the same vintage (Peach Bottom, Browns Ferry, Cooper, Arnold) and it appears that it could (or should) have been addressed as part of Appendix J, Option B, but was not. Nothing in the CTS Bases, UFSAR, or the original November 20, 1972 NRC SER (and Supplements 1 and 2) seems to shed any light on the topic or indicate that the inspection is in any way different than the inspection required by the Containment Leakage Rate Testing Program (ITS SR 3.6.1.1.1).
3. Note that other ITS conversions of "custom" TS of the same vintage as Fitzpatrick CTS relocated the same requirement to "plant procedures" (Peach Bottom) and more recently to the UFSAR (Cooper).

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3.6.1.1-3	DOC LA 3 JFD DB 1 JFD Bases PA 2 JFD Bases DB 4 CTS 3.7.A.5.e CTS 4.7.A.5.d STS SR 3.6.1.1.2 ITS SR 3.6.1.1.2 and Associated Bases
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The CTS and ITS markup of CTS 3.7.A.5.e, CTS 4.7.A.5.d and STS SR 3.6.1.1.2 shows that the details that the drywell and suppression chamber leakage rate limit shall be monitored via the suppression chamber 10 minute pressure transient of 0.25 inches of water/minute are relocated to ITS B3.6.1.1 Bases - SR 3.6.1.1.2. This change is justified by DOC LA1 and JFD DB1. The staff considers this change to be a generic change which is a beyond the scope of review (**BSCR**) for this conversion.

Comment: Delete this generic change.

NYPA Response:

1. NYPA does not agree that the changes associated with CTS 3.7.A.5.e, CTS 4.7.A.5.d, ITS SR 3.6.1.1.2 or the associated ITS Bases are changes that should be classified as "generic changes."
2. The design basis drywell-pressure suppression chamber bypass leakage is 0.032 square feet. (Reference UFSAR Section 5.2.4.4.)
3. The leakage through a 1.0 inch diameter plate orifice (which is 0.0033 square feet or ~10% of the design basis 0.032 square feet) at is 71 scfm and results in an increase in the pressure suppression chamber pressure of 0.25 inches water gauge per minute when the drywell to suppression chamber differential pressure is approximately one pound per square inch. (See UFSAR Section 5.2.4.4, last paragraph on page 5.2-30 and continued at the top of page 5.2-31.)
4. Drywell-suppression chamber bypass leakage measurement (with a differential pressure of 1.0 psi), whether expressed as an equivalent area (0.0033 square feet or a one inch diameter hole), leakage volume per unit time (71 scfm), or as an increase in torus pressure over time (0.25 inches water gauge per minute) are all directly related the equivalent bypass leakage area.

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Response to ITS Section 3.6 RAIs

5. Selection of one of the measures of equivalent bypass leakage area (leakage volume per unit time) and relocation of another measure (suppression chamber pressure change over time) to the Bases does not seem to make the change a "generic" change. In fact, the change could easily be considered to be a simple non-technical clarification since any means of measuring the equivalent bypass leakage area should be acceptable.
6. Notwithstanding the above, NYPA will change the CTS markup, DOCs and ITS SR 3.6.1.1.2, associated Bases, JFDs, etc, to express the acceptance criteria for ITS SR 3.6.1.1.2 in terms of the pressure suppression chamber pressure increase over time since pressure is the parameter that is routinely measured and monitored using permanently installed instrumentation.

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3.6.1.1-4	JFD CLB1
	JFD Bases CLB1
	JFD Bases CLB 3
	JFD Bases PA 2
	CTS 4.7.A.2
	STS SR 3.6.1.1.1 and Associated Bases
	ITS SR 3.6.1.1.1 and Associated Bases

CTS 4.7.A.2.a requires leak rate testing in accordance with the Primary Containment Leakage Rate Testing Program which is based on the requirements of 10 CFR 50 Appendix J, Option B. STS SR 3.6.1.1.1 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 3.6.1.1.1 modifies STS SR 3.6.1.1.1 to conform to CTS 4.7.A.2 as modified in the CTS markup. The STS is based on Appendix J, Option A while the CTS and ITS are based on both Appendix J, Options A and B. Changes to the STS with regards to Option A versus Option B are covered by a letter from Mr. Christopher I. Grimes to Mr. David J. Modeen, NEI, dated 11/2/95 and TSTF-52 as modified by staff comments 10/96 and 12/98. The changes to ITS 3.6.1[3.6.1.1], 3.6.2[3.6.1.2], 3.6.3[3.6.1.3], 3.6.9[??] and their Associated Bases are not in conformance with the letter and TSTF-52 as modified by staff comments. See Comment Numbers 3.6.1.1-2, 3.6.1.1-6, 3.6.1.2-2, 3.6.1.3-1, 3.6.1.3-4 and 3.6.1.3-7.

Comment: Licensee should revise its submittal to conform to the 11/2/95 letter and TSTF-52 modified by the staff. See Comment Numbers 3.6.1.1-2, 3.6.1.1-6, 3.6.1.2-2, 3.6.1.3-1, 3.6.1.3-4 and 3.6.1.3-7.

NYPA Response:

1. The ITS 3.6.1.1 Conversion package is based on the current licensing basis with respect to 10 CFR 50, Appendix J, Option B. CTS Amendment 234 reflected 10 CFR 50, Appendix J, Option B. TSTF-52 was only used as a guide to make the ITS 3.6.1.1 Conversion package consistent with the changes shown in TSTF-52 for style and content where appropriate.
2. The NYPA submittal concerning proposed CTS changes that reflect 10 CFR 50, Appendix J, Option B (which became CTS Amendment 234) was consistent with the three "adjustments" addressed in the referenced 11/2/95 NRC letter to NEI except for the suggested STS Bases Reference to NEI 94-01 and ANSI/ANS-56.8-1994. Consistent with item 5) in the discussion/summary of TSTF-52, Revision 1 changes, the NEI and ANSI references were not included in the ITS 3.6.1.1 Bases References.

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3.6.1.1-5 JFD Bases TP1
ITS B3.6.1.1 Bases - BACKGROUND

The second paragraph, item a.2 of ITS B3.6.1.1 Bases - BACKGROUND is modified by the phrase "or equivalent isolation methods." The ITS markup shows that JFD Bases TP1 provides a justification for this change. No JFD Bases TP1 provided. A similar type change was proposed in TSTF-196 which was rejected by the staff. See Comment Numbers 3.6.1.3-11 and 3.6.4.2-5.

Comment: Delete this change. See Comment Numbers 3.6.1.3-11 and 3.6.4.2-5.

NYPA Response:

1. NYPA will correct the error. (Complete removal of TSTF-196 changes was intended.)

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.1-6 CTS 4.7.A.2.c
ITS SR 3.6.1.1.1 and Associated Bases
ITS SR 3.6.1.3.11 and Associated Bases

CTS 4.7.A.2.c specifies that once per 24 months the leakage rate of Low Pressure Coolant Injection (LPCI) System valves 10AOV-68A and B and of Core Spray (CS) System Valves 14AOV - 13A and B shall be within the specified limits when either pneumatically or hydrostatically tested. The corresponding ITS SR is ITS SR 3.6.1.3.11. The CTS and ITS surveillances for these valves is based on 10 CFR 50 Appendix J Option A for Type C testing. Amendment 234 did not convert this test and its associated frequency to 10 CFR 50 Appendix J Option B. Thus, ITS SR 3.6.1.1.1 needs to be modified either by a Note or a statement in the SR that the frequency for ITS SR 3.6.1.3.11 is in accordance with 10 CFR 50 Appendix J Option A, rather than 10 CFR 50 Appendix J Option B (Primary Containment Leakage Rate Testing Program). As proposed in the ITS, there could be some confusion as to which frequency to use. See Comment Numbers 3.6.1.3-4 and 3.6.1.3-7.

Comment: Revise the CTS/ITS markups to address this concern and provide the appropriate discussions and justifications. See Comment Numbers 3.6.1.3-4 and 3.6.1.3-7.

NYP A Response:

1. The hydrostatic or pneumatic testing of the LPCI and Core Spray subsystem air operated testable check valves is **not** part of the testing required by 10 CFR 50, Appendix J, Option A, Option B, or a combination of Options A and B. See CTS Amendment 40 which removed these valves from those subject to Appendix J test or acceptance criteria.
2. The NYP A submittal which became CTS Amendment 234 did not address any change to CTS SR 4.7.A.2.c because 10 CFR 50, Appendix J is not applicable to the SR.
3. Based in 1 above, NYP A does not consider ITS 3.6.1.1 and the associated ACTIONS and SRs to be applicable to the LPCI and Core Spray air operated testable check valves.
4. Considering 1 above, ITS SR 3.6.1.3.11 Frequency is correct as stated. That is, the Frequency of LPCI and Core Spray subsystem air operated testable check valve testing is **not** governed by the Primary Containment Leakage Rate Testing Program or 10 CFR 50, Appendix J, Option A or Option B.

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Response to ITS Section 3.6 RAIs

3.6.1.2 Primary Containment Air Lock

3.6.1.2-1 DOC A4
 JFD DB1
 JFD Base DB1
 CTS 3.7.A.2
 ITS 3.6.1.2 ACTIONS Note 2 and Associated Bases

CTS 3.7.A.2 is modified by the addition of ITS 3.6.1.2 ACTIONS Note 2, which allows separate condition entry for each air lock. The change is justified in the CTS by DOC A4. DOC A4 discusses the application of the Note as it applies to the ITS not the CTS. The staff cannot determine, based on the CTS wording and DOC A4, that the addition of this Note is an Administrative change to the CTS. The staff concludes based on the wording of CTS 3.7.A.2 and 3.7.A.8 that separate condition entry is not allowed in the CTS and thus the addition of this Note is a Less Restrictive (L) change.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive change.

NYPA Response:

1. NYPA does not agree that addition of the Note regarding separate Condition entry for each air lock should be classified as a Less Restrictive (L) change.
2. Allowing separate Condition entry for each air lock, as discussed in DOC A4 provides explicit instructions for proper application of ACTIONS and is consistent with current plant practice. In addition, separate Condition entry for each air lock penetration of Primary Containment is consistent with the separate Condition entry allowed for the process line penetrations of Primary Containment addressed in ITS 3.6.1.3, Primary Containment Isolation Valves.
3. The addition of an identical Note to ITS 3.6.1.3 is considered to be an Administrative change (see ITS 3.6.1.3, DOC A2) that provides explicit instructions and is consistent with the intent of CTS (and ITS) and current practice.
4. Classification of the change as Administrative is also consistent with the ITS conversion for other plants with more than one primary containment air lock (Reference Nine Mile Point Unit 2 ITS conversion).

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Response to ITS Section 3.6 RAIs

3.6.1.2-2 JFD CLB 1
JFD PA 2
JFD Bases CLB 1
JFD Bases PA 3
JFD Bases PA 5
JFD Bases PA 6
JFD Bases DB 1
JFD Bases X2
STS SR 3.6.1.2.1 and Associated Bases
ITS SR 3.6.1.2.1 and Associated Bases

See Comment Number 3.6.1.1-4.

Comment: See Comment Number 3.6.1.1-4.

NYPA Response:

1. See response to item 3.6.1.1-4.

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3.6.1.2-3	JFD Bases PA 2 JFD Bases DB 1 STS B3.6.2/3.6.1.2 Bases - ACTIONS (NUREG 1430, 1431, 1432, and 1434) STS B3.6.1.2 Bases - ACTIONS (NUREG 1433) ITS B3.6.1.2 Bases ACTIONS
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NUREG - 1433 STS 3.6.1.2 is based on one containment airlock. JAFNPP has modified NUREG STS 3.6.1.2 in the ITS to reflect the JAFNPP design of two containment airlocks. While the changes made in ITS 3.6.1.2 conform to STS 3.6.2/3.6.1.2 in NUREGs 1430, 1431, 1432, and 1434 which are based on two containment airlocks, some of the changes made to ITS B3.6.1.2 Bases - ACTIONS are not in conformance with the accepted wording found in the other NUREGs for two containment airlocks. In particular, the discussions for ACTION Note 1, for Required Action A Note 2, and Required Action B Note 1 deviate from the standard by deleting sentences, changing words or making similar sentences different, without adequate justification.

Comment: Revise the ITS markup to bring it into conformance with the other NUREGs or provide a discussion and justification for the deviations.

NYP A Response:

1. NYP A will revise Bases to be consistent with NUREG-1434 and provide appropriate JFDs for the differences.

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3.6.1.2-4 JFD Bases PA 2
ITS B3.6.1.2 Bases - A.1, A.2, and A.3

The last paragraph of ITS B3.6.1.2 Bases - A.1, A.2 and A.3 is modified by a sentence describing the administrative controls associated with entry and exit through the OPERABLE airlock door. The wording of the sentence is ambiguous and could allow the airlock door to remain open as long as it was being used for entry and exit. The STS/ITS requires that the airlock door be closed immediately after each entry and exit (See ITS B3.6.1.2 Bases ACTION first paragraph). This added sentence does not require this.

Comment: Revise this sentence or delete it.

NYPA Response:

1. NYPA does not agree that the added sentence is ambiguous or that it allows deferral of the closure of the airlock door after entry and exit. The sentence provides clarification with respect to the nature of the administrative controls ("...stationing a **dedicated individual** to...")
2. The added sentence is essentially identical (only two words are different) to a sentence added to previously approved ITS (Reference Duane Arnold ITS 3.6.1.2, ACTIONS A.1, A.2, and A.3 Bases, page B 3.6-10) and is identical to ITS submittals for Cooper and Nine Mile Point 2.
3. In addition, the added sentence conveys the same principle regarding administrative control as provided by the Bases discussion of NUREG 3.6.1.3, ACTIONS Note 1. Refer to the second sentence of NUREG 3.6.1.3, ACTIONS Bases on NUREG Bases page B 3.6-17.

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3.6.1.2-5 JFD TA 1
JFD Bases PA 2
JFD Bases TA 1
STS SR 3.6.1.2.2 and Associated Bases
ITS SR 3.6.1.2.2 and Associated Bases

STS SR 3.6.1.2.2 requires verifying only one door in the airlock will open at a time at six month intervals. The interval is modified in ITS SR 3.6.1.2.2 from 6 months to 24 months. This modification is in accordance with TSTF-17; however, the Bases changes are not in accordance with TSTF-17.

Comment: Revise the ITS Bases to be in accordance with TSTF-17 or justify the deviations.

NYPA Response:

1. NYPA will revise the NUREG Bases markup to reflect TSTF-17, Revision 2. The changes will correct NUREG Bases markup "INSERT BSR 36122" on Bases markup Insert Page B 3.6-12. Note that the TSTF-17, Revision 1 discussion (see last paragraph on the second page of the TSTF) changed "INSERT B" in response to a comment by the NRC as part of the Revision 0 review; however, the change is not actually shown in TSTF INSERT B. The last sentence of the insert (which justified the 24 month Frequency based on operating experience) was revised to state that "...operating experience shows that the airlocks usually pass the surveillance."
2. In addition, note that TSTF-17, Revision 2, corrects an editorial error - which was corrected on the FitzPatrick ITS submittal prior to the initiation of Revision 2. (The Frequency of "24 months" was not properly inserted in place of the deleted "184 days" in the Bases for SR 3.6.1.2.2 in TSTF-17, Revision 1.)
3. NYPA will revise NUREG markup JFD TA1 and NUREG Bases markup JFD TA1 to reflect use of TSTF-17, Revision 2 (in place of Revision 1).

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3.6.1.3 Primary Containment Isolation Valves (PCIVs)

3.6.1.3-1 DOC A6
JFD CLB 10
JFD CLB 11
JFD X4
JFD Bases CLB 10
JFD Bases CLB 11
JFD Bases DB 5
CTS 4.7.A.2.b
CTS 4.7.A.2.c
ITS SR 3.6.1.3.10, SR 3.6.1.3.11 and Associated Bases

See Comment Numbers 3.6.1.1-4, 3.6.1.1-6, 3.6.1.3-4 and 3.6.1.3-7.

Comment: See Comment Number 3.6.1.1-4, 3.6.1.1-6, 3.6.1.3-4 and 3.6.1.3-7.

NYPA Response:

1. See responses to items 3.6.1.1-4, 3.6.1.1-6, 3.6.1.3-4, and 3.6.1.3-7.

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3.6.1.3-2 DOC M1
 JFD PA 2
 CTS 3.7.D.3
 STS 3.6.1.3 ACTION I
 ITS 3.6.1.3 ACTION G

ITS 3.6.1.3 ACTION G is proposed to be added to CTS 3.7.D.3 in the event Condition A or B and associated Completion Times cannot be met in MODES 4 and 5. STS 3.6.1.3 Condition I defines the acronym OPDRVs in Condition I. ITS 3.6.1.3 ACTION F removes the phrase "operation with a potential for draining the reactor vessel (OPDRVs) from Condition G and places it in RA G.1 in place of "OPDRVs." JFD PA 2 states the change is made for editorial clarity. DOC M.1 implies that there are a number of operations that deal with OPDRVs including but not limited to RHR Shutdown Cooling System operation. The justifications do not provide adequate justification as to why ITS 3.6.1.3 ACTION G should not apply to the other OPDRVs implied by the justifications. Since the required ACTIONS (RA) are connected by an "or" there is no guaranty that RA G.1 will be used for when the RHR valves are inoperable rather than RA G.2. While the staff considers the addition of ITS 3.6.1.3 ACTION G as acceptable, the staff has determined that the modifications made are a generic change which is beyond the scope of review for this conversion.

Comment: Delete this generic change.

NYPA Response:

1. DOC M1 states, in part, that "Only those PCIVs which isolate to prevent reactor vessel draindown are required in MODES 4 and 5. Therefore, this change adds a MODES 4 and 5 requirement for RHR Shutdown Cooling isolation valves. In addition, ITS ACTION G has been added..." Since the only PCIVs required to be OPERABLE when in MODES 4 and 5 are the RHR-SDC System suction valves (see ITS Table 3.3.6.1-1, Function 6.b), Condition G, and ACTIONS G.1 and G.2 address initiation of ACTIONS to either suspend OPDRVs or restore the PCIV(s) to an OPERABLE status. Either ACTION G.1 OR G.2 is an acceptable alternative because either ACTION eliminates the RHR-SDC System suction penetration OPDRV pathway.
2. NYPA notes that the same change was included in the ITS conversions for Peach Bottom, Cooper and Duane Arnold.

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3. With regard to the discussion there is no guarantee that ACTION G.1 will be used in place of the optional ACTION G.2 for inoperable RHR-SDC System suction isolation valves - the observation is correct - there is no guarantee (and none is necessary since, as discussed above, either ACTION G.1 OR G.2 are considered to be equivalent alternatives). This is also consistent with the use of alternate ACTIONS (that is ACTIONS connected by the logical connector OR) throughout ITS which, in general, also have the same Completion Time for each of the alternate ACTIONS. In actual practice there is a very high probability that actions will be initiated for both ACTION G.1 and G.2 when Condition G is entered - unless it is readily apparent that one of the ACTIONS can be completed much quicker, easier, or with less disruption of other activities than the other ACTION.

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Response to ITS Section 3.6 RAIs

3.6.1.3-3	DOC M2 JFD X5 JFD Bases X5 CTS 4.7.D.1.b STS SR 3.6.1.3.10 and Associated Bases ITS SR 3.6.1.3.8 and Associated Bases
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CTS 4.7.D.1.b specifies that the instrument line EFCVs shall be tested for proper operation. The CTS is modified by DOC M2 to add the acceptance criteria that the EFCV actuates to the isolation position on an actual or simulated instrument line break. The corresponding ITS SR is ITS SR 3.6.1.3.8. The modified CTS 4.7.D.1.b and ITS SR 3.6.1.3.8 differ from STS SR 3.6.1.3.10 in two places. The STS words "to restrict flow to less than 1 gph" is replaced with "to the isolation position" and the ITS adds the words "an actual or". While the former change can be considered plant specific and therefore is acceptable; the later change is not acceptable. The addition of the words "an actual or" is applicable to other BWR-4 and BWR-6 plants and the technical implications of the change are unknown. Thus the change is considered as a generic change which would be a beyond scope of review item (**BSCR**) for this review.

Comment: Delete this generic change.

NYPA Response:

1. NYPA will delete the phrase "an actual or" and revise DOC M2, NUREG markup, NUREG markup JFD X5, NUREG Bases markup, NUREG Bases markup JFD X5, etc, to reflect the deletion of the phrase.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-4	DOC L3 DOC L10 JFD X8 JFD Bases X12 CTS 3.7.A.2 CTS 3.7.D STS 3.6.1.1 ACTIONS STS 3.6.1.3 ACTIONS A, B and Associated Bases ITS 3.6.1.1 ACTIONS ITS 3.6.1.3 ACTIONS A, B, E and Associated Bases
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CTS 3.7.A.2 has been modified by the addition of ITS 3.6.1.3 ACTION E which provides the Required Actions for the LPCI and CS Systems' check valve leakage not within limit. In addition, STS 3.6.1.3 Conditions A and B have been modified in the ITS to account for this new ACTION. With regards to these changes associated with the pneumatically/hydrostatically tested valve leakage, the pneumatic/hydrostatic test leakage is considered as part of the 10 CFR 50 Appendix J Type B and C leakage (See Comment Numbers 3.6.1.1-4, 3.6.1.1-6 and 3.6.1.3-7) and thus is covered by STS 3.6.1.1 ACTIONS and 3.6.1.3 ACTIONS A, B and C for PCIVs. In the ITS the ACTIONS would be ITS 3.6.1.1 ACTIONS and ITS 3.6.1.3 ACTIONS A and B. Even though the CTS completion time change from no restoration time (immediate shutdown per CTS 3.7.A.8) to an ITS Completion Time of 4 hours (ITS 3.6.1.3 ACTION A) or 1 hour (ITS 3.6.1.1 ACTION or ITS 3.6.1.3 ACTION B) is a Less Restrictive change which would be acceptable, the addition of ITS 3.6.1.3 ACTION E is a variation of the generic change proposed in TSTF-207 Rev 2, which is under review by the staff and it is uncertain at this time as to whether it will be rejected in part or accepted. See Comment Number 3.6.1.3-8 for additional concerns with regards to TSTF-207.

Comment: Delete this generic change. See Comment Numbers 3.6.1.1-4, 3.6.1.1-6, 3.6.1.3-7, and 3.6.1.3-8.

NYPA Response:

1. See Response to item 3.6.1.1-6.
2. Note that there are several typographic errors with regard to ITS 3.6.1.3, ACTION E. References to ACTION E Completion Times of "4" hours in DOC L10, NSHC L10 and NUREG Bases markup insert of ACTION E are all in error and should indicate "72" hours. The NUREG insert for ACTION E and the clean-typed ITS are correct in that they properly indicate a Completion Time of "72" hours.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-5 DOC L4
JFD TA3
JFD Bases DB6
JFD Bases DB10
JFD Bases TA3
STS 3.6.1.3 ACTION C and Associated Bases
ITS 3.6.1.3 ACTION C and Associated Bases

ITS 3.6.1.3 ACTION C and its Associated Bases modifies STS 3.6.1.3 ACTION C and its Associated Bases to incorporate TSTF-30. The changes to ITS 3.6.1.3 ACTION C are not in accordance with TSTF-30, in particular the Note Associated with Condition C should read "Only applicable to penetration flow paths with only one PCIV and a closed system" since DOC L4 states that the valves covered by this ACTION are in closed systems, this change should not cause a problem. In addition , the Bases is not in accordance with TSTF 30.

Comment: Licensee to update submittal to conform to TSTF-30.

NYPA Response:

1. NYPA will revise the Condition C Note to address "...only one PCIV and a closed system" as suggested by the NRC. Please note, notwithstanding the response in 2 below, it also appears that reference to "a closed system" should also be added to the first sentence of the Bases for Action C as discussed in 3 below.
2. NYPA does not agree that the Bases changes are not accordance with TSTF-30. As stated in NUREG Bases markup JFD TA3, TSTF-30, Revision 2 (approved by the NRC on 10/1/97) is the basis for the changes. TSTF-30, Revision 3 (which is not yet approved) was initiated after the NYPA ITS submittal.
3. The changes to TSTF-30 shown in Revision 3, specifically the addition of "for penetrations with a closed system" (shown in TSTF-30, Revision 3, markup of NUREG Bases page B 3.6-20) will be incorporated into the first sentence of the second paragraph on NUREG Bases page B 3.6-21 and the third sentence (which was added and is marked JFD PA1) will be deleted. NYPA will incorporate the TSTF-30, Revision 3 changes in this manner since Condition C addresses only penetration flow paths with a single PCIV and with a closed system.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-6 JFD CLB 4
JFD Bases CLB 4
CTS 3.7.A.3
ITS SR 3.6.1.3.1 Note 1 and Associated Bases

See Comment Number 3.7.A.3-2.

Comment: See Comment Number 3.7.A.3-2.

NYPA Response:

1. See response to Item 3.7.A.3-2.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-7 JFD CLB 11
JFD Bases CLB 11
CTS 4.7.A.2.c
STS SR 3.6.1.3.14 and Associated Bases
ITS SR 3.6.1.3.11 and Associated Bases

CTS 4.7.A.2.c specifies that once per 24 months the leakage rate of LPCI System valves 10AOV-68A and B and of CS System valves 14AOV-13A and B shall be within the specified limits when either pneumatically or hydrostatically tested. The corresponding ITS SR is ITS SR 3.6.1.3.11. The CTS and ITS surveillances for these valves is based on 10 CFR 50 Appendix J Option A for Type C testing. Amendment 234 did not convert this test and its associated frequency to 10 CFR 50 Appendix J Option B. Thus, ITS SR 3.6.1.3.11 needs to be modified to conform to the frequency specified in STS SR 3.6.1.3.14. See Comment Numbers 3.6.1.1-4, 3.6.1.1-6, 3.6.1.3-1 and 3.6.1.3-4.

Comment: Revise the ITS markup and provide any necessary discussion and justification for this change. See Comment Numbers 3.6.1.1-4, 3.6.1.1-6, 3.6.1.3-1, and 3.6.1.3-4.

NYP&A Response:

1. See response to Item 3.6.1.1-6.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-8 JFD Bases CLB 9
JFD Bases X1
JFD Bases X12
STS 3.6.1.3 ACTION A, B, and D
ITS 3.6.1.3 ACTIONS A, B, and D and Associated Bases

STS 3.6.1.3 ACTIONS A, B, and D have been modified in ITS 3.6.1.3 ACTIONS A, B, and D to reflect the changes associated with TSTF-207 Rev O [Rev 0], which has been approved by the staff. While the changes made to ITS 3.6.1.3 ACTIONS A, B, and D are in accordance with TSTF 207 Rev 0, the changes made to the Associated Bases are not in accordance with the TSTF. See Comment Number 3.6.1.3-4.

Comment: Licensee should revise submittal to conform to TSTF 207 Rev 0. See Comment Number 3.6.1.3-4.

NYPA Response:

1. NYPA will revise the NUREG markup and NUREG Bases markup to reflect TSTF-207, Revision 0. Please note that due to design differences most of the changes to the markups will only result in the addition of references to TSTF-207, Revision 0, with very little change to the text as it was marked for the original ITS submittal.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-9 JFD Bases PA 1
STS B3.6.1.3 Bases - BACKGROUND
ITS B3.6.1.3 Bases - BACKGROUND

The first sentence in STS B3.6.1.3 Bases - BACKGROUND states the following: "The function of the PCIVs...is to limit fission product release...to within limits." ITS B3.6.1.3 Bases - BACKGROUND modifies this sentence to state the following: "The function of the PCIVs...is to ensure fission product release...is within limits." The change of the word "limit" to "ensure" changes the meaning of the sentence. The ITS implies that the PCIV function guarantees that the fission product release will always be at its limit, where the STS words do not imply this, which is the intent of the sentence.

Comment: Delete this change.

NYPA Response:

1. NYPA will delete the change as requested.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-10 JFD Bases PA 1
STS B3.6.1.3 Bases - ACTIONS
ITS B3.6.1.3 Bases - ACTIONS

The third paragraph, last sentence of STS B3.6.1.3 Bases - ACTIONS states: "Pursuant to LCO 3.0.6, these actions are not required...". ITS B3.6.1.3 Bases - ACTIONS modifies this sentence by deleting "are not" and replacing it with "would not be". For consistency sake, this change has not been made in other places within the ITS where this statement occurs. In addition, the change is for editorial clarity. The staff does not believe it enhances clarity and may change the meaning of the sentence.

Comment: Delete this change.

NYPA Response:

1. NYPA will delete the change as requested.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-11 JFD Bases PA 1
STS B3.6.1.3 Bases - C.1, C.2, SR 3.6.1.3.3 and SR 3.6.1.3-4
ITS B3.6.1.3 Bases - C.1 and C.2, SR 3.6.1.3.2 and SR 3.6.1.3-3

In a number of places, ITS B3.6.1.3 Bases changes the STS words "valves," "valves and blind flanges", "these valves," and "PCIVs" to the generic term "isolation devices". The change is incorrect. The term "isolation device" is not defined in the Bases and based on its intended use encompasses more than just valves, it would include blind flanges, plugs, caps, and other suitable closure devices (See Comment Number 3.6.1.1.5). In all cases where the change was made the discussion concerned the applicability of the Note and/or the verification of valve misposition. Blind flanges, plugs, caps and other suitable closure devices cannot be mispositioned. They are fixed isolation devices. In addition, a similar change was proposed in TSTF 196 which was rejected by the staff. Thus the STS words are the correct words. See Comment Number 3.6.4.2-5.

Comment: Delete this change. See Comment Numbers 3.6.1.1-5 and 3.6.4.2-5.

NYPA Response:

1. NYPA does not agree that the changes should be deleted. The changes are not based on TSTF-196.
2. The changes make the Bases discussions consistent with the terminology contained in the ACTION C.2 Note.
3. NYPA does not consider any formal "definition" of the term "isolation devices" to be necessary. The term is defined by the context of its use in the ACTION C.2 Note and associated Bases (as revised).

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-12 JFD Bases PA1
ITS B3.6.1.3 Bases - C.1 and C.2

The second paragraph of ITS B3.6.1.3 Bases - C.1 and C.2 adds the following sentence at the end of the paragraph: "This Note is necessary since this Condition is written specifically to address those penetrations with a single PCIV." This change is based on enhanced editorial clarity or correction of a grammatical/typographical error. This addition does neither of these items. In fact, it duplicates or restates the first sentence in that paragraph.

Comment: Delete this change.

NYPA Response:

1. NYPA will delete the change as requested.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-13 JFD Bases PA 3
JFD Bases X 10
STS SR3.6.1.3.13 and Associated Bases
ITS SR 3.6.1.3.10 and Associated Bases

STS B3.6.1.3 Bases-SR 3.6.1.3.13 describes a Note 1 that is added to STS SR 3.6.1.3.13. STS SR 3.6.1.3.13 does not contain such a Note, however, BWR 16 justification C.5, approved by the staff, added this Note to STS SR 3.6.1.3.13. It was inadvertently omitted in Revision 1 to the NUREGs. TSB 13 has been generated to correct this problem. ITS B3.6.1.3 Bases SR 3.6.1.3.13 deletes this Note description based on JFD Base X10. JFD Bases X10 is incorrect. JFD Bases PA 3 would be a more appropriate justification for deleting the Note description.

Comment: Provide additional discussion and justification for the deletion of this Note description.

NYPA Response:

1. EXCEL Services Corporation, which maintains the records concerning TSTFs, indicates that "TSB 13" has been "rejected by the NRC." That is, TSB 13 is not approved.
2. Traveler BWROG 16, which became TSTF-16, is related to STS 3.8.9, Distribution Systems - Operating and is not in any way related to ITS SR 3.6.1.3.11 (STS ST 3.6.1.3.13).
3. A review of the "List of Travelers by Affected Specification" for NUREG-1433 on the EXCEL Services web site (reflecting the 1/27/00 update) indicates that the only TSTFs associated with STS SR 3.6.1.3.13 (ITS SR 3.6.1.3.11) are TSTF-30, Revision 3, and TSTF-52, Revision 2. Neither of the TSTFs addresses STS SR 3.6.1.3.13 (ITS SR 3.6.1.3.11) or the associated Bases.
4. Since there does not appear to be an approved TSTF related to correction of NUREG SR 3.6.1.3.13 Bases discussion of a Note that does not exist in the associated SR, deletion of the Bases text regarding the Note as discussed in NUREG Bases markup JFD X10 appears to be correct.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-14 JFD Bases DB 8
STS B3.6.1.3 Bases - APPLICABLE SAFETY ANALYSES
ITS B3.6.1.3 Bases - APPLICABLE SAFETY ANALYSES

The third paragraph in STS B3.6.1.3 Bases - APPLICABLE SAFETY ANALYSES discusses Bases for PCIV closure times. The ITS deletes this entire paragraph. The basis for the deletion is discussed in JFD Bases DB 8. The change should not have been a deletion but the discussion in JFD Bases DB 8 should be used in place of the STS words to provide a complete discussion on the APPLICABLE SAFETY ANALYSES for PCIVs with regards to isolation times.

Comment: Revise the ITS markup to substitute the discussion in JFD Bases DB 8 for the deleted STS words.

NYPA Response:

1. NYPA will revise the markup of the paragraph in the APPLICABLE SAFETY ANALYSIS section of the Bases to indicate that the assumed primary containment leakage is 1.5% per day as stated in UFSAR Section 14.8.2.1.1 (Ref. 8) and revise the associated JFD accordingly.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.3-15 JFD Bases X 3
STS B3.6.1.3 Bases - SR 3.6.1.3.2
ITS B3.6.1.3 Bases - SR 3.6.1.3.1

ITS B3.6.1.3 Bases - SR 3.6.1.3.1 modifies STS B3.6.1.3 Bases - SR 3.6.1.3.2 by deleting the second and third sentences. While the deletion of the third sentence is acceptable, the deletion of the second sentence is not. The second sentence describes what constitutes an inoperable open purge valve with regards to this SR. Thus, it needs to be retained in order to fully describe the intent of the SR.

Comment: Revise the ITS markup to retain the STS sentence.

NYPA Response:

1. NYPA will revise the NUREG Bases markup to retain the second sentence as requested.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.6 Reactor Building-to-Suppression Chamber Vacuum Breakers

3.6.1.6-1 DOC M3
 JFD X1
 JFD Bases DB 5
 JFD Bases X2
 CTS 4.7.A.4
 STS SR 3.6.1.6.3 [**STS SR 3.6.1.7.3**]
 ITS SR 3.6.1.6.4 and Associated Bases

CTS 4.7.A.4 is modified by the addition of ITS SR 3.6.1.6.4. This addition is justified by DOC M3. DOC M3 states that the addition is ITS SR 3.6.1.6.3. In addition, ITS SR 3.6.1.6.4 has a frequency of 24 months. JFD X1 and JFD Bases X2 states that the frequency change from the STS frequency of 18 months to the ITS frequency of 24 months is justified in DOC M3. DOC M3 does not provide a justification for the 24 months.

Comment: Correct the discrepancy between the CTS/ITS markup and DOC M3 and provide a discussion and justification for the 24 month surveillance frequency.

NYPA Response:

1. NYPA will correct the editorial error in DOC M3 (change SR 3.6.1.6.3 to SR 3.6.1.6.4).
2. NYPA will revise the NUREG markup, NUREG Bases markup, and associated JFDs to restore the Frequency of NUREG SR 3.6.1.7.3 (ITS SR 3.6.1.6.4) to 18 months.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.6-2 DOC L1
JFD DB1
CTS 3.7.A.4
ITS 3.6.1.6 ACTIONS and Associated Bases

CTS 3.7.A.4.a requires two OPERABLE suppression chamber-reactor building vacuum breakers. ITS LCO 3.6.1.7 **[3.6.1.6]** requires each vacuum breaker be OPERABLE. Since there are a total of 4 reactor building-to-suppression chamber vacuum breakers this change increases the number required OPERABLE vacuum breakers from 2 to 4. CTS 3.7.A.4.b specifies the ACTIONS to be taken when one of the required two reactor building-to-suppression chamber vacuum breakers is inoperable. Thus the CTS allows plant operation with 2 vacuum breakers inoperable and no ACTIONS need to be taken until 3 vacuum breakers become inoperable. The addition of ITS 3.6.1.7 **[3.6.1.6]** ACTIONS A through D require remedial actions be taken as soon as one out of the four vacuum breakers becomes inoperable. In addition, the justification (DOC L1) states that the CTS fails to make the distinction between loss of function and loss of redundancy and is therefore "unnecessarily conservative." The staff believes that the CTS is less conservative because of this lack of distinction. Thus, all the changes associated with DOC L1, including the addition of the ACTION Note are More Restrictive changes rather than Less Restrictive changes.

Comment: Revise the CTS markup and provide discussion and justification for these More Restrictive changes.

NYPA Response:

1. NYPA does not agree with the logic or thought process involved in the conclusion that is stated in the 5th sentence ("Thus the CTS allows plant operation with 2 vacuum breakers inoperable and no ACTION need be taken until 3 vacuum breakers become inoperable."). While CTS 3.7.A.4.a states, in part, that "...two...vacuum breakers shall be operable..." this statement is taken to mean that the "vacuum relief function of two vacuum relief lines" shall be operable. It then follows (as stated in CTS 3.7.A.4.b) that if "...one of the vacuum breakers [one vacuum relief line] is...inoperable...reactor operation is permissible...[for]...7 days..." It also follows that if more than one vacuum breaker is inoperable (that is, the vacuum relief function of more than one vacuum relief line is inoperable), a plant shutdown is required under CTS 3.7.A.8 because there is a loss of the vacuum relief function. (CTS 3.7.A.4 is also taken to be addressing only the vacuum relief function with the isolation function of the vacuum relief lines being addressed by CTS 3.7.D.)

Attachment 1

Response to ITS Section 3.6 RAIs

2. Note that the changes proposed by NYPA are essentially identical to those that were proposed in the Peach Bottom and Cooper ITS conversions which also had "custom" CTS requirements essentially identical to those contained in the FitzPatrick CTS.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.6-3 JFD Bases DB3
STS B3.6.1.7 Bases - APPLICABILITY
ITS B3.6.1.6 Bases - APPLICABILITY

STS B3.6.1.7 Bases - APPLICABILITY justifies the OPERABILITY of the reactor building-to-chamber suppression chamber vacuum breakers in MODES 1, 2, and 3. Two conditions related to excessive negative pressure necessitate this MODE applicability, an inadvertent actuation of the Suppression Pool Spray System and depressurization of the drywell. ITS B3.6.1.6 Bases APPLICABILITY states that depressurization of the drywell could occur due to a DBA. All mention of inadvertent actuation of the RHR Containment Spray System has been deleted or severely modified. JFD Bases DB3 states that inadvertent actuation of the RHR Containment Spray System is not the main concern. The justification does not adequately address this deletion since it implies that it is a concern in drywell depressurization, just not the main concern. In addition, the change could be considered a potential generic change.

Comment: Provide additional justification and discussion for this deletion based on current licensing bases, system design or operational constraints.

NYPA Response:

1. In the 1970s there were concerns regarding the proper failure mode of the air-operated Reactor Building-to-Suppression Chamber vacuum breakers (valves 27AOV-101A and 101B) which are in series with the self-actuated vacuum breakers (valves 27VB-6 and 7) at the FitzPatrick plant. On one hand, failure of the air-operated vacuum breaker in the closed position results in isolation of the vacuum breaker line (while rendering the same line inoperable with respect to vacuum relief). On the other hand, failure of the air-operated vacuum breaker in the open position results maintaining the line available for vacuum relief (if it is assumed that the self-actuated vacuum breaker is operable) while rendering isolation of the vacuum relief line vulnerable to single failure.

One of the concerns from the discussions regarding the failure mode of the air-operated vacuum breakers was with respect to whether or not the design negative pressure of primary containment would be exceeded in the event of loss of the Reactor Building-to-Suppression Chamber vacuum relief function. (The vacuum relief function would be lost if one vacuum relief flow path is isolated due to the associated air-operated vacuum relief valve having failed in the closed position and either the air-operated or self-actuated vacuum relief valve fails to open in the other vacuum relief flow path.)

Attachment 1

Response to ITS Section 3.6 RAIs

In response to this concern GE analyzed a number of primary containment depressurization scenarios and compared the results of the analyses to the design negative pressure. The results of the analyses indicated that even with loss of the Reactor Building-to-Suppression Chamber vacuum relief function, the negative pressure would be less negative than the design value for all of the scenarios analyzed and that the most limiting scenario was a small break LOCA (which purges essentially all of the non-condensable gases from the drywell) followed by condensation of the steam in the drywell. This is the scenario described as "case a" in the Bases APPLICABLE SAFETY ANALYSIS (ASA).

2. With regard to deletion of the NUREG Bases APPLICABILITY discussion regarding "inadvertent actuation of suppression pool spray," as noted above, the most limiting scenario does not involve suppression pool spray (inadvertent or planned). This is due to the presence of significant quantities of non-condensable gases in the suppression chamber (during both normal plant operation and accident scenarios) which reduces the rate and magnitude of depressurization events and results in the most limiting scenarios being those that condense the steam in the drywell when there are almost no non-condensibles present. In addition, since the portion of the Bases being addressed here is APPLICABILITY (not ASA), discussion of the limiting scenario in the APPLICABILITY would be a duplication of the discussion previously presented in the Bases ASA.
3. With respect to the NUREG Bases change marked DB3 being a "potential generic change," the change is based on analyses performed by GE specifically for the FitzPatrick plant. NYPA does not have sufficient knowledge of the design and licensing basis of any other BWR plant to judge whether or not the change might be applicable to another plant.
4. For purposes of clarification, NYPA will revise NUREG Bases markup JFD DB3 (by paraphrasing "case a") to more clearly indicate the reason for the change and also mark the changes with a new JFD (probably PA7) that notes deletion of information that duplicates discussion in the Bases ASA.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.7 Suppression Chamber-to-Drywell Vacuum Breakers

3.6.1.7-1 DOC M1
 JFD CLB1
 JFD Bases CLB1
 CTS 4.7.A.5
 STS SR 3.6.1.8.1 and Associated Bases
 ITS SR 3.6.1.7.1 and Associated Bases

CTS 4.7.A.5 is modified by the addition of a new surveillance requirement (ITS SR 3.6.1.7.1). Since the CTS does not have a similar SR the change is a More Restrictive change. ITS SR 3.6.1.7.1 which is based on STS SR 3.6.1.8.1 modifies the STS frequencies by deleting the frequency "and within 2 hours after any discharge..reduced by \geq [0.5] psid." The justifications for this deletion JFD CLB1 and JFD Bases CLB1 implies that the SR and the associated ITS frequency is based on the retention of existing requirements/current licensing basis. If the addition of the SR is a new surveillance per DOC M1 then there is no existing requirements to justify the deletion of the second STS frequency. In addition the discussion provided in JFD CLB1 and JFD Bases CLB1 to delete the frequency can apply to any BWR/4 suppression chamber-to-drywell vacuum breaker. Thus the staff finds the change to be generic and beyond the scope of review for this conversion (**BSCR**).

Comment: Delete this generic change.

NYPA Change:

1. NYPA will change the designation of the changes to STS SR 3.6.1.8.1 (ITS SR 3.6.1.7.1) and associated Bases from JFD CLB1 to JFD X2. (No significant change to the NUREG markup or NUREG Bases markup will be made and the text of the JFD will also remain essentially unchanged.)
2. Note that essentially identical changes were made as part of the Peach Bottom, Cooper and Duane Arnold ITS conversions. These plants had "custom" TS that were very similar to the FitzPatrick CTS.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.7-2 DOC M3
 JFD X1
 JFD Bases DB6
 JFD Bases X2
 CTS 3.7.A.5.g
 STS 3.6.1.8 ACTION B and Associated Bases
 ITS 3.6.1.7 ACTION B and Associated Bases

CTS 3.7.A.5.g imposes limitations if one suppression chamber-to-drywell vacuum breaker is made or found to be inoperable for any reason. CTS 3.7.A.5.g is modified to address the condition of one suppression chamber-to-drywell vacuum breaker not closed (ITS 3.6.1.7 ACTION B). This change is considered as a More Restrictive change in which the staff agrees. However, as part of this change ITS 3.6.1.7 ACTION B has a Completion Time of 12 hours. The STS for this similar condition (STS 3.6.1.8 ACTION B) has a Completion Time of 2 hours. The justification provided (JFD X1, JFD Bases DB6, and JFD Bases X2) to justify the additional time (10 hours)) is that adequate time is needed to prepare and perform the leakage test of STS SR3.6.1.1.2/ITS SR 3.6.1.1.2. The staff finds that the STS Completion Time of 2 hours is adequate in light of the safety concern associated with an open vacuum breakers (breach of containment). In addition, the staff finds that the change is generic and beyond the scope of review for this conversion (**BSCR**).

Comment: Delete this generic change.

NYPA Response:

1. NYPA will delete the change and associated NUREG markup JFD X1 and NUREG Bases markup JFD X2.
2. The changes to the NUREG Bases for Required Action B.1 that are marked DB6 and the associated NUREG Bases markup JFD DB6 are not related to the change in Completion Time that was proposed. The Bases changes marked DB6 address alternate means of verification that the vacuum breaker is closed as required by Required Action B.1 and have no relationship to the associated Completion Time. As a result, no revision of the NUREG Bases changes marked DB6 are planned.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.7-3	DOC L3	JFD Bases DB3
	CTS 3.7.A.5.b	
	ITS B3.6.1.7 Bases-SR 3.6.1.7.1	

CTS 3.7.A.5.b states that “One drywell suppression chamber vacuum breaker may be non-fully closed so long as it is determined to be not more than 1° open as indicated by the position lights.” The CTS markup indicates and DOC L3 states that this requirement has been deleted. This is incorrect. This OPERABILITY requirement on what constitutes a closed valve has been relocated to ITS B3.6.1.7 Bases - SR 3.6.1.7.1 as “Insert SR 3.6.1.7.1.” Thus this change is a Less Restrictive (LA) change rather than a Less Restrictive (L) change.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (LA) change.

NYPA Response:

1. NYPA will revise the CTS markup and DOCs to reflect relocation of the vacuum breaker closure details to the Bases.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.7-4 JFD PA2
JFD Bases PA3
CTS 3.7.A.5.f
CTS 4.7.A.5.g
STS SR 3.6.1.8.3 and Associated Bases
ITS SR 3.6.1.7.3 and Associated Bases

CTS 3.7.A.5.f and 4.7.A.5.g specify that the self actuated vacuum breakers shall "open" when subjected to a force equivalent to 0.5 psid acting on the valve disc. The corresponding STS SR is STS SR 3.6.1.8.3. ITS SR 3.6.1.7.3 modifies the STS to require the verification of the "full open" setpoint rather than the CTS/STS requirement of "opening setpoint". This change is characterized in the ITS as an editorial clarification (JFD PA2 and JFD Bases PA3). This is incorrect. There is a technical difference between CTS/STS requirement of being capable of opening or starting to open at a set pressure versus the ITS requirement of being fully open at a set pressure. The staff considers this change to be a More Restrictive change.

Comment: Revise the CTS markup and provide a discussion and justification for this More Restrictive change.

NYPA Response:

1. NYPA does not agree that the changes to NUREG SR 3.6.1.8.3 (ITS SR 3.6.1.7.3) and the associated Bases are "More Restrictive." The discussion in 2, 3 and 4 below provides explanation.
2. NUREG SR 3.6.1.7.3 and NUREG SR 3.6.1.8.3 Bases describe the purpose of the SRs as being "...to ensure...vacuum breaker **full open** differential pressure...is valid." (emphasis added)
3. NUREG SR 3.6.1.7.3 and NUREG SR 3.6.1.8.3 were revised as described in ITS SR 3.6.1.6.4, JFD DB3 and ITS SR 3.6.1.7.3, JFD PA2 to make the wording in the SRs consistent with the Bases wording regarding **full open** differential pressure.
4. In addition, NUREG SR 3.6.1.8.3 (ITS SR 3.6.1.7.3) Bases was revised as discussed in NUREG Bases JFD PA3 for consistency with (or clarification of) the change to the SR as discussed in 2 and 3 above.
5. Note that a change similar to the NUREG SR 3.6.1.8.3 (ITS SR 3.6.1.7.3) Bases change described in JFD PA3 should have also been made to NUREG SR 3.6.1.7.3 (ITS 3.6.1.6.4) Bases for consistency.

Attachment 1

Response to ITS Section 3.6 RAIs

6. The changes are consistent those contained in the Cooper ITS conversion submittal (both SRs and Bases), consistent with the Peach Bottom approved ITS for suppression chamber-to-drywell vacuum breakers (SR and Bases) and are also consistent with the approved Duane Arnold ITS Bases for both SRs.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.7-5 JFD Bases PA3
JFD Bases DB4
STS B3.6.1.8 Bases - APPLICABILITY
ITS B3.6.1.7 Bases - APPLICABILITY

See Comment Number 3.6.1.6-3.

Comment: See Comment Number 3.6.1.6-3.

NYPA Response:

1. See response to Item 3.6.1.3-6.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.7-6 JFD Bases DB2
STS B3.6.1.8 Bases - LCO
ITS B3.6.1.7 Bases - LCO

The first two sentences of STS B3.6.1.8 Bases - LCO states the following: "Only [9] of the [12] vacuum breakers must be OPERABLE for opening. All suppression chamber-to-drywell vacuum breakers, however, are required...their intended design function." ITS B3.6.1.7 Bases-LCO modifies these sentences as follows: "All vacuum breakers must be OPERABLE." The ITS deletes the words "for opening. All...design function." The basis for this deletion JFD Bases DB2 states that the "change is consistent with the format of ITS 3.6.1.7 for reactor building-to-suppression chamber vacuum breakers." This is incorrect. First, the ITS reference is wrong; it should be ITS 3.6.1.6 even though ITS B3.6.1.6 Bases-LCO is worded slightly different, the deleted ITS B3.6.1.7 Bases-LCO words are in ITS B3.6.1.6 Bases -LCO. In addition, the deleted words define what constitutes an OPERABLE vacuum breaker and need to be retained in this section which defines OPERABILITY.

Comment: Delete this change.

NYP A Response:

1. NYP A will revise the Bases LCO markup change and JFDs as needed to indicate that the open function of all 5 vacuum breakers is required to preserve single failure protection for vacuum relief function and the close function of all 5 vacuum breakers is required to limit the bypass area to within the assumptions of analysis.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.9 Residual Heat Removal (RHR) Containment Spray System

3.6.1.9-1 DOC A.1
 CTS 3/4.5.B
 STS 3.6.1.7 and Associated Bases
 ITS 3.6.1.9 and Associated Bases

CTS 3/4.5.B has been converted into the Improved Technical Specifications requirements using the guidance of NUREG-1434 for STS 3.6.1.7, Residual Heat Removal (RHR) Spray System. DOC A.1 states that this ITS is based upon the guidance provided in NUREG-1433 which contradicts with the presentation of the ITS markup.

Comment: Revise the DOC A.1 to be consistent.

NYPA Response:

1. DOC A1 will be corrected.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.9-2	DOC M2 DOC LA1 DOC L4 JFD PA1 JFD Bases PA1 JFD Bases PA2 CTS 3.5.B.1 CTS 4.5.B.1.a ITS LCO 3.6.1.9 SR 3.6.1.9.2 and Associated Bases
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CTS 3.5.B.1 states that both RHR containment spray subsystems shall be OPERABLE and that each subsystem contains two (2) RHR pumps and 2 RHR service water pumps. CTS 4.5.B.1.a requires for each pump an operability and flow rate test. The CTS markup of CTS 3.5.B.1 shows that the details concerning the number of pumps required for an OPERABLE subsystem has been relocated to the Bases by DOC LA1. This is incorrect. The ITS markup for ITS SR 3.6.1.9.2, ITS B3.6.1.9 Bases - BACKGROUND, ITS B3.6.1.9 Bases-LCO and ITS B3.6.1.9 Bases SR 3.6.1.9.2 states that only one RHR pump per subsystem is required to be OPERABLE and only tests that one "required" RHR pump. This is not in accordance with the current licensing basis as stated in CTS 3.5.B.1 and 4.5.B.1.a. In addition, no justification is provided in the CTS markup to indicate this change. The staff considers this total change to be a beyond scope of review item for this conversion (**BSCR**). This concern is also applicable to ITS 3.6.2.3. See Comment Number 3.6.2.3-1.

Comment: Revise the ITS markup to bring it into conformance with the CTS and provide any appropriate discussions and justifications for these changes. See Comment Number 3.6.2.3-1.

NYPA Response:

1. DOC LA1 addresses the relocation of the details concerning the number of RHR pumps required in an OPERABLE RHR Containment Spray subsystem (loop). DOC LA1 does not address the less restrictive change of requiring only one RHR pump to be OPERABLE in an OPERABLE subsystem.
2. DOC L4 and the associated NSHC provide the justification of the less restrictive change of requiring only one RHR pump to be OPERABLE in an OPERABLE RHR Containment Spray subsystem consistent with the design discussed in UFSAR Section 14.6.1.3.3.

Attachment 1

Response to ITS Section 3.6 RAIs

3. With regard to ITS SR 3.6.1.9.2 only requiring test of the single "required" RHR pump in each subsystem, it should be noted that ITS 3.5.1, ECCS - Operating, has the same Applicability as ITS 3.6.1.9, with respect to RHR pumps and requires both RHR pumps in both LPCI subsystems to be OPERABLE. ITS 3.5.1 thus becomes the controlling specification with respect to RHR pump operability and the requirement for only one OPERABLE RHR pump in each RHR Containment Spray subsystem is moot.
4. Addition of "required" to ITS SR 3.6.1.9.2 and the associated Bases as discussed in NUREG markup JFD PA1 and NUREG Bases markup JFD PA1 is consistent with usage of the term as described in paragraph 4.1.3.b of the Writer's Guide for ITS.
5. With regard to item 3.6.2.3-1, the same changes described in the LA and L DOCs discussed in 1 and 2 above were made to CTS as shown in the ITS 3.6.2.3 Conversion package for the same reasons with the same justifications. In addition, the word "required" was also added to ITS SR 3.6.2.3.2 as described in NUREG markup JFD PA2 for the same reasons as discussed in 4 above. Please note that "required" should have also been added to the Bases for ITS SR 3.6.2.3.2 but was not. NYPA will correct this error.
6. ITS 3.6.1.9 and 3.6.2.3 changes discussed above result in specifications that are consistent with the ITS conversions for Peach Bottom and Cooper. The Duane Arnold ITS would also be consistent with the changes discussed above except that Duane Arnold requires two OPERABLE RHR pumps in the RHR Suppression Pool Cooling specification due to a plant unique analysis for a stuck open safety relief valve event.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.9-3 DOC LA2
 CTS 4.5.B.1.b
 ITS 5.5.8 **[5.5.7]**

The CTS markup of CTS 4.5.B.1.b shows that the entire specification is being relocated to the Inservice Testing Program (DOC LA2). This relocation designation is incorrect. CTS 4.5.B.1.b is incorporated into ITS 5.5.8 **[5.5.7]**. Thus the CTS markup should reflect that these requirements have been moved to ITS 5.5.8 **[5.5.7]** and that this is an Administrative change (movement within the TS) rather than a Less Restrictive (LA) change. This concern is also applicable to ITS 3.6.2.3. See Comment Number 3.6.2.3-2.

Comment: Revise the CTS markup of CTS 4.5.B.1.b to show that it has been moved to ITS 5.5.8 **[5.5.7]** and provide the appropriate discussion and justification for this Administrative change. See Comment Number 3.6.2.3-2.

NYPA Response:

1. Since ITS 5.5.7 does not contain any specifics with regard to what systems or components are within the scope of the IST Program (those details are in the Program), NYPA does not agree that classification of this relocation of the requirement to test certain motor operated valves should be considered to be an administrative change.
2. The relocation discussed in DOC LA2 is consistent with other portions of the ITS submittal as well as previously approved ITS conversion submittals for Cooper and Peach Bottom.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.9-4 DOC LA3
 CTS 4.5.B.1.f
 ITS SR 3.6.1.9.3 and Associated Bases

CTS 4.5.B.1.f requires that the containment headers and spray nozzles are verified to be unobstructed. The corresponding ITS SR is ITS SR 3.6.1.9.3. The details on the method used to perform this verification (i.e., an air test) is according to DOC LA3 relocated to the Bases. The staff cannot find this detail in the Bases for ITS 3.6.1.9.

Comment: Revise the ITS markup to include this detail.

NYPA Response:

1. NYPA will correct the NUREG Bases markup error and label the change with the appropriate JFD.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.9-5 DOC L1
 CTS 4.5.B.3

CTS 4.5.B.3 requires that the redundant containment cooling subsystem be verified to be OPERABLE immediately and daily thereafter when one containment cooling subsystem becomes inoperable. The CTS markup shows this requirement as being deleted and indicates that it is a Less Restrictive (L) change. This is incorrect. The discussion provided for DOC L1 indicates that the change is an Administrative change, rather than a Less Restrictive (L) change. This change is the equivalent to the Administrative change of the deletion of restore an inoperable item to OPERABLE status. It is implicit within the CTS and ITS. The change would be considered a Less Restrictive (L) change if verify meant perform all surveillance tests or demonstrate subsystem OPERABILITY. However, the staff believes that verify is an administrative verification (paper check) of system OPERABILITY which is implicit in the structure of the CTS/ITS. This concern is also applicable to ITS 3.6.2.3. See Comment Number 3.6.2.3-3.

Comment: Revise the CTS markup and provide a discussion and justification for this Administrative change. See Comment Number 3.6.2.3-3.

NYP&A Response:

1. NYP&A will replace DOC L1 with an "A" DOC as suggested, delete to associated NSHC, etc.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.1.9-6 JFD PA 2
JFD Bases PA2
JFD Bases PA3
STS SR 3.6.1.7.1 and Associated Bases
ITS SR 3.6.1.9.1 and Associated Bases

ITS SR 3.6.1.9.1 modifies STS SR 3.6.1.7.1 by deleting the SR Note on system alignment in MODE 3 and adds the phrase "or can be aligned to the correct position." The details of the SR Note have been relocated to ITS B3.6.1.9 Bases-LCO. The justification for this change (JFD PA2, JFD Bases PA2 and JFD Bases PA 3) states that the change is made to be consistent with the format of STS SR 3.6.2.3.1 and ITS B3.6.2.3 Bases-LCO. See Comment Number 3.6.2.3-5 for additional concerns with regards to the changes to ITS B3.6.2.3 Bases-LCO. STS SR 3.6.2.3.1 has the same wording in both NUREG-1433 and 1434. ITS SR 3.6.1.9.1 is based on NUREG-1434 (STS SR 3.6.1.7.1). Thus basing a change on format consistency when both NUREGs have the same wording is unacceptable and a better justification would need to be provided. In addition, based on the changes made, the staff considers this change as generic and beyond the scope of review for this conversion (**BSCR**).

Comment: Delete this generic change. See Comment Number 3.6.2.3-5.

NYPA Response:

1. The Note in NUREG-1434 SR 3.6.1.7.1 is for BWR/6 plants where the RHR Containment Spray System is automatically initiated. NYPA deleted the Note in the NUREG markup for ITS SR 3.6.1.9.1 because the RHR Containment Spray System at the FitzPatrick plant (which is typical of BWR/4 plants in this case) is manually initiated. The change is marked "PA2" and is discussed in the first line of NUREG markup JFD PA2.
2. NUREG SR 3.6.1.7.1 (ITS SR 3.6.1.9.1) was also changed by adding the phrase "or can be aligned to the correct position." This change (also marked "PA2") is necessary since once the Note is deleted and absent the added phrase, ITS SR 3.6.1.9.1 would not be met (and the LCO not be met) except when the RHR Containment Spray System is actually lined up for spray operations. Addition of the phrase also makes ITS SR 3.6.1.9.1 consistent with NUREG SR 3.6.2.3.1 (ITS SR 3.6.2.3.1) as stated in NUREG markup JFD PA2.

Attachment 1

Response to ITS Section 3.6 RAIs

3. NUREG-1434 SR 3.6.1.7.1 Bases was changed by deletion of the discussion of the SR Note (NUREG-1434 Bases page 3.6-46) to reflect deletion of the Note as discussed in 1 above. The change was marked "PA3" and as discussed in NUREG Bases markup JFD PA3, the change makes the Bases consistent with ITS SR 3.6.1.9.1.
4. NUREG-1434 SR 3.6.1.7.1 (ITS SR 3.6.1.9.1) Bases was also changed by adding two sentences concerning alignment of the system in a non-accident configuration. This change (also marked "PA3") makes the ITS SR 3.6.1.9.1 Bases essentially identical to ITS SR 3.6.2.3.1 Bases.
5. NYPA considers the changes discussed in 1 through 4 above to be correct and necessary. No revision of those changes is planned.
6. NUREG-1434 Specification 3.6.1.7 (ITS 3.6.1.9) Bases LCO was changed as indicated by the change marked PA2 on NUREG-1434 Bases page B 3.6-44 and on INSERT Page B 3.6-57d. The two sentences that were added are very similar to portions of NUREG-1434 SR 3.6.1.7.1 (ITS SR 3.6.1.9.1) Note that was deleted (see discussion in 1 above). Since the SR Note is apparently necessary for plant designs where the RHR Containment Spray system (and RHR Suppression Pool Cooling) are automatically initiated (and the RHR Containment Spray System at FitzPatrick is not automatically initiated), addition of the two sentences is improper. As a result, NYPA will delete the two sentences. The same change will be made to ITS 3.6.2.3 Bases LCO since the RHR Suppression Pool Cooling subsystems are also manually initiated.
7. With respect to the changes being generic - NYPA notes that a specification for RHR Containment Spray was not added as part of the other BWR/4 ITS conversions that NYPA is familiar with (and thus does not appear to be generic with respect to BWR/4 plants). In addition, since the RHR Containment Spray function is automatic for the BWR/6 plants it appears that the change can not be generic with respect to those plants either.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.1 Suppression Pool Average Temperature

3.6.2.1-1 DOC A.2
 CTS 3.7.A.1.c.(2)
 CTS 3.7.A.8
 ITS 3.6.2.1 ACTION C and Associated Bases

CTS 3.7.A.1.c.(2) allows the suppression pool normal power operation temperature limit of 95°F to be exceeded by no more than 10°F during testing which adds heat to the suppression pool. The CTS markup shows that ITS 3.6.2.1 ACTION C has been added to CTS 3.7.A.1.c.(2), and that the change is considered as Administrative (DOC A2). DOC A2 states that the change clarifies that if the temperature exceeds 105°F, testing that adds heat to the suppression pool must be immediately suspended and that the current requirements imply this. This is incorrect. If the limits specified in CTS 3.7.A.1.c.(2) are exceeded then the requirements of CTS 3.7.A.8 apply which requires a shutdown to cold shutdown within 24 hours. The addition of ITS ACTION C as well as ITS 3.6.2.1 ACTION A would allow an additional 24 hours before the shutdown begins. Thus the change would be a Less Restrictive (L) change rather than an Administrative change. See Comment Number 3.6.2.1-6.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change. See Comment Number 3.6.2.1-6.

NYPA Response:

1. NYPA will revise CTS markup and provide appropriate L DOC, NSHC, etc.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.1-2	DOC A5 DOC M2 (ITS 3.6.2.2) CTS 3.7.A.1 ITS 3.6.2.1 APPLICABILITY and Associated Bases ITS 3.6.2.2 APPLICABILITY and Associated Bases
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CTS 3.7.A.1 specifies the APPLICABILITY for both suppression pool average temperature and water level. The CTS APPLICABILITY is the same for both. In the ITS the APPLICABILITY is also the same for both ITS 3.6.2.1 and ITS 3.6.2.2. However, the CTS markup for ITS 3.6.2.1 show the APPLICABILITY change as Administrative while for ITS 3.6.2.2 it shows the change as More Restrictive. Based on the discussions in DOC A5 and M2 (ITS 3.6.2.2) the staff concludes that the changes should be More Restrictive for both specifications. See Comment Number 3.6.2.2-1.

Comment: Correct this discrepancy. See Comment Number 3.6.2.2-1.

NYPA Response:

1. NYPA will revise the CTS markup and DOCs to eliminate the discrepancy.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.1-3 DOC L3
 CTS 4.7.A.1

CTS 4.7.A.1 requires an external visual inspection of the suppression chamber whenever there is indication of relief valve operation with the local suppression pool temperature $\geq 160^{\circ}\text{F}$ and RCS pressure ≥ 200 psig. DOC L3 states that ITS 3.6.2.1 does not retain this CTS requirement in accordance with NEDO-30832, "Elimination of Limit on BWR Suppression Pool Temperature for SRV Discharge with Quenchers," dated December 1984. The discussion and justification do not indicate if NEDO-30832 has been reviewed and approved by the staff for its applicability to JAFNPP. This item may be considered a beyond scope of review item for this conversion since its applicability to JAFNPP may not have been approved by the staff.

Comment: Provide additional discussion and justification to show that NEDO - 30832 has been reviewed by the staff and found to be acceptable for use at JAFNPP.

NYPA Response:

1. The enclosure to a letter from G. M. Holahan (NRC) to R. Pinelli (BWROG), dated August 29, 1994, addressed NRC review of NEDO-30832 and acceptance of the report with respect to elimination of the local pool temperature limit.
2. The requirements of CTS 4.7.A.1 are based on potential damage to the suppression chamber due to condensation oscillation (CO) loading as a result of Safety/Relief Valve (S/RV) operation during elevated suppression pool temperature conditions. In other words, the requirements of CTS 4.7.A.1 are based on potential damage to the suppression chamber as a result of S/RV operations that result in high local pool temperatures and associated condensation oscillation loading.
3. The NRC evaluation of NEDO-30832 states, in part, that the NRC "...staff has concluded that the local temperature limit may be eliminated provided that SRV discharges are delivered to the suppression pool through a "T" or "X" quencher... The BWROG has demonstrated in NEDO-30832 that unstable CO loads are bounded by the air clearing hydrodynamic load when the "T" or "X" quencher is used."
4. Since T-quenchers were installed on all S/RV discharge lines as part of the "Mark I Containment" modifications and the NRC has found elimination of suppression pool local temperature limits with respect to containment loading acceptable based on the data contained in NEDO-30832, it is appropriate that the requirements of CTS 4.7.A.1 be deleted as discussed in ITS 3.6.2.1, DOC L3.

Attachment 1

Response to ITS Section 3.6 RAIs

5. It should also be noted the CTS 3.7 Bases (which were reviewed and issued by the NRC as part of CTS Amendment 239) briefly discuss SRV discharge related condensation loading, T-quenchers and NEDO-30832 on CTS page 188a and the NRC Safety Evaluation for CTS Amendment 239 (see page 14 of the SE) also contains a brief discussion regarding NEDO-30832 as a basis for elimination of local suppression pool temperature limits. From these references it is apparent that the NRC has reviewed and accepted NEDO-30832 in general and for the FitzPatrick plant as it pertains to containment structural loads.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.1-4 JFD Bases PA4
STS B3.6.2.1 Bases - D.1 and D.2
ITS B3.6.2.1 Bases - D.1, D.2 and D.3

STS B3.6.2.1 Bases - D.1 and D.2 uses the phrase "In this Condition..." ITS B3.6.2.1 Bases - D.1, D.2 and D.3 decapitalizes the "C" in "Condition" and justifies it as a typographical or editorial change. This is incorrect. The condition referred to in the sentence is Condition D and not the system operating or physical condition. Therefore, it should be "Condition" rather than "condition".

Comment: Correct this discrepancy.

NYPA Response:

1. NYPA will restore the upper case letter "C" at the location noted.
2. See response to Item 3.6.2.3-6 (same issue).

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.1-5 JFD Bases DB3
STS B3.6.2.1 Bases - SR3.6.2.1.1
ITS B3.6.2.1 Bases - SR3.6.2.1.1

STS B3.6.2.1 states the following: "The average temperature is determined by taking an arithmetic average of OPERABLE suppression pool water temperature channels." The ITS modifies this sentence by deleting the word "OPERABLE". Insufficient justification is provided for this deletion.

Comment: Provide additional discussion and justification on this deletion.

NYPA Response:

1. The entire sentence is inconsistent with the design of the suppression pool water temperature instrumentation installed at the FitzPatrick plant. Refer to the Bases for ITS 3.3.3.1, PAM Instrumentation, Function 10, (or UFSAR section 5.2.3.10) for a more complete description of the suppression pool temperature monitoring instrumentation.
2. NYPA will correct the inconsistency by deletion of the entire sentence (and also delete both of the sentences which were added and marked "DB3" on the NUREG Bases markup) and add a reference to ITS 3.3.3.1. This will result in deletion a sentence that is inconsistent with the design and will also delete information in the Bases for ITS SR 3.6.2.1.1 that duplicates information provided in the Bases for ITS 3.3.3.1, Function 10.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.1-6 CTS 3.7.A.1.c.(2)
 ITS 3.6.2.1 ACTION A

CTS 3.7.A.1.c.(2) allow the suppression pool normal operational temperature limit of 95°F to be exceeded by no more than 10°F during testing which adds heat to the suppression pool. CTS 3.7.A.1.c.(2) also states the following: "In connection with such testing, the pool temperature must be reduced to below the normal power operation limit specified in (1) above with 24 hours." The CTS markup shows this statement as being part of ITS 3.6.2.1 ACTION A. The staff does not believe this is the correct change. Based on the structure of the paragraph and the words in the sentence, the staff interprets the above statement to mean that during testing which adds heat to the suppression pool, one is allowed to remain between 95°F and 105°F for only 24 hours. If one exceeds the time limit or temperature limit then a shutdown per CTS 3.7.A.8 is required. In the ITS during testing which adds heat to the suppression pool, there is no time limit specified for this condition only a temperature limit. Thus the CTS statement is not associated with ITS 3.6.2.1 ACTION A, but is deleted for the CTS. Therefore, the change would be a Less Restrictive (L) change. See Comment Number 3.6.2.1-1.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change. See Comment Number 3.6.2.1-1.

NYPA Response:

1. NYPA will revise the CTS markup and provide appropriate L DOC, NSHC, etc.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.2 Suppression Pool Water Level

3.6.2.2-1 DOC A5 (ITS 3.6.2.1)
 DOC M2
 CTS 3.7.A.1
 ITS 3.6.2.1 APPLICABILITY and Associated Bases
 ITS 3.6.2.2 APPLICABILITY and Associated Bases

See Comment Number 3.6.2.1-2.

Comment: See Comment Number 3.6.2.1-2.

NYPA Response:

1. See response to Item 3.6.2.1-2.
2. ITS 3.6.2.2 DOC M2 will be revised if necessary for consistency with ITS 3.6.2.1 M
 DOC written to replace ITS 3.6.2.1 DOC A5.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

3.6.2.3-1 DOC M1
 DOC LA1
 DOC L2
 JFD PA2
 CTS 3.5.B.1
 CTS 4.5.B.1.a
 ITS LCO 3.6.2.3, SR 3.6.2.3.2 and Associated Bases

See Comment Number 3.6.1.9-2. In addition, the change proposed for ITS SR 3.6.2.3.2 can be considered as generic.

Comment: See Comment Number 3.6.1.9-2. Delete the generic change.

NYPA Response:

1. See response to item 3.6.1.9-2.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.3-2 DOC LA2
 CTS 4.5.B.1.b
 ITS 5.5.8

See Comment Number 3.6.1.9-3.

Comment: See Comment Number 3.6.1.9-3.

NYPA Response:

1. See response to Item 3.6.1.9-3.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.3-3 DOC L1
 CTS 4.5.B.3

See Comment Number 3.6.1.9-5.

Comment: See Comment Number 3.6.1.9-5.

NYPA Response:

1. See response to Item 3.6.1.9-5.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.3-4 JFD X1
JFD Bases X2
STS 3.6.2.3 ACTION B and Associated Bases
ITS 3.6.2.3 ACTIONS B, C and Associated Bases

STS 3.6.2.3 ACTION B requires a shutdown if the Required Actions and Associated Completion Time of Condition A is not met or two RHR suppression pool cooling subsystems are inoperable. ITS 3.6.2.3 breaks STS 3.6.2.3 ACTION B up into two separate Conditions and allows an 8 hour Completion Time to restore one RHR suppression pool cooling subsystem to OPERABLE status. This change is justified by JFD X1 and JFD Bases X2 is not in accordance with TSTF-230.

Comment: Revise the ITS mark for ITS 3.6.2.3 ACTIONS B, C and their Associated Bases to bring them into conformance with TSTF-230.

NYPA Response:

1. NYPA will revise the NUREG markup, NUREG markup JFDs, NUREG Bases markup and NUREG Bases markup JFDs to be in conformance with TSTF-230, Revision 1.

Attachment 1

Response to ITS Section 3.6 RAIs

3.6.2.3-5 JFD Bases PA2
STS B3.6.2.3 Bases-LCO
ITS B3.6.2.3 Bases-LCO

ITS B3.6.2.3 Bases-LCO adds "Insert LCO" to STS B3.6.2.3 Bases-LCO which defines RHR Suppression Pool Cooling System OPERABILITY in MODE 3. The justification used to add this insert (JFD Bases PA2) states the addition is for enhanced clarity or consistency with other Bases. Since this paragraph is not currently in either NUREG 1433 or 1434, the change would modify the OPERABILITY of this system in MODE 3 and would apply to all BWR-4 and BWR-6 plants. Therefore, this change for this specification is considered as generic and beyond the scope of review for this conversion (**BSCR**). See Comment Number 3.6.1.9-6.

Comment: Delete this generic change.

NYP A Response:

1. See last sentence of part 6 of response to Item 3.6.1.9-6.

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Response to ITS Section 3.6 RAIs

3.6.2.3-6 JFD Bases PA3
STS B3.6.2.3 Bases-A.1
ITS B3.6.2.3 Bases-A.1

See Comment Number 3.6.2.1-4.

Comment: See Comment Number 3.6.2.1-4.

NYPA Response:

1. NYPA will restore the upper case "C" in the second sentence of ITS 3.6.2.3, ACTIONS A.1 Bases.
2. See response to Item 3.6.2.1-4 (same issue).

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Response to ITS Section 3.6 RAIs

S3.6.2.4 Residual Heat Removal (RHR) Suppression Pool Spray

S3.6.2.4-1 JFD DB1
JFD Bases CLB1
JFD Bases DB1
STS 3.6.2.4 and Associated Bases

STS 3.6.2.4 and its Associated Bases is not included in the ITS for JAFNPP. The justifications for this deletion are JFD DB1 and JFD Bases DB1. While the deletion of this specification is acceptable, the ITS markup of the Bases shows a JFD Bases CLB1 also associated with the deletion. No justification for JFD Bases CLB1 is provided.

Comment: Correct this discrepancy.

NYPA Response:

1. NYPA will correct the editorial error by changing "CLB1" to "DB1" on NUREG Bases markup page B 3.6-71 under Tab N 3.6.2.4.

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Response to ITS Section 3.6 RAIs

3.6.3.1 Primary Containment Oxygen Concentration

- 3.6.3.1-1 JFD Bases DB1
JFD Bases DB2
STS B3.6.3.3 Bases - BACKGROUND
ITS B3.6.3.1 Bases - BACKGROUND

STS B3.6.3.3 Bases - BACKGROUND states that the capability to inert the primary containment and maintain oxygen concentration limits is dependent on the Drywell Cooling System fans. ITS B3.6.3.1 Bases - BACKGROUND deletes all references to the Drywell Cooling System fans. This is unacceptable. Resolution of this item is dependent on resolution of Comment Number S3.6.3.2-1.

Comment: See Comment Number 3.6.3.2-1[S3.6.3.2-1].

NYPA Response:

1. Deletion of the discussion of drywell cooling system fans and hydrogen recombiners is correct as shown. The associated NUREG markup JFDs (DB1 and DB2) are also correct as written.
2. See response to Item S3.6.3.2-1.

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Response to ITS Section 3.6 RAIs

S3.6.3.2 Drywell Cooling System Fans

S3.6.3.2-1 JFD DB1
JFD Bases DB1
JFD Bases DB1 (ITS 3.6.3.1)
STS 3.6.3.2 and Associated Bases

STS 3.6.3.2, Drywell Cooling System Fans is deleted from the ITS. The discussion and justification (JFD DB1 and JFD Bases DB1) for deleting Drywell Cooling System fans states that the specification "is being deleted because no comparable system exists for post accident drywell atmosphere mixing at JAFNPP." This statement is incorrect. JFD Bases DB1 (ITS 3.6.3.1) states that this system does exist at JAFNPP. It also states that the JAFNPP specific analysis does not assume Drywell Cooling System fans are available to assure adequate mixing. [Emphasis added by NYPA. See explanation in response below.] However, the Bases for STS 3.6.3.2 APPLICABLE SAFETY ANALYSIS states that hydrogen is released to the drywell within 2 minutes following a DBA LOCA. Natural circulation phenomena results in a gradient concentration difference in the drywell and suppression chamber. "Even though this gradient is acceptably small and no credit for mechanical mixing was assumed in the analysis, two [Drywell Cooling System fans] are [required] be OPERABLE (typically four to six fans are required to keep the drywell cool during operation in MODE 1 or 2) by this LCO." The staff has determined that this system meets Criterion 3 of 10 CFR 50.36(c)(2)ii)(C). Thus, in light of the STS Bases discussion, JFD DB1, JFD Bases DB1, and JFD Bases DB1 (ITS 3.6.3.1) are inaccurate and incomplete.

Comment: Provide additional justification and discussion for the STS deviation based on current licensing basis, system design or operations constraints, or retain STS 3.6.3.2 and Associated Bases.

NYPA Response:

1. While the underscored sentence in the discussion above is not contained in either NUREG markup JFD DB1 or NUREG Bases markup JFD DB1 as stated, it is a correct statement - no credit for forced flow mixing of the drywell atmosphere is assumed. Refer to UFSAR Section 5.2.3.7
2. The NYPA statement in NUREG markup JFD DB1 that "...no comparable system exists for post accident drywell atmosphere mixing..." is a correct statement. The installed drywell cooling system is designed for normal (non-accident) reactor operation only. All of the drywell cooling fans (four in each of two drywell cooler assemblies) have fan motor overload settings consistent with the fan blade pitch settings and fan motor ratings that provide the necessary drywell atmosphere cooling

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Response to ITS Section 3.6 RAIs

flow at the normal drywell atmospheric pressure (approximately 1.9 psig). A significant increase in drywell atmospheric pressure, such as that expected during loss of coolant accident conditions, will promptly result in a trip of all of the operating drywell cooling fan motors on overload. Thus, there is no system for post accident drywell atmosphere mixing.

3. NYPA will revise NUREG JFD DB1 to provide a clear reference to UFSAR Section 5.2.3.8 (which is the basis for the conclusion that NUREG-1433, Revision 1, Specification 3.6.3.2, Drywell Cooling System Fans, should not be included in the FitzPatrick plant ITS).
4. Since, as discussed in 1 through 3 above, the drywell cooling system fans at FitzPatrick do not perform any accident mitigating functions, it is apparent that Criterion 3 of 10 CFR 50.36(c)(2)(ii) is not applicable.
5. See response to Item 3.6.3.1-1.

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Response to ITS Section 3.6 RAIs

3.6.4.1 Secondary Containment

- 3.6.4.1-1** DOC A5
CTS 3.7.C.1
CTS 3.7.C.2
ITS 3.6.4.1 Required Action C.1 Note and Associated Bases

CTS 3.7.C.2 requires that when secondary containment integrity cannot be met within 24 hours then all conditions specified in CTS 3.7.C.1 must be met. The CTS is modified by the addition of ITS 3.6.4.1 Required Action C.1 Note which states that if secondary containment is inoperable during movement of irradiated fuel assemblies ITS LCO 3.0.3 is not applicable. This change is characterized as an Administrative change (DOC A5). This is incorrect. The CTS requires all 4 conditions of CTS 3.7.C.1 to be met if secondary containment is inoperable. Therefore, if secondary containment is inoperable during movement of irradiated fuel and the plant is in MODES 1, 2, and 3, then the CTS requires a shutdown (CTS 3.7.C.1.a and CTS 3.7.C.1.b must be met) as well as the suspension of irradiated fuel assembly movement (CTS 3.7.C.1.d) within 24 hours. If secondary containment is inoperable during movement of irradiated fuel and the plant is in cold shutdown, then CTS 3.7.C.1.a and CTS 3.7.C.1.b are already met and only CTS 3.7.C.1.d needs to be met within 24 hours. As stated in ITS B3.6.4.1 Bases C.1, C.2 and C.3 "The inability to suspend movement of irradiated fuel assemblies would not be a sufficient reason to require a reactor shutdown." Thus the Note is added to ITS 3.6.4.1 Required Action C.1, which would make the CTS change a Less Restrictive (L) change since a shutdown would be required by the CTS. See Comment Numbers 3.6.4.2-2, and 3.6.4.3-4.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change. See Comment Numbers 3.6.4.2-2, and 3.6.4.3-4.

NYPA Response:

1. Based on review of Items 3.6.4.2-2 and 3.6.4.3-4 as well as the Cooper and Peach Bottom ITS submittals, NYPA has determined that the characterization of the change in ITS 3.6.4.3, DOC M5, as a "more restrictive" change is the correct characterization. (See Cooper ITS submittal at 3.6.4.3 DOC M.3 and Peach Bottom ITS submittal at 3.6.4.1 DOC M8, 3.6.4.2 DOC M2, and 3.6.4.3 DOC M4.)
2. NYPA will revise the submittal to indicate that the changes discussed in ITS 3.6.4.1, DOC A5, and ITS 3.6.4.2 DOC A5 (Items 3.6.4.1-1 and 3.6.4.2-2 respectively) are "more restrictive" changes similar to that discussed in ITS 3.6.4.3 DOC M5 (Item 3.6.4.3-4).

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3.6.4.2 Secondary Containment Isolation Valves (SCIVs)

3.6.4.2-1 DOC A3
 CTS 3.7.C.1
 CTS 3.7.C.2
 ITS 3.6.4.2 ACTIONS Note 2 and Associated Bases

CTS 3.7.C.2 is modified by the addition of ITS 3.6.4.2 ACTIONS Note 2, which allows separate Condition entry for each penetration flow path. The change is justified in the CTS by DOC A3. DOC A3 discusses the application of the Note as it applies to the ITS not the CTS. The staff cannot determine based on the CTS wording and DOC A3 that the addition of this Note is an Administrative change to the CTS. The staff concludes based on the wording of CTS 3.7.C.1 and 3.7.C.2 that separate Condition entry is not allowed in the CTS and thus the addition of this Note is a Less Restrictive (L) change.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

NYPA Response:

1. NYPA will replace DOC A3 with a new L DOC and appropriate NSHC.

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3.6.4.2-2 DOC A5
 CTS 3.7.C.1
 CTS 3.7.C.2
 ITS 3.6.4.2 Required Action D.1 Note and Associated Bases

See Comment Number 3.6.4.1-1 and 3.6.4.3-4.

Comment: See Comment Numbers 3.6.4.1-1 and 3.6.4.3-4.

NYPA Response:

1. See response to Item 3.6.4.1-1. (NYPA will revise the submittal to change the characterization of ITS 3.6.4.2, DOC A5 to a "more restrictive" change.)

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3.6.4.2-3 DOC L6
 CTS Table 3.10-2 Note(f)
 ITS 1.0 LOGIC SYSTEM FUNCTIONAL TEST

The CTS markup shows that the details in CTS Table 3.10-2 Note(f) identifying how the LOGIC SYSTEM FUNCTIONAL TEST is to be performed (i.e., using the test jacks) has been deleted. This deletion is justified by DOC L6. The discussion provided in DOC L6 indicates that this information is not really deleted but encompassed by the definition of LOGIC SYSTEM FUNCTIONAL TEST in ITS 1.0. Therefore, the change would be considered as an Administrative change rather than a Less Restrictive (L) change.

Comment: Revise the CTS markup and provide a discussion and justification for this Administrative change.

NYPA Response:

1. NYPA will revise the CTS markup and associated DOCs and NSHC to reflect reclassification of the change identified as L6 to an Administrative change.

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Response to ITS Section 3.6 RAIs

3.6.4.2-4 JFD Bases PA3
STS B3.6.4.2 Bases - APPLICABILITY
ITS B3.6.4.2 Bases - APPLICABILITY

The last sentence in STS B3.6.4.2 Bases - APPLICABILITY states that "Moving irradiated fuel assemblies in the [secondary] containment may also occur in MODES 1, 2, and 3." ITS B3.6.4.2 Bases - APPLICABILITY deletes this sentence based on the reason that MODE 1, 2, and 3 operation is justified in the previous paragraph of the APPLICABILITY. This is not entirely correct since that paragraph deals with secondary containment OPERABILITY with regards to primary containment leakage as a result of a DBA. The deleted statement states that irradiated fuel movement can occur in MODES 1, 2, and 3, as well as MODES 4 and 5 which is not addressed in the previous APPLICABILITY paragraph.

Comment: Delete this change.

NYPA Response:

1. NYPA will delete the change as requested.

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Response to ITS Section 3.6 RAIs

3.6.4.2-5 JFD Bases PA5
STS B3.6.4.2 Bases - A.1 and A.2, and SR 3.6.4.2.1
ITS B3.6.4.2 Bases - A.1 and A.2, and SR 3.6.4.2.1

See Comment Numbers 3.6.1.2-5 and 3.6.1.3-11.

Comment: See Comment Numbers 3.6.1.1-5 and 3.6.1.3-11

NYPA Response:

1. See response to Item 3.6.1.3-11.
2. The changes to ITS 3.6.4.2, ACTIONS A1 and A2 Bases and ITS SR 3.6.4.2.1 Bases make the terminology used consistent with that used in the ITS 3.6.1.3, ACTION C.2 Note and the associated Bases (as revised).

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3.6.4.2-6 JFD Bases X3
JFD Bases X4
ITS B3.6.4.2 Bases - LCO

ITS B3.6.4.2 Bases - LCO is modified to reflect that the SCIVs isolation times are included in the Inservice Testing Program. This change in the ITS markup is designated as JFD Bases X4. No discussion or justification for JFD Bases X4 is provided. However, the discussion and justification provided for JFD Bases X3 seems to cover this change.

Comment: Correct this discrepancy.

NYPA Response:

1. NYPA will revise the NUREG Bases markup to correct the error.

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Response to ITS Section 3.6 RAIs

3.6.4.3 Standby Gas Treatment (SGT) System

3.6.4.3-1 DOC A4
 JFD CLB3
 JFD Bases CLB3
 CTS 4.7.B.1.e
 ITS SR 3.6.4.2.4 and Associated Bases

CTS 4.7.B.1.e requires that manual operability of the bypass valve for filter cooling shall be demonstrated once per 24 months. The corresponding ITS SR is ITS SR 3.6.4.3.4 which requires verifying the SGT System filter cooling cross tie valves are open. There are a number of changes made to the CTS SR in order to arrive at the ITS SR wording. All the changes are considered and described as Administrative changes (DOC A4, JFD CLB3, and JFD Bases CLB3). This is incorrect. The changes associated with the manual operability of the valve and the addition of the ITS SR Note are discussed in Comment Numbers 3.6.4.3-2 and 3.6.4.3-3 respectively. There is a nomenclature change from “bypass valve for filter cooling” to “SGT System filter cooling cross tie valves”. Based on similar nomenclature changes on other conversions, it is difficult to determine from the Bases discussions if the “bypass” valves are the same as the “cross tie” valves since the terminology “bypass” and “cross tie” imply two different types of designs. “Bypass” connotes going around a component(s) whereas “cross tie” connotes connecting two trains or two similar components.

Comment: Provide a simplified PID of the SGT System showing all valves. Indicate the valves to be tested by the CTS/ITS SR. If the valves specified in the CTS are different from the ITS valves, provide a discussion and justification for this Less Restrictive (L) change. See Comment Numbers 3.6.4.3-2 and 3.6.4.3-3.

NYPA Response:

1. The following pages contain a simplified diagram of the SGT System with both subsystems in the normal (standby) configuration (Figure RAI 3.6.4.3-1.1) and a simplified diagram showing one SGT subsystem in operation and providing decay heat cooling for the other (idle) subsystem (Figure RAI 3.6.4.3-1.2). Figure RAI 3.6.4.3-1.1 is marked with references to applicable CTS and ITS SRs adjacent to each valve as requested.

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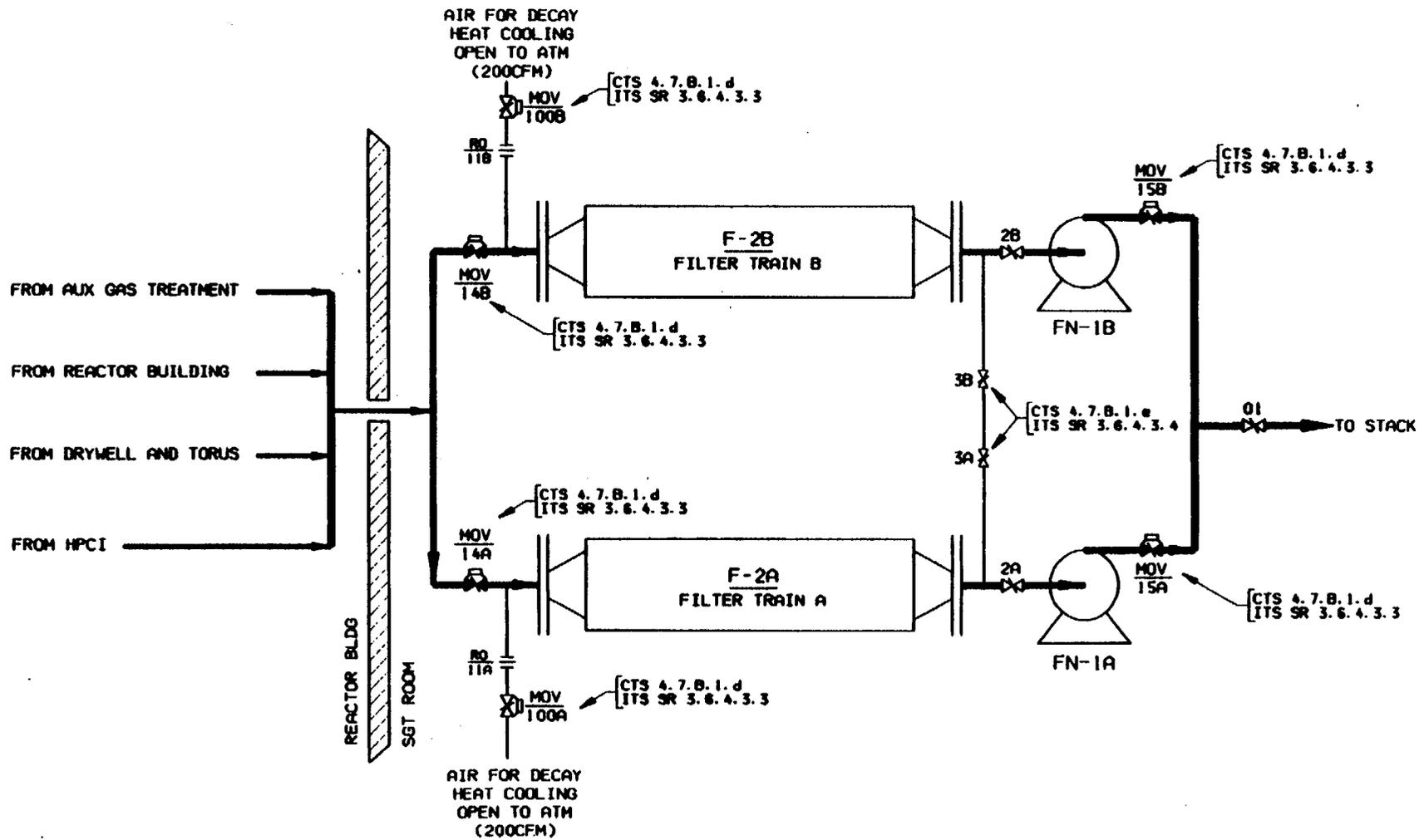


FIGURE RAI 3.6.4.3-1.1

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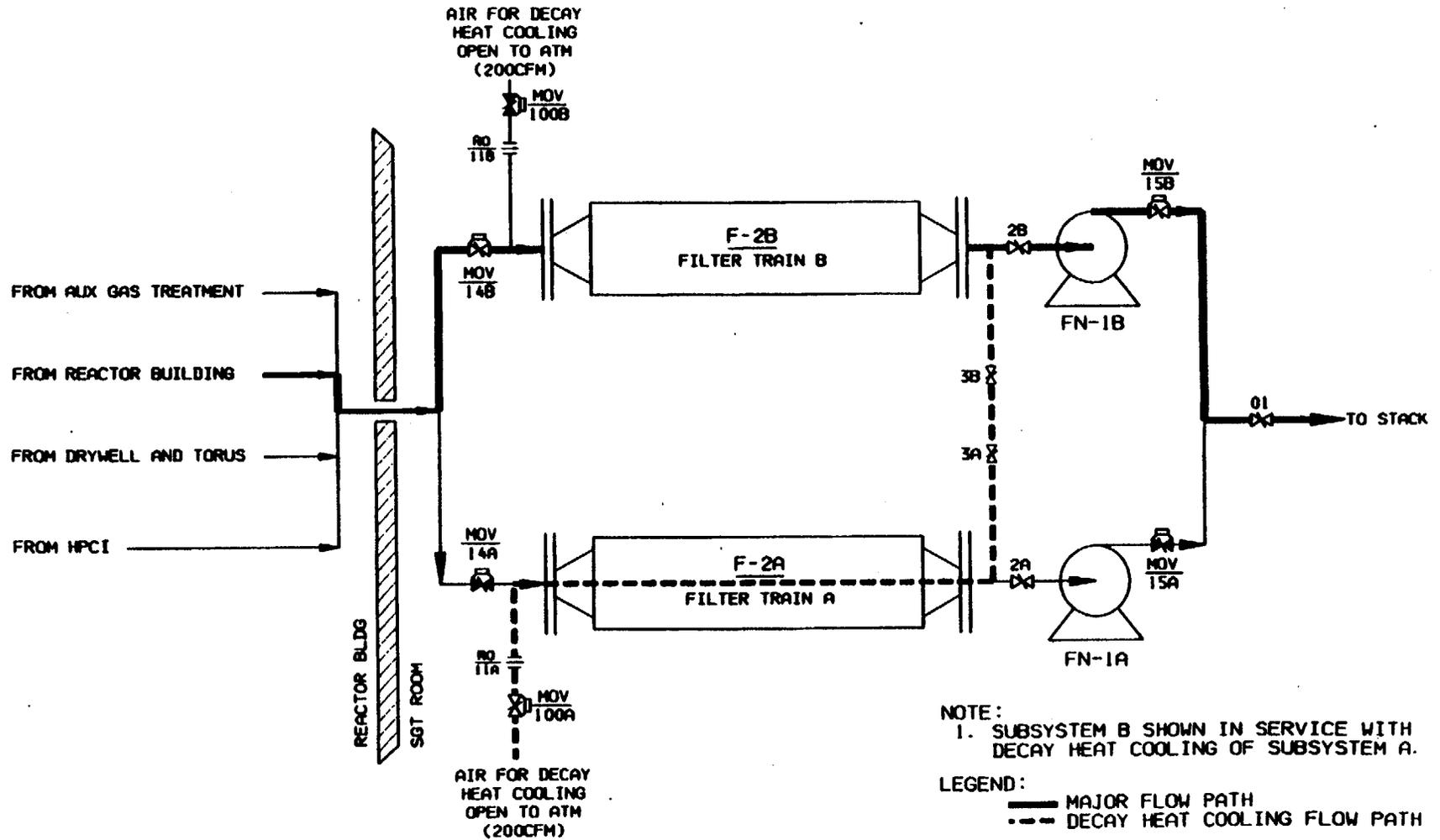


FIGURE RAI 3.6.4.3-1.2

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3.6.4.3-2 DOC A4
JFD CLB3
JFD Bases CLB3
CTS 4.7.B.1.e
STS SR 3.6.4.2.4 and Associated Bases
ITS SR 3.6.4.2.4 and Associated Bases

CTS 4.7.B.1.e requires that manual operability of the bypass valve for filter cooling shall be demonstrated once per 24 months. The corresponding ITS SR is ITS SR 3.6.4.3.4 which requires verifying the SGT System filter cooling cross tie valves are open. There are a number of changes made to the CTS SR in order to arrive at the ITS SR wording. All the changes are considered and described as Administrative changes (DOC A4, JFD CLB 3, and JFD Bases CLB 3). This is incorrect. The changes associated with the valve nomenclature and the addition of the ITS SR Note are discussed in Comment Numbers 3.6.4.3-1 and 3.6.4.3-3 respectively. CTS 4.6.B.1.e requires demonstrating manual operability of the valves which implies operating or stroking the valve. The ITS only verifies that the valve is open. STS SR 3.6.4.3.4 excluding fan starting would more accurately be a reflection of the CTS requirements of opening and closing the valve. Thus, the change to the CTS would be Administrative only if the STS words were used. Thus the proposed ITS change would be considered as a Less Restrictive (L) change.

Comment: Revise the CTS/ITS markups as appropriate and provide the appropriate discussion and justification for this change. See Comment Numbers 3.6.4.3-1 and 3.4.3.3-2.

NYPA Response:

1. Refer to response to item 3.6.4.3-1 and Figures RAI 3.6.4.3-1.1 and RAI 3.6.4.3-1.2
2. As shown on Figure RAI 3.6.4.3-1.1, the manual valves associated with filter decay heat cooling are labeled 3A and 3B. CTS 4.7.B.1.e and ITS SR 3.6.4.3.4 are the applicable surveillance requirements. Valves 3A and 3B must be capable of being full open to provide the decay heat cooling air flow path for the idle subsystem filter (see Figure RAI 3.6.4.3-1.2) and must also be capable of full closure to allow isolation of one subsystem filter for maintenance purposes while maintaining operability of the other subsystem.
3. NYPA will revise the NUREG markup of SR 3.6.4.3.4 to require cycling of valves 3A and 3B as suggested.

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3.6.4.3-3 DOC A4
JFD CLB 3
JFD Bases CLB 3
CTS 4.7.B.1.e
ITS SR 3.6.4.2.4 and Associated Bases

CTS 4.7.B.1.e requires that manual operability of the bypass valve for filter cooling shall be demonstrated once per 24 months. The corresponding ITS SR is ITS SR 3.6.4.3.4 which requires verifying the SGT System filter cooling cross tie valves are open. There are a number of changes made to the CTS SR in order to arrive at the ITS SR wording. All the changes are considered and described as Administrative changes (DOC A4, JFD CLB3, and JFD Bases CLB3). This is incorrect. The changes associated with the valve nomenclature and manual operability of the valve are discussed in Comment Numbers 3.6.4.3-1 and 3.6.4.3-2 respectively. CTS 4.7.B.1.e is modified by a Note which exempts performance of ITS SR 3.6.4.3.4 when one SGT subsystem is isolated. The CTS does not currently allow this exemption. Thus the addition of the Note would be a Less Restrictive (L) change. In addition insufficient information is provided to make a determination that the addition of the Note is plant specific. There is the potential that this change is generic and thus beyond the scope of review for this conversion.

Comment: Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change based on plant specific system design or operational constraints.

NYPA Response:

1. NYPA does not agree that the addition of the Note to ITS SR 3.6.4.3.4 should be classified as a less restrictive change.
2. While CTS does not contain explicit wording that states that closure of a decay heat cooling cross-tie valve (see response to item 3.6.4.3-1 and valves 3A and 3B as shown on Figure RAI 3.6.4.3-1.1) when performing maintenance on a filter is allowed, it is obvious that the failure to close a cross-tie valve would result in the inoperability of the SGT subsystem which is not out of service for maintenance (and thus both subsystems would be inoperable whenever maintenance is performed on either subsystem). Closing a cross-tie valve (either valve 3A or 3B) to preserve the operability of the other subsystem during maintenance on a SGT subsystem filter is explicitly addressed in plant procedures and is consistent with the interpretation of CTS.

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3. Note that an essentially identical Administrative change was included in the Cooper ITS conversion. While there are some differences between the Cooper and FitzPatrick SGT system configurations, the flow path for a subsystem filter decay heat cooling is essentially the same. The location of cooling air introduction to a subsystem filter and use of a cross-tie line to the other subsystem fan suction in both the Cooper and FitzPatrick SGT systems makes isolation of the cross-tie line mandatory if inoperability of both subsystems is to be avoided during maintenance of either subsystem filter.

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3.6.4.3-4 DOC M5
CTS 3.7.B.1
CTS 3.7.B.2
CTS 3.7.B.3
ITS 3.6.4.3 Required Action C Note, Required Action E.1 Note and Associated Bases

See Comment Number 3.6.4.1-1. In addition the CTS requirements referenced above seem to be very close to the CTS requirements discussed in Comment Numbers 3.6.4.1-1 and 3.6.4.2-2, yet the change, which is the same in all three cases, is characterized different. It is Administrative in Comment Numbers 3.6.4.1-1 and 3.6.4.2-2 and More Restrictive here.

Comment: See Comment Numbers 3.6.4.1-1 and 3.6.4.2-2. In addition, clarify the discrepancy.

NYPA Response:

1. See response to Item 3.6.4.1-1.

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3.6.4.3-5 DOC L1
 DOC L2
 CTS 3.7.B.3
 CTS 4.7.B.2
 ITS 3.6.4.3 Required Action C.1 and Associated Bases

CTS 3.7.B.3 is modified by the addition of ITS 3.6.4.3 Required Action C.1 which allows placing the OPERABLE SGT subsystem in operation in lieu of the performing the other CTS requirements for an inoperable SGT subsystem during movement of irradiated fuel assemblies in secondary containment, during CORE ALTERATIONS and during OPDRVs. CTS 4.7.B.2 requires that when one circuit of the SGT system becomes inoperable the OPERABLE circuit shall be verified to be OPERABLE immediately and daily thereafter. By adding ITS 3.6.4.3 Required Action C.1, one is meeting the requirements of CTS 4.7.B.2. by operating the system which verifies OPERABILITY. Thus CTS 4.7.B.2 is associated with the addition of ITS 3.6.4.3 Required Action C.1 and would be an Administrative change in this situation. See Comment Number 3.6.4.3-6 for additional concerns with regards to CTS 4.7.B.2.

Comment: Revise the CTS markup and provide a discussion and justification for this Administrative change.

NYPA Response:

1. NYPA will revise the CTS markup and provide an appropriate Administrative DOC to address the NRC comment.

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3.6.4.3-6 DOC L2

CTS 4.7.B.2

See Comment Number 3.6.1.9-5.

Comment: See Comment Number 3.6.1.9-5.

NYPA Response:

1. See response to item 3.6.1.9-5.

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3.6.4.3-7 DOC L5
 CTS Table 3.10-2 Note f
 ITS 1.0 LOGIC SYSTEM FUNCTION TEST

See Comment Number 3.6.4.2-3.

Comment: See Comment Number 3.6.4.2-3.

NYPA Response:

1. NYPA will revise the CTS markup and associated DOCs and NSHC to reflect reclassification of the change identified as L5 to an Administrative change.

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3.6.4.3-8 JFD Bases PA3
STS B3.6.4.3 Bases - A.1
ITS B3.6.4.3 Bases - A.1

See Comment Number 3.6.2.1-4.

Comment: See Comment Number 3.6.2.1-4.

NYPA Response:

1. See response to items 3.6.2.1-4 and 3.6.2.3-6 (same issue).
2. NYPA will restore the upper case letter "C" at the change marked with JFD PA3 in ACTIONS A.1 Bases.

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3.7.A.3 Containment Purge Through Standby Gas Treatment System

3.7.A.3-1 DOC R1
 CTS 3.7.A.3
 CTS 3.7.A.8

The CTS markup shows that CTS 3.7.A.3 is being relocated out of the JAFNPP TS by DOC R1. DOC R1 states that "The CTS 3.7.A.3 LCO and associated surveillance requirement,...is proposed to be relocated to the Offsite Dose Calculator Manual (ODCM)." The CTS markup and DOC R1 are incorrect and/or incomplete. DOC R1 states that there is an "associated surveillance requirement", but the CTS markup does not include this surveillance requirement. In addition CTS 3.7.A.8, primary containment shutdown requirements, is directly associated with CTS 3.7.A.3 and needs to be included as part of this specification relocation. See Comment Numbers 3.6.1.3-6 and 3.7.A.3-2 for additional concerns with regards to relocation this specification.

Comment: Revise the CTS markup and provide additional discussions and justifications for surveillance and shutdown requirements associated with CTS 3.7.A.3. See Comment Numbers 3.6.1.3-6 and 3.7.A.3-2.

NYPA Response:

1. DOC R1 is in error with respect to any surveillance requirement associated with CTS 3.7.A.3. No surveillance requirement for verification that the purge path is through SGT has ever existed and DOC R1 will be revised accordingly.
2. DOC R1 will also be revised to address CTS 3.7.A.8 as it relates to CTS 3.7.A.3. The shutdown requirement of CTS 3.7.A.8 will be relocated to the ODCM along with CTS 3.7.A.3 so that the creation of (or discovery of) a purge path that is not through SGT when in MODE 1, 2, and 3 will require a plant shutdown if the purge path via SGT is not restored.
3. See response to Item 3.7.A.3-2.

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3.7.A.3-2 DOC R1
 CTS 3.7.A.3
 ITS SR 3.6.1.3.1 and Associated Bases

CTS 3.7.A.3 states that "The containment shall be purged through the Standby Gas Treatment System whenever the primary containment integrity is required." Based on the CTS and the ITS markup, the staff does not conclude that CTS 3.7.A.3 can be relocated out of the JAFNPP TS. CTS 3.7.A.3 has a direct relationship to the OPERABILITY of the containment vent and purge valves, in that purging shall be through the SGT System. If purging cannot be through the SGT System then based on CTS 3.7.A.3 the vent and purge valves need to be closed. Thus CTS 3.7.A.3 needs to be retained in ITS SR 3.6.1.3.1 either as part of Note 1 or as a separate Note.

Comment: Revise the CTS/ITS markups and provide, as appropriate, additional discussion and justification adding CTS 3.7.A.3 to ITS SR 3.6.1.3.1.

NYPA Response:

1. NYPA does not agree that CTS 3.7.A.3 (or a modified form of CTS 3.7.A.3) should be added to ITS SR 3.6.1.3.1 or the associated Note. Requiring primary containment purge through the Standby Gas Treatment (SGT) system (or discontinuation of purging without delay if the requirement is not met) is to cause filtering of any radioactive materials that might be present in the primary containment atmosphere when purging. Filtering the purge path in the SGT system and releasing the effluent through the plant stack (elevated release point) minimizes the resulting dose consistent with the objectives of Radiological Effluent Technical Specifications.

Creation of a purge path that is not through the Standby Gas Treatment (SGT) System would not have any effect on the automatic or manual closure capabilities of the primary containment vent and purge valves under either normal or accident conditions. Similarly, the inoperability of the vent and purge valves has no effect on the purge path (if any path is assumed to exist with inoperable vent and purge valves). In other words, there is no relationship between the purge path and operability of the vent and purge valves. Thus, no modification ITS SR 3.6.1.3.1 or the associated Note to reflect CTS 3.7.A.3 is necessary.

2. CTS 3.7.A.3 was added to CTS as part of Facility Operating License Amendment 93 dated May 29, 1985. Amendment 93 added Radiological Effluent Technical Specifications (RETS) to bring the License into compliance with 10 CFR 50, Appendix I.

Attachment 1

Response to ITS Section 3.6 RAIs

As discussed in the NRC letter that transmitted Amendment 93, NYPA initially submitted proposed RETS to the Commission on April 29, 1983. The April 29, 1983 submittal did not include any proposed changes to CTS 3.7.A.3. The April 29, 1983 submittal was subsequently superseded by a December 21, 1984 submittal and finally supplemented by a February 19, 1995 submittal. The December 21, 1984, submittal reflected the results of an August 8, 1984 meeting between the NRC and NYPA and included the addition of the requirements of CTS 3.7.A.3.

Attachments to the December 21, 1984 submittal letter (Attachment III, titled "Safety Evaluation for Proposed RETS and Associated Changes" and Attachment IV, titled "Additional Information Concerning the Differences Between the Revised RETS and NUREG-0473, Revision 3, Draft 7") do not include any discussions that are specific to the requirements contained in CTS 3.7.A.3.

The NRC approved the RETS submittal (as Amendment 93) without any changes to the requirements of CTS 3.7.A.3. The NRC safety evaluation for Amendment 93 (and the associated "Technical Evaluation Report" which was prepared by a contractor) do not include any specific discussion of CTS 3.7.A.3.

Based on the recollection of NYPA personnel involved in the preparation of the RETS submittal and a number of meetings and discussions with NRC personnel concerning the implementation of Technical Specifications intended to bring the plant into compliance with 10 CFR 50, Appendix I, and the absence of documentation to the contrary, it is concluded that CTS 3.7.A.3 was apparently considered to be a necessary component of RETS implementation. It follows that relocation of RETS requirements should include the relocation of CTS 3.7.A.3 to the ODCM as proposed by NYPA in DOC R1.

3. It should be noted that the only primary containment purge pathway that exists (without modification of the plant) is through the SGT System so that primary containment vent and purge effluents are filtered prior to release (Reference UFSAR 5.2.3.6). During initial construction of the plant the design of the Vent and Purge System, the Reactor Building Ventilation System, the SGT System, and the associated control systems was modified so that the only purge pathway that physically exists is through the SGT System. These changes were made prior to the issuance of the plant operating license in October, 1974.

Response to ITS Section 3.8 Requests for Additional Information

(64 RAIs and Responses)

Attachment 2

Response to ITS Section 3.8 RAIs

James A. FitzPatrick Nuclear Power Plant
Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems

3.8.1, AC Sources - Operating

3.8.1-01 DOC M.5
 CTS 3.9.B.2
 ITS 3.8.1 Required Action D.1 and D.2
 Bases for Required Action D.2 for ITS 3.8.1, STS Bases markup
 page B 3.8-12 (insert page)

CTS allow operation for 7 days with 2 offsite circuits inoperable provided that all EDGs are OPERABLE and all core and containment cooling systems and shutdown cooling systems are OPERABLE. In the ITS, it is proposed to delete the requirement that cooling systems must be OPERABLE, and substitute (1) A requirement to declare required features inoperable when the redundant required features are inoperable, and (2) A requirement to reduce power to less than 45% of RTP. The 7 day completion time to restore both offsite circuits to OPERABLE status would remain unchanged.

Comment: The staff is of the opinion that this proposed change is beyond the scope of a conversion review (**BSCR**) since it does not totally represent what is in the CTS or in NUREG-1433. Therefore, it will have to be addressed outside of the conversion review

Licensee Response:

1. Required Action D.1 and D.2 changed to C.1 and C.2 as part of ITS Revision C.
2. NYPA will delete Required Action C.2. This will make the Required Actions associated with inoperability of both reserve circuits the same as CTS. That is, NYPA will retain the Current Licensing Basis (CLB) with no changes or additions.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-02 CTS 4.9.B.1
 DOC L.3
 ITS SR 3.8.1.3

The licensee has proposed to modify the loading requirements for the EDG subsystems to include a load range. The staff finds this acceptable. However, the licensee has also proposed to delete the CTS requirement to demonstrate the load sharing capability of the EDG subsystems. DOC L.3 does not explain why this is proposed or why it is acceptable.

Comment: The licensee should revise DOC L.3 to discuss why deletion of this CTS requirement is acceptable.

Licensee Response:

1. NYPA will add wording to DOC L3 that effectively states that maintaining the load of each EDG in the EDG subsystem within the load range specified in ITS SR 3.8.1.3 demonstrates the load sharing capability. (If the load sharing capability was not working properly the Operator would find it difficult, if not impossible, to maintain the load of each EDG within the specified range.)
2. See response to Item 3.8.1.13.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-03 CTS 3.9.B.3, 3.9.B.4
 ITS 3.8.1, Condition F

The CTS and the proposed ITS include conditions of one EDG inoperable, two EDGs in one subsystem inoperable, and two EDG subsystems inoperable. However, it is not clear in the CTS or proposed ITS what constitutes an inoperable EDG subsystem. Is a subsystem considered inoperable when one of the two EDGs is inoperable, or must both EDGs in the subsystem be inoperable before the subsystem is considered inoperable.

Comment: Consideration should be given to revising the language in proposed Condition F to make it clear when the Condition is entered. Language such as "Two EDG subsystems with one or more EDGs inoperable" is a possibility.

Licensee Response:

1. ITS submittal Revision C incorporated CTS Amendment 253 into the ITS and eliminated the one (single) EDG inoperable Condition which had been included in the original ITS 3.8.1 Conversion Package. The proposed CTS changes, which were the basis of the original ITS submittal, were revised after submittal on 3/31/99 and the revision resulted in changes to the enumeration (letter identification) of Conditions C through H to reflect CTS Amendment 253. What was Condition F prior to Revision C has been changed to Condition E. Note that elimination of the Condition for a single inoperable EDG also resulted in changing "EDG" to "EDG subsystem" in a number of locations throughout ITS 3.8.1, 3.8.2, and 3.8.3 Conversion Packages to ensure proper interpretation of the terms "EDG" and "EDG subsystem."
2. ITS 3.8.1 Bases Background (first part of the paragraph beginning at the top of ITS page B 3.8-3) contains a description of what constitutes an EDG subsystem. The Bases discussion states, in part, "Each EDG subsystem consists of two EDGs which operate in parallel and are dedicated to an emergency power division (1 or 2). The Division 1 EDG subsystem consists of EDGs A and C and is dedicated to emergency bus 10500. The Division 2 EDG subsystem consists of EDGs B and D and is dedicated to emergency bus 10600." It follows that with either or both EDGs associated with an EDG subsystem inoperable, then the EDG subsystem is inoperable and (depending on what other AC Power Sources are also inoperable) Condition B, D, E, or G is entered.
3. NYPA does not consider any additional change or clarification to be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-04 CTS 3.9.B.3, 3.9.B.5
 ITS 3.8.1, Condition H
 DOC A.6

Proposed Condition H addresses three or more AC sources inoperable. However, it is not clear what constitutes three inoperable AC sources. Proposed Condition E addresses one offsite inoperable coincident with one or both EDGs in a subsystem inoperable. This appears to be 3 inoperable sources, but LCO 3.0.3 is not involved.

Comment: Under what conditions, then, is LCO 3.0.3 invoked? Is LCO 3.0.3 invoked when two offsite circuits and any one of the 4 EDGs is inoperable? Is it invoked with one offsite circuit and one EDG in each EDG subsystem inoperable? It appears that Condition H requires some rewording consistent with the language used in other 3.8.1 Conditions that will make it clear when Condition H is entered.

Licensee Response:

1. As discussed in the response to Item 3.8.1-03 above, ITS submittal Revision C resulted in what was designated Conditions "E" and "H" being changed to Conditions "D" and "G" respectively. In addition, ITS submittal Revision C reflects the deletion of CTS 3.9.B.5.
2. Regarding proposed Condition D (formerly Condition E) - consistent with the ITS 3.8.1 Bases Background discussion concerning what constitutes an EDG subsystem (see the first paragraph at the top of ITS page B 3.8-3), the inoperability of either one or both EDGs within an EDG subsystem results in the EDG subsystem being inoperable. Thus, Condition D is entered when one reserve circuit and one or both EDGs within an EDG subsystem is (are) inoperable.
3. Regarding Condition G (formerly Condition H) - consistent with the ITS 3.8.1 Bases Background discussion concerning what constitutes an EDG subsystem - inoperability of one or both EDGs within an EDG subsystem results in the EDG subsystem being inoperable. Thus, any one of the following combinations of inoperable AC Sources results in entry into Condition G:
 - a) both reserve circuits inoperable plus either EDG subsystem inoperable (where the EDG subsystem is inoperable due to inoperability of one or both EDGs within the EDG subsystem as previously noted), or

Attachment 2

Response to ITS Section 3.8 RAIs

- b) both EDG subsystems inoperable due to inoperability of one or both EDGs within the EDG subsystem plus the inoperability of one reserve circuit, or
 - c) both reserve circuits inoperable plus both EDG subsystems inoperable.
4. Since ITS 3.8.1 Bases clearly describes an EDG subsystem and the usage of the term "EDG subsystem" is consistent throughout the ITS 3.8.1 Conversion package and the use of the term is also consistent with CTS and practices that have been used for the past 25 years, NYPA does not consider any additional wording changes necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-05 CTS 4.9.C.2
 DOC L.10

The proposal to change the frequency of monitoring automatic operation of the fuel oil transfer system from monthly to every 92 days is not acceptable. DOC L.10 states that the proposed change is consistent with NUREG-1433. This is not entirely correct.

Comment: The NUREG Bases state that the fuel oil system surveillance interval may be extended to as much as 92 days if the amount of fuel consumed during a monthly EDG load run is not enough to cause the transfer pump to automatically start. If, however, the amount of fuel consumed each month is enough to cause the transfer pump to start, then the surveillance interval is monthly.

Licensee Response:

1. At the FitzPatrick plant EDG operation at full load results in consumption of fuel at a rate of approximately 3 gallons per minute (or approximately 180 gallons per hour). The effective fuel oil day tank volume between automatic transfer pump shutdown on high level and the subsequent automatic transfer pump starting on decreasing day tank level is approximately 147 gallons.
2. Since load testing of the EDGs at the 31 day Frequency of ITS SR 3.8.1.3 will result in the need for a fuel oil transfer pump starting on low level in the EDG fuel oil day tank, NYPA will revise the Frequency of ITS SR 3.8.1.6 to 31 days consistent with the discussion in the second paragraph of NUREG SR 3.8.1.6 Bases. Changes to the CTS markup, DOCs, ITS SR 3.8.1.6 Bases, and associated JFDs will also be made for consistency with the SR Frequency change.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-06 Condition B
 JFD DB7

The proposed Condition has the possibility of being confusing. The Condition addresses one EDG inoperable, but LCO 3.8.1.b addresses two EDG subsystems. It is possible that Condition B could be interpreted to mean one EDG subsystem inoperable rather than 1 of 4 EDGs inoperable.

Comment: The LCO and/or the Condition should be modified such that they use the same language. For example, the LCO could be stated as requiring four EDGs in two EDG subsystems.

Licensee Response:

1. Revision C to the ITS submittal resulted in deletion of the Condition for one individual inoperable EDG. The Revision C changes and the ITS 3.8.1 Bases Background discussion concerning what constitutes an EDG subsystem resolve the concern.
2. NYPA does not consider additional changes to be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-07 Required Action B.2
JFD DB3

The Conditions associated with these Required Actions both address inoperable EDGs. The staff does not understand why there should be a difference between Required Actions B.2 and C.1, and JFD DB3 does not provide a great deal in way of an explanation.

Comment: The licensee is requested to provide an explanation for why Required Action B.2 differs significantly from Required Action C.1.

Licensee Response:

1. ITS submittal Revision C deleted the single inoperable EDG Condition and the associated NUREG markup JFD DB3. The revised Required Action B.2 is essentially identical to NUREG Required Action B.2.
2. NYPA does not consider any additional explanation to be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-08 Required Action B.3.1, B.3.2, B.4

The language of these Required Actions is possibly confusing.

Comment: Consideration should be given to modifying the language to address only EDGs as opposed to EDG and EDG subsystem. See comment 3.8.1-06.

Licensee Response:

1. ITS submittal Revision C replaced Required Actions B.3.1, B.3.2, and B.4 with Required Actions that are essentially identical to NUREG Required Actions B.3.1, B.3.2, and B.4. The only changes to the NUREG Required Actions are:
 - a) the addition of "subsystem" a number of places to provide consistency with ITS 3.8.1 Bases Background discussion (see top of ITS Bases page B 3.8-3) concerning what constitutes an EDG subsystem, and
 - b) changes to the Completion Times to reflect the current licensing basis (effective with CTS Amendment 253).
2. NYPA does not consider any addition explanation or clarification to be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-09 Condition E and Required Action E.2

The Condition E is stated in terms of EDGs (in a subsystem) while the Required Action E.2 is stated in terms of restoring a EDG subsystem to OPERABLE status. This is potentially confusing because the relationship of individual EDGs to a subsystem or to the OPERABILITY of a subsystem has not been established.

Comment: Consideration should be given to modifying the language of this Condition to eliminate this potential confusion. See also comment 3.8.1-06.

Licensee Response:

1. ITS submittal Revision C deleted the Condition B for a single inoperable EDG resulting in changing the enumeration (letter designation) of Conditions "C" through "H" to "B" through "G" respectively. Thus, Condition E and Required Action E.2 which are discussed above were changed to Condition D and Required Action D.2 respectively.
2. Since the Condition for a single inoperable EDG (formerly Condition B) was deleted and the word "subsystem" was added at a number of locations to provide consistency with the ITS 3.8.1 Bases Background discussion concerning what constitutes an EDG subsystem (see ITS 3.8.1 Bases Background discussion at the top of ITS page B 3.8-3) and all of the various Conditions, Required Actions, Bases discussions, etc concerning a single inoperable EDG were deleted, NYPA does not consider any additional explanation or clarification to be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-10 Condition F, Required Action F.1

Condition B, C, and E are stated in terms of inoperable EDGs. Condition F, however, is stated in terms of EDG subsystems. This is potentially confusing because the relationship between individual EDGs and the OPERABILITY of the EDG subsystems has not been established.

Comment: Consideration should be given to revising the language of this Condition to eliminate this potential confusion. The Condition could be worded as follows: One or two EDGs or both EDG subsystems inoperable. The Required Action could be worded as follows: Restore two EDGs in one EDG subsystem to OPERABLE status.

Licensee Response:

1. ITS submittal Revision C deleted Condition B for a single inoperable EDG the enumeration of Conditions C, D, E, F, G, and H was changed to Conditions B, C, D, E, F, and G respectively,
2. Since the single inoperable EDG Condition (formerly Condition B) was deleted by ITS Revision C the terminology used in Condition E (formerly Condition F) is consistent with that used in other Conditions and Required Actions and associated Bases. Use of the term "EDG subsystem" is also consistent with the ITS 3.8.1, Bases Background discussion concerning what constitutes an EDG subsystem (see ITS Bases page B 3.8-3, near the top of the page).
3. As a result, NYPA does not consider any additional explanation or clarification necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-11 Condition H

The wording of this Condition needs some revision. As stated, the plant status in Condition E (with two EDGs in a subsystem inoperable) would invoke this Condition.

Comment: Something is necessary to make it clear that the Condition applies to multiple inoperabilities other than those covered by Condition E.

Licensee Response:

1. ITS submittal Revision C deleted the Condition for a single inoperable EDG and resulted in changing the enumeration (letter designation) of Conditions "E" and "H" to Conditions "D" and "G" respectively.
2. Since the wording in the Conditions, Required Actions and the associated Bases discussions was revised by deletion of words and phrases associated with a single inoperable EDG, the use of phrase "EDG subsystem" is consistent with the ITS 3.8.1 Bases Background discussion of what constitutes an EDG subsystem (see discussion at the top of ITS Bases Background Page B 3.8-3) and NYPA does not consider any additional explanation or clarification to be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-12 SR 3.8.1.2
 JFD DB6

Note 2 to this SR in NUREG-1433 is a permissive, not a requirement. Without this Note, the SR can be interpreted as not allowing prelube, and as requiring immediate EDG loading following a start.

Comment: The licensee might want to reconsider including at least part of this Note in the ITS.

Licensee Response:

1. NYPA agrees that the Note is intended to be a permissive and that deletion of the Note could result in a misinterpretation. NYPA will restore the Note and revise the JFDs, Bases, etc, to reflect retention of the Note.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-13 SR 3.8.1.3

This proposed SR does not accurately reflect CTS requirements in that the requirement to demonstrate load sharing is not included.

Comment: The staff is of the opinion that this proposed change is beyond the scope of a conversion review (BSCR) since it does not totally represent what is in the CTS or in NUREG-1433. Therefore, it will have to be addressed outside of the conversion review . See comment 3.8.1-02

Licensee Response:

1. NYPA does not agree. Performance of SR 3.8.1.3, within the load range specified, demonstrates the load sharing capability of the EDGs within the EDG subsystem. If the load sharing capability of the voltage and speed regulation was not functioning properly it would be difficult, if not impossible, for the Operator to maintain the load of the EDGs within the specified range.
2. See response to Item 3.8.1-02.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-14 SR 3.8.1.6
 JFD X12

The 92 day frequency for verifying fuel oil transfer system OPERABILITY is not acceptable.
Comment: See comment 3.8.1-05.

Licensee Response:

1. See response to Item 3.8.1-05.

Attachment 2

Response to ITS Section 3.8 RAIs

- 3.8.1-15** JFD CLB.9
ITS SRs 3.8.1.7, 3.8.1.8, and 3.8.1.11
STS SR 3.8.1.8 Note
STS SR 3.8.1.9 Note 1
STS SR 3.8.1.14 Note 2
Bases for ITS SR 3.8.1.7, STS Bases markup page B 3.8-20
Bases for ITS SR 3.8.1.8, STS Bases markup page B 3.8-21
Bases for ITS SR 3.8.1.11, STS Bases markup page B 3.8-28

JFD CLB.9 references GL 91-04 which in turn, addresses giving proper regard for the effect of performing surveillance at power on safe operational of the plant.
Comment: JFD CLB.9 states, "This change is consistent with the current JAFNPP licensing basis which does not restrict the Mode in which these Surveillances may be performed." The licensee should provide the results of an analysis that demonstrates that these SRs can be performed at power without adversely affecting safety. Special attention should be focused on voltage perturbations during performance of these SRs.

Licensee Response:

1. TSTF-283, Revision 3, specifically addresses changes to the MODE restriction Notes in the SRs associated with ITS 3.8.1 and is currently under review by the NRC.
2. NYPA will revise the NUREG markup, associated JFDs, etc, as necessary to reflect TSTF-283, Revision 3.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-16 ITS SR 3.8.1.10

Part of the acceptance criteria for this SR is to demonstrate that permanently connected loads remain energized from offsite power and that emergency loads are energized from offsite power.

Comment: The licensee has changed "offsite" to "reserve" which is consistent with plant terminology. However, it is the staff's understanding that power to the emergency busses during power operation comes from the main generator and not from the reserve transformers. In the event of an accident (ECCS initiation) there would be a reactor trip and a generator trip followed by a transfer of power to the reserve transformers. Since this is the scenario that would occur in the event of an actual design basis accident, should it not be a part of the acceptance criteria for this SR?

Licensee Response:

1. The sequence of events described (accident, scram, generator trip, AC power source transfer from Normal to Reserve) is the normal sequence when the main generator is in service and AC power is provided from the main generator via NSST 71T-4.
2. The testing of both the manual and automatic power transfer capability from the Normal power source (from the main generator via 71T-4) to the Reserve power source (from the 115 kV network via RSSTs 71T-2 and 3) is performed under ITS SR 3.8.1.7. The automatic transfer is insensitive to the underlying reason for the need for the power source transfer. Any event that results in a generator trip (generator or transformer faults, reactor scram for any reason, etc.) results in initiation of an automatic transfer of power from the Normal to the Reserve source.
3. Performance of SR 3.8.1.10 demonstrates EDG subsystem automatic starting (but not loading since no loss of power is involved), maintaining energized the "permanently connected" loads, and starting of the low pressure ECCS spray/injection subsystem pumps in the prescribed sequence.
4. Note that for design basis accidents that include a loss of power (LOP), ITS SR 3.8.1.12 tests the EDG subsystem capability of starting of the low pressure ECCS spray/injection pumps in the prescribed sequence.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-17 JFD X.8
DOC M.11
CTS 4.9.B
ITS SRs 3.8.1.9 and 3.8.1.12

ITS SRs 3.8.1.9 and 3.8.1.12 require achieving steady state voltage ≥ 3830 volts and ≤ 4400 volts. This is a proposed change relative to corresponding CTS 4.9.B, which does not specify these values.

Comment: JFD X.8 and DOC M.11 do not explain why proposed the lower limit (3830 volts) for ITS SRs 3.8.1.9 and 3.8.1.12 which differs from the lower limit (3744 volts) for ITS SRs 3.8.1.2 and 3.8.1.10 values are acceptable. Revise the submittal to explain why these proposed values are acceptable.

Licensee Response:

1. The differences in the minimum steady state voltage expressed in ITS SRs 3.8.1.2, 3.8.1.9, 3.8.1.10 and 3.8.1.12 were apparently due to an error. All should have been the same value.
2. NYPA will revise SRs 3.8.1.2, 3.8.1.9, 3.8.1.10, and 3.8.1.12 to indicate that the minimum steady state voltage is 3900 VAC. The 3900 VAC value is consistent with ITS 3.3.8.1, Loss of Power (LOP) Instrumentation, Function 2.a, Allowable Value of 109.8 to 111.4 Volts. The ITS 3.3.8.1, Function 2.a, Allowable Values correspond to voltage range of 3843 to 3899 volts at the associated 4160 VAC bus. Thus, continuous operation of EDGs at the minimum steady state voltage of 3900 VAC would not result in an actuation of the "degraded voltage" protection trip function.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-18 ITS SR 3.8.1.11
 JFD CLB 3

The licensee has deleted the value for power factor (≤ 0.9) from this SR and substituted the phrase "within the power factor limit." It is assumed that the "limit" is stated in the Bases. This is not acceptable because the value in the Bases becomes a part of the TS.

Comment: The Bases are intended to explain the TS, but should not include requirements such as has been done in this case. This SR needs to be revised to eliminate this problem.

Licensee Response:

1. NYPA provided changes in ITS Revision C. See changes made at SR 3.8.1.8 Note, associated Bases, and NUREG Bases markup JFD X4 which was included in Revision C.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-19 NUREG SR 3.8.1.18
 JFD DB2

The licensee has proposed to delete this SR. The justification is that JAFNPP does not have sequencers, and the SR is, therefore, not applicable. JAFNPP may not have sequencers, but it does have individual load timers.

Comment: The purpose of this NUREG surveillance is to verify that the interval between load applications to the EDGs (and offsite circuit in some cases) is adequate to ensure the EDG has recovered from one load application before another load is applied. This SR is applicable to individual load timers as well as to sequencers. It should be included in the TS.

Licensee Response:

1. ITS 3.3.5.1, Functions 1.d and 2.f are the timers. CALIBRATION and LOGIC SYSTEM FUNCTIONAL TESTING is performed under ITS SR 3.3.5.1.5. and SR 3.3.5.1.6 respectively and these SRs fulfill the all of the requirements stated in NUREG SR 3.8.1.18.
2. The allowable values (AVs) for ITS 3.3.5.1, Functions 1.d and 2.f, include consideration of EDG subsystem recovery following the application of a load to ensure that the EDG subsystem is capable of starting the next load to be applied.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-20 SR 3.8.1.12
 Note 1 JFD DB1

Proposed Note 1 indicates that force paralleling is only applicable to an EDG subsystem with two OPERABLE EDGs. This Note may be acceptable in some cases, but does not appear to be acceptable here.

Comment: This SR is a test of the response of the onsite power sources to a LOOP/LOCA, and the onsite power sources, by design, include two EDGs in each of 2 subsystems. The force paralleling of the EDGs in a subsystem is also a design feature that must be tested as part of this SR. If one or more of the EDGs is inoperable, this SR cannot be adequately performed. Consequently, Note 1 is not acceptable. This staff comment may apply to other SRs with the same Note.

Licensee Response:

1. The single inoperable EDG Condition was deleted as part of ITS submittal Rev C. As a result the Note was also revised and this question/comment is no longer applicable.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-21 Bases for ITS LCO 3.8.1, STS Bases markup page B 3.8-4 (insert page)
Bases for STS LCO 3.8.1

The Bases for ITS LCO 3.8.1 states, "The Limiting Condition for Operation may be met with the 115 kV North and South bus disconnect (10017) open or closed. With the disconnect closed, the automatic opening feature must be Operable."

Comment: Identify the proposed Surveillance Requirement that verifies the Operability of the automatic opening feature, and explain how the verification is accomplished. Also provide a discussion regarding the purpose of the disconnects and under what conditions they are supposed to function.

Licensee Response:

1. No SR is provided for demonstrating Disconnect 10017 is OPERABLE.
2. The Bases discussion which indicates that the automatic opening feature of Disconnect 10017 "...must be OPERABLE." is in error. The disconnect is part of the 115 kV network and is not within the scope of equipment addressed by ITS. Thus, use of the term "OPERABLE" is inappropriate with respect to the availability or functionality of the disconnect.
3. NYPA will revise the Bases discussion to indicate that the automatic opening feature of disconnect 10017 must be functional if the disconnect is closed.
4. UFSAR Section 7.1.16 (pages 7.1-44 through 7.1-47) and Section 8.3.2.4 (page 8.3-3) provide additional discussion regarding the operation of 115 kV bus sectionalizing disconnect 10017.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-22 Bases PG. B3.8-8
Action B.2 JFD DB2

The licensee is requested to provide a more detailed discussion regarding Action B.2. The discussion should address how the RHR pumps function when both EDGs in a subsystem are OPERABLE, and how they function when one EDG in a subsystem is inoperable.

Comment: The response should also discuss which RHR pump is declared inoperable under what circumstances per Action B.2, and why it is tied to inoperable core or containment cooling features. It should also be noted that the proposed Bases discussion for Action B.2 does not appear to adequately describe the Action or its intended effect. A Bases revision may be required.

Licensee Response:

1. The single inoperable EDG Condition was deleted as part of ITS submittal Revision C. As a result there is no need for any Bases discussion regarding the relationship of RHR pumps and EDGs when one EDG within an EDG subsystem is inoperable.
2. Inoperability of one EDG in an EDG subsystem results in the EDG subsystem being declared inoperable and RHR pumps (as well as all other "required features") are declared inoperable as required by Required Action B.2 in the same manner as they would be in a plant with a single EDG in each division.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-23 Bases Pg. B3.8-12
Insert Condition D

In the last part of the second paragraph of the insert there is a discussion of a scenario wherein both reserve circuits become inoperable at different times. For this scenario, it is stated that Action A.3 must be met for the first inoperable reserve circuit.

Comment: The staff understanding of this is that if Action A.3 is not satisfied, Condition G must be entered. Is this correct? The staff further understands that if Condition D is entered, it continues to apply until both reserve circuits are restored to OPERABLE, or until Condition G is entered 7 days following the inoperability of the second reserve circuit. Is this also correct?

Licensee Response:

1. ITS Revision C deleted the Condition associated with a single inoperable EDG and resulted in changing the enumeration (letter designation) of Conditions D and G to C and F respectively.
2. If Required Action A.3 and the associated Completion Time of Condition A is not met then Condition F (formerly Condition G) is entered.
3. If Condition C (formerly Condition D) is entered, it is exited at any time that the entry conditions are no longer met. That is, if either Reserve circuit is restored to Operable status, Condition C is exited because the entry conditions no longer exist. Note that both Reserve circuits do not have to be restored to exit Condition C (formerly Condition D).
4. Since both Condition A and Condition C (formerly Condition D) are concurrently applicable when both Reserve circuits are inoperable, Condition F (formerly Condition G) is entered after seven days unless both Reserve circuits are restored to Operable status because: a) if only one (either) Reserve circuit is restored to Operable Condition C would be exited; however, Condition A and the associated seven day Completion Time continues to be applicable, or b) neither of the Reserve circuits is restored to operable within the seven day Completion Times associated with Conditions A and C. (Note that this discussion assumes that the 21 day Completion Time associated with Condition A is not applicable.)

Attachment 2

Response to ITS Section 3.8 RAIs

NOTE: The NRC question regarding Required Action A.3 (and the associated Completion Time) being not met is correct. The NRC question regarding Condition C (formerly Condition D) continuing to apply until both Reserve circuits are restored to OPERABLE, or until Condition F (formerly Condition G) is entered seven days following the inoperability of the second Reserve circuit is in error because as soon as the conditions described in Condition C do not exist, Condition C is exited - just as every other Condition in ITS is exited when the conditions described in the Condition statement do not exist.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-24 Bases PG. B3.8-13
Condition F

The Bases discussion does not clearly state what constitutes an inoperable EDG subsystem.

Comment: The staff believes that one or both EDGs in a subsystem constitutes subsystem inoperability. The licensee should revise this Bases discussion to clearly state under what conditions the subsystem is inoperable. See also 3.8.1-10.

Licensee Response:

1. ITS 3.8.1 Bases Background (first part of the paragraph beginning at the top of ITS page B 3.8.3) contains a description of what constitutes an EDG subsystem. In addition, see part 2 of the responses to Items 3.8.1-03 and 3.8.1-10.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-25 Bases Pg. B3.8-15
Condition H

This Bases discussion needs to be revised to clearly state under what circumstance the Condition is entered. For example, Condition E includes a plant status in which one reserve circuit and two EDGs in one subsystem could be inoperable, but Condition H is not invoked.

Comment: The above inconsistency needs to be addressed.

Licensee Response:

1. See Response to Item 3.8.1-11.
2. NYPA does not consider any additional clarification to be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-26 Bases Pg. B3.8-19
 SR 3.8.1.6

The staff does not agree with the 92 day frequency for this SR.

Comment: See 3.8.1-05.

Licensee Response:

1. See Response to Item 3.8.1-05.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-27 Bases Pg. B3.8-20
SR 3.8.1.7 JFD PA1

JFD PA1 does not provide an adequate justification for inclusion of Insert BSR 3.8.1.7-A.

Comment: The licensee is requested to provide a detailed justification of the acceptability of this proposed change. Also, in order for the staff to understand this proposed change, the licensee is requested to provide a discussion of how this SR can be successfully demonstrated is a "series of sequential, overlapping, or total steps."

Licensee Response:

1. An actual residual transfer of power from normal (or backfeed) to reserve may cause a significant electrical transient on the bus that is transferred. Accordingly, it is desirable to perform the test in a manner that minimizes (or eliminates) the bus transient.
2. Testing of the residual transfer scheme will be essentially the same as testing of a logic circuit. As a result, NYPA has proposed to test in a manner similar to the testing of a logic circuit under the definition of Logic System Functional Test and has similarly stated that the test may be performed by series of sequential, overlapping, or total steps. It is not possible to provide the NRC with a copy of the test procedure at this time as this is a requirement in addition to CTS requirements and the procedure has not yet been written. (It is possible that the procedure which will be developed for this SR will not perform the test in a series of sequential or overlapping steps but that is not known at this time.)
3. NYPA will revise the JFDs to provide additional explanation of the design and testing of the automatic residual transfer.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-28 Bases Pg. B3.8-25
 SR 3.8.1.10

Comment: See 3.8.1-16

Licensee Response:

1. See Response to 3.8.1-16.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-29 Bases Pg. B3.8-30
NUREG SR 3.8.1.18

Comment: See 3.8.1-19

Licensee Response:

1. See Response to 3.8.1-19.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.1-30 Bases Pg. B3.8-31
 Insert BSR 3.8.1.12NT

Comment: See 3.8.1-20

Licensee Response:

1. See Response to 3.8.1-20.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.2, AC Sources - Shutdown

3.8.2-01 LCO 3.8.1 [LCO 3.8.2]

Part a. of LCO 3.8.2 requires one reserve circuit between the 115 kV transmission network and the plant class IE electrical power distribution subsystem (s) required by LCO 3.8.8.

Comment: Given the Fitzpatrick design (each reserve transformer can power only one division), how can one reserve circuit provide power to required loads per LCO 3.8.8 if those loads are associated with the division not connected to the one reserve circuit? Does this LCO need to be revised?

Licensee Response:

1. One Reserve transformer can provide power to only one of the AC electrical power subsystem (division) as noted in the comment above.
2. While ITS LCO 3.8.2.a requires only a single OPERABLE Reserve circuit (consistent with NUREG-1433 LCO 3.8.2.a) the other AC electrical subsystem would normally be energized by either the other Reserve circuit (which is not required to be OPERABLE) or the Backfeed AC power source. In addition, as discussed in ITS 3.8.2 Bases (see first paragraph of LCO discussion on ITS page B 3.8-31), "An OPERABLE EDG subsystem, associated with a 4.16 kV emergency bus required OPERABLE by LCO 3.8.8, ensures that a diverse power source is available..."
3. With respect to providing power to required loads per ITS LCO 3.8.8 - the plant design and licensing basis (which is consistent with the design and licensing basis for all or most other plants) only requires either an OPERABLE Reserve circuit or an OPERABLE EDG subsystem associated with each required power distribution subsystem when in MODE 4 or 5. There is no requirement that power be available from both an OPERABLE Reserve circuit and an OPERABLE EDG subsystem when in MODE 4 or 5. The design and licensing basis (for operation in MODE 4 or 5) does not require the plant be capable of mitigating an event (such as a refueling accident) coincident with a loss of the single required Reserve circuit (or loss of the single required EDG subsystem). As a result, there is no requirement to assume power loss to either power distribution subsystem (if it is assumed that an event such as a refueling accident occurs); or, if a loss of one of the required power sources is assumed, there is no requirement to assume an accident takes place. In other words, the licensing and design basis does not require consideration of coincident Reserve power loss (or loss of the OPERABLE EDG subsystem) and an accident when

Attachment 2

Response to ITS Section 3.8 RAIs

operating the plant in MODE 4 or 5 and requirements for a single OPERABLE Reserve circuit and single OPERABLE EDG subsystem in ITS LCO 3.8.2.a and 3.8.2.b are reflections of the licensing and design basis.

4. The requirements set forth in ITS 3.8.2 are consistent with NUREG-1433, LCO 3.8.2 and the plant design and licensing basis. The requirements of ITS 3.8.2 are also consistent with ITS 3.8.8 even when ITS 3.8.8 requires portions of both divisions to be OPERABLE since one power distribution subsystem (say division 1) may be considered to be OPERABLE if the single OPERABLE Reserve circuit required by ITS 3.8.2 is associated with that subsystem while the single OPERABLE EDG subsystem required by ITS 3.8.2 is associated with the other (division 2) power distribution subsystem. NYPA does not see any need for revision of ITS 3.8.2.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.2-02 DOC M.4
 JFD TP.1
 ITS 3.8.2 Actions Note
 STS 3.8.2
 Bases for ITS 3.8.2 Actions Note, STS Bases markup
 page 3.8-38 (insert page)

A NOTE is proposed to be added to the Actions of this LCO for ITS 3.8.2 states. The NOTE states that "LCO 3.0.3 is not applicable," and the justification provided is that inclusion of this NOTE is consistent with TSTF-36. TSTF-36 has not been accepted by the staff.

Comment: Any proposed changes that use an unapproved TSTF as a justification are likely not acceptable. The proposed NOTE should be deleted.

Licensee Response:

1. As of the 1/27/00 update of TSTF status, TSTF-36, Revision 4, remained in an "Under Consideration" status. Since the TSTF has not been disapproved, and approval prior to issuance of the final SER is likely, NYPA desires to leave the ACTIONS Note as is until there is definitive NRC action (approval or disapproval) regarding TSTF-36.
2. Changes to reflect Revision 4 to TSTF-36 will be made as necessary
3. NYPA also notes, notwithstanding the status of TSTF-36, the NRC has previously approved ITS conversions with essentially the same changes as contained in TSTF-36. (Ref. Duane Arnold ITS.)

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.2-03 ITS LCO 3.8.2
 STS LCO 3.8.2

ITS LCO 3.8.2 requires, "One emergency diesel generator capable of supplying one division of the plant Class 1E AC electrical power distribution subsystem(s) required by LCO 3.8.8," in conformance with the STS.

Comment: Confirm that each emergency diesel generator can provide the power required in Modes 4 and 5.

Licensee Response:

1. ITS submittal Revision C revised ITS LCO 3.8.2.b. As previously discussed, Revision C deleted Conditions in ITS 3.8.1 and 3.8.2 for a "single" inoperable EDG. The changes associated with ITS Revision C also revised ITS LCO 3.8.2.b by requiring an OPERABLE EDG subsystem (rather than a single EDG). No additional clarification or information should be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.2-04 Bases Pg. B3.8-37
LCO discussion

In the second paragraph of the LCO discussion it is stated that the reserve circuits (plural) must be capable of maintaining rated frequency and voltage while connected to their respective 4.16 kV emergency bus (singular).

Comment: This seems to support the question raised in 3.8.2-01 regarding how one reserve circuit can supply loads associated with 2 divisions. Is this Bases discussion correct? Is some revision required here as well as in the LCO?

Licensee Response:

1. The discussion in the second paragraph of NUREG Bases markup page B 3.8-37 is in error. The clean-typed ITS Bases is correct. The NUREG Bases markup discussion should be essentially the same as the third paragraph discussion concerning an EDG subsystem. The discussion should indicate that the reserve circuit (singular) "...must be...while connected to its respective 4.16 kV emergency bus..."

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.2-05 Bases Pg. B3.8-37
LCO discussion

The next to last paragraph includes a statement to the effect that “proper sequence operation is an integral part of reserve circuit OPERABILITY–.” Is this correct?

Comment: If the statement is correct, what function do the sequences or load times play, and why is this not reflected in LCO 3.8.1?

Licensee Response:

1. The statement is correct as written. At FitzPatrick the starting time delays for the OPERABLE low pressure ECCS pumps (LPCI and Core Spray pumps) is always the same for both plant operation (MODE 1, 2, and 3) and during plant shutdown (MODE 4 and 5) without regard to the power source (Reserve power or onsite EDG subsystem).
2. With regard to reflection of the low pressure ECCS pump start time delays in ITS 3.8.1, as noted in the response to Item 3.8.1-19, each start time delay timer is associated with a specific pump and they have been addressed in ITS 3.3.5.1, Functions 1.d and 2.f.
3. While the pump start time delay timers could, from some points of view, be considered as appropriate topics for ITS 3.8.1, NYPA considers their incorporation in ITS 3.3.5.1 to be appropriate since inoperability of a timer results in inoperability of the associated low pressure ECCS pump (and inoperability of the associated injection/spray subsystem if appropriate). (Incorporation of the timers in ITS 3.3.5.1 is also consistent with CTS.)

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.2-06 Bases Pg. B3.8-38
Action A.1, Insert Action A.1

This Bases discussion is based on a plant design which allows one offsite circuit to power more than one 4.16 kV emergency bus. This is not the Fitzpatrick design.

Comment: (1) The Bases should be revised to make it clear that a reserve circuit is inoperable if it is not available to its associated bus (no one required bus), and that if 2 divisions are required, then both reserve circuits must be OPERABLE.

(2) The staff does not understand the purpose of proposed Insert Action A.1. How can a reserve circuit be considered inoperable because it is not powering other required features? The licensee is requested to provide a detailed explanation of what the proposed insert means.

Licensee Response:

1. Concerning first part of Comment 1: NYPA agrees that the Bases should be revised by stating that a reserve circuit is inoperable if it is not available to the associated 4.16 kV emergency bus.
2. Concerning the second part of Comment 1: NYPA does not agree that both reserve circuits must be operable if both divisions are required. As previously discussed in response to Item 3.8.2-01, if both power distribution subsystems (divisions) are required by ITS 3.8.8, ITS allows one division to be associated with the single required OPERABLE reserve circuit (which may or may not actually be in service) and the other division to be associated with the single OPERABLE EDG subsystem (which may or may not actually be in service).
3. Concerning Comment 2: NYPA agrees that "INSERT ACTION A.1" is inappropriate for the FitzPatrick plant design where it is not possible for a single reserve circuit to be connected to both power distribution subsystems (divisions). NYPA will revise NUREG Bases markup page B 3.8-38 and NUREG Bases markup Insert Page B 3.8-38 accordingly.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.2-07 Bases Pg. B3.8-38 and B3.8-39
Action A.2.1, A.2.2, etc.

On Pg. B3.8-37, there is another reference to a single reserve circuit not being available to multiple 4.16 kV emergency busses. As discussed previously, this is not the Fitzpatrick design. The Bases should be revised accordingly. On Pg. B3.8-38 (first paragraph) the licensee has proposed to add "or the required reserve circuit inoperable and Required Action A.1 not taken" in the discussion of EDG inoperability.

Comment: The staff does not understand what the intent of this proposed addition is. The licensee is requested to provide a discussion of what the purpose of this addition is.

Licensee Response:

1. See response to item 3.8.2-04 concerning a "single reserve circuit not being available to multiple 4.16 kV busses." (The editorial error will be corrected.)
2. The first sentence of the Bases for ACTIONS A.2.1, A.2.2, A.2.3, A.2.4, B.1, B.2, B.3 and B.4 is actually in reference to ACTION A.1. The second sentence states that "Since this option...' (meaning ACTION A.1) "...may involve...the allowance for sufficiently conservative actions is made." (reference is made to the option of taking ACTIONS A.2.1 through A.2.4 in place of ACTION A.1).

The discussion continues (in the third and last sentences of the paragraph) by noting that "With the required EDG subsystem inoperable...it is...required...to suspend..." These actions "...to suspend..." are references to ACTIONS B.1, B.2, B.3, and B.4 which are the Required Actions for inoperability of the single required EDG subsystem. Since ACTIONS B.1 through B.4 are identical to ACTIONS A.2.1 through A.2.4 (except that B.4 addresses restoration of the single required EDG subsystem while A.2.4 addresses restoration of the single required reserve circuit), the discussion in the third and last sentences of the paragraph is applicable to the condition where the single required reserve circuit is inoperable and ACTIONS A.2.1 through A.2.4 are taken (because the option to take ACTION A.1 was not selected). Thus, since the third and last sentences are applicable to the situations where the single required reserve circuit is inoperable or where the single required EDG subsystem is inoperable, the phrase in question was added for clarification.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.3, Diesel Fuel Oil, Lube Oil, and Starting Air

3.8.3-01 NUREG SR 3.8.3.6
 JFD TA.1

The licensee has proposed to relocate this SR to licensee control in accordance with TSTF-2.

Comment: This is acceptable in concept. However, the licensee should provide information regarding where the SR will be relocated to, and the controls associated with the relocation.

Licensee Response:

1. NYPA will revise the submittal as necessary to indicate that the activities described in NUREG SR 3.8.3.6 are to be relocated to the UFSAR.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.3-02 Bases for ITS SR 3.8.3.3, STS Bases markup page B 3.8-46
Bases for STS SR 3.8.3.3

The Bases for STS SR 3.8.3.3 states, "These tests are to be conducted prior to adding the new fuel to the storage tank(s), but in no case is the time between receipt of the new fuel and conducting the tests to exceed 31 days." The Bases for corresponding ITS SR 3.8.3.3 states, "These tests are to be conducted prior to adding the new fuel to the storage tank(s), but in no case is the time between ~~receipt the sample (and corresponding test results)~~ of the new fuel and ~~conducting the tests~~ addition of new fuel oil to the storage tanks to exceed 31 days." PA.2 states, "Editorial changes have been made for enhanced clarity ..."

Comment: The proposed difference is not editorial. Revise the submittal to provide the appropriate justification for the proposed difference, or conform to the STS.

Licensee Response:

1. NYPA considers the changes to be editorial for the following reasons:
 - a) Changing from "receipt" of fuel to the "sample" time and date eliminates all potential ambiguity with regard to what the receipt time might be - the time that the transport vehicle entered the plant protected area (passed through security), the time that plant personnel indicated (verbal or written) "acceptance" of the fuel, the time that transfer of the fuel from the transport vehicle to the first storage tank began, the time that transfer of the fuel from the transport vehicle to the last storage tank was completed, etc. Use of the "sample time" eliminates all of the potential variations.
 - b) The 31 day period from "receipt of new fuel and conducting the test" effectively allows testing of the fuel by a vendor without also requiring Licensee review of the test results within the 31 day period since the time period as stated in the NUREG is silent with regard to review of the test results. The editorial changes make it clear that the time period starting with the sampling of the fuel through providing the test results of the testing is 31 days. Addition of the fuel to the storage tank(s) several days after the sampling has no effect on when the results are to be provided and variations in the time from when fuel is transferred to the first tank versus the last tank also has no effect on when the test results are to be provided.
2. The same editorial changes were made in the ITS conversion submittals for Peach Bottom and Cooper.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.3-03 Bases Pg. B3.8-47
JFD DB3

The NUREG Bases reference to ASTM D2276 is deleted and a reference to ASTM D5452 is substituted. However, JFD DB3 does not explain why this change should be considered acceptable.

Comment: The licensee is requested to provide a discussion of why the change should be acceptable; i.e., D5452 replaces D2276 and provides the same information, or other justification.

Licensee Response:

1. ASTM D 5452 is specifically intended for the gravimetric determination by filtration of particulate contamination in a sample of fuel delivered to a laboratory. As noted in footnote 1 of ASTM D 5452, the "...standard has been separated from D 2276 and has been modified primarily to establish improved safety measures."
2. ASTM D 5452-96 (which was referenced in the ITS submittal) has been superseded by D 5452-98. NYPA will revised NUREG SR 3.8.3.3 Bases to reflect this change.
3. NYPA will also provide a copy of ASTM D 5452-98 to the NRC technical reviewer as requested. (COMPLETED. Sent via e-mail on 11/10/99 to Foster, Vissing and Le.)

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.3-04 Bases JFD PA.1
Bases for ITS SR 3.8.3.3, STS Bases markup insert page B 3.8-47
Bases for STS SR 3.8.3.3

The Bases for STS SR 3.8.3.3 states, "Within 31 days following the initial new fuel oil sample, the fuel oil is analyzed to establish that the other properties" The Bases for corresponding ITS SR 3.8.3.3 states, "These additional analyses are required by Specification 5.5.10, Diesel Fuel Oil Testing Program, to be performed within 31 days following sampling and addition."

Comment: The proposed difference does not provide a clear reference point for the additional analyses because sampling and addition are not concurrent events. Bases JFD PA.1 does not explain why the proposed difference is acceptable. Revise the Bases to clarify the intent and provide the appropriate justification for the proposed difference, or conform to the STS.

Licensee Response:

1. Sampling of the new fuel, which always is prior to the actual addition of the new fuel to the storage tank(s), provides a definitive reference point in time for the completion of the required analyses. Addition of the new fuel to the storage tank(s) can be spread over a period of hours or even days as the transport vehicle is moved and connected to the various tanks that may be filled from a single transport vehicle. As stated in ITS 3.8.3 Bases Insert B 3.8.3-2 on Insert Page B 3.8-47, requiring the sample be taken prior to addition of new fuel to the storage tank(s) results in a new fuel sample that is never more than 31 days old at the time that the new fuel is added to the storage tank(s), and even if addition of the new fuel to the storage tank(s) immediately follows sampling, the results of the sample analysis must be provided within 31 days.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.4, DC Sources - Operating

3.8.4-01 DOC A.4
 ITS 3.8.4
 STS 3.8.4
 CTSs 3.9.E.3 and 3.9.F.3

CTSs 3.9.E.3 and 3.9.F.3 state, "From and after the time that both batteries/power supplies are made or found to be inoperable for any reason, the reactor shall be in a cold condition within 24 hours." This requirement has not been retained in the Actions for corresponding ITS 3.8.4, in conformance with the STS.

Comment: DOC A.4 states that in the event that this Condition occurs, the plant would be shutdown in accordance with ITS LCO 3.0.3, which requires achieving Mode 4 in 37 hours. This proposed change appears to be less restrictive. Revise the submittal to provide the appropriate justification for the proposed change.

Licensee Response:

1. ITS 3.8.4, DOC A4, notes that the circumstances addressed in CTS 3.9.E.4 and 3.9.F.4 are consistent with those addressed by CTS 3.0.C which requires the plant to be placed in the cold condition within 24 hours. DOC A4 also notes that in the conversion of CTS 3.0.C to ITS 3.0.3, DOC L1 addresses the addition time (37 hours vice 24 hours) allowed to bring the plant to MODE 4 (Cold Shutdown).
2. The discussion contained in ITS 3.8.4, DOC A4 appears to NYPA to be a clear and straight forward discussion of conversion of the 24 hours allowed by CTS 3.9.E.4 and 3.9.F.4 to the 37 hours allowed by ITS 3.0.3 (by reference to ITS 3.0/L1) to achieve the same plant status (MODE 4).
3. The general format used in DOC A4 for reference to other changes in the ITS conversion (reference to ITS 3.0 and associated DOC L1 in the case) is consistent with that used throughout this ITS submittal and is also consistent with the ITS submittals of numerous other plants. NYPA does not consider any changes to be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.4-02 CTS 4.9.E.1
 DOC L2

The proposed change to decrease the frequency for overall battery voltage measurement from every 7 days to every 31 days is not acceptable.

Comment: The submittal should be revised to retain the current 7 day frequency.

Licensee Response:

1. The submittal will be revised to retain the current 7 day Frequency.
2. NYPA will also revise the ITS submittal to reflect withdrawal of TSTF-202.
3. Please note that NYPA intends to adopt the changes contained in TSTF-360 when the TSTF is approved by the NRC. If TSTF-360 is approved prior to issuance of the final ITS SER, NYPA intends to revise the ITS submittal at that time to reflect TSTF-360.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.4-03 CTS 3.9.F.1

The CTS include a requirement that MCC-155 and MCC-165 be OPERABLE. The CTS markup indicates that this requirement is moved to ITS 3.5.1. However, the staff is unable to locate any requirement for MCC OPERABILITY in LCO 3.5.1.

Comment: The licensee is requested to provide additional discussion on why they consider this CTS requirement to be included in LCO 3.5.1, or revise the ITS to include a specific requirement.

Licensee Response:

1. MCC-155 and 165, as well as numerous other circuit breakers, cables, etc, are considered to be support components which are required by the Definition of the term OPERABLE ("...all necessary attendant instrumentation, controls...lubrication, and other auxiliary equipment that are required for the system...to perform its specified function...are also..."). Thus, when ITS LCO 3.5.1 requires LPCI subsystem A and B to be OPERABLE, MCC-155 and 165 are also required. No explicit reference to the MCCs is necessary any more than it is necessary to explicitly reference the circuit breakers for RHR LPCI pump motors or explicitly reference the MCC which contains the motor controller for a Core Spray subsystem injection valve, etc.
2. ITS 3.5.1, DOC L contains additional discussion regarding the deletion of this detail.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.4-04 CTS 3.9.F.2.a
 DOC A.2, L3

The proposed change deletes the requirement that the other LPCI MOV independent power supply be OPERABLE. The justification is that the ITS does not have a Condition for two inoperable independent power supplies, and that such a plant status would invoke LCO 3.0.3. However, the Required Action with one power supply inoperable is to declare the associated LPCI subsystem inoperable. With this arrangement, ITS Section 3.5 will control in one case, while ITS Section 3.8 will control in another case. Is this not a possible cause for confusion? Would it not be better to have only one section of the ITS control the actions for single or multiple independent power supply inoperabilities?

Comment: The licensee is requested to reconsider the proposed organization of ITS 3.5 and ITS 3.8.

Licensee Response:

1. Change L3 deletes the explicit statement that the other LPCI MOV independent power supply (IPS) be OPERABLE. Change L3 does not delete the requirement that the other LPCI MOV IPS be OPERABLE if plant operation is to continue under ITS 3.8.4.
2. The LPCI MOV IPSs are an appropriate topic for ITS 3.8.4. SRs 3.8.4.1, 3.8.4.3, and 3.8.4.4 for the batteries associated with the LPCI MOV IPSs obviously belong in ITS 3.8.4 rather than ITS 3.5.1.
3. Once ITS LCO 3.8.4 addresses the LPCI MOV IPSs, a Condition addressing the inoperability of one IPS is also necessary since in the absence of a Condition, inoperability of one LPCI MOV IPS would be a Condition beyond that addressed in the Conditions associated with ITS 3.8.4 and would result (improperly) in "default" to ITS 3.0.3.
4. NYPA notes that ITS Condition C would be clearer if it addressed "One or more 419 VDC..." rather than only "One 419 VDC..." as currently written. The change would also make the Condition C statement consistent with the second and third portions of ITS 3.8.6, Condition B and address situations concerning inoperability of one and both LPCI MOV IPSs.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.4-05 CTS 3.9.F.2.C
 DOC L6

The licensee has proposed to delete this CTS requirement because failure to meet the requirement is cause for an immediate plant shutdown.

Comment: Such action is overly restrictive when viewed in light of the 7 day AOT allowed for a LPCI subsystem inoperability for other reasons. The staff understands and accepts this proposed change. However, staff acceptance notwithstanding, is it not desirable to repower the MOV bus from an alternate source if it can be done? Should this requirement be considered for relocation to something like the TRM instead of being completely deleted?

Licensee Response:

1. NYPA is in complete agreement that it is desirable to power the LPCI MOV bus (MCC-155 or 165) from the alternate source if that can be done without interference with or deferral of completion of the Required Actions (and within the associated Completion Times) required by ITS; however, from a Technical Specification, Licensing basis, and accident analysis point of view, the powering the MOV from an alternate source has no value since no "credit" for the alternate source is allowed.
2. It is the preference of NYPA that instructions regarding providing alternate power to the MOV bus be contained in plant procedures rather than the TRM, UFSAR or similar document since no credit for the alternate power source is allowed or taken.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.4-06 SR 3.8.4.1
Bases Pg. B3.8-54 SR 3.8.4.1
JFD TP1

TSTF-202 has not been accepted by the staff.

Comment: Therefore, the change in frequency for this SR from 7 days to 31 days is not acceptable.

Licensee Response:

1. See response to Item 3.8.4-02.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.4-07 Bases Pg. B3.8-54
Action C.1

The Bases discussion needs to be expanded to include a discussion of what constitutes an inoperable LPCI MOV power supply subsystem similar to what is included in the Action A.1 Bases.

Comment: Licensee to address the above staff concern.

Licensee Response:

1. NYPA does not consider any additional discussion necessary. The wording in ITS 3.8.4, Required Action C.1 Bases is essentially the same as the discussion in NUREG 3.8.4, Required Action C.1 Bases for inoperability of a Diesel Generator DC power subsystem. Inoperability of the Diesel Generator DC power subsystem (as discussed in the NUREG Bases) results in inoperability of the supported Diesel Generator. Inoperability of a 419 VDC LPCI MOV independent power supply is an analogous situation. Since the NUREG 3.8.4, Required Action C.1 Bases does not contain a lengthy discussion concerning what constitutes inoperability of the Diesel Generator DC power subsystem, NYPA does not consider a lengthy discussion of an analogous inoperability to be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.4-08 CTS 3.9.F.1

The CTS includes a reference to inverter busses MCC-155 and MCC-165. The CTS markup shows these busses being moved to LCO 3.5.1. However, LCO 3.5.1 does not appear to include any reference to these MCCs.

Comment: The licensee should revise the submittal to show these MCCs appropriately in LCO 3.5.1 or retain them in the appropriate 3.8 LCO.

Licensee Response:

1. Duplication of Item 3.8.4-03.
2. In addition, see ITS 3.5.1 CTS markup (page 18 of 20) and DOC L9.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.4-09 DOC M.3
 ITS SR 3.8.4.1
 STS SR 3.8.4.1
 CTSs 4.9.E.1 and 4.9.F.1

ITS SR 3.8.4.1 requires to "Verify battery terminal voltage is

- a. ≥ 127.8 VDC for 125 VDC batteries, and
- b. ≥ 396.2 VDC for 419 VDC LPCI MOV independent power supply batteries,"

Comment: Why is the voltage for the 419 VDC LPCI MOV independent power supply batteries specified as 396.2 VDC as opposed to 419 VDC? How many cells are in these batteries, and what individual cell voltage is maintained in each?

Licensee Response:

1. The LPCI MOV IPS batteries each contain 186 cells. The manufacturer's minimum recommended voltage is 2.13 volts per cell. $186 \text{ cells} \times 2.13 \text{ VDC per cell} = 396.2 \text{ VDC}$.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.5, DC Sources - Shutdown

3.8.5-01 ITS LCO 3.8.5, Bases Pg. B3.8.61
Proposed Actions Note
JFD TP.1

TSTF-36 has not been accepted by the staff. Therefore, inclusion of the proposed Actions Note regarding LCO 3.0.3 is not acceptable.

Comment: Licensee to revise submittal to retain current requirement or provide justification.

Licensee Response:

1. See response to Item 3.8.2-02.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.6, Battery Cell Parameters

3.8.6-01 CTS 4.9.E.1, 4.9.F.1, SR 3.8.6.1
 DOC L1, JFD TP1

TSTF-202 has been accepted by the staff. The proposed change in frequency for this surveillance from 7 days to 31 days is not acceptable.

Comment: Licensee to retain current requirement or provide justification.

Licensee Response:

1. See response to Item 3.8.4-02.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.6-02 Base Pg. B3.8-67, Table 3.8.6-1
JFD X3

The Bases discussion should be revised to more clearly state the purpose and limitation of the term “and following” which is added to footnote (a).

Comment: The staff suggests that the Bases discussion be in two parts, one covering during the equalizing charge, and a second part covering “and following” the equalizing charge. In addition, the second part should include some of the material in JFD X3 such as “72 hours”, and “allows time for the electrolyte temperature to stabilize---“. The proposed Bases language of “several days following—“ is not specific enough and should be replaced with a definite time; i.e., 72 hours.

Licensee Response:

1. The additional allowance for electrolyte level to be temporarily above the specified maximum level is due to the potential for electrolyte expansion and displacement due to temperature increase and the formation of gas bubbles on cell plates during the equalizing charge. A temperature increase and electrolyte displacement due to gas bubble formation would cause an increase in electrolyte level. The electrolyte level has the potential to remain above the maximum specified level from the time that the electrolyte temperature increases and bubbles are formed during the charge until the electrolyte temperature returns to pre-charge conditions and the gas bubbles are released from the cell plate surfaces and float to the surface of the electrolyte. The cooling of the electrolyte and the release of the bubbles occurs over a period of several days and the time necessary for electrolyte level to return to the specified maximum level varies depending on the margin to the specified maximum level prior to the start of the charge and factors that effect the rate at which the electrolyte temperature is returned to the pre-charge temperature and the rate at which the gas bubbles release from the cell plate surfaces. Thus, it should be apparent that the electrolyte level may be above the specified maximum both during the equalizer charge and for some time period following the completion of the charge for the same reasons. Since the reasons for the electrolyte level being temporarily above the specified maximum are the same both during and following the equalizer charge, it follows that a single discussion of the topic is acceptable. That is, presentation of a Bases discussion concerning the temporary allowance for the electrolyte level to be above the specified maximum following an equalizer charge would be a duplication of the discussion of the temporary allowance for the level to be above the specified maximum during the equalizer charge.

Attachment 2

Response to ITS Section 3.8 RAIs

2. Revision of the Bases by adding language that specifically limits the allowance for the electrolyte level to be above the specified maximum for a period of 72 hours would effectively place a "requirement" in the Bases.
3. NYPA considers a better resolution of the NRC comment/concern to be revision of Footnote (a) by addition of language similar to that used in Footnote (c) which limits the time period that float charge current measurement may be substituted for cell specific gravity measurement. Bases changes to reflect a revision of Footnote (a) language would also be necessary. (No specific wording changes to Footnote (a) and the associated Bases are proposed at this time. While the changes would be relatively simple, NRC concurrence with the proposed resolution is more important at this time.)

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.7, Distribution Systems - Operating

3.8.7-01 CTS 4.9 **[CTS 3.9.E/4.9.E]**
DOC L1

CTS require a plant shutdown if a 125 VDC distribution bus is inoperable. The licensee has proposed to change the CTS requirement to allow an 8 hour AOT for an inoperable dc distribution system in the ITS. The justification provided in support of this change (DOC L1) does not provide adequate information on why this change is acceptable.

Comment: The licensee should revise this justification to specifically address the impact of an inoperable distribution system and, based on this, justify the proposed 8 hours. Otherwise, adopt the NUREG limit of 2 hours.

Licensee Response:

1. NYPA will revise DOC L1 (and NSHC L1 if the changes to DOC L1 result in the need to change the NSHC) to provide additional justification. The expected additional justification will be based on the fact that loss of a 125 VDC subsystem was analyzed as the most limiting single failure and was found to be acceptable since there was no loss of function.
2. Note that DOC L1 contains a typographic error. Reference to CTS "3.9.F" in the third line of the DOC should be "3.9.E"
3. Note that the same change was previously approved by the NRC as part of other ITS Conversions. (Ref. Duane Arnold ITS)

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.7-02 CTS 4.9
 DOC A3

The proposed addition of Action D is designated as an Administrative change. The staff does not agree with this classification. CTS requires a plant shutdown if any distribution system is inoperable. Changing the CTS to require a plant shutdown when two (or more) distribution systems are inoperable, and only then if a loss of function is involved, is a decidedly less restrictive change.

Comment: The classification of the DOC covering the addition of Condition D should be changed to less restrictive and an adequate justification for the change provided. The discussion should also address why the allowance of “two or more” AC distribution subsystems inoperable is acceptable.

Licensee Response:

1. ITS 3.8.7, DOC L1, addresses the less restrictive Action (ITS 3.8.7, Action A.1) of not requiring immediate shutdown under CTS 3.0.C (ITS 3.0.3) for one or more inoperable distribution systems (without a loss of safety function).

Inoperability of only one distribution subsystem (and no other SSCs inoperable) does not result in a loss of function and a short time period for restoration is allowed. Condition A is entered for inoperability an AC power subsystem and Condition B is entered for inoperability of a 125 VDC power subsystem..

If more than one distribution subsystem is inoperable (without a loss of function), a short time period for restoration is allowed. Condition A is entered (or Conditions A and B are concurrently entered).

If two or more distribution subsystems are inoperable (and there is a loss of function), no time is allowed for restoration prior to requiring shutdown. Condition D is entered.

2. The topic discussed by ITS 3.8.7, DOC A3 (ACTION D), is the immediate shutdown when two or more distribution subsystems are inoperable and there is a loss of function. The Required Action (plant shutdown under CTS 3.0.C or ITS 3.0.3) is identical under both CTS and ITS (except of the changes to the Completion Times for shutdown requirements under ITS 3.0.3 versus CTS 3.0.C which are discussed in the ITS 3.0 Conversion package).

Attachment 2

Response to ITS Section 3.8 RAIs

3. Since ITS 3.8.7, DOC A3, addresses the same topic as addressed by CTS for inoperable distribution subsystems with an assumed loss of function (CTS does not explicitly state that no loss of function is involved so it is assumed that there is a loss of function), the changes discussed in DOC A3 are properly classified as administrative.
4. Note that revision of DOC A3 will be required to address response to item 3.8.7-03. The discussions presented above are, in part, based on the changes to DOC A3 that will be necessary.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.7-03 LCO 3.8.7 Condition B
Required Action B.1 Completion Time
JFD XI

Condition B addresses "one or more" DC electrical power distribution subsystems inoperable. At this plant, there are only two DC distribution subsystems, and more than one inoperable means that at least two (or both) subsystems are inoperable. Since the DC subsystems provide control power to both divisions of engineered safeguards systems, the loss of 2 subsystems means a complete loss of safeguards systems and is a condition for 3.0.3 entry.

Comment: In light of the above, it seems to be inappropriate for the Condition to address "one or more". The Condition should address only "one" DC subsystem inoperable. With regard to Required Action B.1 Completion Time, The licensee should revise this justification to specifically address the impact of an inoperable distribution system and, based on this, justify the proposed 8 hours. Otherwise, adopt the NUREG limit of 2 hours. (see 3.8.7-01 above.)

Licensee Response:

1. NYPA agrees that inoperability of more than one 125 VDC distribution subsystem would always result in a loss of function. ITS 3.8.7, Condition B, will be revised to address inoperability of a single 125 VDC distribution subsystem (without a loss of function).
2. The proposed 8 hour Completion Time for ITS 3.8.7, ACTION B.1 for inoperability of one 125 VDC distribution subsystem (without a loss of function) will be retained. The proposed 8 hour Completion Time is consistent with the 8 hour Completion Time for ACTION A.1 due to the inoperability of one or more AC power subsystems (without a loss of function) and, as discussed in the response to Item 3.8.7-01, NYPA will provide additional justification for the proposed 8 hour Completion Time.
3. The proposed 8 hour Completion Time is also consistent with approved ITS for at least one other plant of similar design. (Ref Duane Arnold ITS)

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.7-04 Bases Pg. B3.8-82
Action A.1 JFD PA5

In the first paragraph of the Action A.1 discussion on this page, the term "active component" is inserted between single and failure. What is the purpose of this addition? How does the licensee identify what constitutes active components in the distribution subsystems? JFD PA5 does not provide any clarification for this proposed change.

Comment: The licensee is requested to provide a revised justification which discusses what the change is intended for and why it is acceptable.

Licensee Response:

1. Based on additional review NYPA has concluded that the addition of "active component" is improper and will revise the NUREG Bases markup by deleting the words. In addition, the word "active" which was added in subparagraph "b" on NUREG Bases markup page B 3.8-82 will also be deleted.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.7-05 Bases Pg. B3.8-82
JFD X3

The licensee has proposed to change the CTS requirement to allow an 8 hour AOT for an inoperable dc distribution system in the ITS. The justification provided in support of this change (JFD X3) does not provide adequate information on why this change is acceptable.

Comment: The licensee should revise this justification to specifically address the impact of an inoperable distribution system and, based on this, justify the proposed 8 hours. Otherwise, adopt the NUREG limit of 2 hours. See 3.8.7-01

Licensee Response:

1. See response to items 3.8.7-01 and 3.8.1-03.
2. NYPA will revise the JFDs to provide additional information in support of the proposed 8 hour Completion Time.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.7-06 Bases Pg. B3.8-85 Action B.1
JFD PA5, JFD X3

The Bases discussion for Action B.I is proposed to be changed by adding "or more" following "one" in the first sentence of the first paragraph. The discussion then goes on to state that the remaining DC distribution subsystem is adequate, etc. For this plant, there are only two DC distribution subsystems, and loss of more than one (i.e., two) means there is no DC distribution remaining.

Comment: The term "or more" should be deleted from the Bases. This Bases discussion is also modified by adding "active component" between "single" and "failure". See 3.8.7-04 for staff comments on this proposed change. See also 3.8.7-01 for staff comments regarding the 8 hour Completion Time. The above comments are also applicable to the second and third paragraphs on this page.

Licensee Response:

1. NYPA will revise Condition B (and the associated Bases) to address loss of one (not the loss of one or more) 125 VDC distribution subsystems. (See response to item 3.8.7-03.)
2. NYPA will delete the Bases change that added "active component." (See response to item 3.8.7-04.)
3. See response to Items 3.8.7-01, 3.8.7-03, and 3.8.7-05 regarding the 8 hour Completion Time for Condition B.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.7-07 Bases Pg. B3.8-86 Action B.1
JFD X3

The staff concern regarding Completion Time addressed in 3.8.7-01 is also applicable to the second Completion Times discussed in the Bases on this page.

Comment: Licensee to address the above staff concern.

Licensee Response:

1. The second Completion Time for Required Action B.1 has not been changed from the NUREG value by NYPA. The Completion Time of 16 hours is the correct time for the proposed first Completion Time of 8 hours and would also be correct for a first Completion Time of 2 hours.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.7-08 Bases Pg. B3.8-87
 Condition D

This Bases discussion addresses more than one AC or DC electrical power distribution subsystem inoperable and the potential for loss of function.

Comment: See staff comments regarding loss of more than one DC distribution subsystem in 3.8.7-03 and 3.8.7-06. Some Bases revision may be required here.

Licensee Response:

1. NYPA agrees that ACTION D.1 Bases will need revision as a result of revisions to Condition B and the associated Bases as discussed in response to items 3.8.7-03 and 3.8.7-06.

Attachment 2

Response to ITS Section 3.8 RAIs

- 3.8.7-09** Bases for Required Action A.1 for STS 3.8.9
Bases for Required Action A.1 for ITS 3.8.7, STS Bases markup
page B 3.8-81, first paragraph
Bases Table B 3.8.7-1 Footnote *, STS Bases insert markup page B 3.8-88

The Bases for Required Action A.1 for STS 3.8.9 refers to "With one or more required AC buses, load centers, ... in one division." "In one division" has not been adopted in the Bases for Required Action A.1 for ITS 3.8.7.

Comment: No justification has been provided to support this proposed difference. Revise the submittal to provide the appropriate justification, or conform to the STS.

Licensee Response:

1. ITS 3.8.7, Condition A is not restricted to situations involving a single division (subsystem). The "one of more...subsystems inoperable" stated in Condition A could involve both divisions (subsystems) since a division (subsystem) would be declared inoperable when any portion of the division (subsystem) is inoperable. So long as the inoperability of (portions of) both divisions (subsystems) does not result in a loss of function, Condition A and the associated Required Action and Completion Time is the correct and proper Condition. The Bases has accordingly been revised. (If a loss of function is involved, Condition D is entered and a plant shutdown is appropriately required.)
2. The NUREG Bases discussion for Required Action A.1 is inconsistent with NUREG Condition A. Nothing in the Condition A indicates or implies that the Condition is limited to a single division. Deletion of the phrase "in a division" corrects the inconsistency.
3. Refer to previously approved ITS for Cooper and Duane Arnold which also corrected the inconsistency in the Bases by deletion of the phrase "in one Division."

Attachment 2

Response to ITS Section 3.8 RAIs

- 3.8.7-10** Bases for Required Action C.1 for STS 3.8.9
Bases for Required Action B.1 for ITS 3.8.7, STS Bases markup
page B 3.8-85, second paragraph
Bases Table B 3.8.7-1 Footnote *, STS Bases insert markup page B 3.8-88

The Bases for Required Action C.1 for STS 3.8.9 refers to "... one division without adequate DC power, ..." The Bases for Required Action B.1 for corresponding ITS 3.8.7 refers to "... one or more DC buses without adequate DC power, ...".

Comment: No justification has been provided to support this proposed difference. Revise the submittal to provide the appropriate justification, or conform to the STS.

Licensee Response:

1. NYPA will revise ITS 3.8.7, ACTION B.1 Bases to reflect the revision of Condition B and associated Bases as discussed in response to items 3.8.7-03 and 3.8.7-06.

Attachment 2

Response to ITS Section 3.8 RAIs

3.8.8, Distribution Systems - Shutdown

3.8.8-01 ITS LCO 3.8.8, Bases Pg. B3.8-91
Proposed Actions Note
JFD TP.1

TSTF-36 has not been accepted by the staff. Therefore, the proposed Actions Note which addresses LCO 3.0.3 is not acceptable.

Comment: Licensee to retain current requirement or provide justification for the proposed change.

Licensee Response:

1. See response to Item 3.8.2-02

Attachment 2

Response to ITS Section 3.8 RAIs

NOTE TO LICENSEE:

3.8 There are two proposed changes (see items 3.8.1-01 and 3.8.1-13 above) that have been identified by the staff as Beyond Scope of Conversion Review (BSCR) items, these items will need to be addressed separately.

Licensee Response:

3.8.1-01: As noted in response to 3.8.1-01, NYPA will delete the Required Action currently designated C.2 making the ACTIONS for inoperability of both reserve circuits consistent with the current licensing basis.

3.8.1-13: As noted in response to 3.8.1-13 and 3.8.1-02, proper load sharing of the EDGs within an EDG subsystem is demonstrated by maintaining the EDG loading within the specified load band.

**Attachment 3
JAFP-00-0078**

ITS Request for Additional Information (RAI)

List of Commitments

Commitment No.	Commitment Description	Due Date
JAFP-00-0078-01	Revise ITS submittal as stated in responses to ITS 3.6 RAIs	8/15/00
JAFP-00-0078-02	Revise ITS submittal as stated in responses to ITS 3.8.RAIs	8/15/00