

February 11, 1999

Mr. Douglas R. Gipson
Senior Vice President
Nuclear Generation
Detroit Edison Company
6400 North Dixie Highway
Newport, Michigan 48166

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING CONVERSION TO IMPROVED STANDARD TECHNICAL SPECIFICATIONS, SECTION 3.6 FOR FERMI 2 (TAC NO. MA1465)

Dear Mr. Gipson:

On April 3, 1998, the Detroit Edison Company (DECo) submitted an amendment request to convert to the improved standard technical specifications for Fermi 2. By letters dated September 28, October 19, and December 10, 1998, and January 8 and 26, 1999, DECo provided supplements to the original submittal. The staff has reviewed Section 3.6 of the proposed conversion. Additional information, as discussed in the enclosure, is requested in order for the staff to complete its review.

The enclosed request was discussed with Mr. G. Ohlemacher of your staff on February 3 and 4, 1999. A mutually agreeable completion schedule of April 2, 1999, for your initial response and April 30, 1999, for the closure package was established. If circumstances result in the need to revise the schedule, please call me at the earliest opportunity.

If you should have any questions regarding this request, please contact me at 301-415-2828.

Sincerely,

Original signed by

Andrew J. Kugler, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-341

Enclosure: As stated

cc w/encl: See next page

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Fermi 2

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REQUEST FOR ADDITIONAL INFORMATION REGARDING
CONVERSION TO IMPROVED STANDARD TECHNICAL SPECIFICATIONS,
SECTION 3.6 FOR FERMI 2 (TAC NO. MA1465)

General Note: Throughout this request for additional information (RAI), references to a standard technical specification (STS) mean the standard version of the TS published by the NRC in NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," Revision 1. References to an improved TS (ITS) mean the proposed converted TS submitted by the licensee.

All Sections

RAI 0.0-1: There is a generic issue involving a number of the Less Restrictive Administrative (LA) discussions of change (DOCs) in the Fermi submittal. Refer to RAI 0.0-1 in the October 26, 1998, RAI. Additional DOCs affected by this issue are listed in the following table:

ITS	LA DOC
3.6.1.3	LA.2
3.6.1.3	LA.3
3.6.1.9	LA.1
3.6.1.9	LA.2
3.6.1.9	LA.3
3.6.2.3	LA.1
3.6.3.1	LA.1
3.6.3.1	LA.2
3.6.3.1	LA.3

ENCLOSURE

Section 3.6

3.6.1.1 Primary Containment

- 3.6.1.1-1** Discussion of Change (DOC) A.12 (CTS 1.0)
 - CTS 1.29
 - CTS 3.4.7
 - CTS 3.5.3
 - CTS 3.6.1.1
 - CTS 3.6.1.2
 - CTS 3.6.1.3
 - CTS 3.6.1.8
 - CTS 3.6.2.1
 - CTS 3.6.3
 - CTS 3.6.4.2
 - ITS 3.6.1.1 and Associated Bases
 - ITS 3.6.1.2 and Associated Bases
 - ITS 3.6.1.3 and Associated Bases
 - ITS 3.6.1.7 and Associated Bases
 - ITS 3.6.2.1 and Associated Bases
 - ITS 3.6.2.2 and Associated Bases

CTS 1.29 defines Containment Integrity. A markup of CTS 1.29 is provided in the CTS markup of CTS 1.0, but not in the markup of CTS 3.6. DOC A.12 (CTS 1.0) states that the definition of Containment Integrity is deleted from the CTS/ITS, because it duplicates requirements that are appropriately contained in Specifications, specifically CTS 3/4.6.1.1/ITS 3.6.1.1 "Primary Containment." DOC A.12 (CTS 1.0) is incorrect and incomplete. DOC A.12 (CTS 1.0) is incorrect in that the definition is not deleted but relocated to various Bases in ITS 3.6, which is a less restrictive (LA) change. In addition, while DOC A.12 is correct in stating that it duplicates requirements that are appropriately contained in other specifications, it limits it to just Primary Containment (CTS 3.6.1.1/ITS 3.6.1.1). This is incorrect. The items specified in the definition are also contained in CTS 3/4.6.1.2/ITS 3.6.1.1, CTS 3/4.6.1.3/ITS 3.6.1.2, CTS 3/4.4.7, 3/4.6.1.8 and 3/4.6.3/ITS 3.6.1.3, CTS 3/4.6.2.1/ITS 3.6.2.1/ITS 3.6.2.2, and CTS 3/4.6.4.2/ITS 3.6.1.7. (See RAIs 3.6.1.1-2, 3.6.1.1-3, 3.6.1.2-1, 3.6.1.3-1, 3.6.1.7-1, 3.6.2.1-1, and 3.6.2.2-1.)

Comment: Revise the CTS markup of CTS 1.29 and CTS 3/4.6 to reflect the above discussion. Provide additional discussions and justifications for relocating the details of the definition to ITS B3.6.1.1 Bases -Background and to ITS 3.6.1.2, 3.6.1.3, 3.6.1.7, 3.6.2.1, 3.6.2.2 and their associated Bases. See RAIs 3.6.1.1-2, 3.6.1.1-3, 3.6.1.2-1, 3.6.1.3-1, 3.6.1.7-1, 3.6.2.1-1, 3.6.2.2. A single answer will suffice for these various specifications, with reference to the RAI numbers.

Fermi 2 Response:

- 3.6.1.1-2 DOC A.12 (CTS 1.0)
CTS 1.29.b.
ITS B3.6.1.1 Bases - Background

CTS 1.29 defines Containment Integrity. A markup of CTS 1.29 is provided in the CTS markup of CTS 1.0. DOC A.12 (CTS 1.0) states that the definition of Containment Integrity is deleted from the CTS/ITS. DOC A.12 is incorrect. CTS 1.29.b states that "All equipment hatches are closed and sealed." ITS B3.6.1.1 Bases - Background states the following: "To maintain this leak tight barrier: c. All equipment hatches are closed; and..." The requirement for sealing the equipment hatches has been deleted. No justification is provided for this less restrictive change. **Comment:** Provide a discussion and justification for this less restrictive change.

Fermi-2 Response:

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- 3.6.1.1-3 DOC A.12 (CTS 1.0)
CTS 1.29.f
Justification For Difference (JFD) P.2
STS B3.6.1.1 Bases - Background
ITS B3.6.1.1 Bases - Background

CTS 1.29 defines Containment Integrity. A markup of CTS 1.29 is provided in the CTS markup of CTS 1.0. DOC A.12 (CTS 1.0) states that the definition of Containment Integrity is deleted from the CTS/ITS. DOC A.12 is incorrect. CTS 1.29.f states that "The sealing mechanism associated with each primary containment penetration, e.g., welds, bellows, or O-rings, is OPERABLE." STS B3.6.1.1 Bases - Background has a similar statement defining the leak tight barrier. ITS B3.6.1.1 Bases - Background deletes this statement based on plant specific design details (JFD P.2). Since CTS 1.29.f is contained in the CTS, it needs to be included in ITS B3.6.1.1 Bases - Background. **Comment:** Revise ITS B3.6.1.1 Bases - Background to include CTS 1.29.f or provide additional discussion and justification for its deletion based on system design, operational constraints, or current licensing basis. See RAI 3.6.1.3-7. A single answer will suffice for these two specifications, with reference to the RAI numbers.

Fermi-2 Response:

-
- 3.6.1.1-4 DOC M.1
CTS 3.0.3
CTS 3.6.1.1 Actions
CTS 3.6.1.2 Actions
ITS 3.6.1.1 Actions

CTS 3.6.1.2 Actions restrict reactor coolant heat up beyond 200°F if the containment leakage rates are outside established limits. The CTS markup of CTS 3.6.1.2 changes this requirement to ITS 3.6.1.1 Actions A and B. This change is characterized as a more restrictive change since the CTS Actions are non-specific as to the appropriate required actions and ITS 3.6.1.1 Action A's completion time of 1 hour is more restrictive than CTS

requirements. This change is incorrect. As currently written and as proposed in the CTS markup, no remedial actions are provided if the reactor coolant temperature is >200° (Mode 3) and the containment leakage rates are outside established limits. In this case, CTS 3.0.3 or CTS 3.6.1.1 Actions are to be entered since they are equivalent. Because ITS 3.6.1 Actions are the same as both CTS 3.6.1.1 Actions and CTS 3.0.3, the replacement of these CTS Action requirements by the Actions of ITS 3.6.1 is an administrative change not a more restrictive change. **Comment:** Revise the submittal to address this change in presentation of CTS Action requirements and provide a discussion and justification for this administrative change.

Fermi-2 response:

3.6.1.1-5 JFD P.2
JFD P.4
CTS 4.6.1.1.a
CTS 4.6.1.1.c
CTS 3/4.6.1.2
STS Surveillance Requirement (SR) 3.6.1.1.1
ITS SR 3.6.1.1.1 and Associated Bases

CTS 4.6.1.1 a and c and 3/4.6.1.2 require leak rate testing in accordance with the 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 requires the visual examination and leakage rate testing be performed in accordance with 10 CFR 50 Appendix J as modified by approved exemptions. ITS SR 3.6.1.1 modifies STS SR 3.6.1.1 to conform to CTS 4.6.1.1 a and c and 3/4.6.1.2 as modified in the CTS markup. The STS is based on Appendix J, Option A while the CTS and ITS are based on Appendix J, Option B. Changes to the STS with regards to Option A versus Option B are covered by a letter from Mr. Christopher I. Grimes to Mr. David J. Modeen, NEI, dated 11/2/95 and generic change Technical Specifications Task Force (TSTF)-52, as modified by staff comments of 10/96. The changes to ITS 3.6.1, ITS 3.6.2 and ITS 3.6.3 and their associated Bases are not in conformance with the letter and TSTF-52 as modified by staff comments. See RAs 3.6.1.1-7, 3.6.1.2-2, 3.6.1.3-9, and 3.6.1.3-15. **Comment:** Licensee should revise its submittal to conform to the 11/2/95 letter and TSTF-52 as modified by the staff. See RAs 3.6.1.1-7, 3.6.1.2-2, 3.6.1.3-9, and 3.6.1.3-15.

Fermi-2 response:

3.6.1.1-6 JFD P.5
ITS 3.6.1.1 and Associated Bases

JFD P.5 justifies an editorial correction with regards to the suppression pool bypass test boundary. The ITS markup for ITS 3.6.1.1 and associated Bases do not show a JFD P.5. **Comment:** Revise the ITS markup for ITS 3.6.1.1 and its Associated Bases to indicate this change or delete the justification.

Fermi-2 response:

3.6.1.1-7 JFD P.6
ITS SR 3.6.1.1.1 and Associated Bases

JFD P.6 justifies changes made to ITS SR 3.6.1.1.1 and/or its Associated Bases. The ITS markup for ITS SR 3.6.1.1.1 and its Associated Bases do not show a JFD P.6. In addition based on the writeup in JFD P.6, the proposed change would be considered as a generic change which would be beyond the scope of review for this conversion. See RAI 3.6.1.1-5. **Comment:** Delete this generic change. See RAI 3.6.1.1-5.

Fermi-2 response:

3.6.1.1-8 STS B3.6.1.1 Bases - SR 3.6.1.1.1
ITS B3.6.1.1 Bases - SR 3.6.1.1.1

STS B3.6.1.1 Bases - SR 3.6.1.1.1 lists several other surveillances. As a result of the conversion, the ITS changes the numbers for these surveillances. Not all of the changes are correct. (e.g., SR 3.6.1.3.12 should be SR 3.6.1.3.11). **Comment:** Correct these discrepancies.

Fermi-2 response:

3.6.1.2 Primary Containment Air Lock

3.6.1.2-1 DOC A.12 (CTS 1.0)
CTS 1.29.c
CTS 3/4.6.1.3
ITS 3.6.1.2 and Associated Bases

See RAI 3.6.1.1-1. **Comment:** See RAI 3.6.1.1-1.

Fermi-2 response:

3.6.1.2-2 DOC A.9
JFD P.6
CTS 4.6.1.3
ITS SR 3.6.1.2.1 and Associated Bases

See RAI 3.6.1.1-5. **Comment:** See RAI 3.6.1.1-5.

Fermi-2 response:

3.6.1.2-3 DOC L.1
JFD P.5
CTS 3.6.1.3 Actions
STS 3.6.1.2 Action Note 1
ITS 3.6.1.2 Action Note 1 and Associated Bases

CTS 3.6.1.3 Actions are modified by a Note which allows entry and exit through a closed or locked air lock door for the purpose of making repairs. STS 3.6.1.2 Actions contains such a Note (Note 1); however, the ITS markup of ITS 3.6.1.2 Action Notes modifies this Note and the associated Bases to state that the entry and exit shall be under administrative control. The justification used for this change, JFD P.5 states that "This commitment is essential to the allowance...". This is insufficient justification for this change. While the addition of the STS Note is acceptable, the staff considers the change made to the Note to be a generic change which is beyond the scope of review for this conversion. **Comment:** Delete this generic change.

Fermi-2 response:

3.6.1.2-4 DOC L.2
JFD P.4
JFD P.5
CTS 3.6.1.3 Action a
STS 3.6.1.2 Required Action A.1 Note 2 and Associated Bases
ITS 3.6.1.2 Required Action A.1 Note 2 and Associated Bases

With one inoperable air lock door, CTS 3.6.1.3 Action a does not contain provisions for entering containment if access would require opening the Operable airlock that is otherwise required to be closed to comply with the Actions. STS 3.6.1.2 Required Action A.1 Note 2 allows entry through a closed and/or locked air lock for reasons other than repairs for a limited period of time. ITS 3.6.1.2 Required Action A.1 contains this STS Note. However, the description of the intent of the Note contained in STS B3.6.1.2 Bases A.1, A.2 and A.3 has been modified in ITS B3.6.1.2 Bases A.1, A.2 and A.3. The justifications used to make modifications (JFD P.4 and P.5) state that the discussion eliminates the implication that the Bases imposes a restriction on allowed activities and the "commitment is essential to the allowance." For the former, the staff does not believe that STS Bases words impose a restriction on allowed activities. For the latter item, see RAI 3.6.1.2-3. The staff considers these changes to be generic and beyond the scope of review for this conversion. **Comment:** Delete these generic changes.

Fermi-2 response:

3.6.1.2-5 JFD C.1
STS SR 3.6.1.2.2
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.

Fermi-2 response:

3.6.1.2-6 STS B3.6.1.2 Bases - D.1 and D.2
ITS B3.6.1.2 Bases - D.1 and D.2

STS B3.6.1.2 Bases D.1 and D.2 states the following: "If the inoperable primary containment air lock cannot be restored to OPERABLE status within the associated Completion Time...apply." ITS B3.6.1.2 Bases - D.1 and D.2 modifies this statement by adding "closed and locked as appropriate or" between "cannot be" and "restored to". No justification is provided for this change. The staff believes that the proposed change is not needed since the words "restored to OPERABLE status" covers the situation, as well as the other conditions specified in the Required Actions (i.e., verification of door locked closed). The staff considers the change to be a generic change which is beyond the scope of review for this conversion. **Comment:** Delete this generic change.

Fermi-2 response:

3.6.1.3 Primary Containment Isolation Valves (PCI's)

3.6.1.3-1 DOC A.12 (CTS 1.0)
CTS 1.29.a
CTS 3/4.4.7
CTS 3/4.6.1.8
CTS 3/4.6.3
ITS 3.6.1.3 and Associated Bases

See RAI 3.6.1.1-1. **Comment:** See RAI 3.6.1.1-1.

Fermi-2 response:

3.6.1.3-2 DOC A.3
JFD P.2
CTS 3.6.3
STS Limiting Condition For Operation (LCO) 3.6.1.3
ITS LCO 3.6.1.3 and Associated Bases

CTS 3.6.3 requires all PCIVs be Operable. STS LCO 3.6.1.3 requires all PCIVs to be Operable except the reactor building-to-suppression chamber vacuum breakers. CTS 3.6.3 has been modified to include this ITS exception and justifies the exception by DOC A.3. This modification is acceptable.

However, CTS 3.6.3 is further modified by DOC A.3 to exempt the scram discharge volume (SDV) vent and drain valves, using the same justification. The staff does not agree that this is an administrative change and, therefore, the justification is insufficient.

The justification states that CTS LCO 3.1.3.1. addresses the necessary requirements for the valves. In fact, it only addresses the system function of the valves. The valves' other safety function, that is, containment isolation, is governed by CTS LCO 3.6.3. The valves' dual safety functions are both necessary, although the allowed outage times for inoperability are different in the two LCOs, which reflects the importance of the valves to each of the two functions. Under CTS, valve inoperability requires both LCOs to be satisfied; in general, the shorter response times of CTS LCO 3.6.3. would be most limiting and would have to be followed.

In addition, the ITS markup of ITS LCO 3.6.1.3 does not reflect this change, while the ITS markup of ITS B3.6.1.3 Bases - LCO does reflect this change.

The staff has no indication that the design of Fermi-2 is any different than any other BWR with regards to the SDV vent and drain valves. Thus the staff considers this change to be generic and beyond the scope of review for this conversion. **Comment:** Delete this generic change or justify the plant-specific issues that support it.

If the licensee chooses to provide a plant-specific justification for the change, provide revised proposed LCOs which retain the CTS requirements (i.e., which address the dual safety functions of the valves), or provide additional justification for the present proposed LCOs, in particular justifying the proposed increase in allowed response time to inoperability, when compared to other containment isolation valves.

Fermi-2 response:

3.6.1.3-3 DOC A.5
CTS 3.6.3 Action a.2 and a.3
ITS 3.6.1.3 Required Action A.1 and Associated Bases

CTS 3.6.3 Action a.2 and a.3 explicitly lists all acceptable isolation devices that may be used to satisfy remedial actions to isolate a penetration with an inoperable isolation valve. CTS 3.6.3 Action a.3 is modified to also include "check valves with the flow secured" and justifies this modification as an administrative change (DOC A.3). This change is not an administrative change but a less restrictive (L) change since it expands the list of acceptable isolation devices. **Comment:** Revise the CTS markup and provide additional discussion and justification for this less restrictive (L) change.

Fermi-2 response:

- 3.6.1.3-4 DOC A.10
- DOC M.2
- DOC L.3
- JFD P.3
- JFD P.5
- JFD P.6
- CTS 3.6.3 Action b
- STS 3.6.1.1
- STS 3.6.1.3 Actions A, C, and D
- ITS 3.6.1.1
- ITS 3.6.1.3 Actions A, B, and C and Associated Bases

CTS 3.6.3 Action b specifies the remedial actions to be taken for inoperable excess flow check valves (EFCVs). DOC A.10 states that "The only Operability criteria associated with EFCVs is that they actuate to restrict flow, which is a qualitative leakage rate requirement." Thus, for the sake of simplicity, STS 3.6.1.3 Action D is modified in the ITS to combine the PCIV leakage rate failures into a single action. This is incorrect. While STS 3.6.1.3 Action D has been modified by TSTF - 207 to provide actions for certain PCIV leakage, it did not include the EFCVs. See RAI 3.6.1.3-6 for additional concerns with regards to implementing TSTF-207. Furthermore, DOC A.10 implies ITS Action C would address all PCIV leakage which is not the case. STS/ITS 3.6.1.1 and STS 3.6.1.3 Action A and C cover PCIV leakage and the associated actions for Type B and C leakage as well as EFCVs' leakage. Furthermore, the statement in DOC A.10 with regards to the leakage being the only Operability criteria is incorrect. The associated ITS SR (SR 3.6.1.3.9)) requires the valve to actuate as well as restrict leakage. A failure to actuate does not necessarily result in valve leakage if the valve could be closed.

In addition, DOC L.3 provides a justification for increasing the allowed outage time (AOT) for an inoperable EFCV from a CTS AOT of 4 hours to an ITS time of 72 hours. The basis for this change is TSTF-30. While the statement in DOC L.3 with regards to TSTF-30 is true, TSTF-30 did not change the Completion Time in STS 3.6.1.3 Action C for restoring inoperable EFCVs from 12 hours to 72 hours. It only changed the Completion Time for the other PCIVs in a closed system.

Since the design and function of the EFCVs at Fermi-2 do not seem to be any different than the EFCVs at other BWR/4 plants, the staff concludes that these change are generic and beyond the scope of review for this conversion. See RAIs 3.6.1.3-5, 3.6.1.3-7, 3.6.1.3-14, and 3.6.1.3-31. **Comment:** Delete this generic change. See RAIs 3.6.1.3-5, 3.6.1.3-6, 3.6.1.3-7, 3.6.1.3-14, and 3.6.1.3-31.

Fermi-2 response:

- 3.6.1.3-5 DOC A.10
DOC M.2
JFD P.3
JFD P.5
CTS 3.6.3 Action b
STS 3.6.1.1 Actions
STS 3.6.1.3 Actions A, B, C, and D
ITS 3.6.1.1 Actions
ITS 3.6.1.3 Action A, B, and C and Associated Bases

STS 3.6.1.3 Actions D has been modified in ITS 3.6.1.3 Action C to reflect what the licensee states is potential inconsistencies between valve leakage and inoperability. Five changes have been made to STS 3.6.1.3 Action D; they are changes associated with (1) secondary containment bypass leakage, (2) main steam isolation valve (MSIV) leakage, (3) purge valve leakage, (4) hydrostatic tested valve leakage, and (5) EFCV leakage. The changes associated with EFCV leakage have been addressed in RAI 3.6.1.3-4. The changes associated with purge valve leakage are acceptable since it maintains the current licensing basis. The changes associated with changes 1 and 2 are encompassed by TSTF-207. See RAI 3.6.1.3-6 for concerns on TSTF-207 changes. With regards to the changes associated with the hydrostatically tested valve leakage, the hydrostatic test leakage is considered as part of the 10 CFR 50 Appendix J Type B and C leakage and thus is covered by STS 3.6.1.1 Actions and 3.6.1.3 Action A, B, and C for PCIVs. Thus, the Completion Time change would be considered as a less restrictive (L) change rather than a more restrictive change. However, because this change is applicable to all plants, the staff considers the proposed change as generic and beyond the scope of review for this conversion. See RAIs 3.6.1.3-4, 3.6.1.3-6, 3.6.1.3-7 and 3.6.1.3-14. **Comment:** Delete this generic change. See RAIs 3.6.1.3-4, 3.6.1.3-6, 3.6.1-7, and 3.6.1.3-14.

Fermi-2 response:

-
- 3.6.1.3-6 DOC A.10
DOC M.2
DOC M.4
JFD P.3
JFD P.5
CTS 3.6.3 Action b
STS 3.6.1.3 Action D
ITS 3.6.1.3 Action A, B, and C and Associated Bases

STS 3.6.1.3 Action D has been modified in ITS 3.6.1.3 Action C to reflect what the licensee states is potential inconsistencies between valve leakage and inoperability. Five changes have been made to STS 3.6.1.3 Action D; they are changes associated with (1) secondary containment bypass leakage, (2) main steam isolation valve (MSIV) leakage, (3) purge valve leakage, (4) hydrostatic tested valve leakage, and (5) EFCV leakage. The changes associated with EFCV leakage and the hydrostatically tested valves have been addressed in RAIs 3.6.1.3-4 and 3.6.1.4-5 respectively. The changes associated with purge valve leakage are acceptable since it maintains the current

licensing basis. The changes associated with 1 and 2 above are encompassed by TSTF-207. However, these changes and the changes made to ITS B 3.6.1.3 Bases - C.1 are not in accordance with TSTF-207. **Comment:** Licensee should revise its submittal to conform to TSTF-207.

Fermi-2 response:

3.6.1.3-7 DOC M.2
CTS 3.0.3
CTS 3.6.1.1 Actions
CTS 3.6.1.2 Actions
ITS 3.6.1.1 Actions
ITS 3.6.1.3 Actions

See RAI 3.6.1.1-4. **Comment:** See RAI 3.6.1.1-4.

Fermi-2 response:

3.6.1.3-8 DOC M.3
JFD P.8
CTS 3.6.1.2.e
CTS 3.6.3 Applicability and Actions
ITS 3.6.1.3 Action E and Associated Bases

CTS 3.6.3 Applicability for PCIVs only includes Modes 1, 2, and 3. ITS 3.6.1.3 adds an Applicability which effectively adds a Mode 4 and 5 Operability requirement to the residual heat removal (RHR) shutdown cooling isolation valves. The CTS markup indicated this change as applicable to CTS 3.6.1.2.e and CTS 3.6.3 Applicability. The changes made to these items are acceptable. However, DOC M.3 also indicates that ITS 3.6.1.3 Action F has been added to provide appropriate actions for this change. The ITS markup does not show an Action F, however, ITS 3.6.1.3 Action E does provide the appropriate actions for this change. In addition, the CTS markup does not show the addition of ITS 3.6.1.3 Action E/F. **Comment:** Correct these discrepancies.

Fermi-2 response:

3.6.1.3-9 DOC M.4
JFD P.3
JFD P.7
CTS 4.6.1.2
STS SR 3.6.1.3.12
ITS SR 3.6.1.3.11 and Associated Bases

The CTS does not include requirements for secondary containment bypass leakage paths. ITS SR 3.6.1.3.11 (STS SR 3.6.1.3.12) has been included to address this issue. ITS SR 3.6.1.3.11 and its associated Bases are not in conformance with the discussion of RAI 3.6.1.1-5. In addition, the frequency of STS SR 3.6.1.3.12 is modified in ITS SR 3.6.1.3.11 to include the Inservice Testing Program. No justification is provided for

this deviation from the standard and the discussion of RAI 3.6.1.1-5. **Comment:** Revise the ITS submittal in accordance with RAI 3.6.1.1-5. Provide additional discussion and justification for the additional frequency.

Fermi-2 response:

3.6.1.3-10 DOC LR.2
CTS 4.6.3.2
ITS SR 3.6.1.3.8 and Associated Bases

CTS 4.6.3.2 requires an automatic valve test at least once per 18 months during cold shutdown or refueling. ITS SR 3.6.1.3.8 requires the same test on a frequency of 18 months. The CTS markup shows that the test frequency detail of "during COLD SHUTDOWN or REFUELING" as being relocated to a licensee-controlled document that is not under regulatory program controls. The justification is incorrect. The details on when the test is to be performed are found in the Bases for ITS SR 3.6.1.3.8. The description in the Bases would require the test be performed during cold shutdown or refueling, thus the change is a less restrictive (LA) change rather than a Less Restrictive (LR) change. **Comment:** Revise the CTS markup and DOC LR.2 to show that this information is relocated to ITS B3.6.1.3 Bases - SR 3.6.1.3.8 and that the change is a less restrictive (LA) change.

Fermi-2 response:

3.6.1.3-11 DOC LR.3
CTS 3.6.1.8
ITS SR 3.6.1.3.1 and Associated Bases

CTS 3.6.1.8 states that nitrogen venting/makeup and pressure control is allowed through the 1" nitrogen venting and pressure control valves and that these valves are not subject to the 90 hour per 365 day limit imposed on the drywell and suppression chamber purge isolation valves. The CTS markup shows that these statements are relocated to licensee-controlled documents not under regulatory control. DOC LR.3 justifies this relocation on the basis that they "Do not impose any requirements or limitations; they do note allowances to use these valves for venting and pressure control with no restriction." While the staff agrees that there is no restriction on how long the valves may be opened, it disagrees that it does not impose any requirements. The requirement imposed is that the valves may only be opened for nitrogen venting/makeup and pressure control, and if not being used for that they must be closed. In addition, these valves are considered purge valves which communicate directly to the atmosphere and need to be verified closed unless open for a specific reason. Therefore, this requirement on these 1" purge valves must be retained in the ITS and incorporated in ITS SR 3.6.1.3.1. **Comment:** Revise the CTS/ITS markups to include the requirement to verify the 1" nitrogen venting and pressure control valves are closed except when used for nitrogen venting/makeup and pressure control. Provide additional discussion and justification as necessary for this change.

Fermi-2 response:

3.6.1.3-12 DOC LR.4
CTS 4.6.1.1.b
CTS 3.6.3 Action a.3
CTS 3.4.7 Action a.1.b
ITS 3.6.1.3 Actions, SR 3.6.1.3.2, SR 3.6.1.3.3
and Associated Bases

CTS 4.6.1.1.b and 3.6.3 Action a.3 contain a requirement for a manual valve which is closed to isolate a penetration to be locked closed. CTS 3.4.7 Action a.1.b requires the use of a deactivated MSIV which in the case of the third MSIV is a type of locked manual valve. ITS 3.6.1.3 Actions, SR 3.6.1.3.2 and SR 3.6.1.3.3 only require that the manual valves be closed and ITS SR 3.6.1.3.2 does not require the verification of locked, sealed or otherwise secured valves. The CTS markup shows that these items are relocated to licensee-controlled documents that are not under regulatory program control. This change is not a less restrictive (LR) change, but a less restrictive (L) change, since the requirement to lock closed all manual valves is deleted and the verification of locked closed valves is also deleted. The only requirement is to isolate the penetration by a closed manual valve and verify its closure. See RAI 3.6.1.3-13 and 3.6.1.3-30.

Comment: Revise the CTS markup and provide additional discussion and justification for this less restrictive (L) change. See RAI 3.6.1.3.-13 and 3.6.1.3-30.

Fermi-2 response:

3.6.1.3-13 DOC LR.4
CTS 4.6.1.1.b
STS SR 3.6.1.3.3 and SR 3.6.1.3.4
ITS SR 3.6.1.3.2, SR 3.6.1.3.3 and Associated Bases

CTS 4.6.1.1.b contains a requirement to verify that manual valves which are closed to isolate a penetration are locked closed. ITS SR 3.6.1.3.2 modifies STS SR 3.6.1.3.3 which verifies that the manual valves outside containment are closed to exclude those valves which are locked, sealed, or otherwise secured. This change implemented TSTF-45. The ITS markup did not implement TSTF-45 for STS SR 3.6.1.3.4/ITS SR 3.6.1.3.3 and its associated Bases, as well as ITS B3.6.1.3 Bases - SR 3.6.1.3.2. No justification was provided for this deviation from the TSTF. See RAI 3.6.1.3-30.

Comment: Licensee should revise its submittal to conform to TSTF-45 or justify the deviation. See RAI 3.6.1.3-30.

Fermi-2 response:

- 3.6.1.3-14 DOC L.2
- JFD P.3
- JFD P.6
- CTS 3.6.3 Actions
- CTS 3.4.7 Actions
- STS 3.6.1.3 Actions A, B, and C
- ITS 3.6.1.3 Actions A, B and C and Associated Bases

CTS 3.6.3 Actions and 3.4.7 Actions for inoperable isolation valves require maintaining one isolation valve in the penetration Operable. In the event both valves in the penetration are inoperable, an immediate shutdown is required by these CTS Actions. ITS 3.6.1.3 Action B provides a 1 hour restoration time prior to commencing this shutdown. This less restrictive change DOC L.2 is acceptable; however, it is incomplete in one aspect. For penetration flow paths with only one PCIV, the remedial measures specified in the CTS to be taken with the PCIV inoperable is an immediate shutdown. Based on the ITS markup of STS 3.6.1.3 Actions A, B, and C and JFD P.6, the time to restore and/or isolate this type of penetration has been increased to 4 hours (ITS 3.6.1.3 Action A) based on the discussion in RAI 3.6.1.3-5. In addition, the changes made to ITS 3.6.1.3 Actions A and B - deletion of the Note - would allow the penetration to be isolated by check valves with the flow secured which is not allowed by the STS. Taking the above discussion into account, as well as the discussions in RAIs 3.6.1.3-4, 3.6.1.3-5, 3.6.1.3-6 and 3.6.1.3-7, all the changes proposed for STS 3.6.1.3 Actions A, B, and C could be considered as generic. It is recommended that STS 3.6.1.3 Action C as modified by TSTF-30 be retained in the Fermi-2 ITS. **Comment:** Revise the CTS/ITS markup in accordance with the above discussion and provide the appropriate discussion and justifications. See RAIs: 3.6.1.3-4, 3.6.1.3-5, 3.6.1.3-6, and 3.6.1.3-7.

Fermi-2 response:

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- 3.6.1.3-15 DOC L.5
 - JFD P.1
 - JFD P.7
 - CTS 3.6.1.2.d and e
 - CTS 3.6.1.2 Action d and e
 - CTS 4.6.1.2 ** footnote
 - ITS SR 3.6.1.3.12 and Associated Bases

CTS 3.6.1.2.d, CTS 3.6.1.2 Action d require hydrostatic leak rate testing to limit the combined leakage of all hydrostatically tested lines to 5 gpm. CTS 3.6.1.2.e also requires a hydrostatic leak rate test, but its acceptance criteria is on a penetration basis. CTS 4.6.1.2 ** footnote requires the LPC1 injection isolation valves be hydrostatically tested in accordance with CTS 4.4.3.2.2. ITS SR 3.6.1.3.13 retains only the second hydrostatic leak rate test based on its application in meeting applicable safety analysis assumptions. DOC L.5 states that the deleted requirement (to limit combined leakage of all hydrostatically tested lines to 5 gpm) appears to have been adopted in the Fermi-2 Technical Specifications to reflect commitments to minimize post-LOCA leakage of primary coolant sources outside of containment. This commitment deals specifically with

leakage across the system boundary (e.g., piping, gaskets, flanges, valve packing), and not leakage past valve seating surfaces. Therefore, the licensee contends that the CTS 3.6.1.2.d requirement is inappropriate to address this commitment. Based on the information provided, the staff cannot make a determination on whether CTS 3.6.1.2.d and its associated Action meets the Fermi-2 commitment or that they can be completely deleted from the CTS/ITS. Thus, the staff considers the deletion of the commitment to be a beyond scope of review item for this conversion. The commitment requirements, as well as the testing requirements of CTS 4.4.3.2.2, should be retained in ITS SR 3.6.1.2.13 as modified by RAI 3.6.1.1-5 with the specific details being relocated to the ITS B3.6.1.3 Bases - SR 3.6.1.3.12. Thus the change would be a less restrictive (LA) change for CTS 3.6.1.2.d and e. **Comment:** Revise the CTS/ITS submittal to reflect the above discussion and RAI 3.6.1.1-5. Provide additional discussion and justification for the less restrictive (LA) change.

Fermi-2 response:

3.6.1.3-16 JFD C.1
ITS SR 3.6.1.3.2

ITS SR 3.6.1.3.2 indicates a change designated a JFD C.1. It is unclear if JFD C.1 refers to the changes associated with TSTF-45 or some other change since no JFD discussion or justification is provided for JFD C.1. **Comment:** Provide a discussion and justification for JFD C.1.

Fermi-2 response:

3.6.1.3-17 JFD P.2
STS B3.6.1.3 Bases - Applicable Safety Analyses
ITS B3.6.1.3 Bases - Applicable Safety Analyses

The second and third paragraphs of STS B3.6.1.3 Bases - Applicable Safety Analyses state the following: "Of the events analyzed in Reference 1...startup (for loss of site power) and PCIV stroke time." These sentences provide specific details with regards to the various accidents requiring PCIV actuation. ITS B3.6.1.3 Bases - Applicable Safety Analyses deletes the STS words and substitute some general wording. This is unacceptable. The details provide necessary information with regards to understanding the purpose and the specified requirements in the specification. **Comment:** Revise the ITS markup to provide this plant specific information or provide additional discussion and justification to show why it should not be included.

Fermi-2 response:

3.6.1.3-18 JFD P.4
ITS B3.6.1.3 Bases - Background

ITS B3.6.1.3 Bases - Background states the following: "For test vent and drain connections, which are part of the primary containment boundary, a threaded pipe cap with acceptable sealant in addition to the primary containment isolation valve(s) provides protection equivalent to a blank flange." It is unclear from this statement as to what constitutes an acceptable sealant and whether the PCIVs specified are the vent and drain valves associated with the test connection or the larger PCIVs associated with the penetration. **Comment:** Provide additional information on the sealant and the PCIVs referred to in the statement.

Fermi-2 response:

3.6.1.3-19 JFD P.4
STS B3.6.1.3 Bases - LCO
ITS B3.6.1.3 Bases - LCO

The third paragraph of the Bases discussion of LCO for STS 3.6.1.3 states "The normally closed PCIVs...are those listed in Reference 2." This paragraph deals with those containment isolation valves that are required to be closed during an accident and are in the closed position during normal operation. This paragraph is omitted from the Bases discussion of LCO for ITS 3.6.1.3 and the STS Bases markup indicates this omission is justified by JFD P.4 which does not address this subject. JFD P.4 also states this editorial preference is based on incomplete and misleading discussion of these valves, and elimination of this detail does not modify the requirements or interpretation of these requirements. This is incorrect. 10 CFR 50 Appendix A, General Design Criteria 55 through 57, and the definition of containment integrity (CTS 1.29.a) tie the operability of isolation valves to the integrity of a closed system, and this wording defines the operability of these isolation valves. Therefore, the STS wording is correct and should be retained. In addition, the staff finds this change to be generic and beyond the scope of review for this conversion. **Comment:** Delete this generic change.

Fermi-2 response:

3.6.1.3-20 JFD P.1
JFD P.4
STS 3.6.1.3 Actions Note 1 and Associated Bases
STS SR 3.6.1.3.1
ITS 3.6.1.3 Actions Note 1 and Associated Bases
ITS SR 3.6.1.3.1 Note 2

STS 3.6.1.3 Actions Note 1 allows penetration flow paths, except for purge valve penetration flow paths, to be unisolated intermittently under administrative controls. The intent of the exception in this Note is that it applies only to the purge valves that are sealed closed per STS SR 3.6.1.3.1. ITS 3.6.1.3 Actions Note 1 retains the exception. This is incorrect. By retaining the exception, ITS 3.6.1.3 Actions Note 1 conflicts with or

contradicts the ITS SR 3.6.1.3.1 Note. Fermi-2 does not require STS SR 3.6.1.3.1 since the purge valves are capable of closing in a post-accident environment and are not required to be sealed. Therefore, the exception in STS/ITS 3.6.1.3 Actions Note 1 can be deleted. **Comment:** Revise the ITS submittal to delete this exception.

Fermi-2 response:

3.6.1.3-21 JFD P.4
STS B3.6.1.3 Bases - Actions
ITS B3.6.1.3 Bases - Actions

The first paragraph of STS B3.6.1.3 Bases - Actions is modified in ITS B3.6.1.3 Bases - Actions by the words "with inoperable PCIVs.. with these Actions." The justification that adds these words (JFD P.4) states that they are added for editorial clarity and consistency. The staff does not believe these words clarify the description of Actions Note 1 and may restrict operations since the change would limit the application to only those valves closed by the Actions. The Note also applies to valves that are normally closed and are Operable. The Note in this case would not require entry into the Actions. **Comment:** Delete this change.

Fermi-2 response:

3.6.1.3-22 JFD P.4
STS B3.6.1.3 Bases SR 3.6.1.3.10
ITS B3.6.1.3 Bases SR 3.6.1.3.9

ITS B3.6.1.3 Bases-SR 3.6.1.3.9 makes a number of editorial and clarity changes to STS B3.6.1.3 Bases-SR 3.6.1.3.10. The staff believes that these changes do not clarify the STS words and are confusing. Furthermore, the addition of the words "typical performance of" does not seem to make sense and is generic in that they would apply to all SRs that have similar STS wording. **Comment:** Retain the STS wording.

Fermi-2 response:

3.6.1.3-23 JFD P.7
JFD P.9
STS SR 3.6.1.3.13 and Associated Bases
ITS SR 3.6.1.3.12 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 P.7. This is incorrect. JFD P.7 has nothing to do with this Note. JFD P.9

would be a more appropriate justification for deleting the Note description. **Comment:** Provide additional discussion and justification for the deletion of this Note description.

Fermi-2 response:

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- 3.6.1.3-24** CTS 3.6.1.1 Actions
CTS 4.6.1.1.b
ITS 3.6.1.3 Actions
ITS SR 3.6.1.3.2 and SR 3.6.1.3.3

CTS 4.6.1.1.b verifies that all penetrations not capable of being closed by Operable automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions. The corresponding ITS SRs for this CTS surveillance are ITS SR 3.6.1.3.2 for valves outside containment and ITS SR 3.6.1.3.3 for valves inside containment. If CTS 4.6.1.1.b cannot be met, the Actions of CTS 3.6.1.1 are entered which require restoration of valve Operability within 1 hour or shutdown within the following 36 hours. If ITS SR 3.6.1.3.2 or ITS SR 3.6.1.3.3 cannot be met, the Actions of ITS 3.6.1.3 are entered which allows for one valve inoperable between 4 hours and 72 hours depending on the type of penetration to restore valve Operability before shutdown commences. This less restrictive change to the CTS is not justified. **Comment:** Revise the CTS markup to show this less restrictive change and provide the appropriate discussions and justifications.

Fermi-2 response:

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- 3.6.1.3-25** CTS 4.6.1.8.1
ITS SR 3.6.1.3.1 and Associated Bases

CTS 4.6.1.8.1 requires verifying that the drywell and suppression chamber purge butterfly isolation valves have not been open for more than 90 hours in the previous 365 days. In essence, this CTS SR verifies the valve closed. The corresponding ITS SR is ITS SR 3.6.1.3.1. The frequency for performing CTS 4.6.1.8.1 is "Before being opened for purge/vent operation" while the frequency for ITS SR 3.6.1.3.1 is every 31 days. No justification is provided for this change in surveillance frequency. Since the staff does not know the valves operating history, how often these valves are opened (and for how long), the staff cannot make a determination of whether the change is an administrative change, a more restrictive change or a less restrictive (L) change. **Comment:** Revise the CTS markup and provide an appropriate discussion and justification for this change based on the drywell and suppression chamber butterfly isolation valve operating history.

Fermi-2 response:

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- 3.6.1.3-26** Resolved in the February 3 and 4, 1999, meeting.
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3.6.1.3-27 CTS 3.6.1.8 Actions
ITS 3.6.1.3 Action B

CTS 3.6.1.8 Action a specifies that with one drywell and suppression chamber purge valve inoperable for any reason other than leakage, the valve shall be closed or the penetration isolated within 4 hours. For one valve inoperable the remedial measures are equivalent to ITS 3.6.1.3 Required Action A.1. See RAI 3.6.1.3-26 for additional concerns with regards to one valve inoperable. However, for two valves in a penetration inoperable the CTS does not specify an Action but requires immediate entry in CTS 3.0.3. The corresponding ITS Action - ITS 3.6.3 Action B allows 1 hour to close at least one valve or isolate the penetration. This change is not reflected in the CTS markup of CTS 3.6.1.8 Action. **Comment:** Revise the CTS markup to reflect this change (the addition of ITS Action B) and provide the appropriate discussions and justification for this change.

Fermi-2 response:

3.6.1.3.28 CTS3.4.7 Actions
CTS 3.6.1.8 Actions
CTS 3.6.3 Actions
ITS 3.6.1.3 Action Notes and Associated Bases

The CTS markup of CTS 3/4.6.3 adds four Notes to CTS 3.6.3 Actions. The markup justifies the addition of these Notes. The CTS markup of CTS 3/4.6.1.8 and 3.4.7 do not show the addition of the four Notes to the Actions of CTS 3.6.1.8 and 3.4.7. Based on the structure and format of the CTS markup these Notes need to be added to the markup of CTS 3/4.6.1.8 and 3.4.7 because they also apply to these CTS. See RAI 3.6.1.3-20 The justifications used to add these Notes to CTS 3.6.3 were based on CTS 3.6.3 and therefore they may not be applicable to CTS 3.6.1.8 and 3.4.7. **Comment:** Revise the CTS markup of CTS 3/4.6.1.8 and 3.4.7 to add the four ITS Action Notes and provide the appropriate discussion and justification for these changes. See RAI 3.6.1.3-20

Fermi-2 response:

3.6.1.3-29 CTS 4.6.3.4
STS SR 3.6.1.3.10
ITS SR 3.6.1.3.9 and Associated Bases

CTS 4.6.3.4 verifies that each EFCV is Operable by "verifying that the valve checks flow." The corresponding ITS SR 3.6.1.3.9 verifies that each EFCV restricts flow. The "check flow" in CTS 4.6.3.4 implies that the flow is stopped with no leakage. The "restricts flow" in ITS SR 3.6.1.3.9 which is based on STS SR 3.6.1.3.10 implies that there may be a slight leakage. STS SR 3.6.1.3.10 specifies the leakage as " \leq 1 gph." No justification is provided for this less restrictive (L) change. **Comment:** Revise the CTS markup and provide a discussion and justification for this less restrictive (L) change.

Fermi-2 response:

3.6.1.3-30 CTS 3.6.3 ** Footnote
ITS SR 3.6.1.3.2 Note 2, SR 3.6.1.3.3 Note 2 and Associated Bases

CTS 3.6.3 requires all PCIVs to be Operable. CTS 3.6.3 is modified by ** Footnote which allows "locked or sealed closed valves to be opened on an intermittent basis under administrative control." The CTS markup shows that this ** Footnote becomes Note 2 in ITS SR 3.6.1.3.2 and SR 3.6.1.3.3. Based on the wording in Note 2 to ITS SR 3.6.1.3.2 and SR 3.6.1.3.3, the wording of the SRs and the discussion in RAI 3.6.1.3-13, the meaning of the ** Footnote is changed in the conversion to ITS Note 2. The change is considered as a less restrictive (L) change. **Comment:** Revise the CTS markup and provide a discussion and justification for this less restrictive (L) change.

Fermi-2 response:

3.6.1.3-31 JFD P.5
DOC M.2
CTS 3.6.1.2, Action e
STS 3.6.1.3, Condition C
ITS 3.6.1.3, Condition C

In the ITS, the licensee adopted the 72-hour completion time provided in TSTF-30. This completion time applies to flow paths in which the single PCIV (emphasis added) in the penetration is inoperable. Rather than applying this completion time as written in the TSTF, the licensee modified it to apply to hydrostatically tested lines. JFD P.5 indicates that the "vast majority of hydrostatically tested valves are in penetrations having a single valve and a closed system." In addition, application of TSTF-30 also requires the adoption of a Bases change. In particular, the Bases must state that the closed systems associated with the penetrations with single isolation valves must meet the requirements of Standard Review Plan Section 6.2.4. This portion of the TSTF was not adopted in the DECo submittal. **Comments:** Provide justification for applying the 72-hour completion time to hydrostatically tested lines with two isolation valves or adopt the standard. Also, modify the Bases to adopt the TSTF.

Fermi-2 response:

3.6.1.3-32 ITS 3.6.1.3, Condition A

The completion time for Action A.1 reads "4 hours except for main steam line EFCV." The addition of EFCV to the STS completion time appears to be a typographical error. **Comment:** Delete EFCV from the completion time.

Fermi-2 response:

3.6.1.4 Primary Containment Pressure

- 3.6.1.4-1 JFD P.1
CTS 3.6.1.6
ITS LCO 3.6.1.4 and Associated Bases

CTS 3.6.1.6/ITS LCO 3.6.1.4 state that the primary containment pressure shall be ≥ -0.10 and ≤ 2.0 psig. ITS B3.6.1.4 Bases - LCO Insert B3.6.1.4-4 states that "In the event of an inadvertent drywell spray actuation, with an initial primary containment pressure of ≥ 0.10 psig, the resultant negative primary containment pressure..." Based on the consistency between the CTS/ ITS LCO limits and the Bases discussion in ITS B3.6.1.4 Bases - Applicable Safety Analyses Insert B3.6.1.4-1, shouldn't the "0.10 psig" specified in Insert B3.6.1.4-4 be "-0.10 psig." **Comment:** Correct this discrepancy or provide additional discussion and justification for this Bases statement.

Fermi-2 response:

3.6.1.5 Drywell Air Temperature

- 3.6.1.5.1 DOC LR-1
JFD P.4
CTS 4.6.1.7
ITS SR 3.6.1.5 and Associated Bases

CTS 4.6.1.7 states that "The drywell average air temperature shall be the volumetric average of the temperatures..." for the locations specified in CTS 4.6.1.7. The CTS markup shows that the locations specified in CTS 4.6.1.7 and how the drywell average air temperature is determined are being relocated to licensee-controlled documents that are not under a regulatory program control (i.e., 10 CFR 50.59). This change is incorrect and unacceptable to the staff. The determination of the drywell average air temperature (volumetric average) has been relocated to ITS B3.6.1.5 Bases SR 3.6.1.5.1 which makes this portion of the change a less restrictive (LA) change rather than a less restrictive (LR) change. In addition, Fermi-2 was licensed based on the temperature being measured at specific locations. While it is permissible to relocate these items out of TS, because they are part of the licensing basis for temperature determination, they should be relocated to a licensee-controlled document under a regulatory control program (i.e., ITS Bases, UFSAR, or other appropriate licensee-controlled document). Thus the change would be a less restrictive (LA) change rather than a less restrictive (LR) change. **Comment:** Revise the CTS/ITS markup to reflect that these items are being relocated to licensee-controlled documents under a regulatory control program. Provide any addition justifications as necessary.

Fermi-2 response:

3.6.1.6 Low-Low Set (LLS) Valves

- 3.6.1.6-1 Resolved in the February 3 and 4, 1999, meeting.
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- 3.6.1.6-2 JFD P.4
STS B3.6.1.6 Bases - SR 3.6.1.6.2
ITS B3.6.1.6 Bases - SR 3.6.1.6.2

The last paragraph in STS B3.6.1.6 Bases - SR 3.6.1.6.2 states the following: "This SR is modified by a Note that excludes valve actuation. This prevents a reactor pressure vessel blowdown." ITS B3.6.1.6 Bases - SR 3.6.1.6.2 modifies this paragraph by deleting the last sentence and modifying it as follows: "This SR... actuation, since valve actuation is addressed in SR 3.6.1.6.1." The justification used for the change (JFD P.4) states that the SR is intended to be performed while shutdown, thus the sentence regarding blowdown is inappropriate. This is incorrect. While it is true that valve actuation is addressed by ITS SR 3.6.1.6.1 and that ITS SR 3.6.1.6.2 is intended to be performed while shutdown, there may be instances when this SR is performed at power. In those cases one does not want to open the valve and blowdown the reactor pressure vessel. Thus the STS words are correct. In addition, the proposed change is considered generic and beyond the scope of review for this conversion. **Comment:** Delete this change.

Fermi-2 response:

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- 3.6.1.6-3 JFD P.5
STS B3.6.1.6 Bases - SR 3.6.1.6.1
ITS B3.6.1.6 Bases - SR 3.6.1.6.1

STS B3.6.1.6 Bases - SR 3.6.1.6.1 states that adequate pressure at which ITS SR 3.6.1.6.1 is to be performed is the pressure recommended by the valve manufacturer. ITS B3.6.1.6 Bases - SR 3.6.1.6.1 deletes the reference to the manufacturer's recommendation and substitutes its own pressure limit of 850 psig. JFD P.5 does not provide sufficient information as to why the 850 psig test pressure is used in lieu of the manufacturer's recommendation, and how the test pressure of 850 psig was determined. **Comment:** Provide additional discussion and justification to show that the 850 psig test pressure limit is acceptable in lieu of the manufacturer's recommended test pressure.

Fermi-2 response:

3.6.1.7 Reactor Building-to-Suppression Chamber Vacuum Breakers

- 3.6.1.7-1 DOC A.12 (CTS 1.0)
CTS 1.29.g
CTS 3/4.6.4.2
ITS 3.6.1.7 and Associated Bases

See RAI 3.6.1.1-1. **Comment:** See RAI 3.6.1.1.-1.

Fermi-2 response:

3.6.1.7-2 DOC A.4
CTS 4.6.4.2.a
ITS SR 3.6.1.7.1

CTS 4.6.4.2.a requires that the vacuum breakers be closed at all times; with no explicit allowance for opening during the performance of required surveillances. Thus opening the vacuum breaker to perform surveillances would result in entry into the appropriate Actions of CTS 3.6.4.2 since the vacuum breaker would be considered inoperable (i.e., not meeting the SR). CTS 4.6.4.2.a is modified by ITS SR 3.6.1.7.1 Note 1 to allow opening the vacuum breakers during the performance of required surveillances. This change is designated and justified as an administrative change (DOC A.4), which is incorrect. The change is a less restrictive (L) change, since the vacuum breaker is not considered inoperable when open to perform required surveillances. **Comment:** Revise the CTS markup and provide additional discussion and justification for this less restrictive (L) change.

Fermi-2 response:

3.6.1.7-3 DOC A.5
JFD P.1
CTS 4.6.4.2.b.2.a
ITS SR 3.6.1.7.3 and Associated Bases

CTS 4.6.4.2.b.2.a requires the demonstration that the force required to open each vacuum breaker does not exceed the equivalent of 0.5 psig. ITS SR 3.6.1.7.3 requires the same demonstration but does not include the wording "The equivalent of..." This detail is specified in ITS B3.6.1.7 Bases - SR 3.6.1.7.3. The CTS markup shows this change as an administrative change. Based on the wording of the justification (DOC A.5) and the markup of ITS B3.6.1.7 Bases - SR 3.6.1.7.3, this is not an administrative change but a less restrictive (LA) change; relocation of details out of the CTS and into the Bases, et al. **Comment:** Revise the CTS markup and provide additional discussion and justification on relocating this information to the Bases for this less restrictive (LA) change.

Fermi-2 response:

3.6.1.7-4 DOC LA.1
CTS 3.6.4.2 Action c
CTS 4.6.4.2.b.1.b
CTS 4.6.4.2.b.2.c
ITS B3.6.1.7 Bases

CTS 3.6.4.2 Action c, 4.6.4.2.b.1.b and 4.6.4.2.b.2.c specify the Actions and surveillance requirements for the vacuum breaker position indicators. DCC LA.1 states that these details are being relocated to the Technical Requirements Manual (TRM) and the ITS Bases. The staff cannot find any information on the Vacuum Breaker Position Indication

System in ITS B3.6.1.7 Bases. **Comment:** Revise ITS B3.6.1.7 to include a description of the vacuum breaker position indication system.

Fermi-2 response:

3.6.1.7-5 JFD P.1
CTS 3.6.4.2 Actions a and b
ITS 3.6.1.7 Actions and Associated Bases

CTS 3.6.4.2 Action a specifies the Actions to be taken if a vacuum breaker is inoperable for opening but known to be closed while CTS 3.6.4.2 Action b specifies the Actions to be taken if a vacuum breaker is open. No Actions are specified for a vacuum breaker that is open and inoperable for opening even if it were closed. Under this scenario CTS 3.6.4.2 could be interpreted in two ways. One interpretation, since there are no Actions provided, would be that CTS 3.0.3 should be entered. In the alternate interpretation, since it would not matter whether the vacuum breaker could open if it were closed, the vacuum breaker would be considered open, thus CTS 3.6.4.2 Action b would be entered, which would allow 74 hours to close the open vacuum breaker. Then CTS 3.6.4.2 Action a would be entered which would allow 72 hours to restore the vacuum breaker to Operable status (capable of opening on demand). The total elapsed time would be 146 hours. ITS 3.6.1.7 Actions would only allow 72 hours to correct this problem (simultaneous Action entry). This change has not been addressed in converting the CTS to the ITS. From the CTS 3.0.3 aspect, the change would be considered as a less restrictive (L) change while the latter case would be considered as a more restrictive (M) change (146 hours to 72 hours). See RAI 3.6.1.7-6 for additional concerns with regards to the ITS Actions. **Comment:** Revise the CTS markup to address this concern and provide the appropriate discussions and justifications for this change.

Fermi-2 response:

3.6.1.7-6 JFD P.1
JFD P.2
CTS 3/4.6.4.2
STS 3.6.1.7 and Associated Bases
ITS 3.6.1.7 and Associated Bases

CTS 3.6.4.2 states that "All reactor building-suppression chamber vacuum breakers shall be OPERABLE and closed." ITS LCO 3.6.1.7 states that "Two reactor building-to-suppression chamber vacuum breakers shall be OPERABLE." ITS B3.6.1.7 Bases - Background describes the vacuum breaker system as two lines each with two valves in series - a vacuum breaker and an air-operated butterfly isolation valve. The butterfly valve is normally closed and automatically opens upon sensing a set differential pressure. Bases on the proposed ITS markup of ITS LCO 3.6.1.7, 3.6.1.7 Actions and the associated Bases, Fermi-2 does not consider the air operated butterfly isolation valve as a vacuum breaker but as only a containment isolation valve. If the butterfly valve was either normally open or closed, and received a containment isolation signal to close, then the staff possibly could consider this valve as solely a containment isolation valve.

However, based on the information provided in the ITS Bases that the butterfly valve opens on a differential pressure, the staff concludes that the primary safety function of this valve is a vacuum breaker and that the reactor building-to-suppression chamber vacuum breaker system design is no different than any other BWR/4 plant. Thus, the "all" in CTS 3.6.4.2 and "each" in CTS 4.6.4.2 refers to both the butterfly valves and vacuum breakers. Therefore, the changes made to STS LCO 3.6.1.7, STS 3.6.1.7 Actions A, B, C and D, and the Associated Bases which limit the specification to only the vacuum breakers (i.e., not the butterfly valves) is unacceptable. **Comment:** Revise the ITS markup to include the butterfly valves as part of ITS 3.6.1.7. Provide additional discussion and justification to support these changes.

Fermi-2 response: This item will be resolved after the associated beyond-scope issue (removal of the suppression pool spray from the TS) has been reviewed by the staff.

3.6.1.7-7 JFD P.4
ITS B3.6.1.7 Bases - Applicability

ITS B3.6.1.7 Bases - Applicability deletes all reference to the suppression pool spray system. This deletion is unacceptable based on RAI S3.6.2.4-1. **Comment:** See RAI S3.6.2.4-1.

Fermi-2 response:

3.6.1.7-8 ITS B3.6.1.7 Bases - SR 3.6.1.7.2

ITS B3.6.1.7 Bases - SR 3.6.1.7.2 states the following: "The 31 day frequency of this SR...at least once every 92 days." **Comment:** Correct this discrepancy.

Fermi-2 response:

3.6.1.8 Suppression Chamber-to-Drywell Vacuum Breakers

3.6.1.8-1 DOC A.3
CTS 4.6.4.1.a
ITS SR 3.6.1.8.1

CTS 4.6.4.1.a requires that the vacuum breakers be closed at all times; with no explicit allowance for opening during the performance of required surveillances. Thus, opening the vacuum breaker to perform surveillances would result in entry into the appropriate Actions of CTS 3.6.4.1 since the vacuum breaker would be considered inoperable (i.e., not meeting the SR). CTS 4.6.4.1.a is modified by ITS SR 3.6.1.8.1 Note 1 to allow opening the vacuum breakers during the performance of required surveillances. This change is designated and justified as an administrative change (DOC A.3), which is incorrect. The change is a less restrictive (L) change, since the vacuum breaker is not considered inoperable when open to perform required surveillances. **Comment:** Revise the CTS markup and provide additional discussion and justification for this less restrictive (L) change.

Fermi-2 response:

3.6.1.8-2 JFD P.4
STS B3.6.1.8 Bases - B.1
ITS B3.6.1.8 Bases - B.1

STS B3.6.1.8 Bases - B.1 states the following: "If vacuum breaker position indication is not reliable... is considered adequate to perform this test." ITS B3.6.1.8 Bases - B.1 deletes these sentences. The justification used (JFD P.4) states that the description is revised for clarity and the detail is relocated to ITS B3.6.1.8 Base - SR 3.6.1.8.1. The staff does not believe that the deletion improves the clarity of the discussion. The discussion provides a justification for the 2 hour Completion Time based on the ability to determine if the vacuum breaker is closed through a pressure differential test. The performance of the SR has nothing to do with this Action. **Comment:** Delete this change.

Fermi-2 change:

3.6.1.8-3 JFD P.5
ITS B3.6.1.8 Bases - Applicability

See RAIs 3.6.1.7-7 and S3.6.2.4-1. **Comment:** See RAIs 3.6.1.7-7 and S3.6.2.4-1.

Fermi-2 response: This item will be resolved after the associated beyond-scope issue (removal of the suppression pool spray from the TS) has been reviewed by the staff.

3.6.2.1 Suppression Pool Average Temperature

3.6.2.1-1 DOC A.12 (CTS 1.0)
CTS 1.29.e
CTS 3/4.6.2.1
ITS 3.6.2.1 and Associated Bases

See RAI 3.6.1.1-1. **Comment:** See RAI 3.6.1.1-1.

Fermi-2 response:

3.6.2.1-2 DOC M.1
DOC L.1
JFD P.3
JFD P.4
CTS 3.6.2.1 Actions
STS 3.6.2.1 Action D, Action E.2 and Associated Bases
ITS 3.6.2.1 Action D, Action E.1 and Associated Bases

ITS 3.6.2.1 makes the following changes to STS 3.6.2.1:

- a. ITS 3.6.2.1 Condition D deletes the STS words "but $\leq 120^{\circ}\text{F}$ ".
- b. ITS 3.6.2.1 Action D.2 changes the STS wording from "Verify" to "Monitor" and deletes " $\leq 120^{\circ}\text{F}$ ".
- c. ITS 3.6.2.1 Actions deletes the STS wording "AND E.2 be in Mode 4 36 hours."

The justification for these changes (JFD P.3 and P.4) states that STS 3.6.2.1 Action D could inadvertently be skipped if the average temperature was $\geq 120^{\circ}\text{F}$ but never discovered in the range between 110°F and 120°F . If such an event occurred, Action D would no longer apply. Justification M.1 justifies adding STS 3.6.2.1 Action D but does not address STS 3.6.2.1 Required Action E.2. The staff finds JFDs P.3 and P.4 unacceptable. Unmonitored and sizeable temperature increases should not occur. The operators should be aware of what is going on in the plant. In addition, DOC L.1 contradicts JFD P.4 with regards to the preceding statement. The staff has also determined that this change is a generic change which is beyond the scope of review for a conversion. **Comment:** Delete this generic change.

Fermi-2 response:

3.6.2.1-3 DOC LR.2
CTS 3.6.2.1 Action c
CTS 4.6.2.1.f

CTS 3.6.2.1 Action c and 4.6.2.1.f establish Actions and surveillance requirements for the instrumentation used to monitor suppression pool temperature. Since this instrumentation performs an alarm/indication - only function, it can be relocated out of the technical specification. However, because it is the primary means used to verify the temperature limit, it has a direct relation in verifying the suppression pool temperature limit. Therefore, this information needs to be relocated to a licensee-controlled documents controlled by 10 CFR 50.59, and the change should be a less restrictive (LA) change rather than a less restrictive (LR) change. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications to indicate that this information is being relocated to a 10 CFR 50.59 licensee-controlled document.

Fermi-2 response:

3.6.2.1-4 DOC L.2
CTS 4.6.2.1.d

CTS 4.6.2.1.d requires an external visual inspection of the suppression chamber whenever there is indication of safety/relief valve (SRV) operation with the local suppression pool temperature $\geq 160^{\circ}\text{F}$ and reactor coolant system pressure ≥ 200 psig. DOC L.2 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 Fermi-2. This item may be considered a beyond scope of review item for this conversion since its applicability to Fermi-2 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 Fermi-2.

Fermi-2 response:

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- 3.6.2.1-5** JFD P.8
STS LCO 3.6.2.1, Actions A, B, and C and Associated Bases
ITS LCO 3.6.2.1, Actions A, B, and C and Associated Bases

STS LCO 3.6.2.1 and Actions A, B, and C specifies the suppression pool temperature at a specific reactor power as determined by any Operable intermediate range monitor channel. ITS LCO 3.6.2.1, Actions A, B, and C modify the STS to be consistent with the CTS requirements. The proposed ITS modifications have been addressed by TSTF-206. ITS LCO 3.6.2.1, Actions A, B, and C and their associated Bases have not been modified in accordance with TSTF-206. **Comment:** Licensee is to revise the ITS markup to conform to TSTF-206 or justify the deviations.

Fermi-2 response:

3.6.2.2 Suppression Pool Water Level

- 3.6.2.2-1** DOC A.12 (CTS 1.0)
CTS 1.29.e
CTS 3/4.6.2.1
ITS 3.6.2.1 and Associated Bases

See RAI 3.6.1.1-1. **Comment:** See RAI 3.6.1.1-1.

Fermi-2 response:

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- 3.6.2.2-2** DOC LR.1
CTS 3.6.2.1 Actions e and f
CTS 4.6.2.1.g

CTS 3.6.2.1 Actions e and f and CTS 4.6.2.1.g establish Actions and surveillance requirements for the instrumentation used to monitor suppression pool water level. Since this instrumentation performs an alarm/indication-only function, it can be relocated out of the Technical Specifications. However, because it is the primary means used to verify the water level limits as specified in ITS B3.6.2.2 Bases, it has a direct relation in verifying the suppression pool temperature limit. Therefore, this information needs to be relocated to a licensee-controlled document controlled by 10 CFR 50.59, and the change should be a less restrictive (LA) change rather than a less restrictive (LR) change. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications to indicate that this information is being relocated to a 10 CFR 50.59 licensee-controlled document.

Fermi-2 response:

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

- 3.6.2.3-1 JFD P.2
STS B3.6.2.3 Bases - SR 3.6.2.3.2
ITS B3.6.2.3 Bases - SR 3.6.2.3.2

STS B3.6.2.3 Bases - SR 3.6.2.3.2 states the following: "This test confirms one point on the pump design curve and the results are indicative of overall performance." ITS B3.6.2.3 Bases - SR 3.6.2.3.2 deletes "This test confirms one point on the pump design curve, and." The justification (JFD P.2) used for the deletion states that the change was made to reflect plant specific design details, equipment terminology, and analyses. The deletion does not seem to fall into any of these categories. Since this is a pump test, the staff believes that the information if applicable and should be retained. **Comment:** Retain the deleted STS words or provide additional discussion and justification for their deletion.

Fermi-2 response:

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- 3.6.2.3-2 JFD P.4
STS 3.6.2.3 Action B and Associated Bases
ITS 3.6.2.3 Actions B and C and Associated Bases

STS 3.6.2.3 Action B requires an immediate shutdown when two RHR suppression pooling cooling subsystems are inoperable. ITS 3.6.2.3 Actions B and C modifies the STS Action to allow 8 hours to restore one RHR subsystem to Operable status prior to commencing a shutdown. This change is encompassed by TSTF-230. The changes proposed for ITS 3.6.2.3 Actions B and C and their associated Bases are not in accordance with TSTF-230. **Comment:** Revise the ITS markup and its associated Bases to be in accordance with TSTF-230 or justify the deviations.

Fermi-2 response:

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

- S3.6.2.4-1 JFD P.1
CTS 3/4.6.2.2
STS 3.6.2.4 and Associated Bases

CTS 3/4.6.2.2 specifies the Operability requirements for the RHR Suppression Pool and Drywell Spray Systems. STS 3.6.2.4 specifies the Operability requirements for the RHR Suppression Pool Spray. ITS 3.6. does not include STS 3.6.2.4 based on the premise (R.10) that CTS 3/4.6.2.2 does not meet the Criterion specified in 10 CFR 50.36(c)(2)(ii). This justification is incomplete in that it does not address the other aspects of the RHR Suppression Pool Spray System and Drywell Spray System encompassed by CTS 3/4.6.2.2. In addition, the staff has determined and stated in the Bases of STS B3.6.2.4 that the RHR Suppression Pool Spray System does meet Criterion 3 of 10 CFR 50.36(c)(2)(ii). Since this system was in the CTS and the staff determination is that it meets Criterion 3, this specification should be included in the ITS. Furthermore,

deletion of this specification is considered by the staff as a beyond scope of review item for this conversion. However, STS 3.6.2.4 of NUREG-1433 may not be the appropriate TS in the Fermi-2 case, STS 3.6.1.7 "RHR Containment Spray System" of NUREG-1434 (BWR-6) may be the more appropriate TS to use. Also consideration should be given to adding a separate LCO for Drywell Spray System instead of having a combined TS. See RAIs 3.6.1.7-7 and 3.6.1.8-3. **Comment:** Revise the CTS/ITS markups to include CTS 3/4.6.2.2 in ITS 3.6. Provide additional discussions and justifications for any changes made to the CTS/ITS. In addition, to support the review of this beyond-scope issue, address the following six questions:

4. Does the value of $A/\sqrt{k} = 0.147$ given in UFSAR Section 6.2.1.3.6 include credit for actuation of suppression pool sprays?
5. In considering hydrodynamic loads due to chugging following a large-break LOCA, is credit taken for suppression pool sprays to limit the magnitude of the loads, e.g., the number of fatigue cycles of the downcomers? If yes, please describe.
6. Is credit taken for drywell or suppression pool sprays in limiting the temperatures or pressures for environmental qualification of equipment inside containment? If yes, please describe.
7. Technical specifications inclusion criterion 4 specifies risk as a criterion for inclusion of a system in the technical specifications. Discuss whether the benefit of containment spray in relatively high likelihood severe accidents (such as vessel melt-through or core-concrete interactions) warrants retaining containment spray systems in the technical specifications.
8. If the LCOs and SR for containment drywell and suppression pool sprays are removed from the TS, describe how these systems, and any associated surveillances will be maintained.
9. If the LCOs and SR for containment drywell and suppression pool sprays are removed from the TS, describe what changes, if any, will occur in the treatment of these systems under the Maintenance Rule, Inservice Inspection, and Inservice Testing Programs.

Fermi-2 response:

3.6.3.1 Primary Containment Hydrogen Recombiners

3.6.3.1-1 JFD P.2

STS B3.6.3.1 Bases - Background, Applicable Safety Analyses, LCO and Applicability

ITS B3.6.3.1 Bases - Background, Applicable Safety Analyses, LCO and Applicability.

ITS B3.6.3.1 Bases changes the STS word "hydrogen" in a number of places to "oxygen". The justification used for this change (JFD P.2) makes the change based on

plant specific design details, equipment terminology, and analyses. This justification is inadequate for this change. Since most of the changes deal with the "flammability" (STS wording) or "combustibility" or "combustibility limit" (CTS wording), the change is incorrect. Oxygen is not a combustible gas while hydrogen is. Furthermore, the changes proposed would be considered as generic changes which are beyond the scope of review for this conversion. **Comment:** Delete these generic changes.

Fermi-2 response:

3.6.4.1 Secondary Containment

- 3.6.4.1-1** A.12 (CTS 1.0)
CTS 1.36
CTS 3/4.6.5.1
CTS 3/4.6.5.2
CTS 3/4.6.5.3
ITS 3.6.4.1 and Associated Bases
ITS 3.6.4.2 and Associated Bases
ITS 3.6.4.3 and Associated Bases

CTS 1.36 defines Secondary Containment Integrity. A markup of CTS 1.36 is provided in the CTS markup of CTS 1.0, but not in the markup of CTS 3.6. DOC A.12 (CTS 1.0) states that the definition of Secondary Containment Integrity is deleted from the CTS/ITS, because it duplicates requirements that are appropriately contained in specifications specifically CTS 3/4.6.5.1/ITS 3.6.4.1 "Secondary Containment." DOC A.12 (CTS 1.0) is incorrect and incomplete. DOC A.12 (CTS 1.0) is incorrect in that the definition is not deleted but relocated to various Bases in ITS 3.6. which is a less restrictive (LA) change. In addition, while DOC A.12 is correct in stating that it duplicates requirements that are appropriately contained in other specifications, it limits it to just Secondary Containment (CTS 3/4.6.5.1/ITS 3.6.4.1). This is incorrect. The items specified in the definition are also contained in CTS 3/4.6.5.2/ITS 3.6.4.2 and CTS 3/4.6.5.3/ITS 3.6.4.3. (See RAIs 3.6.4.1-2, 3.6.4.2-1, and 3.6.4.3-1). **Comment:** Revise the CTS markup of CTS 1.36 and CTS 3/4.6 to reflect the above discussion. Provide additional discussions and justifications for relocating the details of the definition to ITS 3.6.4.1, 3.6.4.2, 3.6.4.3 and their associated Bases. See RAIs 3.6.4.2-1 and 3.6.4.3-1. A single answer will suffice for these various specifications, with reference to the RAI numbers.

Fermi-2 response:

- 3.6.4.1-2 DOC A.12 (CTS 1.0)
 - CTS 1.36.e
 - CTS 3/4.6.5.1
 - CTS 3/4.6.5.2
 - ITS 3.6.4.1 and Associated Bases
 - ITS 3.6.4.2 and Associated Bases

CTS 1.3.6 defines Secondary Containment Integrity. A markup of CTS 1.36 is provided in the CTS markup of CTS 1.0. DOC A.12 (CTS 1.0) states that the definition of Secondary Containment Integrity is deleted from the CTS/ITS. DOC A.12 is incorrect. CTS 1.3.6.e states that "The sealing mechanism associated with each secondary containment penetration, e.g., welds, bellows, or O-rings, is OPERABLE." This statement cannot be found in ITS 3.6.4.1, 3.6.4.2 or their associated Bases. A similar type statement is in CTS 1.29 Containment Integrity and it will be found in ITS B3.6.1.1 Bases - Background. (See RAI 3.6.1.1-3). If this statement is being deleted, then the change would be a less restrictive change - LR or L, depending on whether it is being relocated to a licensee document or eliminated completely. If it is being relocated to ITS 3.6.4.1, 3.6.4.2 or their associated Bases, then the change would be either an administrative (A) change or a less restrictive (LA) change. See RAIs 3.6.4.1-1 and 3.6.4.2-1. **Comment:** Revise the CTS/ITS markup of CTS 1.36.e with regards to the above discussion. Provide additional discussion and justification as necessary. See RAI 3.6.4.2-1. A single answer will suffice for these two specifications, with reference to the RAI numbers.

Fermi-2 Response:

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- 3.6.4.1-3 JFD P.1
 - JFD P.3
 - CTS 3.6.5.1 Action a.1
 - CTS 3.6.5.1 Action b.1
 - ITS 3.6.4.1 Actions A and B and Associated Bases

CTS 3.6.5.1 Action a.1 specifies the remedial actions to be taken for an inoperable secondary containment for reasons other than an inoperable railroad bay access door. CTS 3.6.5.1.b.1 specifies the remedial actions to be taken for an inoperable secondary containment with an inoperable railroad bay access door. The corresponding ITS Actions are ITS 3.6.4.1 Action A and Action B respectively. Based on the proposed format and wording of ITS 3.6.4.1 Action A and Action B and the guidelines in the Writer's Guide, ITS 3.6.4.1 Action A and Action B should be in the reverse order (i.e., ITS 3.6.4.1 Action A should be ITS 3.6.4.1 Action B and ITS 3.6.4.1 Action B should be Action A). **Comment:** Revise the CTS/ITS markup to put ITS 3.6.4.1 Action A and B in the correct order.

Fermi-2 response:

3.6.4.1-4 JFD P.1
JFD P.3
CTS 3.6.5.1 Actions a and b #Footnote
ITS 3.6.4.1 Action B
ITS SR 3.6.4.1.2 Note and Associated Bases

The # footnote to CTS 3.6.5.1 Actions a and b states that one railroad bay access door may be open for specific conditions and associated times, provided the other door is Operable and closed. The # footnote in the ITS is now a Note in ITS SR 3.6.4.1.2 rather than as a Note to the Actions. This is an acceptable change. However, the ITS Note deletes the words "...provided the other door is OPERABLE and closed." As written in the ITS, the Note does not conform to the current licensing basis. The ITS would allow one railroad bay access door to be open for specified times and conditions while the other door is inoperable (ITS 3.6.4.1 Action b). This is not the intent of the CTS, and no justification is provided for this less restrictive (L) change in the current licensing basis. **Comment:** Revise the Note associated with ITS SR 3.6.4.1.2 to require the other door to be Operable and closed, or provide the appropriate discussion and justification for this less restrictive (L) change.

Fermi-2 response:

3.6.4.1-5 JFD P.1
CTS 4.6.5.1.c
ITS SR 3.6.4.1.4

CTS 4.6.5.1.c requires verifying the Steam Tunnel Blowout Panels are closed during each Cold Shutdown if not performed within the previous 31 days. The corresponding ITS SR is ITS SR 3.6.4.1.4. However, the frequency associated with ITS SR 3.6.4.1.4 does not make sense and seems to be missing some words. It states "Once each MODE 4 if not performed in the previous 31 days." To make sense, and be in conformance with the CTS and the Writer's Guide, the frequency should probably state: "Prior to entering MODE 3 if not performed within the previous 31 days". **Comment:** Revise the ITS markup to correct this discrepancy.

Fermi-2 response:

3.6.4.1-6 JFD P.3
ITS SR 3.6.4.1.2 and Associated Bases

The Note to ITS SR 3.6.4.1.2 states that one railroad bay access door may be open for ≤ 4 hours for entry, exit or testing and ≤ 12 hours for new fuel receipt activities. The Bases description for this Note specifies the times as "= 4 hours" and "=12 hours" respectively. **Comment:** Correct this discrepancy.

Fermi-2 response:

3.6.4.1-7 CTS 3.6.5.1 Actions a.2 and b.2
ITS 3.6.4.1 Action D and Associated Bases

CTS 3.6.5.1 Actions a.2 and b.2 specify the remedial actions to be taken for an inoperable secondary containment when in Condition* (when handling irradiated fuel in secondary containment, during Core Alterations and operations with a potential for draining the reactor vessel (OPDRVs)). These Actions are modified by the statement that the provisions of CTS 3.0.3 are not applicable and it applies to all of Condition*. The corresponding ITS Action is ITS 3.6.4.1 Action D. ITS 3.6.4.1 Action D also has a Note specifying that the provision of ITS LCO 3.0.3 are not applicable, but this Note only applies to the movement of irradiated fuel assemblies and not to Core Alterations and OPDRVs. No justification is provided for this more restrictive change. **Comment:** Revise the CTS markup and provide the appropriate discussion and justification for this more restrictive change. See RAIs 3.6.4.2-8 and 3.6.4.3-3. A single answer will suffice for these various specifications, with reference to the RAI numbers.

Fermi-2 response:

3.6.4.2 Secondary Containment Isolation Valves (SCIVs)

3.6.4.2-1 DOC A.12 (CTS 1.0)
CTS 1.36.a
CTS 1.36e
ITS 3.6.4.2 and Associated Bases

See RAIs 3.6.4.1-1 and 3.6.4.1-2. **Comment:** See RAIs 3.6.4.1-1 and 3.6.4.1-2.

Fermi-2 response:

3.6.4.2-2 DOC A.12 (CTS 1.0)
DOC A.2
DOC A.3
DOC A.6
DOC L.1
JFD P.5
CTS 1.36
CTS 3/4.6.5.1
CTS 3/4.6.5.2
ITS 3.6.4.2 and Associated Bases

Based on the CTS markup and the ITS markup, it is difficult to determine what is encompassed by ITS 3.6.4.2 and whether the CTS/ITS markups have been marked appropriately. Based on the CTS markup of CTS 1.36, 3/4.6.5.1 and 3/4.6.5.2, it appears that the SCIVs encompass the following items: automatic valves, automatic ventilation dampers, manual valves, blank flanges, deactivated automatic valves, and deactivated automatic dampers. It is unclear from the CTS/ITS markup if the automatic isolation system and the automatic valves specified in CTS 1.36.a.1 and 4.6.5.1.b.3 are

the same as the automatic ventilation dampers specified in CTS 1.36.a.2, 4.6.5.1.b.3 and 3/4.6.5.2. Since ITS 3.6.4.2 and ITS associated Bases only describes valves, it is assumed that the conversion resulted in a nomenclature change in that all valves and dampers are referred to as valves in the ITS. If the valves and dampers are the same and there are not other automatic SCIVs, then this portion of the concern is moot. If, however, there are additional automatic SCIVs not considered dampers, then CTS 3/4.6.5.1 needs to be marked up to reflect the Actions and surveillance requirements (SRs) imposed on these valves by ITS 3.6.4.2. In addition, based on the ITS markup of ITS B3.6.4.2 Bases - LCO, it is unclear whether manual valves and blind flanges are included as SCIVs, which would also affect the markup of CTS 3/4.6.5.1. See RAls 3.6.4.2-3, 3.6.4.2-4, 3.6.4.2-7 and 3.6.4.2-8 for specific concerns. **Comment:** Clarify if the automatic ventilation dampers are the only automatic SCIVs. Based on the above discussion, and RAls 3.6.4.2-3, 3.6.4.2-4, 3.6.4.2-7 and 3.6.4.2-8, revise the CTS/ITS markup and provide the appropriate discussions and justifications.

Fermi-2 response:

3.6.4.2-3 DOC A.2
 CTS 3/4.6.5.1
 CTS 3.6.5.2 Actions
 ITS 3.6.4.2 Actions Note 2 and Associated Bases

CTS 3.6.4.2 Actions are modified by ITS 3.6.4.2 Actions Note 2 which provides clarification that for the purpose of this LCO, separate Condition entry is allowed for each penetration flow path. This is an acceptable administrative change for CTS 3.6.5.2 since the wording of the CTS Actions would allow this. However, the Actions associated with CTS 3.6.5.1 do not allow this nor can they be interpreted to allow separate Condition entry. CTS 3.6.5.2 only applies to the ventilation dampers and the balance of the SCIVs (manual, blind flanges, and other automatic valves) are covered by CTS 3/4.6.5.1. Thus, CTS 3/4.6.5.1 needs to add this change which would be considered as a less restrictive (L) change. See RAls 3.6.4.2-2, 3.6.4.2-4 and 3.6.4.2-8. **Comment:** Revise the CTS markup and provide the appropriate discussion and justification for this less restrictive (L) change. See RAls 3.6.4.2-2, 3.6.4.2-4, and 3.6.4.2-8.

Fermi-2 response:

3.6.4.2-4 DOC A.2
 DOC A.3
 DOC L.1
 DOC L.2
 CTS 3/4.6.5.1
 CTS 3.6.5.2 Actions
 ITS 3.6.4.2 Actions and Associated Actions

CTS 3.6.5.2 Actions specify the remedial actions to be taken with one or more secondary containment ventilation system automatic isolation dampers inoperable. CTS 3.6.5.2 Actions have been modified by the addition of Notes and Actions and the deletion of

extraneous phrases to bring it into conformance with ITS 3.6.4.2 Actions. While these changes are acceptable to CTS 3.6.5.2 Actions, no changes have been made to CTS 3.6.5.1 Actions. CTS 3/4.6.5.1 applies to all the other SCIVs. (See RAI 3.6.4.2-2). For the other SCIVs, an inoperable or open valve would require isolation of the penetration within 4 hours rather than the 8 hours of CTS 3.6.5.2/ITS 3.6.4.2 Actions. This change would be a less restrictive (L) change, while the other changes made to CTS 3.6.5.2 Actions when applied to CTS 3.6.5.1 Actions may or may not remain the same. See RAIs 3.6.4.2-3 and 3.6.4.2-8. **Comment:** Revise the CTS markup of CTS 3.6.5.1 Actions to reflect ITS 3.6.4.2 Actions. Provide the appropriate discussions and justifications for these changes. See RAIs 3.6.4.2-2, 3.6.4.2-3 and 3.6.4.2-8.

Fermi-2 response:

3.6.4.2-5 DOC LR.2
CTS 4.6.5.2.b
ITS SR 3.6.4.2.3 and Associated Bases

CTS 4.6.5.2.b requires an automatic valve test at least once per 18 months during Cold Shutdown or Refueling. ITS SR 3.6.4.2.3 requires the same test on a frequency of 18 months. The CTS markup shows that the test frequency detail of "during COLD SHUTDOWN or REFUELING" as being relocated to a licensee-controlled document that is not under regulatory program controls. The justification is incorrect. The details on when the test is to be performed are found in the Bases for ITS SR 3.6.4.2.3. The description in the Bases would require the test be performed during Cold Shutdown or Refueling, thus the change is a less restrictive (LA) change rather than a less restrictive (LR) change. **Comment:** Revise the CTS markup and DOC LR.2 to show that this information is relocated to ITS B3.6.4.2 Bases - SR 3.6.4.2.3 and that the change is less restrictive (LA) change.

Fermi-2 response:

3.6.4.2-6 JFD P.5
CTS 1.36.a.2
CTS 4.6.5.1.b.3
STS B3.6.4.2 Bases - LCO
ITS B3.6.4.2 Bases - LCO

The third paragraph of the Bases discussion of LCO for STS 3.6.4.2 states "The normally closed isolation valves... are those listed in Reference 3." This paragraph deals with those containment isolation valves that are required to be closed during an accident and are in the closed position during normal operation. This paragraph is omitted from the Bases discussion of LCO for ITS 3.6.4.2 and the Bases markup indicates this omission is justified by JFD P.5. JFD P.5 states that the discussion of these valves is incomplete and inconsistent. This is incorrect. The definition of Secondary Containment Integrity (CTS 1.36.a) tie the Operability of isolation valves to the integrity of a closed system. The staff believes the STS wording is correct and should be retained. In addition, the

staff finds this change to be generic and beyond the scope of review for this conversion.
Comment: Delete this generic change.

Fermi-2 response:

3.6.4.2-7 CTS 4.6.5.1
CTS 4.6.5.2.b
CTS 4.6.5.2.c
STS SR 3.6.4.2.2, SR 3.6.4.2.3 and Associated Bases

CTS 4.6.5.2.b and c specify specific surveillances for the automatic ventilation dampers. The corresponding ITS SRs are ITS SRs 3.6.4.2.3 and 3.6.4.2.2 respectively. In light of the discussion in RAI 3.6.4.2-2, CTS 4.6.5.1 needs to be modified to add ITS SRs 3.6.4.2.2 and 3.6.4.2.3 for the other automatic SCIVs. This change would be a more restrictive change. **Comment:** Revise the CTS markup of CTS 4.6.5.1 to add these two ITS SRs and provide the appropriate discussions and justifications.

Fermi-2 response:

3.6.4.2-8 CTS 3.6.5.1 Action a.2
CTS 3.6.5.2 Action
ITS 3.6.4.2 Action D and Associated Bases

CTS 3.6.5.1 Actions a.2 and 3.6.5.2 specify the remedial actions to be taken for an inoperable secondary containment isolation valve/damper when in Condition* (When handling irradiated fuel in secondary containment, during core alterations and operations with a potential for draining the reactor vessel (OPDRVs)). These Actions are modified by the statement that the provisions of CTS 3.0.3 are not applicable and it applies to all of Condition*. The corresponding ITS Action is ITS 3.6.4.2 Action D. ITS 3.6.4.2 Action D also has a Note specifying that the provision of ITS LCO 3.0.3 are not applicable, but this Note only applies to the movement of irradiated fuel assemblies and not to Core Alterations and OPDRVs. No justification is provided for this more restrictive change. **Comment:** Revise the CTS markup and provide the appropriate discussion and justification for this more restrictive change. See RAIs 3.6.4.1-7 and 3.6.4.3-3. A single answer will suffice for these various specifications, with reference to the RAI numbers.

Fermi-2 response:

3.6.4.3 Standby Gas Treatment (SGT) System

3.6.4.3-1 DOC A.12 (CTS 1.0)
CTS 1.36.c
ITS 3.6.4.3 and Associated Bases

See RAI 3.6.4.1-1. **Comment:** See RAI 3.6.4.1-1.

Fermi-2 response:

3.6.4.3-2 CTS 3.6.5.3
ITS 3.6.4.3 and Associated Bases

CTS 3.6.5.3 states that "Two independent standby gas treatment subsystems shall be OPERABLE." ITS 3.6.4.3 states that "Two SGT subsystems shall be OPERABLE." The word "independent" has been deleted in converting from the CTS to the ITS. However, the descriptive information provided in ITS B3.6.4.3 Bases shows that this information (independent subsystems) has been relocated from the CTS to the ITS Bases. This would be a less restrictive (LA) change. **Comment:** Revise the CTS markup and provide the appropriate change for this less restrictive (LA) change.

Fermi-2 response:

3.6.4.3-3 CTS 3.6.5.3 Action b.
ITS 3.6.4.1 Action E and Associated Bases

CTS 3.6.5.3 b. specifies the remedial actions to be taken for an inoperable SGT when in Condition* (when handling irradiated fuel in secondary containment, during Core alterations and OPDRVs). These Actions are modified by the statement that the Provisions of CTS 3.0.3 are not applicable and it applies to all of Condition*. The corresponding ITS Action is ITS 3.6.4.3 Action E. ITS 3.6.4.3 Action E also has a Note specifying that the provision of ITS LCO 3.0.3 are not applicable, but this Note only applies to the movement of irradiated fuel assemblies and not to core alterations and OPDRVs. No justification is provided for this more restrictive change. **Comment:** Revise the CTS markup and provide the appropriate discussion and justification for this more restrictive change. See RAIs 3.6.4.1-7 and 3.6.4.2-8. A single answer will suffice for these various specifications, with reference to the RAI numbers.

Fermi-2 response: