

Mr. Nathan L. Haskell
Director, Licensing
Palisades Plant
27780 Blue Star Memorial Highway
Covert, MI 49043

January 29, 1999

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING THE TECHNICAL SPECIFICATIONS CHANGE REQUEST TO CONVERT TO THE IMPROVED TECHNICAL SPECIFICATIONS FOR THE PALISADES PLANT (TAC NO. MA0805)

Dear Mr. Haskell:

On January 26, 1998, Consumers Energy submitted its request to convert the Palisades Nuclear Plant current technical specifications (CTS) to improved technical specifications (ITS). Additional information, as discussed in the enclosure, is requested in order to complete our evaluation of ITS Sections 3.6 and 3.7. The staff requests that you provide your response using the enclosed comment format, adding your responses where indicated in the enclosure.

The enclosed request was discussed with Mr. B. Young of your staff on January 12 and 25, 1999. A mutually agreeable completion date for your response of March 31, 1999, was established. If circumstances result in the need to revise this schedule, please call me at the earliest opportunity.

Should you have any questions regarding this request, please do not hesitate to contact me at (301) 415-1312 or Mary Lynn Reardon of the Technical Specifications Branch at (301) 415-1177.

Sincerely,

ORIGINAL SIGNED BY

Robert G. Schaaf, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosure: As stated

cc w/encl: See next page

Distribution (w/encl):

Docket File	ACRS	A. Vogel, RIII	OGC
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Consumers Energy Company

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3.6.0 General

3.6.0-1 DOC A.2 (CTS Markup for ITS 3.6.1)
DOC A.2 (CTS Markup for ITS 3.6.2)
CTS 3.6
CTS 4.5
ITS 3.6 Bases

DOC A.2 in Attachment 3 for the CTS markups for ITS 3.6.1 and 3.6.2 states "The Bases of the current Technical Specifications for this section have been completely replaced by the revised Bases that reflect the format and applicable content consistent with NUREG-1432. The revised Bases are shown in the proposed Technical Specifications Bases." There are no CTS Bases provided nor is there any reference in the CTS markup to specifically indicate where DOC A.2 applies. In addition a similar DOC A.2 is not provided in Attachment 3 and the CTS markups for the other five ITS 3.6 LCOs. **Comment:** Revise the CTS markup to indicate where DOC A.2 or a similar DOC applies for all ITS LCOs. Provide the appropriate discussions and justifications in Attachment 3 for the other five ITS 3.6 LCOs.

Consumers Energy's Response:

3.6.1 Containment

3.6.1-1 DOC A.1
DOC A.5
DOC LA.2
DOC LA.4
DOC L.1
JFD 2
JFD 6
CTS 1.0 CONTAINMENT INTEGRITY Item e.
CTS 4.5.1
CTS 4.5.2.a(1)
CTS 4.5.1.a.(2)
CTS 4.5.2.a.(4)
CTS 4.5.2.b
CTS 4.5.2.d
STS SR 3.6.1.1 and Associated Bases
ITS SR 3.6.1.1 and Associated Bases

CTS 1.0 "Containment Integrity" Item e, CTS 4.5.1, 4.5.2.a(1), 4.5.2.a(2), 4.5.2.a(4), 4.5.2.b, and 4.5.2.d specify various leak rate testing requirements and criteria for containment. 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 TSTF 52. The STS is based on 10 CFR 50 Appendix J Option A while the ITS is based on 10 CFR 50 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 TSTF 52 as modified by staff comments of 10/96.

ENCLOSURE

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The ITS changes are not in conformance with the letter and TSTF 52 modified by staff comments. In particular, Amendment 174 only approved 10 CFR 50 Appendix J Option B for the Type A tests only. The Type B and C tests must still be done in accordance with Option A. Thus, only those leakage tests associated with Option B Type A test may be relocated to the Containment Leakage Rate Testing Program. This includes CTS 4.5.1 with regards to Type A tests only. All other CTS requirements specified above must be retained in the ITS as SRs or Notes to the SRs. See Comment Numbers 3.6.1-7, 3.6.1-8, 3.6.1-9, 3.6.2-1, 3.6.2-3, 3.6.2-18, 3.6.2-19, and 3.6.3-1. **Comment:** Licensee to update submittal with regards to 11/2/93 letter, TSTF 52 as modified by staff comments and the above comments or provide additional justification for deviations. See Comment Numbers 3.6.1-7, 3.6.1-8, 3.6.1-9, 3.6.2-1, 3.6.2-3, 3.6.2-18, 3.6.2-19 and 3.6.3-1.

Consumers Energy's Response:

3.6.1-2 DOC A.1
 DOC A.7
 DOC A.4 (ITS 3.6.3)
 CTS 3.6.1.a
 ITS 3.6.1, 3.6.2 and 3.6.3 APPLICABILITY and Associated Bases

CTS 3.6.1.a requires the CONTAINMENT INTEGRITY to be maintained when the plant is above COLD SHUTDOWN. ITS 3.6.1, 3.6.2, and 3.6.3 APPLICABILITY requires containment, the containment air locks, and the containment isolation valves to be OPERABLE in MODES 1, 2,3, and 4. This CTS change is acceptable; however, the change is simply justified as a generic editorial reformatting change (DOC A.1). The technical equivalency of the Palisades Modes of Operation definitions are significantly different from the proposed ITS modes of operation as is discussed in DOC A.7, (DOC A.4 for ITS 3.6.3). The appropriate justification for this change would be DOC A.7 (DOC A.4 for ITS 3.6.3) or an equivalent. **Comment:** Revise the CTS markup to show this change as DOC A.7 (DOC A.4 for ITS 3.6.3) or an equivalent. Provide additional discussion and justification as necessary.

Consumers Energy's Response:

3.6.1-3 DOC A.4
 CTS 3.6.1.c
 STS LCO 3.9.4
 ITS 3.6.1 APPLICABILITY and Associated Bases

CTS 3.6.1.c requires CONTAINMENT INTEGRITY be maintained when positive reactivity changes are made by boron dilution or control rod motion. DOC A.4 provides a discussion with regards to CONTAINMENT INTEGRITY and SHUTDOWN MARGIN specified in ITS LCO 3.1.1 and 3.9.1 in MODES 5 and 6. As states in ITS B3.6.1 Bases - APPLICABILITY, the containment is not required to be OPERABLE in MODES 5 or 6 except as specified in ITS LCO 3.9.3. As such, the discussion in DOC A.4 is incorrect. Because containment

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OPERABILITY is not required in MODE 5, the requirements specified in CTS 3.6.1.c is deleted which would make the change a Less Restrictive (L) change. For MODE 6 Containment OPERABILITY is limited to the APPLICABILITY associated with ITS LCO 3.9.3, thus the change associated with CTS 3.6.1.c with regards to ITS 3.6.1 is an Administrative change moving this requirement to ITS 3.9.3. The staff considers the overall change to be a Less Restrictive (L) change. **Comment:** Revise the CTS markup and provide a discussion and justification for the Less Restrictive (L) change.

Consumers Energy's Response:

3.6.1-4 DOC A.6
 CTS 3.0.3
 CTS 3.6.1.a
 CTS 4.5.4
 CTS 4.5.5
 CTS 4.5.6
 ITS 3.6.1 ACTIONS
 ITS SR 3.6.1.2
 ITS 5.5

CTS 4.5.4, 4.5.5, and 4.5.6 specify surveillance tests which are required to be performed for containment structural integrity. The proposed ITS has included these tests into a Containment Structural Integrity Surveillance Program in ITS 5.5. The replacement of these SRS by ITS SR 3.6.1.2, the movement of the details of these CTS SRs to ITS 5.5, and the justification provided for these changes - (DOC A.6) is acceptable. However, the CTS markup does not show the addition of ITS 3.6.1 ACTIONS that are associate with ITS SR 3.6.1.2. A failure of these CTS requirements would require entry into CTS 3.0.3. In addition, if containment integrity cannot be maintained for reasons other than leakage or inoperable containment isolation valves, then CTS 3.0.3 is entered. Thus, the associated ITS ACTIONS would be considered as a minimum an Administrative change. **Comment:** Revise the CTS markup to show the addition of ITS 3.6.1 ACTIONS with regards to the failure of CTS 4.5.4, 4.5.5 and 4.5.6. Provide the appropriate discussions and justifications for this change.

Consumers Energy's Response:

3.6.1-5 DOC LA.1
 CTS 1.0 CONTAINMENT INTEGRITY
 ITS B3.6.1 Bases - BACKGROUND

The CTS markup of CTS 1.0 CONTAINMENT INTEGRITY and DOC LA.1 only relocates item b to ITS B3.6.1 Bases. This is incorrect. While CTS 1.0 CONTAINMENT INTEGRITY items a, c, and d correctly show that these items are associated with or are the basis for the requirements in ITS 3.6.2 and 3.6.3, they are also relocated to ITS B3.6.1 Bases - BACKGROUND, and should be included in DOC LA.1. **Comment:** Revise the CTS markup and DOC LA.1 to show

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that CTS 1.0 CONTAINMENT INTEGRITY items a, c, and d are also relocated to ITS B3.6.1 Bases - BACKGROUND.

Consumers Energy's Response:

3.6.1-6 DOC LA.4
 JFD 3
 CTS 4.5.2.a (4)(a)
 STS B3.6.1 Bases - BACKGROUND
 ITS B3.6.1 Bases - BACKGROUND

CTS 4.5.2.a(4)(a) states that the local leak rate shall be measured for containment penetrations that employ bellows. DOC LA.4 states that this item is relocated to the FSAR. Based on the definition of CONTAINMENT INTEGRITY in NUREG - 0212 CE-STs, Containment penetrations containing bellows fall under STS B3.6.1 Bases - BACKGROUND, item d., pressurized sealing mechanisms associated with penetrations. ITS B3.6.1 Bases - BACKGROUND deletes item d based on the justification (JFD 3) that it is not applicable to the facility. The staff believes based on the above discussion that STS B3.6.1 Bases - BACKGROUND item d is applicable to Palisades. **Comment:** Revise the CTS/ITS markup and DOC LA.4 to show that CTS 4.5.2.a(4)(a) with regards to "bellows" is relocated to ITS B3.6.1 Bases - BACKGROUND.

Consumers Energy's Response:

3.6.1-7 DOC LA.4
 JFD 6
 CTS 4.5.2.a(4)(a)
 ITS 3.6.3.5 and Associated Bases

CTS 4.5.2.a(4)(a) states that the local leak rate shall be measured for containment penetrations that employ resilient seal gaskets. DOC LA.4 states that this item is relocated to the FSAR. It is assumed that the penetrations referred to in this CTS requirement also include the penetrations associated with the purge valves. Thus this item is not relocated but becomes ITS SR 3.6.3.5. See Comment Number 3.6.1-1. **Comment:** Revise the CTS markup to reflect the above discussion. See Comment Number 3.6.1-1.

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3.6.1-8 DOC LA.4
 JFD 6
 CTS 4.5.2.a.(4)(d)
 STS SR 3.6.1.3.11 and Associated Bases (NUREG 1434)
 STS SR 3.6.1.3.14 and Associated Bases (NUREG 1433)
 ITS SR 3.6.1.1 and Associated Bases

CTS 4.5.2.a(4)(d) requires that the local leak rate test shall be measured for isolation valves on the testable fluid systems' lines penetrating the containment. DOC LA.4 states that this is being relocated to the FSAR. Based on Comment Number 3.6.1-1, this item involves Type B and C testing and thus cannot be relocated out of TS. In addition, it is indeterminate from the CTS and the ITS if these particular isolation valves require a hydrostatic leak rate test. In the development of NUREG-1432, a specific SR with regards to hydrostatically testing containment isolation valves for leakage was not included because the CEOG states that most units did not have any valves that were hydrostatically tested valves. This was not the case for the BWRs (NUREG 1433 and 1434), which had hydrostatically tested valves. In that case, STS SR 3.6.1.3.11 (NUREG 1434) and STS SR 3.6.1.3.14 (NUREG 1433) were included in the NUREGs. 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 the Staff. Neither document deleted or relocated those BWR SRS, but retained the SRS in a modified form. Thus, the Staff requires that CTS 4.5.2.a.(4)(d) be retained if these valves are hydrostatically leak tested. See Comment Numbers 3.6.1-1 and 3.6.3-1. **Comment:** Revise the CTS/ITS markups to show CTS 4.5.2.a(4)(d) as being retained as an SR in ITS 3.6.3. Provide additional discussions and justifications as necessary for this change. See Comment Numbers 3.6.1-1 and 3.6.3-1.

Consumers Energy's Response:

3.6.1-9 DOC L.1
 JFD 6
 CTS 4.5.2.b (1)
 CTS 4.5.2.c (1)

CTS 4.5.2.b(1) and 4.5.2.c (1) limits the total leakage from all penetrations and isolation valves to $<0.6 L_a$. DOC L.1 states that the CTS requirements for Type B and C leak rate testing are being revised such that the leakage limit is $\leq 0.60 L_a$ during the first plant startup following testing performed in accordance with the Containment Leak Rate Test Program. This is unacceptable. 10 CFR 50 Appendix J Option A which applies to Palisades limits the Type B and C leakage limit during the first plant startup following testing performed in accordance with 10 CFR 50 Appendix J Option A to $< 0.60L_a$. See Comment Number 3.6.1-1. **Comment:** Revise the DOC to conform to 10 CFR 50 Appendix J Option A requirements. See Comment Number 3.6.1-1.

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3.6.1-10 JFD 4
 STS B3.6.1 Bases - BACKGROUND
 ITS B3.6.1 Bases - BACKGROUND

The first sentence in STS B3.6.1 Bases - BACKGROUND states that "The containment consists of the concrete reactor building (RB), its steel liner,..." ITS B3.6.1 Bases - BACKGROUND modifies this sentence by deleting the words "reactor building (RB)". The justification used (JFD 4) for this change states that the change reflects facility specific nomenclature, number, etc. The change results in the sentence being incomplete and not making sense. **Comment:** Delete this change or replace the STS words with plant specific nomenclature.

Consumers Energy's Response:

3.6.1-11 JFD 9
 JFD 2 (ITS 3.6.2)
 ITS 3.6.1 and Associated Bases
 ITS B3.6.2 Bases - C.1, C.2, and C.3

JFD 9 states that "A statement is added in the proposed ITS Bases for Actions C.1, C.2, and C.3...." ITS 3.6.1 does not contain an ACTION C nor is JFD 9 indicated in the markup of ITS 3.6.1 and its associated Bases. Based on the wording of JFD 9, it appears to be related to a change to the Bases for ITS 3.6.2 ACTION C.1, C.2, and C.3. However, JFD 2 is referenced for this change. **Comment:** Revise ITS markup to correct this discrepancy.

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3.6.2 Containment Air Locks

3.6.2-1 DOC A.1
 DOC A.12
 DOC LA.2
 DOC L.2
 JFD 2
 JFD 6
 JFD 10
 CTS 1.0, CONTAINMENT INTEGRITY Item e.
 CTS 4.5.1
 CTS 4.5.2.a (2)
 CTS 4.5.2.a. (4).(b)
 CTS 4.5.2.b (2)
 CTS 4.5.2.b (3)
 CTS 4.5.2.c (4)
 CTS 4.5.2.d (1) (b)
 STS SR 3.6.2.1 and Associated Bases
 ITS SR 3.6.2.1 and Associated Bases

See Comment Numbers 3.6.1-1, 3.6.2-3, 3.6.2-18 and 3.6.2-19. **Comment:** See Comment Numbers 3.6.1-1, 3.6.2-3, 3.6.2-18, and 3.6.2-19.

Consumers Energy's Response:

3.6.2-2 DOC A.1
 DOC A.7
 CTS 3.6.1.a
 ITS 3.6.2 APPLICABILITY AND ASSOCIATED BASES.

See Comment Number 3.6.1-2. **Comment:** See Comment Number 3.6.1-2.

Consumers Energy's Response:

3.6.2-3 DOC A.1
 DOC A.13
 JFD 6
 CTS 4.5.2.c(3) and 4.5.2.c(4)
 ITS 3.6.2 ACTION A and B and Associated Bases

CTS 4.5.2.c(3) provides corrective action when the personnel air lock door seal leakage is above 0.023 L_a and less than 0.60L_a or the emergency Escape Lock door seal contact fails to meet its acceptance criterion. ITS 3.6.2 Action A includes these situations into a single Condition of when one or more air locks with one door are inoperable. ITS 3.6.2 Action A is

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acceptable; however, the technical basis provided as this being an editorial and an Administrative change is unacceptable. DOC A.1 justifies the editorial reformatting or rewording of the CTS 4.5.2.c(3) as being in the Containment Leak Rate Testing Program which is unacceptable (See Comment Numbers 3.6.1-1 and 3.6.2-1.) DOC A.13 describes the addition of the words "one or more" as clarification when this is a Less-Restrictive (L) change to permit continued operation if one Operable door can be closed in each air lock. CTS 4.5.2.c(3) does not permit more than one air lock to be inoperable; otherwise, this requires a plant shutdown per Specification 3.0.3. In addition, CTS 4.5.2.c(3), along with CTS 4.5.2.c(4) would allow both doors in the personnel air lock to exceed the seal leakage limit of $0.023L_a$ as long as the total leakage from one door did not exceed $0.60L_a$. ITS 3.6.2 ACTIONS A and B are more restrictive than the CTS ACTIONS in this case. **Comment:** Revise the CTS markup and provide additional discussions and justifications to justify these changes. See Comment Numbers 3.6.1-1, and 3.6.2-1

Consumers Energy's Response:

3.6.2-4 DOC A.4
 CTS 4.5.2.c
 ITS 3.6.2 ACTIONS Note 2 and Associated Bases

CTS 4.5.2.c has been modified to add ITS 3.6.2 ACTIONS Note 2 which states "Separate Condition entry is allowed for each air lock." The CTS justifies this change as an Administrative change (DOC A.4). DOC A.4 states that "This is an explanatory note to explicitly state how the LCO tracking should be accomplished. Previously in the CTS [th]is was a matter of interpretation." This statement provides insufficient information with regards to how the CTS is consistently interpreted in this area so that the staff can determine whether this change is Administrative, More Restrictive, or Less Restrictive (L). See Comment Number 3.6.2-5. **Comment:** Provide additional discussion and justification to show how Consumers Energy interprets the CTS with regards to this change. See Comment Number 3.6.2-5.

Consumers Energy's Response:

3.6.2-5 DOC A.4
 CTS 4.5.2.c
 ITS 3.6.2 ACTIONS Note 2 and Associated Bases.

CTS 4.5.2.c, Corrective Actions, has been modified to add ITS 3.6.2 ACTIONS Note 2 which states "Separate Condition entry is allowed for each air lock." The CTS proposed change to separate condition entry for each air lock now permits concurrent inoperabilities in both air locks. DOC A.4 does not mention that each applicable ITS condition statement allows "one or more" air locks to be inoperable under the Required Actions stated in each condition. The CTS requirements only recognizes one inoperability at a time which must be restored to OPERABLE status within 7 days. When concurrent inoperabilities are encountered, there is no corrective (compensatory) actions provided other than following the rules for a CTS 3.0.3 plant shutdown.

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The CTS change is acceptable under the proposed new ITS Required Actions; however, this is a Less Restrictive (L) change rather than an Administrative change. **Comment:** Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

Consumers Energy's Response:

3.6.2-6 DOC A.5
 CTS 4.5.2.c
 ITS 3.6.2 ACTIONS Note 3 and Associated Bases

CTS 4.5.2.c has been modified to add ITS 3.6.2 ACTIONS Note 3 which states "Enter applicable Conditions and Required Actions of LCO 3.6.1 "Containment", when air lock leakage results in exceeding the overall containment leakage rate." DOC A.5 states that this Note provides guidance on use and application of the ITS where it wasn't explicitly addressed as part of the CTS. DOC A.5 only addresses the ITS aspects, application and interpretation of this Note and does not provide sufficient information with regards to how the CTS is consistently interpreted in this area so that the staff can determine whether this change is Administrative, More Restrictive, or Less Restrictive (L). **Comment:** Provide additional discussion and justification to show how Consumers Energy interprets the CTS with regards to this change.

Consumers Energy's Response:

3.6.2-7 DOC A.6
 CTS 1.0 "CONTAINMENT INTEGRITY" Item c
 ITS 3.6.2 ACTIONS A, B, and C and Associated Bases

CTS 1.0 "CONTAINMENT INTEGRITY" Item c requires "At least one door in each air lock is properly closed and sealed." The CTS markup shows the words "and sealed" as being deleted. DOC A.6 states that the definition forms the basis for ITS 3.6.2 Required Actions A.1, B.1 and C.2. It further states that "The CTS phrase "and sealed" is not included in the proposed ITS as it is implicit in the use of an "OPER4ABLE" door." If this were the case, then the change is a Less Restrictive (LA) change rather than an Administrative change because OPERABILITY is defined in the Bases. However, "sealed" also connotes "locked". Thus the definition also forms the basis for ITS 3.6.2 Required Actions A.2 and B.2 which requires the OPERABLE door to be locked closed. Thus "and sealed" should not be deleted. See Comment Number 3.6.2-8. **Comment:** Revise the CTS markup and provide additional discussion and justification for this change. See Comment Number 3.6.2-8.

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3.6.2-8 DOC A.6
 CTS 1.0 "CONTAINMENT INTEGRITY" Item c
 ITS 3.6.2 ACTIONS A, B, and C and Associated Bases

CTS 1.0 "CONTAINMENT INTEGRITY" Item c requires "At least one door in each air lock is properly closed and sealed." DOC A.6 states that the definition forms the basis for ITS 3.6.2 Required Actions A.1, B.1, and C.2. Depending on the type of inoperability of the air lock door, the inoperable door could also meet this requirement of the definition. However, ITS 3.6.2 Required Actions A.1, A.2, B.1, B.2 and C.2 only apply to the OPERABLE door. This would be a More Restrictive change (limiting the actions to OPERABLE door only). **Comments:** Revise the CTS markup and provide additional discussion and justification for this More Restrictive change.

Consumers Energy's Response:

3.6.2-9 DOC A.8
 DOC M.1
 DOC L.1
 CTS 4.5.2.c
 ITS 3.6.2 RA A.3 Note, RA B.3 Note and Associated Bases

CTS 4.5.2.c is modified by the addition of ITS 3.6.2 RA A.3, and RA B.3 Notes which state "Air lock doors in high radiation areas may be verified locked closed by administrative means." DOC A.8 states that these Notes are added to clarify that the verification required by the Required Actions may be performed by administrative means and thus is considered as an Administrative change. Nothing in the CTS states that locked closed air lock doors are to be or can be verified locked closed by administrative means. Thus for RA A.3 the change would be considered as a Less Restrictive (L) change since the addition of RA A.3 is a Less Restrictive change (DOC L.1). For RA B.3 the change is More Restrictive since the addition of ACTION B is a More Restrictive change (DOC M.1). **Comment:** Revise the CTS markup and provide additional discussions and justifications for these Less Restrictive (L) and More Restrictive changes.

Consumers Energy's Response:

3.6.2-10 DOC A.9
 DOC M.1
 CTS 4.5.2.c
 ITS 3.6.2 Action B and Associated Bases

CTS 4.5.2.c is modified by the addition of ITS 3.6.2 ACTION B. The addition of ITS 3.6.2 ACTION B is considered a More Restrictive change since the CTS does not contain an equivalent action. The markup further shows that ITS 3.6.2 ACTION B is modified by the addition of Note 1 to the Required Actions. This change is considered as an Administrative

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change as stated in DOC A.9 to clarify the usage rules of TS. This is incorrect. The addition of ITS 3.6.2 ACTION B would automatically add all corresponding Notes and Conditions, which would make the change a More Restrictive change rather than an Administrative change.

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

Consumers Energy's Response:

3.6.2-11 DOC A.10
 CTS 4.5.2.c(4)
 CTS 4.5.2.d(1) (b)
 ITS SR 3.6.2.1 Note 1 and Associated Bases

CTS 4.5.2.d (1)(b) is modified by a Note which states "An inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage tests." This change is considered as an Administrative change as stated in DOC A.10 to clarify the usage rules of TS. This is incorrect. CTS 4.5.2.c(4) requires the locking closed and leak testing of the OPERABLE air lock door when one air lock door is inoperable due to leakage. Thus, the adding of this Note is a Less Restrictive (L) change rather than an Administrative change, since the CTS requires the additional leak testing. **Comment:** Revise the CTS markup and provide additional discussion and justification for this Less Restrictive (L) change.

Consumers Energy's Response:

3.6.2-12 DOC A.11
 CTS 4.5.2.c
 ITS 3.6.2 Required Actions Note 1 and Associated Bases

CTS 4.5.2.c is modified by ITS 3.6.2 Required Actions Note 1 which states that "Required Actions A.1, A.2, and A.3 are not applicable if both doors in the same air lock are inoperable and Condition C is entered." This change is considered as an Administrative change as stated in DOC A.11 to clarify the usage rules of TS. This is incorrect. There is nothing in the CTS which relates to this and thus would allow one to consider this change as Administrative. Furthermore, as stated in Comment Number 3.6.2-3, both doors could be inoperable and the Actions associated with the ITS would be More Restrictive. Since there is no CTS requirement in this area, the staff does not consider this change to be Administrative. **Comment:** Revise the CTS markup and provide additional discussion and justification for this change.

Consumers Energy's Response:

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3.6.2-13 DOC A.13
 CTS 4.5.2c(3)
 ITS 3.6.2 ACTIONS Note 3
 ITS 3.6.2 ACTION A

CTS 4.5.2.c(3) is modified by the deletion of the statements on door seal leakage. The basis for this deletion is that the information is contained in ITS 3.6.2 ACTION A. DOC A.13 justifies this deletion which is acceptable. However, DOC A.13 contains the following statement: "This is acceptable since the overall containment leakage must still remain within the limits of LCO 3.6.3 ACTIONS Note 4." The staff believes that this is an incorrect statement. ITS 3.6.3 deals with containment isolation valves which have nothing to do with containment air lock leakage. The statement should either refer to ITS 3.6.1 or ITS 3.6.2 ACTIONS Note 3.

Comment: Correct this discrepancy.

Consumers Energy's Response:

3.6.2-14 DOC M.1
 CTS 3.6.1
 CTS 4.5.2.c
 ITS 3.6.2 ACTION B and Associated Bases

CTS 4.5.2.c provides corrective action for excessive air lock seal leakage but no specific actions for an inoperable air lock door interlock mechanism. ITS 3.6.2 ACTION B provides explicit Required Actions when one or more air lock door interlock mechanisms are inoperable. It is acceptable to add ITS ACTION B; however, the categorization of this CTS change should be Less Restrictive (L) rather than administrative. Per DOC M.1, CTS 3.6.1.3 addresses only an inoperable air lock which was subject to interpretation." First, there is no CTS 3.6.1.3 requirement for Palisades; and secondly, when there is no corrective action for an undefined condition, then Action must be in accordance with the plant shutdown requirements of CTS 3.0.3. ITS 3.6.2 ACTION B permits continued power operation under the successful completion of the Required Actions B.1, B.2 and B.3. ITS 3.6.2 Required Action B, Note 2 permits an alternate method to duplicate the function of the door interlock mechanism which enables continued power operation. The addition of ACTION B including Note 2 both represent Less-Restrictive changes to the CTS contrary to the first seven sentences of DOD M.1. The last four sentences of DOC M.1 describe the More Restrictive change of the addition of a surveillance for the air lock door interlock mechanism. **Comment:** Revise the CTS markup and provide additional discussion and justification to reflect the correct categorization of these CTS changes.

Consumers Energy's Response:

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3.6.2-15 DOC M.1
 JFD 8
 CTS 4.5.2.c
 STS SR 3.6.2.2 and Associated Bases
 ITS 3.6.2 ACTION B
 ITS SR 3.6.2.2 and Associated Bases

CTS 4.5.2.c provides corrective action for air lock excessive seal leakage but no specific actions for an inoperable air lock door interlock mechanism. ITS 3.6.2 ACTION B provides explicit Required Actions when one or more air lock door interlock mechanisms are inoperable. ITS SR 3.6.2.2 is the associated SR which verifies the OPERABILITY of the air lock door interlock mechanism. STS SR 3.6.2.2 verifies that only one door in the air lock can be opened at a time on a frequency of 184 days. TSTF-17 modifies STS SR 3.6.2.2 and associated Bases by deleting the Note and changing the frequency to 24 months. ITS SR 3.6.2.2 and its associated Bases implement TSTF-17; however, the SR frequency and Bases changes are not in accordance with TSTF-17. While the SR frequency change is acceptable based on Palisades current refueling cycle of 18 months, the changes made to the Bases are unacceptable. The changes made to the STS Bases by TSTF-17 justify changing the frequency from the STS frequency of 6 months to a longer frequency, and are appropriate regardless of which longer frequency is used (18 or 24 months). **Comment:** Licensee to update submittal to be in accordance with TSTF-17.

Consumers Energy's Response:

3.6.2-16 DOC M.2
 CTS 4.5.2.c
 ITS 3.6.2 ACTION C

CTS 4.5.2.c is modified by the addition of ITS 3.6.2 ACTION C. This change is characterized as a More Restrictive change (DOC M.2). The staff does not agree that the total change is a More Restrictive change. DOC M.2 only addresses a small portion of the change. There are a number of conditions associated with this change in the CTS. First, if both doors in both air locks are inoperable for other than leakage, then CTS 3.0.3 must be entered. For this case, ITS 3.6.2 ACTION C is entered for all inoperabilities except for the interlock inoperable and it is a Less Restrictive (L) change. In the second case, if both doors in both air locks are inoperable for leakage that is $>0.023L_a$ but $\leq 0.60L_a$, then the addition of ITS 3.6.2 ACTION C is a More Restrictive change. In the third case, if both doors in both air locks are inoperable for leakage with at least one door having a leakage of $\geq 0.023L_a$ and $\leq 0.60 L_a$ and at least one door having a leakage $>0.60L_a$ then ITS 3.6.2 ACTION C would be less restrictive than the CTS since CTS 3.0.3 would be entered. In the fourth case, if both doors in both air locks are inoperable for leakage that is $>0.60L_a$, then ITS 3.6.2 ACTION C is less restrictive since CTS 3.0.3 would have to be entered. Overall, the total change result is a Less Restrictive (L) change. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications for this Less Restrictive change (L) change.

Consumers Energy's Response:

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3.6.2-17 **DOC L.3**
 JFD 7
 CTS 4.5.2.c(3) and 4.5.2.c(4)
 STS 3.6.2 ACTION A
 ITS 3.6.2 ACTION A and Associated Bases

CTS 4.5.2.c(3) requires air lock seal leakage exceeding the $0.023L_a$ acceptance limit, but not exceeding the total containment $0.60L_a$ leakage limit, to be restored to OPERABLE status within 7 days. CTS 4.5.2.c(4) requires air lock seal leakage causing overall containment leakage to exceed $0.60L_a$ that the leakage limit shall be restored to OPERABLE status within 48 hours. ITS 3.6.2 Action A addresses this inoperability by allowing the inoperability to be restored or locking an OPERABLE air lock door to ensure Containment is maintained OPERABLE, except for 7/48 hour period when entry is required to repair the inoperable door. The intention of the STS 3.6.2 Action A Required Actions Note 2 is to restrict the period when inoperable doors concurrently exist in both air locks. When the STS permits one air lock door inoperable in the first air lock (while its OPERABLE door is locked closed), the second OPERABLE air lock may be used without limit because the safety function is maintained. In the STS, if both air locks are inoperable, entry for repairs and other activities are limited to a single 7 day restricted period after which if one air lock is not make OPERABLE then a plant shutdown may be required due to the inability to perform SRs on equipment in containment. At Palisades, the second air lock is the Emergency Escape Air Lock that is not used. Being in ITS 3.6.2 ACTION A is not deemed an emergency. Correspondingly, the second air lock is made unavailable for credit in the indefinite operation permitted under this proposed ITS ACTION; yet it is part of the LCO and the ACTIONS apply to it. Therefore, STS 3.6.2 ACTION A RA Note 2 is modified in the ITS to delete the bracketed phrase "[if both air locks are inoperable.]" This phrase is bracketed to take into account those plants which only have one air lock which Palisades does not. In Palisades' case, it is a question of what is the safe and prudent thing to do - use an inoperable air lock or use an OPERABLE air lock for entry and exit into containment. The staff believes the prudent and safe thing to do is to use the OPERABLE air lock, not the inoperable air lock for entry and exit and if both air locks become inoperable then entry and exit should be restricted. Thus the changes made to ITS 3.6.2 ACTION A Required Actions Note 2, ITS B3.6.2 Bases ACTIONS (Note 1 discussion), and ITS B3.6.2 Bases A.1, A.2 and A.3 are unacceptable. In addition, the discussions and justifications in DOC L.3 and JFD 7 are not consistent with each other, e.g., DOC L.3 discusses other reasons for using the air locks for entry and exit while JFD 7 restricts it only to air lock repair. **Comment:** Revise the CTS/ITS markup to conform to the STS and provide additional discussion and justification for this Less Restrictive (L)change.

Consumers Energy's Response:

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3.6.2-18 JFD 3
 STS B3.6.2 Bases SR 3.6.2.1
 ITS B3.6.2 Bases SR 3.6.2.1

STS B3.6.2 Bases SR 3.6.2.1 states the following: "The acceptance criteria were established during initial air lock and containment OPERABILITY testing." ITS B3.6.2 Bases SR3.6.2.1 deletes this statement based on JFD 3 which states that it is not applicable to Palisades. This is unacceptable. The STS statement provides the basis of how and when the air lock leakage was established. At Palisades the leakage acceptance criteria may not have been established during the initial air lock and containment OPERABILITY testing, but may have been established at some other time or by some other method. Thus, the ITS should reflect this. See Comment Numbers 3.6.1-1 and 3.6.2-1. **Comment:** Revise the markup of ITS B3.6.2 Bases SR 3.6.2.1 to include the STS sentence on establishment of air lock leakage acceptance criteria or modify it to reflect the plant specific criteria. See Comment Numbers 3.6.1-1 and 3.6.2-1.

Consumers Energy's Response:

3.6.2-19 JFD 10
 STS B3.6.2 Bases - APPLICABLE SAFETY ANALYSES
 ITS B3.6.2 Bases - APPLICABLE SAFETY ANALYSES

STS B3.6.2 Bases - APPLICABLE SAFETY ANALYSIS in the paragraph for atmospheric containments states the following: "This leakage rate is defined in 10 CFR 50 Appendix J (Ref.1), as L_a :...which is a design basis MSLB (Ref 2)." This statement is based on 10 CFR 50 Appendix J, Option A. TSTF-52 Revision 1 modifies this statement to reflect 10 CFR 50 Appendix J Option B. ITS B3.6.2 Bases - APPLICABLE SAFETY ANALYSES modifies this sentence to reflect, based on JFD 10, Palisades' design with regards to P_a , the Type A test performed using 10 CFR 50 Appendix J Option B, and the Type B and C testing performed using 10 CFR 50 Appendix J Option A. The modification is incomplete in that it does not address the exemption granted to Palisades with regards to P_a as it relates to Option A versus Option B. See Comment Numbers 3.6.1-1 and 3.6.2-1 **Comment:** Revise the ITS markup of ITS B3.6.2 Bases - APPLICABLE SAFETY ANALYSES to accurately reflect the exemption granted on P_a with regards to 10 CFR 50 Appendix J Option A versus Option B. See Comment Numbers 3.6.1-1 and 3.6.2-1.

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3.6.3 Containment Isolation Valves

3.6.3-1 DOC A.1
 DOC M.3
 DOC LA.4 (ITS 3.6.1)
 JFD 2
 CTS 1.0 CONTAINMENT INTEGRITY, Item e
 CTS 4.5.2.a.(4).(a)
 CTS 4.5.2.a.(4).(d)
 CTS 4.5.2.b.(1)
 CTS 4.5.2.d.(1)
 CTS 4.2 Table 4.2.2 Item 13.b
 STS SR 3.6.1.3.11 and Associated Bases (NUREG 1434)
 STS SR 3.6.1.3.14 and Associated Bases (NUREG 1433)
 STS SR 3.6.3.6 and Associated Bases
 ITS SR 3.6.3.5 and Associated Bases
 ITS B3.6.3 Bases - References

See Comment Numbers 3.6.1-1, 3.6.1-7, and 3.6.1-8.

Consumers Energy's Response:

3.6.3-2 DOC A.1
 DOC A.4
 CTS 3.6.1.a
 ITS 3.6.3 APPLICABILITY and Associated Bases

See Comment Number 3.6.1-2.

Consumers Energy's Response:

3.6.3-3 DOC A.1
 CTS 3.6.1 ACTION

CTS 3.6.1 ACTION states that "With one or more containment isolation valves inoperable (including during the performance of valve testing), maintain at least one isolation valve OPERABLE in each affected penetration that is open...". The CTS 3.6.1 ACTION phrase "(including during the performance of valve testing)" is shown in the CTS markup as being deleted. This deletion was justified as an Administrative editorial change (DOC A.1). This is incorrect. While the change can be considered as an Administrative change in that it reflects current practice that is reflected in ITS LCO 3.0.2, it is not an editorial change. **Comment:** Provide a discussion and justification for the deletion of this phrase in CTS 3.6.1 ACTIONS.

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3.6.3-4 DOC A.2
 CTS 3.6.1 ACTION
 ITS 3.6.3 Condition A and Associated Bases

CTS 3.6.1 ACTION states that "With one or more containment isolation valves inoperable (including during the performance of valve testing), maintain at least one isolation valve OPERABLE in each affected penetration that is open...". ITS 3.6.3 Condition A has a Note which makes the Condition applicable only if there are two containment isolation valves (CIVs) in the penetration flow path which ensures one CIV remains OPERABLE while the other CIV may be inoperable. DOC A.2 was prepared to justify the adding of ITS 3.6.3 Condition A Note; however, it was never used nor identified in the CTS markup. **Comment:** Revise the CTS markup to correct this discrepancy.

Consumers Energy's Response:

3.6.3-5 DOC A.7
 JFD 6
 JFD 10
 JFD 15
 CTS 3.6.1 ACTIONS
 CTS 3.6.5
 ITS 3.6.3 ACTIONS B, D and F and Associated Bases

CTS 3.6.5 specifies that the containment purge exhaust and air supply isolation valves shall be locked closed whenever the plant is above COLD SHUTDOWN. With one containment purge exhaust or air supply isolation valve not locked closed, the valve shall be locked closed within 1 hour or a shutdown shall be started and completed in 36 hours. The corresponding ACTIONS in the ITS are ITS 3.6.3 ACTION D and F. CTS 3.6.1 ACTIONS which deals with inoperable CIVs have been modified to add a new Condition per ITS 3.6.3 ACTION B where the only two containment isolation valves in the same flowpath are inoperable. As stated in DOC A.7, under the CTS 3.6.1 ACTIONS, the same situation would have resulted in entering CTS 3.0.3. ITS 3.6.3 ACTION B is not applicable to purge exhaust valve or air room supply valve not locked closed or leakage. Based on the descriptions and discussions in ITS B3.6.3 Bases, JFD 6, JFD 10 and JFD 15, the purge exhaust system and the air room supply system consist of two valves in series located outside containment for each penetration. Thus if both valves in the penetration are not locked closed, the CTS does not specify an ACTION which would result in entry into CTS 3.0.3. Since ITS 3.6.3 ACTION D only addresses one valve per penetration being inoperable and ITS 3.6.3 ACTION B excludes these valves, no ACTION is provided for when both valves in either the purge exhaust or the air room supply penetrations are not locked closed. **Comment:** Revise the CTS/ITS markup to address this situation. Provide the appropriate discussions and justifications for this change. It should be noted that this change may result in the re-arrangement of ITS 3.6.3 ACTIONS.

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3.6.3-6 DOC A.8
 JFD 6
 CTS 3.6.1
 ITS 3.6.3 ACTIONS Note 1

The CTS markup of CTS 3.6.1 has a *Footnote associated with it. The footnote states that "Penetration flow paths may be unisolated intermittently under Administrative control." A Technical Specification (TS) Amendment Request dated March 26, 1997, proposes to add this footnote to the Palisades CTS which is Less Restrictive (L) change to the CTS. This portion of the Amendment Request has not been approved at this time. The CTS markup modifies this footnote to exclude the 8 inch purge exhaust valves and the 12 inch air room supply isolation valves. This change is designated as an Administrative change (DOC A.8). This is incorrect. As proposed in the March 1997 Amendment Request the footnote would allow the purge exhaust and the air room supply isolation valves to be opened intermittently under Administrative control. Thus the change proposed in the CTS markup would be a More Restrictive change since it would restrict this allowance. **Comment:** The licensee should do one of the following:

- a. Revise the CTS markup and provide additional discussion and justification to show that the exception is a More Restrictive change;
- b. Revise the March 26, 1997, Amendment Request to correctly reflect the intent that the purge exhaust and air room supply valves are excluded from the footnote. Revise the CTS accordingly; or
- c. Delete this portion of the footnote from the March 26, 1997, Amendment Request and revise the CTS markup to show the addition of the corrected footnote as a Less Restrictive (L) change. Provide the appropriate discussion and justifications for this Less Restrictive change.

Consumers Energy's Response:

3.6.3-7 DOC A.9
 CTS 4.5.2.c(2)
 ITS 3.6.3 ACTIONS Note 4 and Associated Bases

CTS 4.5.2.c(2) has been modified to add ITS 3.6.3 ACTIONS Note 4 which states "Enter applicable conditions and Required Actions of LCO 3.6.1 "Containment" when leakage results in exceeding the overall containment leakage rate acceptance criteria". DOC A.9 states that this Note provides guidance on use and application of the ITS where it wasn't explicitly addressed as part of the CTS. DOC A.9 only addresses the ITS aspects, application and interpretation of this Note and does not provide sufficient information with regards to how the CTS is consistently interpreted in this area so that the staff can determine whether this change is Administrative, More Restrictive, or Less Restrictive (L). **Comment:** Provide additional discussion and justification to show how Consumers Energy interprets the CTS with regards to this change.

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3.6.3-8 DOC A.10
 CTS 3.6.1 ACTIONS
 ITS 3.6.3 ACTIONS Notes 2 and 3 and Associated Bases

CTS 3.6.1 ACTIONS have been modified to add ITS 3.6.3 ACTIONS, Notes 2 and 3. DOC A.10 states that these Notes provide guidance on use and application of the ITS where it wasn't explicitly addressed as part of the CTS. DOC A.10 only addresses the ITS aspects, application and interpretation of these Notes and does not provide sufficient information with regards to how the CTS is consistently interpreted in this area so that the staff can determine whether this change is Administrative, More Restrictive, or Less Restrictive(L). **Comment:** Provide additional discussion and justification to show how Consumers Energy interprets the CTS with regards to this change.

Consumers Energy's Response:

3.6.3-9 DOC A.15
 CTS 3.6.1 ACTION
 CTS 3.6.3
 CTS 4.5.3.d
 ITS 3.6.3 ACTIONS A, C, and E and Associated Bases
 ITS SR 3.6.3.2 and SR 3.6.3.3 and Associated Bases

CTS 3.6.1 ACTION has been modified by the addition of ITS 3.6.3 Require Action (RA) A.2 and its associated Note which states "Isolation devices in high radiation areas may be verified by the use of administrative means." The proposed addition of this ITS Note is acceptable; however, DOC A.15 is incorrect and is not the appropriate justification for this change. To start with, DOC A.15 states that the Note is added to ITS 3.6.3 RA A.2 and D.2. There is no ITS 3.6.3 RA D.2 in the ITS markup. Furthermore, the Note is also added to ITS 3.6.3 RA C.2, E.2, SR 3.6.3.2, and SR 3.6.3.3. Depending on the change, the Note either modifies a CTS requirement or does not directly modify a CTS requirement but modifies a new added requirement. ITS 3.6.3 RA A.2 is by the CTS markup a More Restrictive change, thus the addition of the Note to this change is also a More Restrictive change. ITS 3.6.3 RA C.2 is a Less Restrictive (L) change (See Comment Number 3.6.3-11), thus the addition of the Note to this change is a Less Restrictive (L) change. ITS 3.6.3 RA E.2 is a Less Restrictive (L) change (See Comment Numbers 3.6.3-28 and 3.6.3-29), thus the addition of the Note to this change is a Less Restrictive (L) change. CTS 3.6.3 specifies that prior to the reactor going critical after a refueling outage an administrative check will be made to confirm that all "locked closed" manual CIVs are closed and locked. A TS Amendment Request dated March 26, 1997, proposes to modify CTS 3.6.3 to change the "administrative check" to a "visual check" and renumber the specification CTS 4.5.3.d. Even though this Amendment has not been approved by the staff, the CTS conversion submittal is presented as though it has been approved. The corresponding ITS SRs are ITS SR 3.6.3.2 and SR 3.6.3.3. The addition of this Note to these SRs would be considered as an Administrative change if the original pre-March 1997 Amendment Request CTS SR (CTS 3.6.3) is used. If the Amendment Request CTS SR (CTS 4.5.3.d) is used then

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the addition of the Note is a Less Restrictive (L) change since the Note would allow an administrative check rather than a visual verification in high radiation areas. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications for these Administrative, More Restrictive, and Less Restrictive (L) changes. See Comment Numbers 3.6.3-11, 3.6.3-28 and 3.6.3-29.

Consumers Energy's Response:

3.6.3-10 DOC A.X
 CTS 3.6.5
 ITS LCO 3.6.3
 ITS 3.6.3 APPLICABILITY

CTS 3.6.5 specifies the OPERABILITY and APPLICABILITY for the containment purge exhaust and air room supply isolation valves. The CTS markup of 3.6.5 shows an Administrative change to the OPERABILITY and APPLICABILITY which states "The containment isolation valves shall be OPERABLE in MODES 1-4." The designation for this Administrative change has been cut-off by the edge of the page, such that it cannot be determined which DOC A.X is applicable to this change. **Comment:** Correct this discrepancy.

Consumers Energy's Response:

3.6.3-11 DOC M.1
 CTS 3.6.1 ACTION
 ITS 3.6.3 ACTION C and Associated Bases

CTS 3.6.1 ACTION is modified by the addition of ITS 3.6.3 ACTION C. The CTS markup shows this addition as a More Restrictive (DOC M.1) change, based on the justification that the CTS does not address single isolation valves on closed systems, thus it is a new requirement. This is an incorrect justification for this change. One could interpret the CTS for single valve/closed system case in one of two ways. In the first case, based on the discussion in DOC M.4, since there is no remedial measures provided in CTS 3.6.1 ACTION, then CTS 3.0.3 should be entered. ITS 3.6.3 ACTION C is Less Restrictive than CTS 3.0.3. In the second case, it is the staff's position that CTS 3.6.1 ACTION does provide the appropriate remedial measures for the single valve/closed system case. Since an OPERABLE isolation valve cannot be maintained in this case per CTS 3.6.1 ACTION, CTS 3.6.1 ACTION c would be entered. Thus the addition of ITS 3.6.3 ACTION C is Less Restrictive than CTS 3.6.1 ACTION. In either case, the addition of ITS 3.6.3 ACTION C is a Less Restrictive (L) change not a More Restrictive change. See Comment Number 3.6.3-9. **Comment:** Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change. See Comment Number 3.6.3-9.

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3.6.3-12 DOC M.2
 JFD 8
 CTS 3.6.3
 CTS 4.5.3.d
 ITS SR 3.6.3.2 and SR 3.6.3.3 and Associated Bases

CTS 3.6.3 specifies that prior to the reactor going critical after a refueling outage an administrative check will be made to confirm that all "locked closed" manual CIVs are closed and locked. A TS Amendment Request dated March 26, 1997, proposes to modify CTS 3.6.3 to change the "Administrative check" to a "visual check" and renumber the specification as CTS 4.5.3.d. This Amendment is under review by the staff. The corresponding ITS SRs are ITS SR 3.6.3.2 and SR 3.6.3.3. The ITS SRs verify only that the "not-locked closed" valves are closed, shown in the ITS markup by the implementation of TSTF-45 (JFD 8). The CTS markup does not show this Less Restrictive (L) change nor is it discussed as part of the overall More Restrictive changes (DOC M.2) made to this CTS SR. **Comment:** Revise the CTS markup and provide the appropriate discussion and justification for this Less Restrictive (L) change.

Consumers Energy's Response:

3.6.3-13 DOC M.2
 DOC M.3
 JFD 2
 CTS 4.2 Table 4.2.2, Item 13b
 CTS 4.5.3.d
 STS SR 3.6.3.4 and SR 3.6.3.6
 ITS SR 3.6.3.3, SR 3.6.3.5 and Associated Bases

The frequencies specified for CTS 4.2 Table 4.2.2, Item 13.b (ITS SR 3.6.3.5) and CTS 4.5.3.d (ITS SR 3.6.3.3) have been modified to "Once prior to entering...92 days" and "184 days and once within 92 days after each opening of the valve," respectively. These frequencies are different than the frequencies specified for the corresponding STS SRs. The justification used for these changes (JFD 2) is for clarity grammatical preference and to establish consistency. The staff's position is that the change does not fall into any of these categories and is considered to be a generic change which is beyond the scope of review for this conversion. **Comment:** Delete this generic change.

Consumers Energy's Response:

3.6.3-14 DOC LA.2
 CTS 4.5.3.a

CTS 4.5.3.a requires that the CIVs be demonstrated OPERABLE after maintenance, repair or replacement work is performed on the valve or its associated components. This information, according to DOC LA.2 is being relocated to plant procedures. It is unclear from the discussion

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in DOC LA.2 if the procedure change control process is covered by 10 CFR 50.59 or some other non-regulatory control process. If the procedure change control process is not covered by 10 CFR 50.59 then the change is a Less Restrictive (L) change deletion of material rather than a Less Restrictive (LA) change. Less Restrictive (LA) changes are limited to those items which are relocated to licensee controlled documents covered by a 10 CFR 50.59 change control process. **Comment:** Provide additional discussion and justification on the plant procedure change control process.

Consumers Energy's Response:

3.6.3-15 DOC LA.3
 CTS 4.2 Table 4.2.2 Item 13.a

CTS 4.2 table 4.2.2 Item 13.a requires determining that the containment purge and ventilation isolation valves is closed by checking the valve position indicator in the control room. The "checking the valve position indicator in the control room" according to DOC LA.3 is being relocated to plant procedures. It is unclear from the discussion in DOC LA.3 if the procedure change control process is covered by 10 CFR 50.59 or some other non-regulatory control process. If the procedure change control process is not covered by 10 CFR 50.59 then the change is a Less Restrictive (L) change deletion of material rather than a Less Restrictive (LA) change. Less Restrictive (LA) changes are limited to those items which are relocated to licensee controlled documents covered by a 10 CFR 50.59 change control process. **Comment:** Provide additional discussion and justification on the plant procedure change control process.

Consumers Energy's Response:

3.6.3-16 DOC LA.4
 CTS 4.2 Table 4.2.2 Item 13.b

CTS 4.2 Table 4.2.2 Item 13.b requires performing a leak rate test of the containment purge and ventilation isolation valves by performing a leak rate test between the valves. The details of how to perform the test (between the valves) according to DOC LA.4 is being relocated to plant procedures. It is unclear from the discussion in DOC LA.4 if the procedure change control process is covered by 10 CFR 50.59 or some other non-regulatory control process. If the procedure change control process is not covered by 10 CFR 50.59 then the change is a Less Restrictive (L) change deletion of material rather than a Less Restrictive (LA) change. Less Restrictive (LA) changes are limited to those items which are relocated to licensee controlled documents covered by a 10 CFR 50.59 change control process. **Comment:** Provide additional discussion and justification on the plant procedure change control process.

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3.6.3-17 DOC LA.5
 CTS 4.5.3.b.

CTS 4.5.3.b. requires that each CIV activates to ITS isolation position during COLD SHUTDOWN and at least once per refueling cycle. The "during COLD SHUTDOWN" according to DOC LA.5 is being relocated to plant procedures. It is unclear from the discussion in DOC LA.5 if the procedure change control process is covered by 10 CFR 50.59 or some other non-regulatory control process. If the procedure change control process is not covered by 10 CFR 50.59 then the change is a Less Restrictive (L) change deletion of material rather than a Less Restrictive (LA) change. Less Restrictive (LA) changes are limited to those items which are refloats to licensee controlled documents covered by a 10 CFR 50.59 change control process. See Comment Number 3.6.3-18. **Comment:** Provide additional discussion and justification on the plant procedure change control process. See Comment Number 3.6.3-18.

Consumers Energy's Response:

3.6.3-18 DOC LA.5
 CTS 4.5.3.b.
 ITS SR 3.6.3.6 and Associated Bases

CTS 4.5.3.b requires that each CIV be demonstrated OPERABLE by verifying on an actuation signal that the valve actuates to its required position. The corresponding ITS SR is ITS SR 3.6.3.6. The CTS frequency for this SR is "during COLD SHUTDOWN or at least once per refueling cycle." The ITS frequency is 18 months which is the equivalent to "At least once per refueling cycle." The frequency of "during COLD SHUTDOWN" is relocated to plant procedures. It is unclear from the discussion in DOC LA.5 if there are certain CIVs because of plant specific design characteristics, operational constraints or current licensing basis which are required to be tested at each COLD SHUTDOWN, i.e., more than once per refueling cycle. If this is the case then the change is also a Less Restrictive (L) change and could be considered as a beyond scope of review item for this conversion. See Comment Number 3.6.3-17. **Comment:** Provide additional discussion and justification on this Less Restrictive change.

Consumers Energy's Response:

3.6.3-19 JFD 1
 STS 3.6.3 RA E.1 and Associated Bases
 ITS 3.6.3 RA E.1 and Associated Bases

STS/ITS 3.6.3 RA E.1 states that the affected penetration flow path shall be isolated "by use of at least one...closed manual valve with resilient seals..." STS B3.6.3 Bases - E.1, E.2 and E.3 states in the first paragraph that the "Isolation barrier that meet this criterion are ... a closed manual valve with resilient seals". ITS B3.6.3 Bases - E.1, E.2 and E.3 deletes the phrase "A

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closed manual valve with resilient seals” based on JFD 1 which implies that Palisades does not have manual valves in the containment purge system.” See Comment Number 3.6.3-29.

Comment: Revise the ITS markup to make ITS 3.6.3 RA E.1 and its Associated Bases consistent. See Comment Number 3.6.3-29.

Consumers Energy’s Response:

3.6.3-20 JFD 4
 STS B3.6.3 Bases BACKGROUND
 ITS 3.6.3 ACTION Note 1
 ITS SR 3.6.3.2 and SR 3.6.3.3
 ITS B3.6.3 Bases - BACKGROUND

STS B3.6.3 Bases - BACKGROUND first paragraph third sentence states the following: “Manual valves, de-activated automatic...passive devices.” ITS B3.6.3 Bases - BACKGROUND modifies this sentence by adding the word “Closed” prior to “Manual valves.” Based on ITS 3.6.3 ACTION Note 1, ITS SR 3.6.3.2 and ITS SR 3.6.3.3 not all manual valves are required to be closed, only those required to be closed or locked closed for accident conditions. Thus, the adding of the word “closed” to the Bases sentence changes the intent of the sentence and excludes open manual valves. **Comment:** Delete this change.

Consumers Energy’s Response:

3.6.3-21 JFD 4
 STS B3.6.3 Bases - C.1 and C.2
 ITS B3.6.3 Bases - C.1 and C.2

STS B3.6.3 Bases - C.1 and C.2 states in the last paragraph, last sentence, that “The probability of misalignment of these valves, once they have been verified...is small.” ITS B3.6.3 Bases - C.1 and C.2 modifies this sentence by changing “valves” to “devices” . Blind flanges cannot be misaligned. Thus, the STS wording is correct. **Comment:** Delete this change.

Consumers Energy’s Response:

3.6.3-22 JFD 6
 STS SR 3.6.3.1, SR 3.6.3.2 and Associated Bases
 ITS SR 3.6.3.1 and Associated Bases

STS SR 3.6.3.1 specifies that the purge valves are verified sealed closed except for one purge valve in a penetration flow path while in Condition E. The ITS markup shows that STS SR 3.6.3.1 is not used and that STS SR 3.6.3.2 is modified in ITS SR 3.6.3.1 state the same intent as STS SR 3.6.3.1 except that the exception for one purge valve in a penetration not being sealed while in Condition E is not included. JFD 6 does not provide sufficient information as to

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why STS SR 3.6.3.2 and its associated Bases was modified to reflect plant specific design when STS SR 3.6.3.1 and its associated Bases would have been the appropriate SR to use. In addition, the deletion of the exception could result in the unnecessary shutdown of the unit if the purge valve is not within leakage limits and cannot be locked closed. **Comment:** Provide additional discussion and justification with regards to the changes made to STS SR 3.6.3.1, STS SR 3.6.3.2/ITS SR 3.6.3.1 and their associated Bases.

Consumers Energy's Response:

3.6.3-23 JFD 6
 JFD 15
 STS B3.6.3 Bases - BACKGROUND
 ITS B3.6.3 Bases - BACKGROUND

STS B3.6.3 Bases - BACKGROUND in the fifth paragraph, second sentence, states that "Motor operated isolation valves are provided inside containment, and air operated isolation valves are provided outside containment." ITS B3.6.3 Bases - BACKGROUND modifies this sentence by deleting "Motor operated... inside containment, and", deleting the word "are" between "valves" and "provided" in the second part of the sentence, and adding "The purge exhaust and air room supply valves are." This change is designated and justified by JFD 6. This is incorrect. JFD 6 does not describe the location of the containment purge valves, whereas JFD 15 does. In addition, based on the modifications made and JFD 15 the sentence would be more correct if "provided" were changed to located. **Comment:** Revise the ITS markup.

Consumers Energy's Response:

3.6.3-24 JFD 9
 CTS 4.5.3.c
 STS SR 3.6.3.5
 ITS SR 3.6.3.4 and Associated Bases

ITS SR 3.6.3.4 and its associated Bases modifies STS SR 3.6.3.5 and its associated Bases in accordance with TSTF-46 which verifies the isolation time of each automatic power operated CIV. CTS 4.5.3.c verifies the isolation time of "each power operated or automatic" CIV. The CTS and ITS are not in agreement, in that the CTS requires all power operated valves to be tested which would include all non-automatic power operated valves and all automatic valves to be tested which would include check valves. The ITS does not include all these valves. **Comment:** Revise the CTS markup and provide a discussion and justification for this Less Restrictive (L) change.

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3.6.3-25 JFD 10
 CTS 3.6.5
 ITS 3.6.3 ACTION D, F, and Associated Bases

CTS 3.6.5 requires that with one containment purge exhaust or air room supply isolation valve not locked closed, the valve shall be locked closed within 1 hour or the plant shall be shutdown within 36 hours. The corresponding ITS ACTIONS are ITS 3.6.3 ACTION D and F respectively. The Bases discussion of ITS 3.6.3 ACTION D does not provide an adequate justification for requiring the unlocked valve to be locked closed within 1 hour. The STS would allow via STS 3.6.3 ACTION A 4 hours to lock close the valve. **Comment:** Revise the ITS markup of ITS B3.6.3 Bases - D.1 to provide a reasonable justification for the 1 hour Completion Time.

Consumers Energy's Response:

3.6.3-26 JFD 11
 STS B3.6.3 Bases - LCO
 ITS B3.6.3 Bases - LCO

STS B3.6.3 Bases - LCO, second paragraph, first sentence, states that "The automatic power operated...to actuate on an automatic isolation signal." ITS B3.6.3 Bases - LCO modifies the end of the sentence to read as follows: "To actuate on upon receipt of a CHP or CHR signal as appropriate signals." The change does not make sense. **Comment:** Revise the ITS markup to correct this discrepancy.

Consumers Energy's Response:

3.6.3-27 JFD 13

JFD 13 states in the second paragraph "TSTF - 30, Rev. 2, also include a change to the Bases for SR 3.6.2.2 which stated: "The closed system must meet the requirements of SRP 6.2.4." This statement is incorrect. TSTF - 30, Rev 2 did not make a change to the Bases for SR 3.6.2.2. It did, however, add a similar statement to STS B3.6.3 Bases - C.1 and C.2. Also, the quoted statement ends with the words "Requirements of Reference 3," not "requirements of SRP 6.2.4." Reference 3 in the REFERENCE Section of STS B3.6.3 is SRP 6.2.4. **Comment:** Revise JFD 13.

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3.6.3-28 JFD 15
 ITS 3.6.3 Required Action E.2 and Associated Bases
 ITS B3.6.3 Bases - BACKGROUND

ITS 3.6.3 RA E.2 requires the verification that the affected purge valve penetration flow path is isolated with a Completion Time of "Prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days for isolation devices inside containment." Based on the discussion in JFD 15 and ITS B3.6.3 Bases - BACKGROUND, the containment purge valves are located outside containment. Thus, the Completion Time of "Prior to... inside containment" is not applicable to Palisades. See Comment Number 3.6.3-9 and 3.6.3-29. **Comment:** Revise the ITS markup to delete this Completion Time from ITS 3.6.3 RA E.2 and its associated Bases. Provide a discussion and justification for this change. See Comment Numbers 3.6.3-9 and 3.6.3-29.

Consumers Energy's Response:

3.6.3-29 CTS 3.0.3
 CTS 3.6.1 ACTIONS
 CTS 4.2 Table 4.2.2, Item 13.b
 CTS 4.5.2.c
 ITS 3.6.3 ACTION E and Associated Bases
 ITS SR 3.6.3.5 and Associated Bases

CTS 4.2 Table 4.2.2 Item 13.b requires a leak rate test of the containment purge and ventilation isolation valves. No action is provided in the CTS if this surveillance is failed. Thus, as a minimum entry into CTS 3.0.3 is required. The corresponding ITS SR is ITS SR 3.6.3.5. Failure of ITS SR 3.6.3.5 would require entry into ITS 3.6.3 ACTION E. The remedial measures provided in ITS 3.6.3 ACTION E are Less Restrictive than requirements of CTS 3.0.3. The CTS markup of CTS 3.6.1 ACTIONS; CTS 4.2 Table 4.2.2, Item 13.b; or CTS 4.5.2.c do not show the addition of ITS 3.6.3 ACTION E. See Comment Numbers 3.6.3-9, 3.6.3-19 and 3.6.3-28. **Comment:** Revise the CTS markup and provide the appropriate discussions and justifications for the addition of this Less Restrictive (L) change. See Comment Numbers 3.6.3-9, 3.6.3-19 3.6.3-28.

Consumers Energy's Response:

3.6.3-30 CTS 4.5.3.b
 ITS SR 3.6.3.6 and SR 3.6.3.7

The CTS markup of CTS 4.5.3.b shows that this CTS SR is ITS SR 3.6.3.6 and SR 3.6.3.7. ITS 3.6.3 does not contain an SR numbered SR 3.6.3.7. **Comment:** Revise the CTS/ITS markup accordingly.

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3.6.3-31 CTS 4.5.3.b
 ITS SR 3.6.3.6 and Associated Bases

CTS 4.5.3.b verifies that each isolation actuates to its correct or required position upon receipt of an actuation signal. ITS SR 3.6.3.6 verifies the same function, however, it exempts those automatic CIVs that are locked, sealed or otherwise secured in position. Thus the ITS does not encompass as many valves as the CTS. **Comment:** Revise the CTS markup to correctly reflect ITS SR 3.6.3.6 and provide a discussion and justification for this Less Restrictive (L) change.

Consumers Energy's Response:

3.6.4 Containment Pressure

3.6.4-1 DOC A.3
 CTS 3.6.2.b
 ITS 3.6.4 APPLICABILITY

CTS 3.6.2.b specifies a limit of 1.0 psig for containment pressure when in "Power Operation or Hot Standby". ITS 3.6.4, APPLICABILITY makes this pressure limit applicable in Modes 1 and 2. The proposed ITS APPLICABILITY is acceptable; however, the DOC A.3 technical justification appears to have incorrect statements that should be corrected. Between the third and fourth sentences, it appears that the justification for MODE 2 operation is missing, while the fifth sentence does not make sense. **Comment:** Revise the DOC A.3 to provide a corrected technical justification.

Consumers Energy's Response:

3.6.4-2 CTS 3.6.2
 ITS LCO 3.6.4 and Associated Bases

CTS 3.6.2 specifies that the containment internal pressure shall not exceed 3 psig except for containment leak rate tests. An Amendment Request dated March 26, 1997, proposes to change the containment internal pressure limits to ITS LCO 3.6.4 limits of ≤ 1.5 psig in MODES 3 and 4 and ≤ 1.0 in MODES 1 and 2. This change is under review by the staff. Even though the CTS markup is based on the Amendment Request and the CTS/ITS markups correctly show the change, acceptability of the ITS will depend on the acceptability of the change in containment pressure limits. Thus the staff considers this change to be a beyond scope of review item for the conversion. **Comment:** Acceptability of this change is dependent on resolution of the March 26, 1997, Amendment Request.

Consumers Energy's Response:

3.6.5 Containment Air Temperature

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3.6.5-1 JFD 1
 JFD 6
 CTS 3.6.3
 STS B3.6.6.5 Bases LCO
 ITS B3.6.5 Bases APPLICABLE SAFETY ANALYSES AND LCO

The second paragraph of the ITS B3.6.5 Bases APPLICABLE SAFETY ANALYSES contains a new insert that states the containment building design temperature will be exceeded based upon the technical specification containment temperature limit initially assumed to exist prior to a DBA event. This statement is apparently drawn from FSAR 14.18.2.2.3 per the ITS Bases markup margin Notes. In addition, ITS B3.6.5 Bases -LCO changes the STS words "resultant peak accident temperature" and "containment design temperature" to "resultant peak accident pressure" and "containment design pressure" respectively. It appears that the ITS B3.6.5 Bases LCO changes are based upon exceeding the design building temperature limit. A Technical Specification (TS) Amendment Request dated March 26, 1997, proposes to add a new TS on containment temperature (CTS 3.6.3). The justification provided in that Amendment request does not provide sufficient information to evaluate the above Bases statements. No technical justification is provided on the effects or acceptability of exceeding the design building temperature limit or the effects to equipment within containment that may have a lower component qualification temperature. The staff considers this change to be a beyond scope of review item for this conversion. **Comment:** Provide additional discussion and justification for these changes.

Consumers Energy's Response:

3.6.5-2 JFD 2
 STS B3.6.5 Bases - A.1
 ITS B3.6.5 Bases - A.1

STS B3.6.5 Bases - A.1 states that when the containment air temperature is not within limit, "it must be restored to within limit within 8 hours." ITS B3.6.5 Bases - A.1 deletes the phrase "to within limit" from the restoration statement. The justification used for this deletion (JFD 2) is for editorial clarity, etc. The deletion does not clarify the intent of the sentence and results in the sentence not making sense, with regards to what one is restoring. **Comment:** Delete this change.

Consumers Energy's Response:

3.6.5-3 JFD 4
 ITS B3.6.5 Bases SR 3.6.5.1

ITS B3.6.5 Bases - SR 3.6.5.1 adds the following statement: "The 140°F limit is the actual limit assumed for the accident analyses and does not account for instrument uncertainties." The intent of the STS/ITS is to be more operator/inspector friendly in that the limits and parameters

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specified in the TS would be those numbers as read directly from the gages and instruments. If instrument uncertainties are not taken into account, this could lead to confusion as to what is the correct limit. **Comment:** Provide additional discussion and justification for the deviation from the intent of the STS/ITS.

Consumers Energy's Response:

3.6.6 Containment Cooling Systems

3.6.6-1 DOC A.1
 DOC M.1
 DOC M.7
 DOC LA.1
 DOC L.1
 JFD 2
 JFD 4
 JFD 6
 JFD 8
 JFD 11
 CTS 3.4
 ITS 3.6.6 and Associated Bases

ITS B3.6.6 Base - BACKGROUND and JFD 6 state that the original design of the system considered the containment spray pumps and the containment air coolers to be redundant systems. Subsequent analysis required that one containment spray pump be used when the three containment air coolers are being relied on for heat removal. Thus the ITS is structured accordingly. It is unclear from the information provided as to whether the staff reviewed and approved the subsequent analysis and whether the CTS reflects this analysis. If the staff has reviewed and approved the subsequent analysis and the CTS reflects this analysis, then the proposed ITS ACTIONS seem to allow more components to be inoperable than is currently allowed. Insufficient information is provided by the DOCs and JFDs to evaluate this change. If, however, the staff has not reviewed and approved the subsequent analysis and the CTS reflects the original design and analysis, then the proposed changes to the ITS ACTIONS constitute a beyond scope of review item for this conversion. The responses to Comment Numbers 3.6.6-2, 3.6.6-3, 3.6.6-5, 3.6.6-6, 3.6.6-14, 3.6.6-15 and 3.6.6-22 will depend on which situation applies. **Comment:** Revise the DOCs and JFDs to clarify which situation applies and provide sufficient information to evaluate the changes. See Comment Numbers 3.6.6-2, 3.6.6-3, 3.6.6-5, 3.6.6-6, 3.6.6-14, 3.6.6-15, and 3.6.6-22.

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3.6.6-2 DOC A.1
 DOC M.1
 DOC M.7
 DOC LA.1
 DOC L.1
 JFD 2
 JFD 4
 JFD 6
 JFD 8
 JFD 11
 CTS 3.4
 STS 3.6.6.A and Associated Bases
 STS 3.6.6B and Associated Bases
 STS 3.6.7 and Associated Bases
 ITS 3.5.5 and Associated Bases
 ITS 3.6.6 and Associated Bases

ITS B3.6.6 Bases - BACKGROUND "Containment Spray System" states the following: "In addition, the Containment Spray System in conjunction with the use of trisodium phosphate (LCO 3.5.5 "Trisodium Phosphate") serve to remove iodine which may be released following an accident." Based on this statement the ITS markup used the wrong specifications, STS 3.6.6.A "Containment Spray and Cooling Systems (Atmospheric and Dual) (credit taken for iodine removal by the Containment Spray System)" should have been used rather than STS 3.6.6.B which does not take credit for iodine removal by the Containment Spray System. The Trisodium Phosphate system and associated LCO take the place of the Spray Additive System description in STS B3.6.6.A Bases - BACKGROUND and STS 3.6.7. See Comment Numbers specified in Comment Number 3.6.6.-1, as well as 3.6.6-16, 3.6.6-18 and 3.6.6-19. **Comment:** Revise the ITS markup to use the STS 3.6.6.A rather than STS 3.6.6.B or provide justification to show that STS 3.6.6.B is the appropriate specification to use. See Comment Numbers specified in Comment Number 3.6.6-1, as well as 3.6.6-16, 3.6.6-18 and 3.6.6-19.

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3.6.6-3 DOC A.1
 DOC M.1
 DOC M.7
 DOC LA.1
 DOC L.1
 JFD 2
 JFD 4
 JFD 6
 JFD 8
 JFD 11
 CTS 3.4
 ITS 3.6.6 and Associated Bases

CTS 3.4.1 provides an LCO that is based upon component OPERABILITY. CTS 3.4.2, 3.4.3, 3.4.4, and 3.4.5 lists the permissible component inoperabilities which limit the number of concurrent components inoperable that are associated with diesel generator 1-2 and 1-1 divisions. ITS 3.6.6 provides an LCO that is based upon maintaining the OPERABILITY of two trains. The CTS markup indicates that DOC A.1 is the justification used for converting from a component based LCO to a train based LCO. This is not acceptable. A new specific DOC which explains how the two trains of Containment Cooling System are derived from the CTS 3.4.1 requirements, should be provided. Also, in order to understand the system design and the proposed ITS 3.6.6 ACTIONS, simplified schematics of the Containment Cooling Systems to describe what specific components comprise each train should be provided. An in-depth technical explanation of how the non-safety-related containment air cooler VHX-4 associated with containment spray pumps 54B and 54C is determined to be equivalent to a 100% cooling capacity cooling train also needs to be provided. In addition, the following information will be needed to evaluate the changes and the conversion from CTS to ITS: What are the cooling capacities of these two trains without any component being inoperable? How is the cooling capacity of each train changed, as one or more components become inoperable? Tabulate these resulting reduced train cooling capacities. Illustrate what favorable combinations of remaining OPERABLE train components can still yield the redundant capacity required to comply with this ITS ACTION A Condition. Explain how the "alternate" trains configurations are created. Identify the cross-over valves between trains that will permit inoperable components to be removed from service and explain how the inoperable components are replaced with redundant OPERABLE components. Are all these re-alignment of train configurations made from the control room. See Comment Numbers specified in Comment Number 3.6.6-1.

Comment: Provide the requested information. Revise the CTS/ITS markup as specified above and provide the appropriate discussions and justifications for the above changes. See Comment Numbers specified in Comment Number 3.6.6-1.

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3.6.6-4 DOC A.5
 CTS 4.6.3
 ITS SR 3.6.6.5

CTS 4.6.3 specifies that the containment spray pumps be tested at intervals "not to exceed three months." The corresponding ITS SR is ITS SR 3.6.6.5 which has a frequency of "In accordance with the Inservice Testing (IST) Program." This change is described in DOC A.5. Insufficient information is provided in DOC A.5 to determine if the change is an Administrative change. If the current IST Program specifies a frequency of 3 months for pump testing, then the change can be considered as Administrative (change in terminology). However, if the current IST Programs specifies a frequency other than 3 months, then the change would be a Less Restrictive (LA) change (movement of detail) plus a More or Less Restrictive (L) change depending on whether the current IST frequency is greater than or less than 3 months respectively. **Comment:** Provide additional discussion and justification to show that this change in frequency nomenclature is an Administrative change.

Consumers Energy's Response:

3.6.6-5 DOC M.1
 DOC L.2
 JFD 8
 CTS 3.4.1
 CTS 3.4.2
 CTS 3.4.3
 ITS 3.6.6 APPLICABILITY and Associated Bases
 ITS 3.6.6 ACTION B and Associated Bases

CTS 3.4.1 specifies that "The reactor shall not be made critical...unless the following conditions are met." CTS 3.4.2 and 3.4.3 require a shutdown to COLD SHUTDOWN (MODE 5) if system/component inoperabilities cannot be restored to OPERABLE status. ITS 3.6.6 APPLICABILITY specifies the applicability of the Containment Cooling Systems as MODES 1, 2 and 3 with shutdown requirement of MODE 4 in ITS 3.6.6 ACTION B. The staff's position is that the APPLICABILITY should be in MODES 1, 2, 3, and 4. The staff bases its position on a number of factors. ITS B3.6.6 Bases - APPLICABLE SAFETY ANALYSES states that the Containment Cooling Systems limit the temperature and pressure that could be experienced following a DBA. Furthermore, it refers to ITS 3.6.4 "Containment Pressure" and ITS 3.6.5 "Containment Air Temperature" for a more detailed discussion on the intent of the design basis and the accident analysis and evaluation. The APPLICABILITY of these two specifications is MODES 1, 3, 3 and 4 because a DBA could in these MODES cause a release of radioactive material into containment. Therefore, the Containment Cooling Systems need to be consistent with the analyses, and thus would be needed in MODE 4. Another factor that was considered was that the CTS in CTS 3.4.2 and 3.4.3 require a shutdown to COLD SHUTDOWN not HOT SHUTDOWN if the inoperable system/component cannot be restored to OPERABLE status. The intent of the CTS from the staff's perspective is that the APPLICABILITY would be

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equivalent of ITS MODES 1, 2, 3, and 4. Finally, the actuation instrumentation for the Containment Cooling System - CHP - is applicable or required to be OPERABLE in MODES 1, 2, 3, and 4. There is no mention in the submittal of system interlocks, cutouts or other switches which would prevent the system from actuating/aligning in MODE 4 regardless of the shutdown cooling alignment (See Comment Number 3.6.6-6). **Comment:** Revise the CTS/ITS markup and provide the appropriate discussion and justification to show the APPLICABILITY as MODES 1, 2, 3, and 4.

Consumers Energy's Response:

3.6.6-6 DOC M.1
 DOC L.2
 JFD 8
 CTS 3.4.1
 ITS 3.6.6 ACTION B and Associated Bases

In light of the discussion in Comment Number 3.6.6-5, ITS 3.6.6 ACTION B needs to be modified. The issue discussed in JFD 8 with regards in the Shutdown Cooling System alignment in MODE 4 using the containment spray pumps needs to be resolved. One possibility is the adding of a note to the ITS APPLICABILITY which states "A containment spray pump flowpath may be considered OPERABLE to the SDC heat exchanger during alignment and operation for shutdown cooling, if capable of being manually realigned to the containment spray mode of operation." This note will allow ITS 3.6.6 to be applicable in MODE 4 and not interfere with shutdown cooling operations, provided the concern about interlocks in Comment Number 3.6.6-5 can be addressed. **Comment:** Revise the CTS markup, DOCs and JFDs, ITS markup and Bases as necessary to resolve this issue.

Consumers Energy's Response:

3.6.6-7 DOC M.4
 CTS 4.6.5.b
 ITS SR 3.6.6.2 and Associated Bases

CTS 4.6.5.b specifies that each fan and valve required to function during accident conditions will be exercised at intervals not to exceed three months. The corresponding ITS SR for the fans is ITS SR 3.6.6.2 which requires that the fan be operated for ≥ 15 minutes, every 31 days. As currently written, the CTS does not require the fan to operate for a specific period of time, thus, the addition of the " ≥ 15 minutes" is a More Restrictive change. The CTS does not show this change. **Comment:** Revise the CTS markup and provide the appropriate discussion and justification for this More Restrictive change.

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3.6.6-8 DOC M.6
 JFD 4
 JFD 14
 CTS 4.6.5.b
 STS SR 3.6.6.3 and Associated Bases
 ITS SR 3.6.6.4 and Associated Bases

ITS SR 3.6.6.4 requires that the total service water flow rate is > 3935.1 gpm, to Containment Air Coolers (CACs) VHX-1, VHX-2, and VHX-3 when aligned for accident conditions. The frequency for this SR is every 18 months. The justification used to justify the 18 months JFD-14 states that the flow rate can only be verified during shutdown conditions. This is insufficient justification for changing the corresponding STS SR 3.6.6.3 frequency from 31 days to 18 months. Based on the requirement in CTS 4.6.5.b to exercise/stroke each valve in the system every three months and the Bases statement in ITS B3.6.6 Bases - BACKGROUND "Containment Air Recirculation and Cooling" insert that the CACs are used during normal operation that is there is service water flow through the coolers, the staff cannot justify a frequency of 18 months for this SR. In addition, the wording of the Bases for STS SR 3.6.6.3 would allow any flow rate and system alignment to be used as long as it can be shown that it would be the equivalent to the design flow rate assumed in the accident analyses with the system in the accident alignment. Thus the requirement in ITS SR 3.6.6.4 to have the system aligned for accident conditions becomes unnecessary. See Comment Numbers 3.6.6-9 and 3.6.6-20. **Comment:** Provide additional discussion and justification to support the 18 month frequency and the accident alignment requirement for ITS SR 3.6.6.4 based on plant specific design, operational constraints or current licensing basis, or revise the ITS markup to reflect the STS or current licensing Basis (CTS 4.6.5.b). See 3.6.6-9 and 3.6.6-20.

Consumers Energy's Response:

3.6.6-9 DOC M.6
 ITS SR 3.6.6.4 and Associated Bases

ITS SR 3.6.6.4 verifies the service water flow rate to the safety related CACs. DOC M.6 states this fact in adding ITS SR 3.6.6.4. However, the third sentence in DOC M.6 states "This requirement to verify service water flow to the CACs is not included in the proposed ITS." This seems to be a contradiction. **Comment:** Correct this discrepancy.

Consumers Energy's Response:

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3.6.6-10 DOC M.8
 CTS 4.6.2.a
 CTS 4.17.3.1.a
 ITS SR 3.6.6.7

ITS SR 3.6.6.7 requires that each containment spray pump starts on an actual or simulated actuation signal every 18 months. DOC M.8 justifies the adding of this SR as a More Restrictive change since the verification (pump starting) is not contained in the CTS. This is incorrect. DOC M.8 states that the pumps are started as a result of the performance of CTS 4.17.3.1.a but is not explicitly verified to start based on that SR. The staff disagrees. The performance of CTS 4.17.3.1.a in and of itself may not explicitly require verification of pump start but it does require a pump start. However, CTS 4.6.2.a does require that verification, whether it is performed in conjunction with or independent of CTS 4.17.3.1.a, CTS 4.6.2.a requires that system operation be verified at each refueling outage by tripping the actuation instrumentation. Since the pump is part of the system, this CTS would verify pump start. Therefore, the staff considers this change to be an Administrative change rather than a More Restrictive change. **Comment:** Revise the CTS markup and provide additional discussion and justification for this Administrative change. Also, include the appropriate markup of CTS 4.17.3.1.a in the CTS markup of 3.6 to reflect this change.

Consumers Energy's Response:

3.6.6-11 DOC LA.2
 CTS 4.6.2.a
 CTS 4.6.2.c

CTS 4.6.2.a specifies for the Containment Spray System test that "The test shall be performed with the isolation valves in the spray lines at the containment blocked closed." CTS 4.6.2.c specifies for the Containment Spray System test that "The test will be considered satisfactory if visual observations indicate all components have operated satisfactorily." This information according to DOC LA.2 is being relocated to plant procedures. It is unclear from the discussion in DOC LA.2 if the procedure change control process is covered by 10 CFR 50.59 or some other non-regulatory control process. If the procedure change control process is not covered by 10 CFR 50.59 then the change is a Less Restrictive (L) change deletion of material rather than a Less Restrictive (LA) change. Less Restrictive (LA) changes are limited to those items which are relocated to licensee controlled documents covered by a 10 CFR 50.59 change control process. See Comment Number 3.6.6-12. **Comment:** Provide additional discussion and justification on the plant procedure change control process. See Comment Number 3.6.6-12.

Consumers Energy's Response:

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3.6.6-12 DOC LA.2
 CTS 4.6.2.a
 ITS SR 3.6.6.6

CTS 4.6.2.a specifies that for the Containment Spray System test "The test shall be performed with the isolation valves in the spray lines at the containment blocked closed." Insufficient information is provided to justify the relocation of this detail to plant procedures. CTS 4.6.2.a tests in part that the automatic containment spray valves actuate to their correct position on an actuation signal. The corresponding ITS SR is ITS SR 3.6.6.6. ITS SR 3.6.6.6 test all automatic valves except those locked, sealed or otherwise secured in the required position under Administrative control. Thus if the isolation valves at the containment are manual valves, then the relocation of the statement in CTS 4.6.2.a is acceptable. However, if the isolation valve is an automatic valve which actuates, then the statement cannot be relocated to procedures, but must be specified in the Bases. The ITS SR 3.6.6.6 exception for locked valves, which is not justified or indicated in the CTS markup, applies to those automatic valves that are normally locked in their correct position during operation and does not apply to valves that are locked for testing purposes. **Comment:** Revise the CTS markup to correctly reflect ITS SR 3.6.6.6 and provide the appropriate discussion and justification for the changes associated with ITS SR 3.6.6.6 discussed above. In addition, if the locked closed isolation valves are automatic valves describe how these valves will be tested to verify that they will actuate to their correct position on an actuation.

Consumers Energy's Response:

3.6.6-13 DOC LA.3
 CTS 4.6.3

CTS 4.6.3.a states for the Containment Spray Pump that "Alternate manual starting between control room console and the local breaker shall be practiced in the test program." CTS 4.6.3.b goes on to require that the pumps operate for a specific period of time (≥ 15 minutes). This information according to DOC LA.3 is being relocated to plant procedures. It is unclear from the discussion in DOC LA.3 if the procedure change control process is covered by 10 CFR 50.59 or some other non-regulatory control process. If the procedure change control process is not covered by 10 CFR 50.59, then the change is a Less Restrictive (L) change deletion of material rather than a Less Restrictive (LA) change. Less Restrictive (LA) changes are limited to those items which are relocated to licensee controlled documents covered by a 10 CFR 50.59 change control process. **Comment:** Provide additional discussion and justification on the plant procedure change control process.

Consumers Energy's Response:

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3.6.6-14 DOC L.1
 JFD 6
 CTS 3.4.2
 CTS 3.4.3
 CTS 3.4.4
 CTS 3.4.5
 STS 3.5.2
 ITS 3.6.6 ACTION A. and Associated Bases

CTS 3.4.2 and CTS 3.4.3 provide a 7-day allowed outage time for when one component is inoperable and a 24 hour allowed outage time when two components are inoperable. ITS 3.6.6 ACTION A permits one or more trains to be inoperable provided there is a least 100% cooling capacity equivalent to a single OPERABLE containment cooling train. This approach is based upon STS 3.5.2; however, acceptability of this potentially generic change will depend on demonstrating that the extra containment cooling capacity is available, (See Comment Number 3.6.6-3) and that the design of the Palisades Containment Spray and Cooling Systems are sufficiently different from the other PWR designs to warrant a unique set of ACTIONS. In addition, the following issues assume that an alternate train configuration can be established. It is tentatively acceptable to have a 72 hour Completion Time; rather than 7 days, for one train of containment cooling inoperable under ITS 3.6.6 ACTION A. However, DOC L.1 does not specifically address this change which appears to be a More-Restrictive change to CTS 3.4.2. The CTS 3.4.3 change from 24 hours to 72 hours is Less-Restrictive. Insufficient information is provided in DOC L.1 for these changes. In CTS 3.4.5, there are components associated with the Containment Cooling System train which only have an outage time limited to 24 hours. Should these certain containment train components be handled in a new Condition? Are there components which should have a longer Completion Time? For example - Can either pump 54b or 54c being solely inoperable in one train only be justified as allowable for 7 days? Are there trains or components which should have a shorter Completion Time? For example - Should a Containment Cooling System train cross-over valve be limited to a 24 hour period of inoperability? **Comment:** Provide additional discussions and justifications for the above Less Restrictive or More Restrictive changes that are separate from the overall grouping provided in DOC L.1. JFD 6 may need to be revised based on the responses to the above.

Consumers Energy's Response:

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3.6.6-15 DOC L.1
 JFD 6
 CTS 3.4.3
 CTS 3.4.4
 CTS 3.4.5
 CTS 3.4.6
 STS 3.5.2
 ITS 3.6.6 ACTION A and Associated Bases

CTS 3.4.2 and CTS 3.4.3 provide a 7-day allowed outage time for when one component is inoperable and a 24 hour allowed outage time when two components are inoperable. ITS 3.6.6 ACTION A permits one more trains to be inoperable provided there is at least 100% cooling capacity equivalent to a single OPERABLE containment cooling train. This approach is based upon STS 3.5.2; however, acceptability of this potentially generic change will depend on demonstrating that the extra containment cooling capacity available (See Comment Number 3.6.6-3) and that the design of the Palisades containment spray pump and cooling systems are sufficiently different from the other PWR designs to warrant a unique set of ACTIONS. In addition, the following issues assume that an alternate train configuration can be established. DOC L.1 and JFD 6 define only two configurations of trains of Containment Cooling Systems that have the capacity to mitigate the assumed accident based upon emergency power from diesel generator 1-1 and 1-2 divisions. The single failure or unavailability of either emergency power division leaves only the redundant train and there appears to be no extra capacity that can be utilized. The ITS 3.6.6 ACTION A phrase allowing "one or more trains to be inoperable" has not been justified. With one train inoperable due to no emergency power from diesel generator 1-1 division and the second train inoperable due to Pump 54A, there is no cooling capacity available which is a loss of function requiring a shutdown per CTS 3.0.3. Therefore, the ITS 3.6.6 ACTION A phrase addition (of "or more") should be removed or any explanation of how two trains can be inoperable and yet 100% cooling capacity is still available needs to be provided. **Comment:** Provide additional discussions and justifications for this less-restrictive change that is separate from the overall DOC L.1.

Consumers Energy's Response:

3.6.6-16 JFD 1
 JFD 12
 STS B3.6.6B Bases APPLICABLE SAFETY ANALYSES
 ITS B3.6.6 Bases APPLICABLE SAFETY ANALYSES

The second paragraph, fifth sentence in STS B3.6.6B Bases -APPLICABLE SAFETY ANALYSES states the following: "The analyses and evaluations assume... conditions of [120]°F and [14.7] psia." ITS B3.6.6 Bases - APPLICABLE SAFETY ANALYSES deletes this statement based on the justification (JFD 12) that it duplicates information in ITS 3.6.4 and ITS B3.6.5. This is unacceptable. The information provided by this statement provides useful information for the understanding of the intent of this specification, so that the operator/user does not have

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to go to other specifications to gain an understanding of the intent. Also, this change would be considered as a generic change which is a beyond scope of review item for this conversion.

Comment: Delete this generic change.

Consumers Energy's Response:

3.6.6-17 JFD 7
 ITS B3.5.4 Bases - ACTIONS
 ITS B3.6.6 Bases - SR 3.6.6.6 and SR 3.6.6.7

The proposed ITS B3.6.6 Bases SR 3.6.6.6 and SR 3.6.6.7 are acceptable; however, JFD 7 presents a question pertaining to Insert #1 (page B3.5-25) of ITS B3.5.4 Bases - ACTION. There appears to be "operational restrictions" placed upon the containment spray pumps when the valves are aligned to the recirculation mode of ECCS operation. These same "operational restrictions" are not found to be discussed in ITS B3.6.6 Bases which covers these pumps.

Comment: Provide further explanation and technical justification of what "operational restrictions" are necessary for this mode of operation in this alignment. Also, provide a discussion to ensure that all the valves involved will be verified by which? identified SR to be in their correct position as required by the collective surveillance requirements of Section 3.5 and Section 3.6.

Consumers Energy's Response:

3.6.6-18 JFD 15
 STS B3.6.6.B Bases - APPLICABLE SAFETY ANALYSES
 ITS B3.6.6 Bases - APPLICABLE SAFETY ANALYSES

The sixth paragraph of STS B3.6.6B Bases APPLICABLE SAFETY ANALYSES is deleted in its entirety in ITS B3.6.6 Bases - APPLICABLE SAFETY ANALYSES. The justification used for this deletion JFD 15 discusses the replacement of the General Design Criteria (GDC) in 10 CFR 50 with reference to plant specific design criteria. This paragraph has nothing to do with the GDC. **Comment:** Provide a discussion and justification for the deletion of this paragraph.

Consumers Energy's Response:

3.6.6-19 JFD 15
 STS B3.6.6B Bases - References
 ITS B3.6.6 Bases - References

In STS B3.6.6B Bases - REFERENCES, Reference 1 lists the 10 CFR 50 Appendix A, GDC applicable to the Containment Spray and Cooling Systems. ITS B3.6.6 Bases - REFERENCES, replaces the GDC with FSAR Section 5.1. This change has no JFD associated with it. The appropriate JFD should be JFD 15. **Comment:** Correct this discrepancy.

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3.6.6-20 CTS 4.6.5
 ITS 3.6.6 and Associated Bases
 ITS 3.7.8.2

CTS 4.6.5.a requires emergency mode automatic valve operation to be checked for OPERABILITY during each refueling shutdown. CTS 4.6.5.b requires the exercising of each Containment Air Cooling System/Service Water system valve at a frequency not to exceed three months. There is no justification for relocating these SRs to ITS 3.7.8, nor is there a ITS SR 3.7.8.2 or ITS 3.6.6 SR for exercising the valves every three months. See Comment Numbers 3.6.6-8 and 3.6.6-21. **Comment:** Revise the CTS markup and provide a discussion and justification for this change. See Comment Numbers 3.6.6-8 and 3.6.6-21.

Consumers Energy's Response:

3.6.6-21 CTS 4.6/5/a
 ITS SR 3.6.6.8

CTS 4.6.5.a requires emergency mode automatic valve and fan operation will be checked for OPERABILITY during each refueling shutdown. The corresponding SRs are ITS SR 3.6.6.8 for the fans and the appropriate SR in ITS 3.7.8 for the valves. ITS SR 3.6.6.8 requires verifying that the containment cooling fan starts on an actual or simulated actuation signal. The CTS markup does not indicate whether "emergency mode operation" is initiated by an actual or simulated actuation signal or just a simulated actuation signal. **Comment:** Revise the CTS markup and provide the appropriate discussion and justification for this change.

Consumers Energy's Response:

3.6.6-22 CTS 3.4.2
 CTS 3.4.3
 ITS 3.6.6 ACTION A and Associated Bases

CTS 3.4.2 and CTS 3.4.3 provide a 7-day allowed outage time for when one component is inoperable and a 24 hour allowed outage time when two components are inoperable. ITS 3.6.6 ACTION A permits one or more trains to be inoperable concurrently with one inoperable Component Cooling Water (CCW) train and one inoperable Service Water System (SSW) train. ITS 3.6.6, ITS 3.7.7 and ITS 3.7.8 now permit seven components from CTS 3.4.1.a to be **inoperable** or five components from CTS 3.4.1.b to be inoperable. There is no DOC provided which identifies and describes the Less Restrictive (L) change that permits the concurrent degraded condition of CCW and SWS with ITS 3.6.6. **Comment:** Provide a discussion and justification for this Less Restrictive (L) change.

Consumers Energy's Response:

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3.6.6-23 CTS 4.6.5.a
 ITS SR 3.6.6.8 and Associated Bases
 ITS SR 3.7.8.2 and Associated Bases

CTS 4.6.5.a checks the containment air cooler (CAC) emergency mode automatic valve and fan operation and function at refueling. ITS SR 3.6.6.8 verifies each "containment cooling" fan starts on an actual or simulated signal. The requirements of CTS 4.6.5.a are fulfilled by ITS SR 3.6.6.8 and ITS SR 3.7.8.2; however, wording changes should be made to ensure there is equivalency. In ITS SR 3.6.6.8, the actuation signal acts on the "containment air coolers trains or units" not just the "cooling fans". The action to be verified is the closing of the high-capacity discharge valve from the non-safety CAC VHX - 4; opening of the high-capacity discharge valves from the safety related CAC VHX-1, 2, and 3; and tripping the normal rated fan motor in each unit. This action is not recognized by the ITS SR 3.6.6.8 or stated in the Bases to ITS SR 3.6.6.8. See Comment Number 3.6.7-2. **Comment:** Revise the ITS markup and provide additional discussion and justification for this change. See Comment Numbers 3.6.6-24 and 3.6.7-2.

Consumers Energy's Response:

3.6.6-24 CTS 4.6.5.b
 ITS SR 3.6.6.2 and Associated Bases

CTS 4.6.5.b checks the containment air cooler (CAC) fan operation every three months. ITS SR 3.6.6.2 operates each containment air cooler fan unit for 15 minutes every 31 days. It is unclear from the wording of ITS SR 3.6.6.2 and its associated Bases as to whether both fans in each CAC unit is verified OPERABLE for a total of eight or just the safety related fans. The CTS wording implies that only the safety related fans are tested. See Comment Number 3.6.7-2. **Comment:** Revise the ITS markup and provide a discussion and justification for this change. See Comment Number 3.6.7-2.

Consumers Energy's Response:

3.6.7 Hydrogen Recombiners

3.6.7-1 DOC A.3
 DOC M.2
 DOC LA.1
 CTS 4.2 Table 4.2.2 Item 11b.1
 ITS SR 3.6.7.1 and 3.6.7.2

DOC A.3 states that the CTS wording in CTS 4.2 Table 4.2.2 Item 11.b.1 "discussing a channel calibration of all recombiner instrumentation and controls" is replaced by a system functional test as ITS SR 3.6.7.1, not ITS SR 3.6.7.2 which is the visual examination for abnormal conditions SR. This same discrepancy is also applicable to DOCs M.2 and LA.1. See

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Comment Numbers 3.6.7-2, 3.6.7-3 and 3.6.7-6. **Comment:** Correct this discrepancy. See Comment Numbers 3.6.7-2, 3.6.7-3 and 3.6.7-6.

Consumers Energy's Response:

3.6.7-2 DOC M.2
 CTS 4.2. Table 4.2.2 Item 11.b.1
 ITS SR 3.6.7.1 and Associated Bases

The OPERABILITY requirements for each hydrogen recombiner as stated in ITS B3.6.7 Bases - BACKGROUND requires at least one containment cooling post-DBA fan OPERABLE to perform the hydrogen mixing function. DOC M.2 describes the need for a new ITS SR 3.6.7.1 that verifies the OPERABILITY of only the post-DBA fan V-4A. The ITS markup does not show this SR. ITS SR 3.6.7.1 performs a system functional test (See Comment Number 3.6.7-1). There appears to be some confusion and concern for the reliability of the non-safety-related containment air cooler (CAC) VHX-4 that does not provide a post-DBA containment cooling function in ITS 3.6.6. The fan V-4A associated with CAC VHX-4 is taken credit for as providing a hydrogen mixing function in ITS 3.6.7; and in ITS 3.6.6, it is also credited for operating in conjunction with the two required containment spray pump trains associated with the diesel generator 1-1 to ensure the full capacity to mitigate the DBA. The presence of this DOC M.2 raises concern about which CACs are really verified in ITS SR 3.6.6.2, SR 3.6.6.4 and SR 3.6.6.8. There should be no need for the DOC M.2 new SR proposed because it should be redundant to the SR 3.6.6.2. 1 See Comment Numbers 3.6.6-1, 3.6.6-2, 3.6.6-3, 3.6.6-23, 3.6.6-24, 3.6.7-1, 3.6.7-3, 3.6.7-6 AND 3.6.7-7. **Comment:** Does ITS SR 3.6.6.2 verify the OPERABILITY of the normal rated fan and the post-DBA fan in each CAC unit every 31 days?: Provide a safety basis for how ITS 3.6.6 and ITS 3.6.7 can both rely upon the same non-safety-related CAC VHX-4 under the governing requirements provided in these proposed improved technical specifications. Provide additional discussion and justification on the need for this new SR. See Comment Numbers 3.6.6-1, 3.6.6-2, 3.6.6-3, 3.6.6-23, 3.6.6-24, 3.6.7-1, 3.6.7-3, 3.6.7-6 and 3.6.7-7.

Consumers Energy's Response:

3.6.7-3 DOC LA.1
 CTS 4.2 Table 4.2-2 Item 11.a
 ITS SR 3.6.7.1 and Associated Bases

CTS 4.2 Table 4.2-2 Item 11.a specifies the acceptance criteria for the hydrogen recombiner functional test. DOC LA.1 states that the acceptance criteria is not included in ITS SR 3.6.7.1, but will be contained in the Bases. Not all of this information has been relocated to the Bases. The Staff cannot find the information contained in the *Footnote associated with CTS 4.2 Table 4.2-2 Item 11.a in the ITS Bases for 3.6.7. See Comment Numbers 3.6.7-1 and 3.6.7-2. **Comment:** Revise the ITS markup of ITS B3.6.7 Bases - SR 3.6.7.1 to include the information

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in CTS 4.2 Table 4.2-2 Item 11.a - *Footnote or provide a discussion and justification for its deletion.

Consumers Energy's Response:

3.6.7-4 DOC LA.2
 CTS 4.2 Table 4.2-2 Item 11.b.3

CTS 4.2 Table 4.2-2 Item 11.b.3 specifies that the integrity check of the recombiner heater electrical circuits is to be performed "immediately following the above functional test." This information according to DOC LA.2 is being relocated to plant procedures. It is unclear from the discussion in DOC LA.2 if the procedure change control process is covered by 10 CFR 50.59 or some other non-regulatory control process. If the procedure change control process is not covered by 10 CFR 50.59 then the change is a Less Restrictive (L) change deletion of material rather than a Less Restrictive (LA) change. Less Restrictive (LA) changes are limited to those items which are relocated to licensee controlled documents covered by a 10 CFR 50.59 change control process. **Comment:** Provide additional discussion and justification on the plant procedure change control process.

Consumers Energy's Response:

3.6.7-5 DOC LA.4
 CTS 4.2 Table 4.2-2 Item 11.b.2

CTS 4.2 Table 4.2-2 Item 11.b.2 provides examples of hydrogen recombiner abnormal conditions which are identified by visual examination. This information according to DOC LA.4 is being relocated to plant procedures. It is unclear from the discussion in DOC LA.4 if the procedure change control process is covered by 10 CFR 50.59 or some other non-regulatory control process. If the procedure change control process is not covered by 10 CFR 50.59 then the change is a Less Restrictive (L) change deletion of material rather than a Less Restrictive (LA) change. Less Restrictive (LA) changes are limited to those items which are relocated to licensee controlled documents covered by a 10 CFR 50.59 change control process. **Comment:** Provide additional discussion and justification on the plant procedure change control process.

Consumers Energy's Response:

3.6.7-6 DOC L.2
 JFD 10
 CTS 4.2 Table 4.2-2 Item 11.a
 ITS SRs 3.6.7.1, 3.6.7.2, 3.6.7.3, 3.6.7.4, 3.6.8.1 and Associated Bases

CTS 4.2 Table 4.2-2 Item 11.a specifies a hydrogen recombiner functional test be performed at least one per 6 months. DOC L.2 states that this SR is ITS SR 3.6.8.1. The CTS markup shows this SR as ITS SR 3.6.7.2 while the ITS markup shows this SR as ITS SR 3.6.7.1. In

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addition, the CTS and ITS markups and the DOCs do not correlate with regards to the SR numbers. See Comment Numbers 3.6.7.1 and 3.6.7.2. **Comment:** Correct these discrepancies. See Comment Numbers 3.6.7-1 and 3.6.7-2.

Consumers Energy's Response:

3.6.7-7 JFD 9
 ITS B3.6.7 Bases - LCO

ITS B3.6.7 Bases - LCO states the following: "In addition, one safety related containment cooling fan in each train must be in operation to ensure adequate mixing of the containment atmosphere in a post-DBA environment." JFD 9 states that the fan must be OPERABLE, while the sentence in the ITS implies that the fan must be in operation, i.e., running, at all times (normal and accident conditions). This would also conflict with the requirements of ITS 3.6.6. **Comment:** Revise the ITS markup to clearly indicate what is required to be OPERABLE and what is required to be in OPERATION during normal and accident conditions.

Consumers Energy's Response:

3.6.7-8 CTS 3.6.4
 ITS LCO 3.6.7 and Associated Bases

CTS 3.6.4 states that "Two independent containment hydrogen recombiners shall be OPERABLE..." ITS LCO 3.6.7 states that "Two hydrogen recombiners shall be OPERABLE." The word "independent" has been relocated in converting from the CTS to the ITS to ITS B3.6.7 Bases - BACKGROUND. No justification is provided for this Less Restrictive (LA) change. **Comment:** Revise the CTS markup and provide a discussion and justification for this Less Restrictive (LA) change.

Consumers Energy's Response:

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3.7.1 Main Steam Safety Valves (MSSVs)

No comments

3.7.2 Main Steam Isolation Valves (MSIVs)

3.7.2-1 CTS 3.5.1
 ITS 3.7.2 Applicability and Bases
 JFD #2

Comment: (Contractor comment 3.7.2-5) The ITS Bases discussion of Applicability has been modified to state "Mode 1, 2, and in Modes 2 and 3 except when both MSIVs are closed and deactivated." This is different from the ITS LCO 3.7.2 Applicability without specific explanation provided.

Consumers Energy's Response:

3.7.2-2 CTS 3.5.1.f
 ITS 3.7.2
 JFD #6

Comment: (Contractor comment 3.7.2-6) The last sentence of the first and fourth paragraphs of the ITS Bases discussion on Applicable Safety Analyses, have not been adopted. The STS text which provides the explanation of the credit taken for the MSIVs should not be removed until all plant specific analyses that are applicable have been included. The discussion identified in JFD #6 should be expanded and included here in the ITS Bases.

Consumers Energy's Response:

3.7.3 Main Feedwater Isolation Valves (MSIVs) [and [MFIV] bypass valves]

3.7.3-1 CTS 4.2, Table 4.2.2, Item 15
 ITS 3.7.3, Applicability, Required Action A.1, and Bases Background
 JFD #1, #4, and #10

Comment: (Contractor comment 3.7.3-1, issue #1) The Bases Background presents the MFRV and MFRV Bypass Valves configuration as a design which is clearly different from the standard design assumed in the STS. The fact that the MFRVs are non-safety and not in safety grade locations should be discussed in the ITS Bases.

Consumers Energy's Response:

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3.7.3-2 CTS 4.2, Table 4.2.2, Item 15
 ITS 3.7.3, Applicability, Required Action A.1, and Bases Background
 JFD #1, #4, and #10

Comment: (Contractor comment 3.7.3-1, issue #2) The STS is based upon redundant isolation valves in the flow path, in addition to the main feedwater regulating, control or bypass valves on a closed system to containment (three valves in the flow path). The Bases needs additional discussion of the fact that manual valves typically are relied on to isolate the flow paths and that for main feedwater the valves providing containment isolation are check valves.

Consumers Energy's Response:

3.7.3-3 CTS 4.2, Table 4.2.2, Item 15
 ITS 3.7.3, Applicability, Required Action A.1, and Bases Background
 JFD #1, #4, and #10

Comment: (Contractor comment 3.7.3-1, issue #3) The ITS Applicability is modified to isolate the feedwater line with a "manually actuated valve" which is different from the STS text of "a closed manual valve." The valve difference is not explained and no reason given why this new wording is required. Provide this explanation.

Consumers Energy's Response:

3.7.3-4 CTS 4.2, Table 4.2.2, Item 15
 ITS SR 3.7.3.1 and Bases
 DOC M.2 and JFD #1

Comment: (Contractor comment 3.7.3-3) ITS SR 3.7.3.1 appears to be acceptable; however, the specific basis for the closure time of 22 seconds should be stated in the SR Bases.

Consumers Energy's Response:

3.7.3-5 ITS Bases Page 3.7.3-2

Comment: The Applicable Safety Analysis states "Closure of the MFRVs and ... may also be relied on" (emphasis added). Are they or not? That statement does not appear consistent with the LCO discussion which only addresses MSLB.

Consumers Energy's Response:

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3.7.3-6 ITS Bases Page 3.7.3-3

Comment: The MFRVs could clearly be closed in less than 8 hrs. The reason 8 hours is the allotted time is to get the plant to the point where conditions support closing the valves. The STS Bases language that was not adopted explained that. That language or something similar would appear to be appropriate.

Consumers Energy's Response:

3.7.4 Atmospheric Dump Valves (ADVs)

3.7.4-1 ITS Bases Page 3.7.4-1

Comment: The Background (as well as the FSAR) state that N2 is not required for operability of the ADVs. What is the technical basis for those statements?

Consumers Energy's Response:

3.7.4-2 ITS Bases Pages 3.7.4.1&2
JFD #8

Comment: The justification in the JFD for not having a surveillance for the block valve is that no credit is taken for the manual isolation valve in the safety analysis. Following a SGTR, if one ADV is being used to cool the plant and the ADV on the other generator spuriously opens, can the total release be tolerated (assuming the block valve cannot be used to isolate the spuriously open valve)?

Consumers Energy's Response:

3.7.5 Auxiliary Feedwater (AFW) System

3.7.5-1 CTS 3.5.3
ITS 3.7.5 Required Action C.2
DOC L.2 and JFD #1

Comment: (Contractor comment 3.7.5-3, issue #2) The CTS markup indicates that DOC L.2 adds Condition C when CTS 3.5.3 already contains the required Actions C.1 and C.2, as shown on the CTS markup. This apparent contradiction and the CTS markup should be revised to delete the "Adds Condition C".

Consumers Energy's Response:

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3.7.5-2 CTS 3.5.4
 ITS 3.7.5 Condition D
 DOC A.8

Comment: (Contractor comment 3.7.5-8) DOC A.8 provides an explanation that "...or flow paths..." are added which does not match the ITS Condition D markup. This apparent inconsistency should be eliminated or further explained in a revised DOC or CTS/ITS markup, as required.

Consumers Energy's Response:

3.7.5-3 CTS 3.5.4
 ITS 3.7.5 Condition D, Note to Required Action D.1
 JFD #12

Comment: (Contractor comment 3.7.5-10) JFD #12 appears to be acceptable; however, this change should be submitted as a generic STS traveler for approval by the Owners Group and the NRC

Consumers Energy's Response:

3.7.5-4 ITS LCO 3.7.5

Comment: The way the CTS is constructed, only one AFW pump could be inoperable at a time meaning that Pump C, which has slightly less performance capability, would never be operable by itself. However, now with the switch to an AFW "train" approach, it is possible that Pump C could be operable by itself which appears to constitute a less restrictive change.

Consumers Energy's Response:

3.7.6 Condensate Storage Tank (CST)

3.7.6-1 ITS Bases 3.7.6
 ITS LCO 3.7.6

Comment: The backup water supplies that are required to be verified in the LCO should be discussed in the Bases. FSAR section 9.7.4, #4 states that the primary water storage tank is a backup, when it is in fact required in the TS.

Consumers Energy's Response:

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3.7.7 Component Cooling Water (CCW) System

3.7.7-1 CTS 3.4.2 and 3.4.3
 ITS 3.7.7 Required Action B.2
 DOC M.4

Comment: (Contractor comment 3.7.7-3, issue #2) The markup of CTS 3.3.2 appears incorrect because it shows a total of 60 hours (6+30+24) to place the plant in Cold Shutdown rather than the ITS (and STS) of 36 hours. Explain this difference. Revise the CTS markup.

Consumers Energy's Response:

3.7.7-2 ITS 3.7.7 Bases

Comment: It should be in the TS, or at least in the Bases, that the two CCW heat exchangers are both required to be operable to have an operable train of CCW.

Consumers Energy's Response:

3.7.7-3 ITS 3.7.7 Bases

Comment: With the failure of either valve CV-0945 or 46, one CCW heat exchanger would be inoperable and there would be no operable CCW train as both heat exchangers are required for an operable train. If that is true, how can the Bases make the statement that the system can sustain an active single failure?

Consumers Energy's Response:

3.7.8 Service Water System (SWS)

No Comments

3.7.9 Ultimate Heat Sink (UHS)

No Comments

3.7.10 Essential Chilled Water (ECW)

No Comments

3.7.11 Control Room Emergency Air Cleanup System (CREACS)

No Comments

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3.7.12 Control Room Emergency Air Temperature Control system (CREATCS)

3.7.12-1 CTS 3.8.1 and 3.8.4
ITS 3.7.12 LCO Statement and related Bases
No DOC and JFD #4, #5, and #8

Comment: (Contractor comment 3.7.12-1, issue #2) ITS 3.7.12 Bases Background, Insert #2, explains that after the fuel accident occurs, then the operator "aligns the fuel handling building exhaust through the emergency filtration arrangement." This appears to be in contradiction with the LCO statement which does not permit any fuel movement until the system is already exhausting through the emergency filtration arrangement. Correct this apparent error or explain the reason for this statement. Also, explain the operator function to "secure" a component. Is this to lock in place, open or close these components?

Consumers Energy's Response:

3.7.12-2 CTS 3.8.4
ITS 3.7.12 Applicability
DOC L.1 and JFD #9

Comment: (Contractor comment 3.7.12-2) The addition of the Action Note is acceptable because the licensee has stated that the Fuel Handling Area Ventilation System does not filter any fission product removal associated with ECCS leakage following an accident. In Modes 1, 2, 3, and 4, the System is independent of reactor operation and is not required to be Operable (that is reflected in the deletion of the Bracketed modes of the ITS markup for Applicability). DOC L.1 justifies the new actions Note based upon how the operator cannot "cease fuel movement" and the need to enter LCO 3.0.3. This appears to be a violation of TS requirements and appears to contradict DOC LA.2. The DOC for this CTS change should be revised. The contents of JFD #9 should be placed in the Bases Applicability discussion, to clearly explain how the Operability of the Fuel Handling Area Ventilation is independent of reactor operations.

Consumers Energy's Response:

3.7.12-3 CTS 4.2 Table 4.2.3, Item 2.c
ITS SR 3.7.12.1
DOC LA.1

Comment: (Contractor comment 3.7.12-3) DOC LA.1 states these SR details are moved to the Bases; when in fact, these details are not retained in the ITS SR 3.7.12 Bases. Revise the CTS/ITS markup as applicable to comply with the technical justification as provided in this DOC.

Consumers Energy's Response:

3.7.12-4 No CTS requirement
STS SR 3.7.14.3 and Bases
No JFD

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Comment: (Contractor comment 3.7.12-5) It is acknowledged that this is not an automatically initiated system; however, the NEI 96-06 guidelines require that all deviations from the STS be justified with a JFD. There is no JFD provided for this STS requirement that is not retained.

Consumers Energy's Response:

3.7.12-5 ITS LCO 3.7.12

Comment: Where does the 90 days of the Applicability come from?

Consumers Energy's Response:

3.7.13 ECCS Pump Room Exhaust Air Cleanup System (PREACS)

3.7.13-1 New LCO from CTS Table 3.17.3, Item 4
 ITS 3.7.13 LCO Statement and related Bases
 DOC M.1; JFD #4 and #6

Comment: (Contractor comment 3.7.13-1, issue #2) The ITS markup of the Bases is missing inserts #1, #2, #3, and #4, as identified on page B 3.7-65. Provide the missing documents.

Consumers Energy's Response:

3.7.13-2 New LCO from CTS Table 3.17.3, Item 4
 ITS 3.7.13 Actions Note
 DOC M.1 and JFD #2

Comment: (Contractor comment 3.7.13-2) No specific technical justification is provided to explain the rationale for developing this LCO as "Separate Condition entry" rather than as a two train system as the STS is developed. "Separate Condition entry" is normally used in the STS for individual inoperable components rather than trains. Also, "Separate Condition entry" is used where the number of inoperabilities are more than two. Therefore, this does not appear to be an appropriate usage of the "Separate Condition entry." The resolution will also depend upon the configuration and contents of each ESRV train noted above in Comment #3.7.13-1.

Consumers Energy's Response:

3.7.14 Fuel Building Air Cleanup System (FBACS)

3.7.14-1 ITS 3.7.14

Comment: Level is greater than or equal to 674 ft relative to what? (above MSL)?

Consumers Energy's Response:

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3.7.15 Penetration Room Exhaust Air Cleanup System (PREACS)

No comments

3.7.16 Fuel Storage Pool Water Level

3.7.16-1 New LCO from CTS 5.4.2.c, d, and i; and Table 5.4-1
 ITS 3.7.16 LCO statement, SR 3.7.16.1, and Bases
 JFD #4

Comment: (Contractor comment 3.7.16-1) JFD #4 contains no specific technical justification for not retaining the requirements that spent fuel storage is in accordance with Specification 4.3.1.1. The Bases discussion of LCO and SR 3.7.16.1 state these requirements are met which is in contradiction with the ITS LCO proposed. Provide explanation and technical justification that resolves this apparent inconsistency.

Consumers Energy's Response:

3.7.16-2 CTS 5.4.2.c and d Bases for ITS 3.7.16
 No DOC

Comment: (Contractor comment 3.7.16-5) The movement of these CTS requirements to a location under licensee control must be justified with a DOC as required by NEI 96-06. Provide the necessary technical justification in a "LA" DOC and revise the CTS markup as required.

Consumers Energy's Response:

3.7.16-3 ITS 3.7.16 Applicability

Comment: The Applicability would be much clearer if it was written as Region II, of either the SFP or the north tilt pit. The present version could be read as Region II of the SFP or anywhere in the north tilt pit.

Consumers Energy's Response:

3.7.17 Fuel Storage Pool Boron Concentration

3.7.17-1 CTS 4.2, Table 4.2.1, Item #7
 ITS SR 3.7.17.1
 DOC L.1

Comment: (Contractor comment 3.7.17-3) The removal of this CTS requirement appears acceptable; however, the DOC L.1 explains this CTS change but does not provide a specific technical justification for why this CTS requirement can be deleted. Provide this missing justification in a revision to the DOC.

Consumers Energy's Response: