May 22, 1998

Mr. Gregory M. Rueger, Senior Vice President
and General Manager
Pacific Gas and Electric Company
Nuclear Power Generation N9B
P.O. Box 770000
San Francisco, California 94177

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON THE PROPOSED CONVERSION TO THE IMPROVED STANDARD TECHNICAL SPECIFICATIONS FOR DIABLO CANYON POWER PLANT, UNIT NOS. 1 AND 2 (TAC NOS. M98984 AND M98985) See Reports

Dear Mr. Rueger:

The Nuclear Regulatory Commission staff is reviewing Pacific Gas & Electric Company's proposed license amendment to convert the current technical specifications for the Diablo Canyon Power Plant, Unit Nos. 1 and 2, to the Improved Standard Technical Specifications. Pacific Gas & Electric Company provided their proposed license amendment request by letter dated June 2, 1997.

The staff has reviewed selected portions of the application. Based on its review, the staff has determined that additional information is needed in Section 3.6, Containment, as discussed in the enclosure. Since you worked with three other utilities in preparing your submittal, the enclosure contains the request for additional information (RAI) questions for all four utilities. However, you need only reply to the RAI questions associated with Diablo Canyon Power Plant, Unit Nos. 1 and 2, as identified in the table within the enclosure.

To assist the staff in maintaining its review schedule, please respond to the questions pertaining to Diablo Canyon Power Plant, Unit Nos. 1 and 2 within 30 days of the date of this letter. If you have any questions regarding the RAI, please contact me at (301) 415-1313. If all four utilities would like to have a common discussion, a single meeting, or phone call, it can be coordinated by contacting the NRR Lead Project Manager, Timothy J. Polich at (301) 415-1038.

Sincerely,
Original Signed By
Steven D. Bloom, Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-275
and 50-323

Enclosure: Request for Additional Information

cc w/encl: See next page

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FOUR LOOP GROUP (FLOG) IMPROVED TS REVIEW COMMENTS
SECTION 3.6 CONTAINMENT

3.6 General

3.6.0-1 CTS 3/4.6.x

In converting CTS 3/4.6 to the ITS, numerous reformatting, renumbering, and editorial rewording changes were made. In addition certain wording preferences and/or English language conventions were adopted, which resulted in the ITS being more readily readable and therefore understandable by the plant operators and users. These changes did not result in any technical changes, but are considered to be Administrative changes. No discussion or justification was provided for these Administrative changes.

Comment: Provide the appropriate discussion and justification for these Administrative changes.

FLOG response:

3.6.0-2 CTS 3/4.6.x
ITS 3.6.x and Associated Bases

Changes to the CTS and ITS markups are indicated by highlighting or striking out text. Modifications and additions are mainly highlighted and in some cases indicated by handwritten text. Deletions are indicated by striking the text out. During the course of the review of Section 3.6 numerous changes, modifications and additions have been found particularly in the ITS Bases which are not highlighted. In addition, a number of deletions were made in the ITS in which the text completely disappeared (it was not struck out). These deletions were found only because the ITS was being checked against another document (TSTF, STS or other FLOG ITS), and they usually occurred at the end of a paragraph, or subsection.

Comment: Review the CTS and ITS markups to verify that the text accurately reflects the CTS and STS and that <u>all</u> changes, modifications, additions and deletions are properly indicated. Update the submittal to reflect results of this review.

FLOG response:

3.6.1 Containment

3.6.1.-1 DOC 1-04 A (CTS 1.0)
DOC 1-01 LG
CTS 1.7 (1.8 for Diablo Canyon)
CTS 3/4.6.1.1
ITS B3.6.1. Bases - BACKGROUND

CTS 1.7 (8.8 in Diablo Canyon) defines CONTAINMENT INTEGRITY. A markup of CTS 1.7/1.8 is provided in the CTS markup of CTS 1.0, but not in the markup of

CTS 3.6. DOC 1-04A (CTS 1.0) states that the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. DOC 1-01 LG in CTS 3.6 states that the definition requirements have been relocated to the Bases for ITS 3.6.1. Both of these justifications are incorrect. DOC 1-04A (CTS 1.0) is incorrect in that the definition is not deleted but relocated to various Bases in ITS 3.6, which is a Less Restrictive (LG) change. In addition, the individual statements within the definition (CTS 1.7a/1.8a, 1.7.c/1.8c, 1.7.d/e/1.8d, and 1.7f) are used as the basis for various ITS SRs and Bases statements in ITS 3.6.1, 3.6.2 and 3.6.3 which are Administrative and Less Restrictive (LG) changes. DOC 1-01 LG does not relocate the definition from the CTS to the ITS Bases, but changes CTS 3/4.6.1.1 from maintaining CONTAINMENT INTEGRITY to the containment shall be OPERABLE. This is an Administrative change. (See Comment Numbers 3.6.1-2, 3.6.1-3, 3.6.1-4, 3.6.2-1, 3.6.2-2, 3.6.3-1 and 3.6.3-2).

Comment: Revise the CTS markup of CTS 1.7/1.8 and CTS 3/4.6.1.1 to reflect the above discussion. Provide additional discussions and justifications for relocating the details of the definition to ITS B3.6.1. Bases-BACKGROUND and to ITS 3.6.2 and 3.6.3. See Comment Numbers 3.6.1-2, 3.6.1-3, 3.6.1-4, 3.6.2-1, 3.6.2-2, 3.6.3-1 and 3.6.3-2.

FLOG response:

3.6.1-2 DOC 1-04 A (CTS 1.0)
DOC 1-01 LG
CTS 1.7.b (1.8.b for Diablo Canyon)
CTS 3/4.6.1.1
ITS B3.6.1. Bases - BACKGROUND

CTS 1.7 (1.8 in Diablo Canyon) defines CONTAINMENT INTEGRITY. A markup of CTS 1.7/1.8 is provided in the CTS markup of CTS 1.0. DOC 1-04 A (CTS 1.0) states that the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. DOC 1-01 LG in CTS 3.6 states that the definition requirements have been relocated to the Bases for ITS 3.6.1. Both of these justifications are incorrect. CTS 1.7.b/1.8.b states that "All equipment hatches are closed and sealed." ITS B3.6.1 Bases - BACKGROUND states the following: "To maintain this leak tight barrier: c. All equipment hatches are closed; and..." The requirement for sealing the equipment hatches has been deleted. No justification is provided for this Less Restrictive change.

Comment: Provide a discussion and justification for this Less Restrictive change.

FLOG response:

3.6.1-3 DOC 1-04 A (CTS 1.0)
DOC 1-01 LG
CTS 1.7.d/e (1.8.e for Diablo Canyon)
CTS 3/4.6.1.1
ITS SR 3.6.1.1 and Associated Bases

CTS 1.7 (1.8 in Diablo Canyon) defines CONTAINMENT INTEGRITY. A markup of CTS 1.7/1.8 is provided in the CTS markup of CTS 1.0. DOC 1-04 A (CTS 1.0) states that the definitions of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. DOC 1-01 LG in CTS 3.6 states that the definition requirements have been relocated to the Bases for ITS 3.6.1. Both of these justifications are incorrect. CTS 1.7.d (1.7.e in Callaway and 1.8.e in Diablo Canyon) specifies that the leakage rates are in accordance with CTS 3.6.1.x. This requirement has not been relocated to the Bases, but is the basis for ITS SR 3.6.1.1. No justification is provided for this Administrative change. See Comment Number 3.6.2-2.

Comment: Provide a discussion and justification for this Administrative change. See Comment Number 3.6.2-2.

FLOG response:

3.6.1-4 DOC 1-04 A (CTS 1.0)
DOC 1-01 LG
CTS 1.7.f
CTS 3/4.6.1.1
ITS SR 3.6.1.2 and Associated Bases

CTS 1.7 defines CONTAINMENT INTEGRITY. A markup of CTS 1.7 is provided in the CTS markup of 1.0. DOC 1-04 A (CTS 1.0) states that the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. DOC 1-01 LG in CTS 3.6. states that the definition requirements have been relocated to the Bases for ITS 3.6.1. Both of these justifications are incorrect. CTS 1.7.f specifies that the "structural integrity is assured via the program described in Specification 6.8.5.c." This requirement has not been relocated to the Bases, but is the basis for ITS SR 3.6.1.2. No justification is provided for this Administrative change.

Comment: Provide a discussion and justification for this Administrative change.

FLOG response:

3.6.1-5 DOC 2-02 A
CTS 3.0.3
CTS 3.6.1.1 ACTIONS
CTS 3.6.1.2 ACTIONS
ITS 3.6.1 ACTIONS

CTS 3.6.1.2 ACTIONS restrict reactor coolant heat up beyond 200°F if the containment leakage rates are outside established limits. The CTS markup of CTS 3.6.1.2 changes this requirement to restore leakage rates "Prior to the first unit startup following testing performed in accordance with the Containment Leakage Rate Testing Program." This change is characterized as an Administrative change since it is a restatement of CTS 4.0.4/ITS 3.0.4. This change is only partially correct. As currently written and as proposed in the CTS markup, no remedial actions are provided if the reactor coolant temperature is >200°F (MODE 4) and the containment leakage rates are outside established limits. In this case, CTS 3.0.3 or CTS 3.6.1.1 ACTIONS are to be entered since they are equivalent. Because ITS 3.6.1 ACTIONS are the same as both CTS 3.6.1.1 ACTIONS and CTS 3.0.3, the replacement of these CTS ACTION requirements by the ACTIONS of ITS 3.6.1 is an Administrative change which has not been addressed.

Comment: Revise the submittal to address this change in presentation of CTS ACTION requirements and provide a discussion and justification for this Administrative change.

FLOG response:

3.6.1-6 DOC 2-05 LG
DOC 2-06 A
JFD 3.6-1
CTS 4.6.1.1.c (Wolf Creek)
CTS 4.6.1.1.d (Callaway)
CTS 3/4.6.1.2 (Diablo Canyon and Comanche Peak)
STS SR 3.6.1.1
ITS SR 3.6.1.1 and Associated Bases

CTS 4.6.1.1.c/d and 3/4.6.1.2 require leak rate testing in accordance with the Containment Leakage Rate Testing Program which is based on the requirements of 10 CFR 50 Appendix J, Option B. STS SR 3.6.1.1 requires the visual examination and leakage rate testing be performed in accordance with 10 CFR 50 Appendix J as modified by approved exemptions. ITS SR 3.6.1.1 modifies STS SR 3.6.1.1 to conform to CTS 4.6.1.1.c/d and 3/4.6.1.2 as modified in the CTS markup. The STS is based on Appendix J, Option A while the CTS and ITS are based on Appendix J, Option B. Changes to the STS with regards to Option A versus Option B are covered by a letter from Mr. Christopher I. Grimes to Mr. David J. Modeen, NEI, dated 11/2/95 and TSTF-52. While the ITS SR 3.6.1.1 differences from STS SR 3.6.1.1 are in conformance with

the letter and TSTF 52 as modified by staff comments, the changes to the ITS Bases as well as ITS 3.6.2 and ITS 3.6.3 and their associated Bases are not in conformance. See Comment Number 3.6.3-28 for additional concerns with regards to CTS 4.6.1.2.c and 4.6.1.2.d at Comanche Peak. Also see Comment Numbers 3.6.0-2, 3.6.2-5, 3.6.3-27, 3.6.3.28 and 3.6.3-37.

Comment: Licensees should revise their submittals to conform to the 11/2/95 letter and TSTF-52 as modified by the staff. See Comment Numbers 3.6.0-2, 3.6.2-5, 3.6.3-27, 3.6.3.28, and 3.6.3-37.

FLOG response:

3.6.1-7 STS B3.6.1 Bases - LCO
ITS B3.6.1 Bases - LCO

The second paragraph of STS B3.6.1 Bases - LCO has been deleted in its entirety in ITS B3.6.1 Bases - LCO for Callaway. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion of this paragraph does not seem to fall into any of these categories. The staff believes that these statements provide useful descriptive information necessary for the understanding of the purpose of this LCO and to define containment OPERABILITY.

Comment: Retain the deleted STS paragraph or provide a discussion justifying its deletion.

FLOG response:

3.6.1-8 ITS B3.6.1 Bases - LCO

The third paragraph of ITS B3.6.1-LCO for Diablo Canyon adds a reference to the Hydrogen Purge valves. See Comment Number 3.6.8-1 for staff concerns with regards to the acceptability of the Hydrogen Purge System. Retention of this reference to the Hydrogen Purge valves will depend on resolution of Comment Number 3.6.8-1.

Comment: See Comment Number 3.6.8-1.

FLOG response:

3.6.1-9 STS B3.6.1 Bases - SR 3.6.1.1
ITS B3.6.1 Bases - SR 3.6.1.1

The second sentence in STS B3.6.1 Bases - SR 3.6.1.1 states the following: "Failure to meet air lock and purge valve with resilient seal leakage limits specified in LCO 3.6.2 and LCO 3.6.3 does not invalidate..." ITS B3.6.1 Bases - SR 3.6.1.1 deletes the STS words "specified in LCO 3.6.2 and LCO 3.6.3." Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion of these words does not seem to fall into any of these categories. The staff believes that the deleted words refer the user to the appropriate LCO in which the airlock and purge valve leakage tests are located.

Comment: Retain the STS words.

FLOG response:

3.6.1-10 STS B3.6.1 Bases - SR 3.6.1.2
ITS B3.6.1 Bases - SR 3.6.1.2

See Comment Number 3.6.0-2.

Comment: See Comment Number 3.6.0-2.

FLOG response:

3.6.2 Containment Air Locks

3.6.2-1 DOC 1-04 A (CTS 1.0)
DOC 1-01 LG
DOC 1-05 A
CTS 1.7.c (1.8.c for Diablo Canyon)
CTS 3/4.6.1.1
CTS 4.6.1.1.b
ITS SR 3.6.2.1, SR 3.6.2.2 and Associated Bases

CTS 1.7 (1.8 in Diablo Canyon) defines CONTAINMENT INTEGRITY. A markup of CTS 1.7/1.8 is provided in the CTS markup of CTS 1.0. DOC 1-04 A (CTS 1.0) states that the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. DOC 1-01 LG in CTS 3.6 states that the definition requirements have been relocated to the Bases for ITS 3.6.1. Both of these justifications are incorrect. CTS 1.7.c (1.8.c in Diablo Canyon) specifies that the air locks shall be in compliance with the requirements of

specification 3.6.1.3. This requirement has been relocated to the Bases of ITS 3.6.1, but it is also the Bases for ITS SR 3.6.2.1 and SR 3.6.2.2. No justification is provided for this Administrative change in CTS 1.0. A similar change made to CTS 4.6.1.1.b is designated DOC 1-05A which is acceptable.

Comment: Provide a discussion and justification for this Administration change similar to DOC 1-05 A.

FLOG response:

3.6.2-2

DOC 1-04 A (CTS 1.0)
DOC 1-01 LG
DOC 1-05 A
DOC 2-03 A
CTS 1.7.d
CTS 3/4.6.1.1
CTS 4.6.1.1.b
CTS 4.6.1.2.a
ITS SR 3.6.2.1 and Associated Bases

CTS 1.7 defines CONTAINMENT INTEGRITY. A markup of CTS 1.7 is provided in the CTS markup of CTS 1.0. DOC 1-04 A (CTS 1.0) states that the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. DOC 1-01 LG in CTS 3.6 states that the definition requirements have been relocated to the Bases for ITS 3.6.1. Both of these justifications are incorrect. CTS 1.7.d specifies that the leak rates are in accordance with CTS 3.6.1.2. This requirement for the air locks has not been relocated to the Bases, but is the basis for ITS SR 3.6.2.1. No justification is provided for this Administrative change in CTS 1.0. A similar change made to CTS 4.6.1.1.b and 4.6.1.2.a are designated DOC 1-05 A and 2-03 A respectively and are acceptable.

Comment: Provide a discussion and justification for this Administrative change similar to DOC 1-05 A or 2-03 A.

FLOG response:

3.6.2-3

DOC 2-02 A
CTS 3.0.3
CTS 3.6.1.1 ACTIONS
CTS 3.6.1.2 ACTIONS
ITS 3.6.2 ACTIONS

See Comment Number 3.6.1.5.

Comment: See Comment Number 3.6.1-5.

FLOG response:

3.6.2-4 DOC 3-02 A
CTS 3.6.1.3 ACTIONS
ITS 3.6.2 ACTIONS Note 2

A Note is added to CTS 3.6.1.3 ACTIONS to permit separate Condition entry for each airlock. The justification DOC 3-02 A states that the change is an Administrative change that is consistent with NUREG-1431. Consistency with the NUREG is not a basis for acceptability of a change. The change must be justified on its own merits based on its applicability to the unit.

Comment: Provide additional discussion and justification for this Administrative change.

FLOG response:

3.6.2-5 JFD 3.6-1
CTS 4.6.1.1.c (Wolf Creek)
CTS 4.6.1.1.d (Callaway)
CTS 3/4.6.1.2 (Diablo Canyon and Comanche Peak)
CTS 4.6.1.3.a
STS SR 3.6.2.1
ITS SR 3.6.2.1 and Associated Bases

See Comment Number 3.6.1-6.

Comment: See Comment Number 3.6.1-6.

FLOG response:

3.6.2-6 JFD 3.6-2
STS SR 3.6.2.2
ITS SR 3.6.2.2 and Associated Bases

STS SR 3.6.2.2 requires verifying only one door in the airlock will open at a time at six month intervals. The interval is modified in ITS SR 3.6.2.2 from 6 months to 24 months. This modification is in accordance with TSTF-17; however, the Bases changes are not in accordance with TSTF-17.

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

FLOG response:

3.6.2-7 CTS 3.6.1.3 ACTIONS
ITS 3.6.2 Condition A-RA Note 1
ITS 3.6.2 Condition B-RA Note 1
and Associated Bases

The Required Actions (RA) for ITS 3.6.2 Condition A and Condition B have a Note 1 which states: "Required Actions X.1, X.2 and X.3 are not applicable if both doors in the same air lock are inoperable and Condition C is entered." CTS 3.6.1.3 ACTIONS do not contain such a Note, nor does the CTS markup of CTS 3.6.1.3 show the addition of this Note. This change would be an Administrative change for Condition A and a More Restrictive change for Condition B.

Comment: Revise the CTS markup to show this Note, and provide a discussion and justification for the addition of this Note to the RA of Condition A and Condition B.

FLOG response:

3.6.2-8 CTS 4.6.1.3
ITS SR 3.6.2.1 Note 1 and 2 and Associated Bases

ITS SR 3.6.2.1 has two Notes associated with it. Note 1 states that an inoperable air lock door does not invalidate the previous successful performance of the overall air lock leakage test. Note 2 requires the results of the leakage test be evaluated against the acceptance criteria of ITS SR 3.6.1.1. CTS 4.6.1.3 does not contain such Notes nor does the CTS markup of CTS 4.6.1.3 show the addition of these Notes. Based on the use of the CTS the addition of these Notes is considered as an Administrative change.

Comment: Revise the CTS markup to show these Notes and provide a discussion and justification for these Administrative changes.

FLOG response:

3.6.2.-9 STS B3.6.2 Bases BACKGROUND
ITS B3.6.2 Bases - BACKGROUND

The second paragraph in STS B3.6.2 Bases - BACKGROUND states the following: "During periods when containment is not required to be OPERABLE, the door interlock mechanism may be disabled, allowing both doors of an air lock to remain open for extended periods of time when frequent containment entry is necessary." ITS B3.6.2 Bases - BACKGROUND modifies this sentence by deleting the words "when frequent containment entry is necessary." Since ITS changes to the STS Bases were made

based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion of these words does not seem to fall into any of these categories. The Staff believes that the deletion changes the meaning of the statement when one considers the requirements of ITS 3.9.

Comment: Retain the STS wording.

FLOG response:

3.6.2-10 STS B3.6.2 Bases - BACKGROUND
ITS B3.6.2 Bases - BACKGROUND

The last sentence in the second paragraph in STS B3.6.2 Bases - BACKGROUND states the following: "To effect a leak tight seal,...sealing force on each door." ITS B3.6.2 Bases-BACKGROUND deletes this sentence from Callaway and CPSES, yet it is retained in DCPP and WCGS. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design or on current licensing basis as specified in the CTS, the deletion of this sentence does not seem to fall into any of these categories particularly since Callaway and WCGS are sister plants.

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

FLOG response:

3.6.2-11 ITS B3.6.2 Bases LCO

ITS B3.6.2 Bases - LCO for WCGS adds the following sentence: "However, an inoperable interlock mechanism does not render an air lock door inoperable." Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, this addition does not seem to fall into any of these categories. The staff believes that this change may be generic and thus is a beyond scope of review item for this conversion.

Comment: Delete this change.

FLOG response:

3.6.2-12 STS B3.6.2 Bases - ACTIONS
ITS B3.6.2 Bases - ACTIONS

ITS B3.6.2 Bases - ACTIONS in DCPP modifies the descriptive information on Note 3 in STS B3.6.2 Bases - ACTIONS. The following words have been added to the first

sentence: "Limiting for the air lock then the leakage must be evaluated for its effect on the..." Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design or on current licensing basis as specified in the CTS, this addition does not seem to fall into any of these categories. The additional wording does not seem to clarify the sentence and it basically repeats what is already being stated in the first part of the sentence.

Comment: Delete this change.

FLOG response:

3.6.2-13 ITS B3.6.2 Bases - RA A.1, A.2 and A.3

ITS B3.6.2 Bases - RA A.1, A.2 and A.3 for CPSES adds a paragraph that describes the reason for the Note associated with RA A.3. This addition is unnecessary and repetitive since the reason for the Note is provided in the third paragraph of this section.

Comment: Delete this change.

FLOG response:

3.6.2-14 ITS B3.6.2 Bases - RA C.1, C.2 and C.3

ITS B3.6.2 Bases - RA C.1; C.2, and C.3 for DCPP adds a sentence to the first paragraph which states: "The air lock operability...under LCO 3.6.1." The addition of this sentence does not seem warranted based on the fact that this information is not relevant here and that it is specified in ITS 5.5.16.

Comment: Provide a discussion and justification for this addition.

FLOG response:

3.6.3 Containment Isolation Valves

3.6.3-1 DOC 1-04 A (CTS 1.0)
DOC 1-01 LG
CTS 1.7.a (1.8.a for Diablo Canyon)
CTS 3/4.6.1.1
CTS 4.6.1.1.b
ITS SR 3.6.3.1, SR 3.6.3.2, SR 3.6.3.3, SR 3.6.3.4, SR 3.6.3.8 and Associated Bases

CTS 1.7 (1.8 in Diablo Canyon) defines CONTAINMENT INTEGRITY. A markup of CTS 1.7/1.8 is provided in the CTS markup of CTS 1.0. DOC 1-04 A (CTS 1.0) states that

the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. DOC 1-01 LG in CTS 3.6 states that the definition requirements have been relocated to the Bases for ITS 3.6.1. Both of these justifications are incorrect. CTS 1.7.a (1.8.a in Diablo Canyon) specifies that all penetrations required to be closed during accident conditions are either capable of being closed by an OPERABLE containment automatic isolation valve system or closed by manual valves, blind flanges or deactivated automatic valves secured in their closed positions. This requirement has been relocated to the Bases of ITS 3.6.1, but it is also the basis for ITS SR 3.6.3.1, SR 3.6.3.2, SR 3.6.3.3, SR 3.6.3.4 and SR 3.6.3.8. No justification is provided for this Administrative change in CTS 1.0.

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

FLOG response:

3.6.3-2

DOC 1-04 A (CTS 1.0)
DOC 1-01 LG
DOC 2-04 A
DOC 2-05 LG
CTS 1.7.d
CTS 3/4.6.1.1
CTS 4.6.1.2.a
CTS 4.6.1.2.b
CTS 4.6.1.2.c
ITS SR 3.6.3.7 and Associated Bases

CTS 1.7 defines CONTAINMENT INTEGRITY. A markup of CTS 1.7 is provided in the CTS markup of CTS 1.0. DOC 1-04 A (CTS 1.0) states that the definition of CONTAINMENT INTEGRITY is deleted from the CTS/ITS. DOC 1-01 LG in CTS 3.6 states that the definition requirements have been relocated to the Bases for ITS 3.6.1. Both of these justifications are incorrect. CTS 1.7.d specifies that the leak rates are in accordance with CTS 3.6.1.2. This requirement for purge valves with resilient material seals and the hydrostatic tests for the Safety Injection and Containment Spray Valves (See Comment Number 3.6.3-30) have not been relocated to the Bases but is the basis for ITS SR 3.6.3.7 and the new ITS SR required by Comment Number 3.6.3-30. No justification is provided for these Administrative changes in CTS 1.0. A similar change made to CTS 4.6.1.2.b is designated DOC 2-04 A and is acceptable.

Comment: Revise the CTS markup and provide a discussion and justification for these Administrative changes.

FLOG response:

3.6.3-3 DOC 2-02 A
CTS 3.0.3
CTS 3.6.1.1 ACTIONS
CTS 3.6.1.2 ACTIONS
ITS 3.6.1 ACTIONS

See Comment Number 3.6.1-5.

Comment: See Comment Number 3.6.1-5.

FLOG response:

3.6.3-4 DOC 7-03 A
CTS 4.6.1.7.1
ITS SR 3.6.3.1 and Associated Bases

CTS 4.6.1.7.1 requires the purge valves to be verified locked closed or blank flanged at least once per 31 days. The CTS has been modified to provide an allowance for one purge valve in the flow path to be open to repair excessive leakage while in the ITS Action for an inoperable purge valve due to excessive leakage. This change designated DOC 7-03 A is characterized as an Administrative change. This is incorrect. The CTS does not currently have this allowance and the change cannot be characterized as Administrative because of consistency with another Less Restrictive change. The change is a Less Restrictive change. See Comment Number 3.6.3-5.

Comment: Provide a discussion and justification for this Less Restrictive change.

FLOG response:

3.6.3-5 DOC 7-03 A
CTS 4.6.1.7.1
CTS 4.6.1.7.2
STS SR 3.6.3.1 and Associated Bases

DCPP CTS 4.6.1.7.1 verifies that the containment purge supply and exhaust valves and vacuum/pressure relief isolation valves are closed at least once per 31 days. The CTS has been modified to provide an allowance for one valve in the flow path to be open to repair excessive leakage while in ITS ACTION D. This change is designated DOC 7-03 A. The proposed change is associated with STS SR 3.6.3.1 which deals with sealed closed purge valves. The DCPP ITS markup shows that STS SR 3.6.3.1 is not used. In addition, the CTS already allows the subject valves to be opened per CTS 4.6.1.7.2. Therefore, DOC 7-03 A is not applicable to DCPP.

Comment: Revise the CTS markup to delete DOC 7-03 A.

FLOG response:

3.6.3-6 DOC 11-02 A
CTS 3.6.1.7 ACTIONS
CTS 3.6.3 ACTIONS
ITS 3.6.3 ACTIONS Note 2

A Note is added to CTS 3.6.1.7 and CTS 3.6.3 ACTIONS to permit separate Condition entry for each penetration flow path. The justification DOC 11-02 A states that the change is an Administrative change that is consistent with NUREG-1431. Consistency with the NUREG is not a basis for acceptability of a change. The change must be justified on its own merits based on its applicability to the unit. In addition, this change in CTS markup for Callaway is labeled in "Insert C for page 3/4 6-11" as 11-02 LS; it should be 11-02A.

Comment: Provide additional discussion and justification for this Administrative change, and correct the discrepancy in the CTS markup for Callaway.

FLOG response:

3.6.3-7 DOC 11-03 A
CTS 3.6.1.7 ACTIONS
CTS 3.6.3 ACTIONS
ITS 3.6.3 ACTIONS Note 3

A Note is added to CTS 3.6.1.7 and CTS 3.6.3 ACTIONS to entail Applicable Conditions and Required Actions for systems made inoperable by containment isolation valves. The justification DOC 11-03 A just states that the Note is added without providing any additional justification as to why it can be added.

Comment: Provide additional discussion and justification for this Administrative change.

FLOG response:

3.6.3-8 DOC 11-09 A
JFD 3.6-7
CTS 4.6.3.3
ITS SR 3.6.3.5 and Associated Bases

CTS 4.6.3.3 verifies that the isolation time of each power-operated or automatic valve including check valves is within limits. The CTS is modified to be consistent with TSTF-46 Rev 1 by deleting the reference to "each power operated" valve, and to limit the

required verification to each automatic isolation valve, including check valves. Even though TSTF-46 Rev 1 has been implemented properly in ITS SR 3.6.3.5 (See Comment Number 3.6.3-9), the changes made to CTS 4.6.3.3 are not in conformance with TSTF-46 and the justifications DOC 11-09 A and JFD 3.6-7 discuss the actual changes made to CTS 4.6.3.3 and not the TSTF-46 change. The actual change described above and in DOC 11-09 A would require isolation time testing of all automatic isolation valves including check valves. TSTF-46 limits isolation time testing to only automatic power operated isolation valves which excludes check valves. Thus the change is a combination of Administrative (deletion of power-operated valves) and Less Restrictive (deletion of check valves).

Comment: Revise the CTS markup of CTS 4.6.3.3 to be consistent with the changes associated with TSTF-46. Provide additional discussion and justification for these Administrative and Less Restrictive changes.

FLOG response:

3.6.3-9 DOC 11-09 A
JFD 3.6-7
CTS 4.6.3.3
STS SR 3.6.3.5 and Associated Bases
ITS SR 3.6.3.5 and Associated Bases

CTS 4.6.3.3 requires the isolation time of each power operated or automatic containment isolation valve be determined to be within limits. STS SR 3.6.3.5 states basically the same thing but the "or" is changed to "and". STS SR 3.6.3.5 has been modified by TSTF-46 Rev 1 which clarifies that the SR only applies to automatic power operated valves. ITS SR 3.6.3.5 and the Associated Bases have been modified to reflect TSTF-46 Rev 1 as justified by DOC 11-09 A and JFD 3.6-7. The changes made to DCPP ITS SR 3.6.3.5 are in accordance with TSTF-46 Rev 1, however, the Associated Bases changes are not in accordance with TSTF-46 Rev 1.

Comment: Revise the ITS Base markup to conform to the approved TSTF-46 Rev 1 or provide additional discussion and justification for the deviations.

FLOG response:

3.6.3-10 DOC 11-11 A
JFD 3.6-3
CTS 3.6.3
STS LCO 3.6.3
ITS LCO 3.6.3 Note and Associated Bases

ITS LCO 3.6.3 contains a Note not contained in CTS 3.6.3 or STS LCO 3.6.3. This Note

states that ITS LCO 3.6.3 is not applicable to the Main Steam Safety Valves (MSSVs), Main Steam Isolation Valves (MSIVs) Main Feedwater Isolation Valves (MFIVs), Main Feedwater Regulation Valves (MFRVs), their associated bypass valves, and Atmospheric Steam Dump, Relief or Dump Valves. The justifications for adding this Note (DOC 11-11 A and JFD 3.6-3) state that it is consistent with current licensing basis, the valves are not considered containment isolation valves, and that they have separate ITS LCOs that provide appropriate required actions in the event these valves are inoperable. Nothing in the CTS states or implies that these valves are exempt from this LCO. Furthermore, the staff considers these valves to be containment isolation valves. In addition, the proposed change was submitted to the staff as a generic change to the STS (TSTF-44) and was rejected. The staff considers this change to be a generic change that is beyond the scope of review for this conversion. See Comment Number 3.6.3-24.

Comment: Delete this generic change.

FLOG response:

3.6.3-11

DOC 11-14 A
DOC 1-06 LS-19
DOC 11-07 LG
JFD 3.6-11
JFD 3.6-12
CTS 3.6.1.7 ACTIONS
CTS 3.6.3 ACTIONS
CTS 4.6.3.3
ITS 3.6.3 RA A.2 Note 2, RA C.2 Note 2, RA D.2 Note 2, SR 3.6.3.5 and Associated Bases

CTS 3.6.1.7 ACTIONS, CTS 3.6.3 ACTIONS, ITS 3.6.3 RA A.2, ITS 3.6.3 RA C.2 and ITS 3.6.3 RA D.2 have been modified by a Note that states the following: "Isolation devices that are locked, sealed or otherwise secured may be verified by administrative means". CTS 4.6.3.3 and ITS SR 3.6.3.5 have been modified by the phrase "that is not locked, sealed or otherwise secured in position" to clarify which valves require isolation time testing. These changes are characterized in JFD 3.6-11 and JFD 3.6-12 as a generic change designated WOG-91. The staff has not received this change through the STS generic change process (TSTF) and therefore considers this change to be beyond the scope of review for this conversion. See Comment Number 3.6.3-12.

Comment: Delete this generic change. See Comment Number 3.6.3-12.

FLOG response:

3.6.3-12 DOC 11-14 A
DOC 11-07 LG
CTS 4.6.3.3

DCPP CTS 4.6.3.3 has been modified by the phrase "that is not locked, sealed or otherwise secured in position" to clarify which valves require isolation time testing. The change seems to be labeled DOC 11-07 LG. DOC 11-07 LG has nothing to do with this particular change. The change should be labeled DOC 11-14 A.

Comment: Correct this discrepancy. See Comment Number 3.6.3-11.

FLOG response:

3.6.3-13 DOC 7-08 M
DOC 7-04 R
CTS 4.6.1.7.3
ITS SR 3.6.3.2 and Associated Bases

CTS 4.6.1.7.3 verifies at least once per 7 days the cumulative time that all 18 inch containment mini purge isolation valves have been open during the calendar year. This surveillance not only verifies how long the valves have been open but also verifies that these valves are closed. The corresponding ITS SR would be ITS SR 3.6.3.2. The CTS markup adds this ITS SR using DOC 7-08 M, and characterizes the change as a More Restrictive change. The staff believes that the change is a Less Restrictive change. The SR is already part of the CTS; the only change is going from a frequency of 7 days to a frequency of 31 days which is a Less Restrictive change. See Comment Number 3.6.3-15.

Comment: Revise the CTS markup to reflect this Less Restrictive change and provide the appropriate discussions and justifications. See Comment Number 3.6.3-15.

FLOG response:

3.6.3-14 DOC 7-08 M
CTS 1.7.a
CTS 3.6.1.7.b
CTS 3.6.1.7 ACTION b
CTS 4.6.1.7.3
STS SR 3.6.3.2 and Associated Bases

CPSES CTS 3.6.1.7.b requires the 18 inch containment pressure relief discharge isolation valves be OPERABLE. The CTS does not have a surveillance other than a leakage test (CTS 4.6.1.7.3) that verifies OPERABILITY of these valves. However, the wording of CTS 3.6.1.7 ACTION b and CTS 4.6.1.7.3 implies that these valves are

normally closed, but can be opened during operation for specific reasons. Thus, OPERABILITY would verify that the valves are closed. STS SR 3.6.3.2 is not used in the CPSES ITS. Based on CTS 1.7.a, CTS 3.6.1.7.b, CTS 3.6.1.7 ACTION b, and CTS 4.6.1.7.3, the Staff believes that STS SR 3.6.3.2 is applicable to CPSES ITS and that DOC 7-08 M should apply.

Comment: Revise the CTS/ITS markup to include STS SR 3.6.3.2 and associated Bases. Provide the appropriate discussion and justification for this More Restrictive change.

FLOG response:

3.6.13-15 DOC 7-04 R
CTS 3.6.1.7 (DCPP)
CTS 3.6.1.7.b (Callaway and WCGS)
CTS 3.6.1.7 ACTIONs (DCPP)
CTS 3.6.1.7 ACTION b (Callaway and WCGS)
CTS 4.6.1.7.2 (DCPP)
CTS 4.6.1.7.3 (Callaway and WCGS)

CTS 3.6.1.7, CTS 3.6.1.7 ACTIONS and CTS 4.6.1.7.2 for DCPP and CTS 3.6.1.7.b, CTS 3.6.1.7 ACTION b, and CTS 4.6.1.7.3 for Callaway and WCGS specify the cumulative time purge valves, vacuum/pressure relief valves and mini-purge valves may be opened per calendar year. The CTS markup shows these items as being relocated and justifies the relocation in DOC 7-04 R. The "R" designation is for technical specifications which do not meet the criteria of 10 CFR 50.36(c)(2)(ii) which applies to entire specifications, not individual LCO, ACTIONS or SRs. Based on Enclosure 3B "Conversion Comparison Table - Current TS 3/4.6," the change for Callaway and WCGS would be a Less Restrictive - Generic (LG) change since the information is relocated to the Safety Analyses Report; for DCPP the change would be either Less Restrictive - Generic (LG) or Less Restrictive - Specific (LS) depending on whether the "ECG" is controlled by 10 CFR 50.59 or not controlled by 10 CFR 50.59 respectively. The DCPP document "ECG" is not defined in the submittal. In addition, no justification is provided as to why this information can be relocated.

Comment: Revise the CTS markup to show this change as a Less Restrictive change and provide additional discussions and justification for this Less Restrictive change. The justification should include the reasons the individual items can be relocated. For DCPP describe the document "ECG" and the document change control process.

FLOG response:

3.6.3-16 DOC 7-04 R
CTS 3.6.1.7 ACTIONS
ITS 3.6.3 ACTIONS A and B

DCPP CTS 3.6.1.7 ACTIONS requires that with a containment purge supply and/or exhaust isolation valve open or with the vacuum pressure relief isolation valves open beyond 50°, the open isolation valve(s) be closed or the penetration be isolated within 1 hour. The CTS markup shows that the conditions for valves open have been relocated and the ACTION modified to conform to ITS ACTION B (two valves in a penetration inoperable). This is incorrect. The correct change is that the above two conditions are retained as ITS 3.6.3 ACTION A and the allowed outage time is increased from 1 hour to 4 hours. This is a Less Restrictive change. ITS 3.6.3 ACTION B is a new condition, which is considered as an Administrative change. The CTS does not have a provision for two valves in the same penetration inoperable, thus, CTS 3.0.3 is entered.

Comment: Revise the CTS markup to reflect the actual changes made and provide the appropriate discussions and justifications.

FLOG response:

3.6.3-17 DOC 7-06 LS-11
DOC 11-13 LS-22
JFD 3.6-18
JFD 3.6-19
CTS 4.6.1.7.2
CTS 4.6.1.7.3
CTS 4.6.1.7.4
CTS 4.6.3.4
ITS SR 3.6.3.6, SR 3.6.3.7 and Associated Bases

CTS 4.6.1.7.2, 4.6.1.7.3, 4.6.1.7.4 and 4.6.3.4 require a leak rate test for the various types of containment purge valves with resilient seals at various specified frequencies. In converting to the ITS these frequencies have been modified. In some cases, the frequency change is a Less Restrictive change (i.e., 24 hours to 92 days), while in others the change is More Restrictive (i.e., 24 months to 184 days), or Administrative (92 days to 92 days of opening valve). Considering the whole change, the staff cannot conclude that the preponderance of the changes would result in the change being classified as Less Restrictive as specified in DOCs 7-06 LS-11 and 11-13 LS-22, rather than More Restrictive or Administrative. The converse is also true. In order to more accurately reflect the changes made, each individual CTS should be reevaluated with regard to the changes and marked accordingly (Administrative, Less Restrictive or More Restrictive). See Comment Numbers 3.6.3-17, 3.6.3-18, 3.6.3-19, 3.6.3-20 and 3.6.3-21 for additional specific concerns with regards to this change.

Comment: Revise the CTS as specified and provide the appropriate discussions and justifications for the Administrative, Less Restrictive and More Restrictive changes. See Comment Numbers 3.6.3-18, 3.6.3-19, 3.6.3-20, 3.6.3-21 and 3.6.3-22.

FLOG response:

3.6.3-18 DOC 11-13 LS-22
CTS 4.6.3.4
ITS SR 3.6.3.7 and Associated Bases

DCPP CTS 4.6.3.4 leak rate tests the containment ventilation isolation valves within 24 hours after each closing of the valve except when the valve is being used for multiple cycling then the frequency is at least once per 72 hours. DCPP ITS SR 3.6.3.7 changes the CTS frequencies to 184 days and within 92 days after opening the valve. DOC 11-13 LS-22 states that the leakage rate tests go from 30 months to 184 days (a More Restrictive change) and 24 hours to 92 days (a Less Restrictive change). DOC 11-13 LS-22 does not address the change or deletion of the 72 hour frequency. The CTS does not specify a frequency of 30 months.

Comment: Revise the CTS markup accordingly and provide additional discussion and justification on where the 30 month frequency is located in the CTS and on the change/deletion of the 72 hour frequency.

FLOG response:

3.6.3-19 DOC 7-06 LS-11
CTS 4.6.1.7.2
ITS SR 3.6.3.7 and Associated Bases

CPSES CTS 4.6.1.7.2 requires a leak rate test on the 48 inch and 12 inch containment and hydrogen purge valves at least once per 184 days on a STAGGERED TEST BASIS. CPSES ITS SR 3.6.3.7 changes the CTS frequency to 184 days and within 92 days after opening the valve. The deletion of the STAGGERED TEST BASIS requirement is considered an Administrative change (the frequency per valve does not change) while the addition of the 92 day frequency is a More Restrictive change.

Comment: Revise the CTS markup accordingly and provide additional discussion and justification for these changes.

FLOG response:

3.6.3-20 DOC 7-06 LS-11
CTS 4.6.1.7.3
ITS SR 3.6.3.7 and Associated Bases

CPSES CTS 4.6.1.7.3 requires a leak rate test on the 18 inch containment pressure relief discharge isolation valves at least once per 92 days. CPSES ITS SR 3.6.3.7 changes the CTS frequency to 184 days and within 92 days after opening the valve. The increasing of the frequency from 92 days to 184 days is a Less Restrictive change. However, the addition of "within 92 days after opening the valve" is an Administrative change since the CTS testing requirement frequency does not change.

Comment: Revise the CTS markup accordingly and provide additional discussion and justification for these changes.

FLOG response:

3.6.3-21 DOC 7-06 LS-11
JFD 3.6-18
CTS 4.6.1.7.2
ITS SR 3.6.3.6 and Associated Bases

CTS 4.6.1.7.2 for Callaway and WCGS requires a leak rate test on the 36 inch containment shutdown purge valves and its associated blank flange at least once per 24 months and following each reinstallation of the blank flange. ITS SR 3.6.3.6 retains the CTS frequency for when the blank flange is installed, but adds the following frequencies for when the blank flange is removed: 184 days and within 92 days after opening the valve. The addition of 184 day/92 day frequencies is a More Restrictive change. The CTS characterizes this change as Less Restrictive, and the CTS markup for WCGS does not show the change. See Comment Number 3.6.3-23 for additional concerns in this area.

Comment: Revise the CTS markup accordingly and provide additional discussion and justification for this More Restrictive change. See Comment Number 3.6.3-23.

FLOG response:

3.6.3-22 DOC 7-06 LS-11
CTS 4.6.1.7.2
CTS 4.6.1.7.4

CTS 4.6.1.7.2 and CTS 4.6.1.7.4 for Callaway and WCGS require leak rate tests on various containment purge valves at specified intervals. DOC 7-06 LS-11 states that one of the changes made is that "testing on a STAGGERED TEST BASIS is no longer

required." The CTS does not require staggered testing of the valves. Thus this statement is not applicable in this case.

Comment: Revise DOC 7-06 LS-11 to delete this statement for Callaway and WCGS.

FLOG response:

3.6.3-23 DOC 7-10 LS-9
JFD 3.6-13
CTS 4.6.1.7.2
CTS 4.6.1.7.3
CTS 4.6.1.7.4
CTS 4.6.3.4
STS SR 3.6.3.7 and Associated Bases
ITS SR 3.6.3.7 and Associated Bases

A Note has been added to CTS 4.6.1.7.2, 4.6.1.7.3, 4.6.1.7.4, 4.6.3.4 and STS SR 3.6.3.7 to clarify that leakage rate testing is not required for containment purge valves with resilient seals when the penetration flow path is isolated by a leak tested blank flange. The staff position is that the valve would still need to be leak tested since the 10 CFR 50 Appendix J requires both isolation devices in the containment penetration to be tested except for GDC 57 penetrations. In addition, because the CTS does not currently contain this exception, the staff considers this change to be a beyond scope of review item for this conversion, as well as a generic change to the STS.

Comment: Delete this generic change.

FLOG response:

3.6.3-24 DOC 7-11 LS-25
CTS 4.6.1.7.1
ITS SR 3.6.3.1 and Associated Bases

CTS 4.6.1.7.1 verifies that the containment shutdown purge isolation valves are blank flanged and closed. CTS 4.6.1.7.1 is modified by DOC 7-11 LS 25 to verify that either the valve is closed or blank flanged. The proposed change is unacceptable to the staff based on the reasons stated in Comment Number 3.6.3-23 above. The staff considers this change to be a beyond scope of review item for this conversion. See Comment Number 3.6.3-25.

Comment: Delete this change.

FLOG response:

3.6.3-25 DOC 7-11 LS-25
JFD 3.6-18
CTS 4.6.1.7.2
ITS SR 3.6.3.6 and Associated Bases

CTS 4.6.1.7.2 for Callaway and WCGS requires a leak rate test on the 36 inch containment shutdown purge valves and its associated blank flange at least once per 24 months and following each reinstallation of the blank flange. CTS 4.6.1.7.2 is modified by DOC 7-11 LS-25 to require testing of either the valve if no blank flange is installed or just the blank flange if the flange is installed. The frequencies for the leakage test as stated in ITS SR 3.6.3.6 are for the installed blank flange- 24 months and following each reinstallation of the blank flange; for the 36 inch purge valve without the blank flange installed - 184 days and within 92 days after opening the valve. No leakage testing of the valve is required if a blank flange is installed. The proposed change is unacceptable to the staff based on the reasons stated in Comment Number 3.6.3-23 above. The staff considers this change to be a beyond scope of review item for this conversion.

Comment: Revise the CTS/ITS markup accordingly and provide any additional discussions and justifications as necessary.

FLOG response:

3.6.3-26 DOC 11-05 LS-14
JFD 3.6-4
JFD 3.6-22
JFD 3.6-23
STS 3.6.3 Condition A and B Note
STS 3.6.3 Action C

The CTS markup for CPSES and DCPP adds a new condition to cover the case where one containment isolation valve is inoperable in a penetration flow path of the type configured with only one containment isolation valve and a closed system (GDC 57). This new condition is STS 3.6.3 ACTION C. The CTS/ITS markup for Callaway and WCGS does not add this new condition but deletes it based on the justification that these plants do not have GDC 57 valves. In addition, the Note associated with STS 3.6.3 Condition A and B is deleted for the same reason. Based on the rejection of the change described in Comment Number 3.6.3-10, the staff position is that the valves listed in that change are 10 CFR 50 Appendix A GDC 57 type valves and STS 3.6.3 Action C and the Note to STS 3.6.3 Conditions A and B are applicable.

Comment: Revise the CTS/ITS markup to add STS 3.6.3 ACTION C and the Note to STS 3.6.3 Conditions A and B, and provide the appropriate discussions and justifications.

FLOG response:

3.6.3-27 DOC 11-08 TR-1
CTS 4.6.3.2
ITS SR 3.6.3.8 and Associated Bases.

CTS 4.6.3.2 requires that each automatic containment isolation valve actuates to its isolation position on a specified test signal. In converting the CTS requirements to ITS SR 3.6.3.8 the CTS is modified to allow credit to be taken for an actual as well as a simulated (test) signal. DOC 11-08 TR-1 does not provide sufficient information to justify allowing the use of an actual signal.

Comment: Provide additional discussion and justification to allow the use of an actual signal to meet this surveillance requirement.

FLOG response:

3.6.3-28 DOC 1-01 LG
CTS 3.6.1.1 ACTIONS
CTS 4.6.1.1.a
ITS 3.6.3 ACTIONS
ITS SR 3.6.3.3, SR 3.6.3.4 and Associated Bases

CTS 4.6.1.1.a verifies that all penetrations not capable of being closed by OPERABLE automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions. The corresponding ITS SRs for this CTS surveillance are ITS SR 3.6.3.3 for valves outside containment and ITS SR 3.6.3.4 for valves inside containment. IF CTS 4.6.1.1.a cannot be met, the ACTIONS of CTS 3.6.1.1 are entered which require restoration of valve OPERABILITY within 1 hour or shutdown within the following 36 hours. If ITS SR 3.6.3.3 or ITS SR 3.6.3.4 cannot be met, the ACTIONS of ITS 3.6.3 are entered which allows for one valve inoperable between 4 hours and 72 hours depending on the type of penetration to restore valve OPERABILITY before shutdown commences. This Less Restrictive change to the CTS is not justified.

Comment: Revise the CTS markup to show this Less Restrictive change and provide the appropriate discussions and justifications.

FLOG response:

3.6.3-29 DOC 2-05 LG
JFD 3.6-1
CTS 4.6.1.2c and 4.6.1.2.d (CPSES)
CTS 4.6.1.7.2
CTS 4.6.1.7.3
CTS 4.6.1.7.4
CTS 4.6.3.4
ITS SR 3.6.3.6, SR 3.6.3.7 and Associated Bases.

See Comment Number 3.6.1-6.

Comment: See Comment Number 3.6.1-6.

FLOG response:

3.6.3-30 DOC 2-05 LG
JFD 3.6-1
CTS 4.6.1.2.c
CTS 4.6.1.2.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 B3.6.1 Bases - SR 3.6.1.1

CPSES CTS 4.6.1.2.c requires a leak test with gas at not less than P_a or a hydrostatic test at not less than $1.1P_a$ for certain Safety Injection valves. CPSES CTS 4.6.1.2.d requires a hydrostatic test at not less than $1.1P_a$ for certain containment spray valves. Amendment 51 for Unit 1 and Amendment 37 for Unit 2 converts the CTS from 10 CFR 50 Appendix J Option A to 10 CFR 50 Appendix J Option B. CTS 4.6.1.2.c and 4.6.1.2.d were retained during that conversion. The CTS markup shows these surveillances as being relocated to the Containment Leakage Rate Testing Program and the Bases for ITS SR 3.6.1.1. DOC 2-05 LG justifies the relocation based on the level of detail in the TS not being consistent with NUREG-1431. Consistency with NUREG-1431 is not an acceptable justification for relocating material from the CTS to a licensee controlled document. In the development of NUREG-1431 a specific SR with regards to hydrostatically testing containment isolation valves for leakage was not included because the WOG stated that most units did not have any valves that were hydrostatically tested. This was not the case for the BWRs (NUREGs 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. In addition, the SE associated with Amendments 51 and 31 states that the changes are in accordance with the 11/2/95 staff letter. Thus, the Staff requires that CTS 4.6.1.2.c and 4.6.1.2.d be retained.

Comment: Revise the CTS/ITS markups to show CTS 4.6.1.2.c and 4.6.1.2.d as being retained as SRs in ITS 3.6.3. Provide additional discussions and justifications as necessary for this change.

FLOG response:

3.6.3-31 DOC 7-07 LG
CTS 4.7.1.7.2
CTS 4.7.1.7.4
ITS SR 3.6.3.6, SR 3.6.3.6.7 and Associated Bases

WCGS CTS 4.7.1.7.2 and 4.7.1.7.4 specify the leakage rate test acceptance criterion for containment isolation valves with resilient seals. DOC 7-07 LG states that this information is being moved to the Bases. ITS SR 3.6.3.6 and SR 3.6.3.7 are the corresponding ITS SRs for the above CTS surveillances. The associated Bases for these ITS SRs do not contain the leakage rate test acceptance criterion nor can they be found in the Bases for ITS 3.6.3.

Comment: Revise the ITS markup of ITS SR 3.6.3.6 and SR 3.6.3.7 to include the acceptance criterion for containment isolation valves with resilient seals.

FLOG response:

3.6.3-32 DOC 7-09 LG
CTS 3.6.1.7
CTS 3.6.1.7 ACTIONS
CTS 4.6.1.7.1
CTS 4.6.1.7.2
CTS 4.6.1.7.4
ITS B3.6.3 Bases

The descriptive details regarding containment purge isolation valve size and isolation requirements specified in CTS 3.6.1.7, 3.6.1.7 ACTIONS, 4.6.1.7.1, 4.6.1.7.2, and 4.6.1.7.4 have been relocated to the Bases for ITS 3.6.3. DOC 7-09 LG states that these items are being moved, but does not provide a justification as to why they can be moved.

Comment: Provide a justification for this Less Restrictive change.

FLOG response:

3.6.3-33 DOC 11-18 LG
CTS 4.6.3.2
ITS B3.6.3 Bases - SR 3.6.3.8

CTS 4.6.3.2 requires that each containment isolation valve be demonstrated OPERABLE during COLD SHUTDOWN or REFUELING MODE at least once per 18 months by verifying that on a specified test signal the valve actuates to its isolation position. The CTS markup moves the "during COLD SHUTDOWN or REFUELING MODE" requirement to ITS B3.6.3 Bases - SR 3.6.3.8. DOC 11-18 LG states that the item is being moved, but does not provide a justification as to why it can be moved.

Comment: Provide a justification for this Less Restrictive change.

FLOG response:

3.6.3-34 JFD 3.6.3-5
STS SR 3.6.3.3, SR 3.6.3.4 and Associated Bases
ITS SR 3.6.3.3, SR 3.6.3.4 and Associated Bases

STS SR 3.6.3.3 and SR 3.6.3.4 have been modified by TSTF-45 Rev. 1. While ITS SR 3.6.3.3 and SR 3.6.3.4 have incorporated the changes associated with TSTF-45 Rev. 1, the Bases for ITS SR 3.6.3.3 and SR 3.6.3.4 do not fully incorporate all of the Bases changes associated with TSTF-45 Rev. 1.

Comment: Revise the Bases for ITS SR 3.6.3.3 and SR 3.6.3.4 to incorporate the Bases changes associated with TSTF-45 Rev. 1 or provide additional discussion and justification for the deviations.

FLOG response:

3.6.3-35 CTS 3.6.1.7 ACTION a and b
ITS 3.6.3 ACTION A

CTS 3.6.1.7 ACTION a and CTS 3.6.1.7 ACTION b (CPSES) specifies that with a containment purge valve inoperable for reasons other than leakage, the valve shall be closed or the penetration isolated within 4 hours. ITS 3.6.3 ACTION A in addition to isolating the penetration within 4 hours requires verifying that the penetration is isolated on a specified frequency. This is not reflected in the CTS markup of CTS 3.6.1.7 ACTIONS a and b.

Comment: Revise the CTS markup to reflect the actual changes to be made and provide the appropriate discussion and justification for this Less Restrictive change.

FLOG response:

3.6.3-36 CTS 3.6.1.7 ACTION b
ITS 3.6.3 ACTION B

CPSES CTS 3.6.1.7 ACTION b specifies that with the 18 inch containment pressure relief discharge isolation valve(s) inoperable for any reason other than leakage, the valve(s) shall be closed or the penetration isolated within 4 hours. For one valve inoperable the remedial measures are equivalent to ITS 3.6.3 RA A.1. See Comment Number 3.6.3-35 for additional concerns with regards to one valve inoperable. However, for two valves in a penetration inoperable the CTS allows 4 hours to close a valve or isolate the penetration. The corresponding ITS ACTION - ITS 3.6.3 ACTION B only allows 1 hour to close at least one valve or isolate the penetration. This More Restrictive change is not reflected in the CTS markup of CTS 3.6.1.7 ACTION b.

Comment: Revise the CTS markup to reflect this change and provide the appropriate discussions and justifications for this More Restrictive change.

FLOG response:

3.6.3-37 CTS 4.6.1.7.1
ITS SR 3.6.3.1 and Associated Bases

CTS 4.6.1.7.1 verifies that each 36 inch containment shutdown purge isolation valve is blanked flanged and closed once per 31 days for valves outside containment and prior to entry into MODE 4 following each COLD SHUTDOWN (Mode 5). This requirement is reflected in ITS SR 3.6.3.1. However, the surveillance frequency for the valves inside containment has been modified in the CTS/ITS markup. This frequency now reads "Prior to entering MODE 4 from MODE 5 if not performed within the previous 92 days." The addition of "if not performed within the previous 92 days" makes the SR frequency Less Restrictive than the CTS which requires the SR be performed every time MODE 4 is entered from MODE 5. No justification is provided for this Less Restrictive change. In addition, the Bases description for ITS SR 3.6.3.1 does not describe or justify the second frequency.

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

FLOG response:

3.6.3-38 CTS 4.6.3.4
ITS SR 3.6.1.1 and Associated Bases
ITS SR 3.6.3.7 and Associated Bases

DCPP CTS 4.6.3.4 verifies the leakage rates for each containment ventilation isolation valve in accordance with the Containment Leakage Rate Testing Program, except for

the air sample supply and return valves. The wording of CTS 4.6.3.4 implies that the air sample supply and return valves are part of the Containment Ventilation System, yet no description of these valves can be found in the Bases for ITS 3.6.3. In addition, two other implications can be deduced from the wording of CTS 4.6.3.4. Since CTS 4.6.3.4 is converted to ITS SR 3.6.3.7 it is implied that the air sample valves do not have resilient seals. It can also be implied that the air sample valves are exempt from all leakage test requirements of 10 CFR 50 Appendix J. However, this exemption is not listed in CTS 6.8.4.j/ITS 5.5.16. or ITS SR 3.6.1.1 and its associated Bases.

Comment: Provide the following:

a. Revise ITS B3.6.3 Bases to provide a description of the Containment Ventilation System air sample valves.

b. Indicate whether these valves have resilient seals.

c. Provide a discussion on whether these valves are exempt from just the leakage tests for resilient seals or all Appendix J leakage tests. Provide the reference in which the staff approved the exemption.

d. If they are exempt from all Appendix J tests, revise the CTS/ITS markups of CTS 4.6.3.4, ITS 5.5.16 and ITS B3.6.1 Bases SR 3.6.1.1 to show that the exemption is being relocated from CTS 4.6.3.4 to at least ITS 5.5.16 and possibly ITS B3.6.1 Bases SR 3.6.1.1 in accordance with the 11/2/95 letter to NEI on Appendix J Option B and TSTF-52 as modified by the staff. Provide the appropriate discussions and justifications for this change.

FLOG response:

3.6.3-39 ITS SR 3.6.3.10 and Associated Bases

DCPP ITS SR 3.6.3.10 verifies that each 12 inch containment vacuum/pressure relief valve is blocked to restrict the valve from opening >50° to ensure that the valves will close within the times assumed in the safety analyses. DCPP ITS B3.6.3 Bases-BACKGROUND states the following for the Containment Purge System: "The 48 inch Containment Purge valves are qualified for automatic closure from their open position under DBA conditions. Therefore, the 48 inch Containment Purge supply and exhaust isolation valves must be blocked to prevent opening more than 80° in MODES 1, 2, 3 and 4 to ensure closure within 2 seconds under DBA conditions (in order to support the required containment ventilation isolation time) and to ensure that the containment boundary is maintained." Based on this statement and a similar statement in ITS B3.6.3 Bases - LCO, the staff requires that a surveillance similar to ITS SR 3.6.3.10 for the 48 inch containment purge valves be included in the ITS to ensure that facility operation will be within safety limits.

Comment: Revise the CTS/ITS markup to include a SR similar to ITS SR 3.6.3.10 for the 48 inch containment purge valves, and provide the appropriate discussions and justifications for this change.

FLOG response:

3.6.3-40 STS B3.6.3 Bases - APPLICABLE SAFETY ANALYSES
ITS B3.6.3 Bases - APPLICABLE SAFETY ANALYSES

The third paragraph of STS B3.6.3 Bases - APPLICABLE SAFETY ANALYSES describes the DBA analysis assumptions with regards to containment isolation - response times and what is included in the total response time. This paragraph is deleted in ITS B3.6.3 Bases - APPLICABLE SAFETY ANALYSES. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, with the exception of the specific response time, the deletion of the paragraph does not seem to fall into any of these categories. The staff believes that this paragraph provides useful information necessary for the understanding of the ITS.

Comment: Retain this paragraph modified by plant specific information or provide a discussion to justify its deletion.

FLOG response:

3.6.3.41 STS B3.6.3 Bases -APPLICABLE SAFETY ANALYSES
ITS B3.6.3 Bases - APPLICABLE SAFETY ANALYSES

The second from last paragraph in STS B3.6.3 Bases - APPLICABLE SAFETY ANALYSES contains the following sentence: "In this case, the single failure criterion remains applicable to the containment purge valves due to failure in the control circuit associated with each valve." This sentence is deleted in ITS B3.6.3 Bases - APPLICABLE SAFETY ANALYSES. Since ITS Changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. The Staff believes that this statement provides useful information necessary for the understanding of the ITS.

Comment: Retain the deleted sentence or provide a discussion justifying its deletion.

FLOG response:

3.6.3-42 STS B3.6.3 Bases - LCO
ITS B3.6.3 Bases - LCO and REFERENCES

The third paragraph of STS B3.6.3 Bases - LCO deals with those containment isolation valves that are required to be closed during an accident and are in the closed position during normal operation. The last sentence in this paragraph states that these passive isolation valves/devices are listed in a plant specific document(s). This sentence has been deleted from ITS B3.6.3 Bases - LCO. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. This statement directs the operator/inspector to those documents which list these passive devices similar to the document that lists the automatic valves. The staff requires that this statement be retained.

Comment: Revise the ITS markup to retain this statement modified to include specific plant documents containing the listing of the passive isolation valves/devices or if the listing of the document is extensive, a general description of the type of documents.

FLOG response:

3.6.3-43 STS B3.6.3 Bases - LCO
ITS B3.6.3 Bases - LCO

The fifth paragraph of STS B3.6.3 Bases - LCO states the following: "This LCO provides assurance that the containment isolation valves and the purge valves will perform their design safety functions..." ITS B3.6.3 Bases - LCO deletes the words "and purge valves" from this sentence. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. In addition, the staff believes the change is a potential generic change.

Comment: Delete this change.

FLOG response:

3.6.3-44 STS B3.6.3 Bases - ACTIONS
ITS B3.6.3 Bases - ACTIONS

The first sentence in the first paragraph of STS B3.6.3 Bases - ACTIONS states the following: "The ACTIONS are modified by a Note allowing penetration flow paths, except for [42] purge valve penetration flow path, to be unisolated intermittently under administrative controls." DCPP ITS B3.6.3 Bases - ACTIONS modifies this sentence to limit the penetration flow paths to those that are normally isolated by locked or sealed closed valves or valves that do not receive a containment isolation signal. The intent of

the STS Note is to allow any closed containment isolation valve except certain purge valves to be opened under administrative controls which may be Less Restrictive than current requirements. The CTS/ITS markup and CTS DOCs indicate that the STS ACTIONS Note 1 was being implemented as modified by the plant specific purge valve opening limitation of CTS 3.6.1.7, and was not being limited as specified by the ITS Bases discussion. If it is DCPP's intent to limit the extent of ITS 3.6.3 ACTIONS Note 1 as specified in the Bases discussion, then the Note itself, the CTS markup and associated DOCs need to be modified. If that is not DCPP's intent then the STS Bases wording should be used as modified by the limitation specified in CTS 3.6.1.7.

Comment: Revise the CTS/ITS markup of STS 3.6.3 ACTIONS Note 1 to reflect either DCPP's intent as specified in the ITS Bases discussion or the STS intent as modified by the limits of CTS 3.6.1.7. Provide additional discussions and justifications as necessary.

FLOG response:

3.6.3-45 STS B3.6.3 Bases - ACTIONS
ITS B3.6.3 Bases - ACTIONS

The first paragraph in STS B3.6.3 Bases - ACTIONS contains the following sentence: "Due to the size of the containment purge line penetration and the fact that those penetrations exhaust directly from the containment atmosphere to the environment, the penetration flow path containing these valves may not be opened under administrative control." Callaway ITS B3.6.3 Bases - ACTIONS modifies this statement to include information on valve inability to close on a DBA and deletes the words "those penetrations...the environment." Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. Nothing in the CTS or ITS Bases indicates that the deleted words are not applicable to Callaway.

Comment: Retain the deleted words or provide a discussion justifying their deletion.

FLOG response:

3.6.3-46 ITS B3.6.3 Bases ACTIONS

A sentence is added to the first paragraph of Callaway ITS B3.6.3 Bases - ACTIONS which describes ACTIONS Note 1. The sentence states "All purge valves in a penetration flow path may be opened at the same time if the flow path is flanged closed". Based on the wording of ITS 3.6.3 ACTIONS Note 1 which does not allow this condition, the current licensing basis as specified in CTS 3.6.1.7 which does not allow this condition and the proposed changes associated with Comment Numbers 3.6.3-23, 3.6.3-24 and 3.6.3-25 which were rejected, this change is found to be unacceptable.

Comment: Delete this change.

FLOG response:

3.6.3-47 STS B3.6.3 Bases ACTIONS
ITS B3.6.3 Bases - ACTIONS

The third paragraph of STS B3.6.3 Bases - actions is modified by the addition of the following words "or by the LCO Required Actions due to an inoperable containment isolation valve." Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the addition does not seem to fall into any of these categories. Furthermore, the additional words do not clarify the intent or meaning of the paragraph, but restate what is already stated or implied by the STS words.

Comment: Delete the change.

FLOG response:

3.6.3-48 STS B3.6.3 Bases - A.1 and A.2
STS B3.6.3 Basis-B.1
STS B3.6.3 Basis-C.1 and C.2
ITS B3.6.3 Bases - A.1 and A.2
ITS B3.6.3 Bases- B.1
ITS B3.6.3 Bases- C.1 and C.2

The first sentence in STS B3.6.3 Bases - A.1 and A.2 states the following: "In the event one containment isolation valve in one or more penetration flow paths is inoperable [except for purge valve or shield building leakage not within limit,] the affected penetration flow path must be isolated." DCPP ITS B3.6.3 Bases A.1 and A.2 modifies this sentence as follows: adds the words "requiring isolation following a DBA" after "one or more penetration flow paths," and deletes reference to purge valve and shield building leakage not within limits. ITS B3.6.3 Bases-B.1 and ITS B3.6.3 Bases-C.1 and C.2 make the same addition - requiring isolation following a DBA - to their first sentence. While the deletion of shield building leakage is acceptable, the other two changes change the meaning and intent of the statements. The addition of the words "requiring isolation following a DBA" to the Bases for A.1 and A.2, B.1, and C.1 and C.2 could be interpreted to limit the Condition to only automatic valves or only those valves required to be closed and not inoperable containment isolation valves that are required to remain open following a DBA. The latter valves have two safety functions, one to remain open in an accident situation and the other an isolation function when required to be closed. The second change - deletion - deletion of purge valve leakage exception - makes the statement inconsistent with ITS 3.6.3 Condition A which exempts purge valves inoperable due to leakage. The intent of the Condition is that it applies to all

containment isolation valves except purge valves declared inoperable due to leakage not within limits.

Comment: Delete these changes.

FLOG response:

3.6.3-49 STS B3.6.3 Bases - A.1 and A.2
ITS B3.6.3 Bases - A.1 and A.2

The first paragraph of STS B3.6.3 Bases - A.1 and A.2 states the following: "Isolation barriers that meet this criterion are a closed and deactivated automatic containment isolation valve, a closed manual valve..." ITS B3.6.3 Bases - A.1 and A.2 deletes the words "automatic containment." While deletion of the word "containment" may be acceptable, the deletion of the word "automatic" changes the meaning and intent of the statement. It could be interpreted to mean that for manual valves the hand wheel must be removed. In addition, the deletion makes the statement inconsistent with the wording of ITS 3.6.3 RA A.1.

Comment: Delete the change.

FLOG response:

3.6.3-50 ITS B3.6.3 Bases - A.1 and A.2
ITS B3.6.3 Bases - B.1

Callaway ITS B3.6.3 Bases - A.1 and A.2 and B.1 adds the following statement to the first paragraph: "(A remote manual valve's Main Control Board power isolate switch may be used to deactivate the valve.)" Since no discussion and justification is provided for this change and insufficient information is provided in the Bases of ITS 3.6.3 on this aspect of Callaway's design, no determination can be made as to whether this design aspect is an acceptable means to deactivate automatic isolation valves to meet the requirements of ITS 3.6.3 RA A.1.

Comment: Provide a discussion and justification on this aspect of Callaway's design to show that it meets the intent of ITS 3.6.3 RA A.1.

FLOG response:

3.6.3-51 ITS B3.6.3 Bases A.1 and A.2

Comment Number 3.6.0-2 applies to the third sentence in WCGS ITS B3.6.3 Bases A.1 and A.2.

Comment: See Comment Number 3.6.0-2.

FLOG response:

3.6.3-52 STS B3.6.3 Bases - A.1 and A.2
STS B3.6.3 Bases - E.1 and E.2
STS B3.6.3 Bases - SR 3.6.3.3
STS B3.6.6.A Bases - SR 3.6.6A.1
STS B3.6.7 Bases - SR 3.6.7.1
ITS B3.6.3 Bases - A.1 and A.2
ITS B3.6.3 Bases - C.1, C.2 and C.3
ITS B3.6.3 Bases - D.1, D.2 and D.3
ITS B3.6.3 Bases - SR 3.6.3.3
ITS B3.6.6 Bases - SR 3.6.6.1
ITS B3.6.7 Bases - SR 3.6.7.1

A number of STS Required Actions (RA) and SRs require verification that certain valves be verified in the correct position. The Bases for these RAs and SRs state that the RA or SR do "not require any testing or valve manipulation." Rather, it involves verification, through a system walkdown, that those valves and/or isolation devices outside containment and capable of being mispositioned are in the correct position. The ITS has modified the statements to either delete the "system walkdown" verification or added a verification "by other approved means." It is the staff's position at this time that the only acceptable way to perform this verification is through a system walkdown. The deletion of the phrase "through a system walkdown" leaves the interpretation of the verification open to any method which may meet the intent of the RA or SR. The addition of the phrase "by other approved means," is too ambiguous and leads to questions such as who approves the method; and how is the approval done. In addition, the staff believes this proposed change is associated in part with WOG-91 (See Comment Number 3.6.3-11). Therefore, the staff considers this total change to be generic and beyond the scope of review of this conversion.

Comment: Delete this generic change.

FLOG response:

3.6.3-53 CTS 3.6.3 ACTIONS
STS B3.6.3 Bases - A.1 and A.2
ITS 3.6.3 Condition A Note and Associated Bases

STS B3.6.3 Bases-A.1 and A.2 states the following: "Condition A has been modified by a Note indicating that this Condition is only applicable to those penetration flow paths with two containment isolation valves. For penetration flow paths with only one containment isolation valve and a closed system, Condition C provides the appropriate Actions". CPSES ITS B3.6.3 Bases-A.1 and A.2 adds the following to the first sentence:

"and those special cases with one containment isolation valve as described on the FSAR [Ref. 2] ." ITS 3.6.3 Condition A Note conforms to the STS wording and is not modified to cover this supposedly plant specific item. In addition, since no specific justifications have been provided for Bases changes, insufficient information has been provided in the Bases for the staff to make a determination that ACTION A, ACTION C or an entirely new plant specific ACTION is needed for this plant specific item. Based on CTS, the appropriate remedial measures for this item, would be an immediate shutdown. Furthermore, the added words imply that the ACTION is the incorrect ACTION to use, since RA A.2 cannot be performed for this type of penetration.

Comment: Provide additional discussion and justification to show that ACTION A is the appropriate ACTION to take for those special cases with one containment isolation valve as described in FSAR Section 6.2. If ACTION A is the appropriate action, revise ITS 3.6.3 Condition A Note accordingly.

FLOG response:

3.6.3-54 ITS B3.6.3 Bases - C.1, C.2, and C.3

Based on the changes made to ITS 3.6.3 with regards to purge valve leakage testing, a number of sentences in ITS B3.6.3 Bases - C.1, C.2, and C.3 which refer to SR 3.6.3.7 also need to refer to SR 3.6.3.6. These sentences are first paragraph, fourth sentence; third paragraph, first sentence and third paragraph, third sentence.

Comment: Revise the ITS markup accordingly or provide a discussion and justification to show that the reference to ITS SR 3.6.3.6 should not be added.

FLOG response:

3.6.3-55 STS B3.6.3 Bases - E.1, E.2 and E.3
ITS B3.6.3 Bases - D.1, D.2 and D.3

The second sentence in the third paragraph of STS B3.6.3 Bases - E.1, E.2 and E.3 states the following: "The periodic verification is necessary to ensure that containment penetrations required to be isolated following an accident, which are no longer capable of being automatically isolated, will be in the isolation position should an event occur." DCPP ITS B3.6.3 Bases - D.1, D.2 and D.3 modifies this sentence as follows: "The periodic verification is necessary to ensure that containment leak rate following an accident, will not exceed the limit assumed in the offsite dose analysis." This modified statement is not entirely correct. The containment leak rate involves more than just this inoperable valve and the statement could allow leakage but not require isolation. The STS statement more accurately reflects the intent of the ACTION which is to ensure that the penetration is isolated.

Comment: Delete this change.

FLOG response:

3.6.3-56 B3.6.3 Bases - E.1, E.2, and E.3
ITS B3.6.3 Bases - D.1, D.2, and D.3

STS B3.6.3 Bases - E.1, E.2 and E.3 does not provide a description of the Note associated with RA E.2. ITS B3.6.3 Bases - D.1, D.2, and D.3 also does not provide a description of the Note associated with RA D.2. The Callaway and WCGS ITS markups provide this description.

Comment: Revise the ITS markup to provide this description.

FLOG response:

3.6.3-57 ITS B3.6.3 Bases - C.1, C.2 and C.3
ITS B3.6.3 Bases - SR 3.6.3.1
ITS B3.6.3 Bases - SR 3.6.3.6
ITS B3.6.3 Bases - SR 3.6.3.7
ITS B3.6.3 Bases REFERENCES

WCGS ITS B3.6.3 Bases - C.1, C.2, and C.3, SR 3.6.3.6 and SR 3.6.3.7 all refer to Multi-Plant Action No. B-20 and states that it is Reference 4. WCGS ITS B3.6.3 Bases - SR 3.6.3.1 refers to Multi-Plant Action No. B-24 and states that it is reference 5. ITS B3.6.3 Bases - REFERENCES indicates that Multi-Plant Action No. B-20 is Reference 3 and B-24 is Reference 4. There is no Reference 5.

Comment: Correct this discrepancy.

FLOG response:

3.6.3-58 STS B3.6.3 Bases - SR 3.6.3.8
ITS B3.6.3 Bases - SR 3.6.3.8

STS B3.6.3 Bases - SR 3.6.3.8 states that "The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power." CPSES ITS B3.6.3 Bases - SR 3.6.3.8 deletes this statement. Since ITS changes to the STS Bases were made on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. Nothing in the CTS or associated DOCs

and JFDs states that performing this SR at power will not have the potential to cause an unplanned transient.

Comment: Provide a discussion and justification for this deletion.

FLOG response:

3.6.5 Containment Air Temperature

3.6.5-1 DOC 5-01 LG
CTS 4.6.1.5
ITS B3.6.5 Bases - SR 3.6.5.1

CTS 4.6.1.5 specifies the method for calculating the containment average air temperature and the locations where the temperature measurements are to be taken. These items have been relocated to ITS B3.6.5 Bases -SR 3.6.5.1. DOC 05-01 LG justifies the relocation based on the level of detail in the TS not being consistent with NUREG 1431. Consistency with NUREG-431 is not an acceptable justification for relocating material from the CTS to a licensee controlled document.

Comment: Provide additional discussion and justification for this Less Restrictive change.

FLOG response:

3.6.5-2 STS B3.6.5 Bases - APPLICABLE SAFETY ANALYSES
ITS B3.6.5 Bases - APPLICABLE SAFETY ANALYSES

The last two sentences in the third paragraph of STS B3.6.5-Bases - APPLICABLE SAFETY ANALYSES state the following: "This resulted in a maximum containment air temperature of [340.9] °F. The design temperature is [320]°F." ITS B3.6.5 Bases - APPLICABLE SAFETY ANALYSES for CPSES deletes these sentences. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. The staff believes that these statement provide a useful, descriptive information necessary for the understanding of the ITS.

Comment: Retain these deleted STS sentences or provide a discussion justifying their deletion.

FLOG response:

3.6.5-3 STS 3.6.5 Bases - APPLICABLE SAFETY ANALYSES
ITS B3.6.5 Bases - APPLICABLE SAFETY ANALYSES

ITS B3.6.5 Bases - APPLICABLE SAFETY ANALYSES makes a number of changes to the fourth paragraph of STS B3.6.5 Bases - APPLICABLE SAFETY ANALYSES. in particular, the end of the paragraph starting at "the maximum peak containment air temperature..." is deleted. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. The staff believes that the deleted information provides useful descriptive information necessary for the understanding of the ITS.

Comment: Retain these deleted STS sentences or provide a discussion justifying their deletion.

FLOG response:

3.6.5-4 STS B3.6.5 Bases - LCO
ITS B3.6.5 Bases - LCO

ITS B3.6.5 Bases - LCO makes a number of changes to the STS B3.6.5 Bases - LCO. Since the ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design or on current licensing basis as specified in the CTS, the changes to STS B3.6.5 Bases - LCO do not seem to fall into any of these categories.

Comment: Provide a discussion and justification for these changes.

FLOG response:

3.6.6 Containment Spray and Cooling Systems
Containment Spray System (CPSES)

3.6.6-1 DOC 8-10 A
JFD 3.6.-9
CTS 3.6.2.1 ACTIONS
STS 3.6.6A ACTION F
ITS 3.6.6 ACTION C and Associated Bases

CPSES CTS 3.6.2.1 ACTIONS provide the remedial actions to be taken if one Containment Spray System is inoperable. If two Containment Spray Systems are in operable, no actions are provided in CTS 3.6.2.1, therefore CTS 3.0.3 is entered. This condition is addressed in the STS in STS 3.6.6 ACTION F which has been modified in the ITS for CPSES to be ITS 3.6.6 ACTION C. The other FLOG units justify the addition/use of STS 3.6.6 ACTION F by DOC 8-10 A. The CPSES CTS markup of CTS 3.6.2.1 does not show the addition of STS 3.6.6 ACTION F as modified or DOC 8-10 A.

The DOCs Enclosure 3A and 3B state that 8-10 A is not applicable to CPSES. The staff disagrees; DOC 8-10 A modified to address the CPSES design is applicable to CPSES.

Comment: Revise the CTS markup to show the addition of ITS 3.6.6 ACTION C and provide a discussion and justification for this Administrative change.

FLOG response:

3.6.6-2

DOC 8-10 A
JFD 3.6-14
CTS 3.6.2.1 ACTIONS
CTS 3.6.2.3 ACTIONS
STS 3.6.6 ACTION F
ITS 3.6.6 ACTION F and Associated Bases

DCPP CTS 3.6.2.1 ACTIONS provide remedial actions to be taken if one Containment Spray System is inoperable. If two Containment Spray Systems are inoperable, no ACTIONS are provided in CTS 3.6.2.1, therefore, CTS 3.0.3 is entered. Likewise, CTS 3.6.2.3 ACTIONS do not provide remedial actions to be taken when one Containment Spray System and two CFCU trains are inoperable such that one or less CFCUs remain OPERABLE or one of less CFCUs are OPERABLE. Thus, CTS 3.0.3 is entered. STS 3.6.6 ACTION F has been modified in ITS 3.6.6 ACTION F to address the above loss of functions. The CTS markup and the ITS Bases markup of STS 3.6.6 ACTION F are not consistent with ITS 3.6.6 ACTION F.

Comment: Revise the CTS and ITS markups to be consistent. Provide any additional discussion and justification, as necessary, for this Administrative change.

FLOG response:

3.6.6-3

DOC 8-03 TR-1
DOC 9-05 TR-1
CTS 4.6.2.1.c
CTS 4.6.2.3.b
ITS SR 3.6.6.5
ITS SR 3.6.6.6
ITS SR 3.6.6.7

CTS 4.6.2.1.c requires that each automatic valve in the Containment Spray System flow path actuates to its correct position and the containment spray pump starts on a specified test signal. CTS 4.6.2.3.b requires the containment cooling fans start on a specified test signal. In converting these CTS requirements to ITS SRs the CTS is modified to allow credit to be taken for an actual as well as a simulated (test) signal.

DOCs 8-03 TR1 and 9-05 TR-1 do not provide sufficient information to justify allowing the use of an actual signal.

Comment: Provide additional discussion and justification to allow the use of an actual signal to meet these surveillance requirements.

FLOG response:

3.6.6-4 DOC 8-11 LS-2
CTS 3.6.2.1 ACTIONS
CTS 3.6.2.3 ACTIONS
ITS 3.6.6 ACTIONS A and C and Associated Bases

The Completion Times for one Containment Spray System and/or one Containment Cooling System inoperable in CTS 3.6.2.1 ACTIONS and CTS 3.6.2.3 ACTIONS have been modified by an additional Completion Time of "and 10 days from discovery of failure to meet the LCO." DOC 8-11 LS-2 states that this change is a Less Restrictive change in that the 10 days is greater than the CTS 7 day AOT. This is incorrect. The intent of the Completion Time of "10 days from discovery of failure to meet the LCO" in ITS 3.6.6 ACTIONS A and C is to prevent the unit from operating indefinitely with a Containment Spray System and/or Containment Cooling System inoperable. Based on the structure and application of the remedial measures specified in the CTS ACTIONS, the CTS would allow indefinite operation with an inoperable Containment Spray System and/or Containment Cooling System. Thus the change is a More Restrictive change rather than a Less Restrictive change.

Comment: Provide a discussion and justification for this More Restrictive change.

FLOG response:

3.6.6-5 DOC 8-08 LG
CTS 4.6.2.1.b
ITS SR 3.6.6.4 and Associated Bases

CTS 4.6.2.1.b specifies that the Containment Spray Pump shall be tested at a specific pump discharge pressure. ITS SR 3.6.6.4 specifies that the Containment Pump shall be tested but does not specify a specific pump test pressure. This information has been relocated to the Inservice Testing Program. DOC 8-08 LG justifies the relocation based on consistency with NUREG-1431. Consistency with NUREG-1431 is not an acceptable justification for relocating material from the CTS to a licensee controlled document.

Comment: Provide additional discussion and justification for this Less Restrictive change.

FLOG response:

3.6.6-6 DOC 8-09 LG
CTS 4.6.2.1.c
ITS B3.6.6 Bases - SR 3.6.6.5 and SR 3.6.6.6

CTS 4.6.2.1.c requires certain surveillances be performed at least once per 18 months during shutdown. The CTS markup moves the "during shutdown" requirement to ITS B3.6.6 Bases - SR 3.6.6.5 and SR 3.6.6.6. DOC 8-09 LG for Callaway states that the item is being moved but does not provide a justification as to why it can be moved.

Comment: Provide a justification for this Less Restrictive change.

FLOG response:

3.6.6-7 DOC 10-01 LG
CTS 3.6.2.3
ITS B3.6.6 Bases

CTS 3.6.2.3 specifies what constitutes an OPERABLE Containment Cooling System. This information has been relocated to ITS 3.6.6 Bases. DOC 10-01 LG justifies the relocation based on consistency with NUREG-1431. Consistency with NUREG-1431 is not an acceptable justification for relocating material from the CTS to a licensee controlled document. See Comment 3.6.6-8 for additional concerns in this area for DCPP.

Comment: Provide additional discussion and justification for this Less Restrictive change. See Comment Number 3.6.6-8.

FLOG response:

3.6.6-8 DOC 10-01 LG
JFD 3.6-14
CTS 3.6.2.3
STS LCO 3.6.6
ITS LCO 3.6.6 and Associated Bases.

DCPP CTS 3.6.2.3 specifies what constitutes an OPERABLE Containment Cooling System. An OPERABLE Containment Cooling System consists of either at least four containment fan coolers (CFCUs) or at least three CFCUs, each of the three supplied from a different vital bus. STS LCO 3.6.6 is modified in ITS LCO 3.6.6 to conform to the CTS. This deviates from NUREG-1431 and the industry's Writer's Guide in which the LCO describes as simply as possible the lowest functional capability of the system and

relegates the details of what constitutes an OPERABLE system to the Bases. JFD 3.6-14 does not adequately justify this deviation. In addition, DOC 10-01 LG also applies since this information is also relocated to the Bases. See Comment Number 3.6.6-7.

Comment: Revise the CTS and ITS markups to show that this level of detail is relocated to the Bases. See Comment Number 3.6.6-6. Otherwise, provide additional discussion to justify the deviation from the STS and Writer's Guide.

FLOG response:

3.6.6-9 DOC 10-02 LG
JFD 3.6-15
JFD 3.6-21
CTS 4.6.2.3.b
ITS SR 3.6.6.8 and Associated Bases.

CTS 4.6.2.3.b requires at least once per 18 months by verifying that on a Safety Injection test signal the Containment Cooling System fans start in slow speed, or if operating, shift to slow speed and the cooling water flow rate increases to at least a specified valve to each cooler group. DOC 10-02 LG, JFD 3.6-15, and JFD 3.6-21 state or imply that ITS SR 3.6.6.8 will verify that the fans start and a minimum cooling water flow rate is established in accordance with current licensing basis, and that specific automatic functions and cooling water flow rates will be moved to ITS 3.6.6 Bases. The CTS and ITS markups do not show this. The CTS markups show everything except verifying fan starts as being relocated, and Callaway ITS SR 3.6.6.8 does not verify that a minimum cooling water flow rate is established as was done in WCGS ITS SR 3.6.6.8 to be in conformance with the CTS requirements and WCGS ITS SR 3.6.6.8. See Comment Numbers 3.6.6-10 and 3.6.6-11.

Comment: Revise the CTS markup for both Callaway and WCGS to be in conformance with WCGS ITS SR 3.6.6.8. Revise the ITS markup for Callaway ITS SR 3.6.6.8 to be in conformance with the CTS requirements and WCGS ITS SR 3.6.6.8 . Provide additional discussions and justification as necessary. See Comment Numbers 3.6.6-10 and 3.6.6-11.

FLOG response:

3.6.6-10 DOC 10-02 LG
JFD 3.6-15
JFD 3.6-21
CTS 4.6.2.3.b
ITS SR 3.6.6.8 and Associated Bases

CTS 4.6.2.3.b requires at least once per 18 months by certifying that on a safety injection test signal the Containment Cooling System fans start in slow speed, or if operating, shift to slow speed and the cooling water flow rate increases to at least a specified valve to each cooler group. DOC 10-02 LG, JFD 3.6-15, and JFD 3.6-21 state or imply that ITS SR 3.6.6.8 will verify that the fans start and a minimum cooling water flow rate is established in accordance with current licensing basis, and that specific automatic functions and cooling water flow rates will be moved to ITS 3.6.6 Bases. DOC 10-02 LG states that the automatic functions and cooling water flow rates are being moved to the Bases, but does not provide a justification as to why they can be moved. See Comment Number 3.6.6-10.

Comment: Provide a justification for these Less Restrictive changes.

FLOG response:

3.6.6-11 DOC 10-02 LG
JFD 3.6-21
CTS 4.6.2.3.b
ITS SR 3.6.6.8 and Associated Bases

CTS 4.6.2.3.b requires at least once per 18 months by verifying that on a safety injection test signal the Containment Cooling System fans start in slow speed or if operating, shift to slow speed. DOC 10-02 LG relocates the requirements to start in slow speed or if operating shift to slow speed to ITS B3.6.6 Bases SR 3.6.6.8. WCGS ITS B3.6.1 Bases SR 3.6.6.8 does not show that the CTS requirement has been incorporated. WCGS ITS B3.6.6 Bases - SR 3.6.6.8 states that the "SR requires verification that each required containment cooling train activates or shifts speed...". This statement does not meet the current licensing basis. The train could start on high speed or if operating in slow speed, shift to high speed and still meet the SR.

Comment: Revise the ITS Bases markup to conform to the CTS requirements.

FLOG response:

3.6.6-12 JFD 3.6-14
CTS 3.6.2.3 ACTION b
ITS 3.6.6 ACTIONS A, B, C, D, E and Associated Bases.

DCPP CTS 3.6.2.3 ACTION b specifies the remedial measures to be taken with one Containment Spray System inoperable and two CFCU OPERABLE. Based on the structure and application of the ITS, CTS 3.6.2.3 ACTION b is encompassed by ITS 3.6.6 Actions A, B, C, and E. ITS 3.6.6 ACTION D also seems to address this condition of one inoperable Containment Spray and at least two CFCUs OPERABLE. However, the Required Actions and Completion Times of ITS 3.6.6 ACTION D cannot be found in CTS 3.6.2.3 ACTIONS, and are More Restrictive changes to the CTS and ITS.

Comment: Revise the CTS markup to show the addition of ITS 3.6.6 ACTION D and provide the appropriate discussion and justification for this More Restrictive change.

FLOG response:

3.6.6-13 CTS 4.6.2.3a.1
ITS SR 3.6.6.2 and Associated Bases

CTS 4.6.2.3.a.1 verifies that containment cooling fan units are started and operated for at least 15 minutes at least once per 31 days. The corresponding ITS surveillance is ITS SR 3.6.6.2. The CTS and ITS are not consistent with each other. CTS 4.6.2.3.a.1 for Callaway and WCGS requires the CTS surveillance be performed on "each non-operating fan group" while ITS SR 3.6.6.2 requires the SR be performed on "each required containment cooling fan" for WCGS and "each containment cooling fan" for Callaway. CTS 4.6.2.3.a.1 for DCPP requires the CTS surveillance be performed on each CFCU while the ITS requires it be performed on each required CFCU. Based on ITS B3.6.6 Bases - BACKGROUND description of the Containment Cooling System, the CTS to ITS conversion for this SR would be a More Restrictive change for WCGS and Callaway (CTS testing only non-operating to ITS testing of all fan units) and a Less Restrictive change for DCPP (CTS testing all CFCUs to ITS testing of a minimum of three CFCUs). No justifications are provided for these changes.

Comment: Revise the ITS markup to conform to the CTS, or provide discussions and justifications for these Less Restrictive or More Restrictive changes.

FLOG response:

3.6.6-14 CTS 4.6.2.3.a.2
ITS SR 3.6.6.1 and Associated Bases

WCGS CTS 4.6.2.3.a.2 verifies at least once per 31 days that each Containment Cooling System manual, power operated, and automatic valve in the cooling water flow

path serving the containment coolers that is not locked, sealed or otherwise secured in position is in its correct position. Enclosure 1 "Cross Reference Table for 3/4.6" shows this CTS surveillance becoming ITS SR 3.6.6.1. ITS SR 3.6.6.1 only verifies the Containment Spray System valves are in their correct position.

Comment: Revise the ITS markup or ITS SR 3.6.6.1 and its associated Bases to also include the Containment Cooling System valves.

FLOG response:

3.6.6-15 STS B3.6.6A Bases - BACKGROUND
ITS B3.6.6 Bases - BACKGROUND and REFERENCES

STS B3.6.6 Bases - BACKGROUND states that the Containment Spray and Cooling Systems are designed to meet the requirements of 10 CFR 50 Appendix A, GDC 38, 39, 40, 41, 42, 43 or other documents that were appropriate at the time of licensing. ITS B3.6.6 Bases - BACKGROUND deletes a number of the GDCs. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletions do not seem to fall into any of these categories based on the particular STS selected. The staff believes that these GDCs provide a useful description of the system design. See Comment Number 3.6.6-16.

Comment: Revise ITS B3.6.6 Bases - BACKGROUND to retain the deleted GDCs or provide a discussion and justification for their deletion. See Comment Number 3.6.6-16.

FLOG response:

3.6.6-16 STS B3.6.6A Bases - BACKGROUND
ITS B3.6.6 Bases BACKGROUND and REFERENCES

STS B3.6.6 Bases - BACKGROUND states that the Containment Spray and Cooling Systems are designed to meet the requirements of various 10 CFR 50 Appendix A GDCs or other documents that were appropriate at the time of licensing. If the other documents statement is used, the STS requires that the documents be specified. Callaway in addition to deleting a number of GDCs (See Comment Number 3.6.6-15) in ITS B3.6.6 Bases, retains the statement on other documents, but does not specify the documents used.

Comment: Revise ITS B3.6.6 Bases to specify the other documents used to design the Containment Spray and Cooling Systems.

FLOG response:

3.6.6-17 STS B3.6.6A Bases -APPLICABLE SAFETY ANALYSES
ITS B3.6.6 Bases - APPLICABLE SAFETY ANALYSES

The second paragraph in STS B3.6.6A Bases - APPLICABLE SAFETY ANALYSES describes briefly the containment pressure and temperature limits used to design the Containment Spray and Cooling Systems. A statement in the paragraph refers the users to the Bases for LCO 3.6.4 "Containment Pressure" and LCO 3.6.5 "Containment Temperature" for a more detailed discussion. DCPP ITS B3.6.6 Bases - APPLICABLE SAFETY ANALYSES deletes this referral statement. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. The staff believes the statement provides the user with the location of additional useful information.

Comment: Retain the deleted STS sentence.

FLOG response:

3.6.6-18 STS B3.6.6A Bases - APPLICABLE SAFETY ANALYSES
ITS B3.6.6 Bases - APPLICABLE SAFETY ANALYSES

The second paragraph in STS B3.6.6.A Bases - APPLICABLE SAFETY ANALYSES describes briefly the containment pressure and temperature limits used to design the Containment Spray and Cooling Systems. A statement in the paragraph specifies the assumptions used in the analyses and evaluations. Callaway ITS B3.6.6 Bases - APPLICABLE SAFETY ANALYSES deletes this sentence. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. The staff believes the statement provides useful descriptive information on the initial assumptions used in the safety analyses.

Comment: Retain the deleted STS sentences modified by plant specific values and assumptions.

FLOG response:

3.6.6-19 STS B3.6.6A Bases - LCO
ITS B3.6.6 Bases - LCO

STS B3.6.6A Bases - LCO describes what constitutes an OPERABLE Containment Spray System. The description includes the automatic transferring of the pump suction from the RWST to the containment sump. At DCPP this transferring of the pump suction is done manually, which is acceptable. However, ITS B3.6.6 Bases - LCO deletes all mention of this capability. The staff requires that this be retained in ITS

B3.6.6 Bases - LCO because the ability or capability to transfer the pump suction constitutes part of the description of system OPERABILITY.

Comment: Retain the STS wording modified by DCPP plant specific design features.

FLOG response:

3.6.6-20 STS 3.6.6A Bases - APPLICABILITY
ITS B3.6.6 Bases - APPLICABILITY

The second paragraph of STS B3.6.6.A Bases - APPLICABILITY describes why the Containment Spray and Cooling Systems are not required to be OPERABLE in MODES 5 and 6. DCPP ITS B3.6.6 Bases - APPLICABILITY deletes the reference to Containment Cooling Systems from this paragraph. Thus, no reason is provided in the Bases as to why the Containment Cooling System is not required to be OPERABLE in MODES 5 and 6. In order for the Bases to be complete, this reference should be retained.

Comment: Revise the ITS markup to retain the reference to Containment Cooling System not be required to be OPERABLE in MODES 5 and 6.

FLOG response:

3.6.6-21 ITS SR 3.6.6.1 and Associated Bases

Callaway ITS SR 3.6.6.1 verifies that the Containment Spray System valves are in their correct position. The Bases description for this SR states that the SR not only verifies the correct alignment for the Containment Spray System, but also for the Containment Cooling System cooling water. The addition of the cooling water valves is not reflected in ITS SR 3.6.6.1 nor is the requirement part of the CTS.

Comment: Revise the ITS markup of ITS B3.6.6 Bases - SR 3.6.6.1 to delete the reference to the "cooling water" or provide a discussion and justification for this More Restrictive change and revise the CTS and ITS markups accordingly.

FLOG response:

3.6.6-22 STS B3.6.6A Bases - SR 3.6.6A.1
ITS B3.6.6 Bases SR 3.6.6.1

See Comment Number 3.6.3-52.

Comment: See Comment Number 3.6.3-52.

FLOG response:

3.6.6-23 STS B3.6.6A Bases - SR 3.6.6A.1
ITS B3.6.6 Bases - SR 3.6.6.1

ITS SR 3.6.6.1 verifies that the Containment Spray System valves are in their correct position. The Bases description in STS B3.6.6A Bases - SR 3.6.6A.1 states that this SR only verifies the valves that are outside containment, since the valves inside containment are check valves whose position cannot be verified. ITS B3.6.6 Bases - SR 3.6.6.1 deletes the statement that "only check valves are inside containment. "Since changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis, insufficient information has been provided to determine if this change falls into one of these categories. In any event, even if one of the above categories applies, the CTS and STS does not exempt the verification of the correct position for the valves inside containment (except for check valves). See Comment Numbers 3.6.6-14, 3.6.6-21 and 3.6.6-22.

Comment: Describe the type of Containment Spray and/or Cooling Water System valves located inside containment. If all the valves are check valves, revise ITS B3.6.6 Bases - SR 3.6.6.1 to retain the deleted STS wording. If the valves are not check valves, revise ITS SR 3.6.6.1 and its associated Bases to verify that all manual, power operated and automatic valves in the flow path both inside and outside containment that are not locked sealed or otherwise secured in position are in the correct position. Provide any additional discussions and justifications needed to support this change. See Comment Numbers 3.6.6-14, 3.6.6-21 and 3.6.6-22.

FLOG response:

3.6.6-24 STS B3.6.6A Bases - SR 3.6.6A.5 and SR 3.6.6A.6
ITS B3.6.6 Bases - SR 3.6.6.5 and SR 3.6.6.6

STS B3.6.6A Bases - SR 3.6.6A.5 and SR 3.6.6A.6 justifies the 18 month frequency for these SRs in part "on the need to perform these Surveillances under the conditions that apply during a plant outage and the potential for an unplanned transient if the Surveillance were performed with the reactor at power." ITS B3.6.6 Bases - SR 3.6.6.5 and SR 3.6.6.6 deletes this part of the 18 month frequency justification. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the deletion of this frequency basis does not seem to fall into any of these categories. The staff believes that these SRs should not be performed at power but during a plant outage.

Comment: Retain the deleted STS sentences or provide a discussion justifying their deletion.

FLOG response:

3.6.7 Spray Additive System
3.6.7 Recirculation Fluid pH Control (RFPC) System (Callaway)

3.6.7-1 DOC 9-03 A
CTS 3.6.2.2 ACTIONS
ITS 3.6.7 ACTIONS and Associated Bases.

DCPP CTS 3.6.2.2 ACTIONS specifies the remedial actions to be taken when the Spray Additive System is inoperable. The CTS markup of the ACTION statement does not show any changes, however, DOC 9-03 A justifies the Administrative changes made to the ACTION in converting from the CTS to ITS 3.6.7 ACTIONS.

Comment: Revise the CTS markup to show the Administrative changes.

FLOG response:

3.6.7-2 DOC 9-04 A
CTS 4.6.2.2.c
ITS SR 3.6.7.4

CTS 4.6.2.2c requires that each automatic valve in the Spray Additive System flow path activates to its correct position on a specified test signal. ITS SR 3.6.7.4 performs this same CTS surveillance except that it exempts those valves which are locked, sealed or otherwise secured in position. The CTS markup and the DOCs (Enclosure 3A) for DCPP adds the exemption to CTS 4.6.2.2.c and justifies this change as an Administrative change (Doc 9-04 A) which is acceptable. However, the conversion comparison Table (Enclosure 3B) shows that this change does not apply to DCPP since this condition is already in the CTS. The CTS markup for WCGS does not show this change; DOC 9-04 A states that it is not applicable to WCGS and the Conversion Comparison Table (Enclosure 3B) states that the change is current practice per CTS 4.6.2.2.c at WCGS. The staff position is that this is a change from the CTS requirements and it is applicable.

Comment: For DCPP correct the Conversion Comparison Table (Enclosure 3B) to show that the change is applicable. For WCGS, revise the CTS markup to show this Administrative change, provide the appropriate discussion and justification, and change the Conversion Comparison Table accordingly.

FLOG response:

3.6.7-3 DOC 9-04 A
CTS 4.6.2.2

DOC 9-04A justifies exempting the locked, sealed, or otherwise secured valves from the 18 month actuation test. The Conversion Comparison Table (enclosure 3B) states that this change is not applicable to Callaway because it is current practice per CTS 4.6.2.2. This is incorrect. Callaway does not have a SR in CTS 3/4.6.2.2 which verifies valve actuation on a test signal.

Comment: Correct the Conversion Comparison Table to show that this change is not applicable to Callaway.

FLOG response:

3.6.7-4 DOC 9-07 M
CTS 4.6.2.2.d
ITS SR 3.6.7.5 and Associated Bases

CTS 4.6.2.2d requires the verification of both spray additive and RWST full flow from the test valve in the Spray Additive System. In converting to ITS SR 3.6.7.5 this SR is modified in the CTS markup by the addition of the words "through each solution flow path." This change is designated DOC 9-07 M. Based on the CTS wording, the staff believes that the change is an Administrative change rather than a More Restrictive change. Insufficient information is provided in DOC 9-07 M to justify a More Restrictive change.

Comment: Provide additional discussion and justification to support the designation of a More Restrictive change.

FLOG response:

3.6.7-5 DOC 9-05 TR-1
CTS 4.6.2.2.c
ITS SR 3.6.7.4 and Associated Bases

CTS 4.6.2.2.c requires that each automatic valve in the Spray Additive System flow path actuates to its correct position on a specified test signal. In converting to ITS SR 3.6.7.4 the CTS is modified to allow credit to be taken for an actual as well as a simulated (test) signal. The identification of the specified signal has been moved to the Bases. DOC 9-05 TR-1 does not provide sufficient information to justify allowing the use of an actual signal. In addition, the specified actuation signal has not been relocated to the Bases of ITS 3.6.7. See Comment Number 3.6.7-6.

Comment: Revise ITS B3.6.7 to specify the specified actuation signal (See Comment Number 3.6.7-6.) and provide additional discussion and justification to allow the use of an actual signal to meet the surveillance requirements.

FLOG response:

3.6.7-6 DOC 9-05 TR-1
CTS 4.6.2.2.c

DCPP CTS 4.6.2.2.c requires that each automatic valve in the Spray Additive System flow path actuates to its correct position on a Containment Spray Actuation test signal. DOC 9-05 TR-1 for DCPP specifies that this signal is a safety injection test signal. Note the safety injection signal is correct for the change associated with CTS 4.6.2.3.b which also used DOC 9-05 TR-1.

Comment: Correct this discrepancy.

FLOG response:

3.6.7-7 DOC 9-02 LG
CTS 3.6.2.2.a
ITS SR 3.6.7.2
ITS SR 3.6.7.3

WCGS CTS 3.6.2.2.a specifies that an OPERABLE Spray Additive System consists of a spray additive tank containing a volume of between 4340 and 4540 gallons of between 28 and 31% by weight NaOH solution. The CTS markup relocates this requirement via DOC 9-02 LG to the Bases. This is incorrect. The limits in CTS 3.6.2.2.a are not relocated to the Bases but are specified in ITS SR 3.6.7.2 and SR 3.6.7.3.

Comment: Revise the CTS markup to show that limits specified in CTS 3.6.2.2.a are specified in ITS SR 3.6.7.2 and SR 3.6.7.3.

FLOG response:

3.6.7-8 DOC 9-06 LG
CTS 4.6.2.2.d
ITS B3.6.7 Bases

WCGS CTS 4.6.2.2.d verifies that each eductor flow rate is $\geq$ 52 gpm using the RWST as the test source throttled to 17 psig at the eductor outlet and that the lines between the spray additive tank and the eductors are not blocked by verifying flow. The CTS markup relocates these details to the Bases. The staff cannot find all these details in

the Bases to ITS 3.6.7 in particular the flow rate pressure of 17 PSIG at the eductor outlet and verification that the lines are not blocked.

Comment: Revise ITS B3.6.7 Bases to include this information or provide a discussion and justification on the deletion.

FLOG response:

3.6.7-9 DOC 9-06 LG
CTS 4.6.2.2.d
ITS SR 3.6.7.5 and Associated Bases

DCPP CTS 4.6.2.2.d verifies both spray additive and RWST full flow from the test valve 8993 in the Spray Additive System. DOC 9-06 LG in the other FLOG CTS relocates the details of CTS 4.6.2.2.d to the Bases. The DCPP DOC Enclosure 3A specifies that DOC 9-06 LG is not applicable to DCPP. This is incorrect. The specific details of CTS 4.6.2.2.d such as flow path and test valve 8993 have not been specified in the corresponding ITS SR 3.6.7.5 but have been moved to ITS B3.6.7 Bases - SR 3.6.7.5.

Comment: Revise the CTS markup to show that these items have been relocated to the Bases and provide the appropriate discussion and justification for DOC 9-06 LG.

FLOG response:

3.6.7-10 JFD 3.6-16
ITS SR 3.6.7.2, SR 3.6.7.3, SR 3.6.7.4, SR 3.6.7.5 and Associated Bases

See Comment Number 3.6.0-2.

Comment: See Comment Number 3.6.0-2.

FLOG response:

3.6.7-11 CTS 4.6.2.2.d
ITS SR 3.6.7.5

WCGS CTS 4.6.2.2.d has been modified to verify "spray additive flow rate from each solution's flow path" to conform to WCGS ITS SR 3.6.7.5. The markup of ITS SR 3.6.7.5 shows brackets ([ ]) around the word "rate" with no indication that the brackets are to be removed or the whole item ([rate]) is to be deleted.

Comment: Revise the ITS markup to conform to the CTS markup.

FLOG response:

3.6.7-12 STS B3.6.7 Bases - BACKGROUND
ITS B3.6.7 Bases - BACKGROUND

The last paragraph in STS B3.6.7 Bases - BACKGROUND has been deleted from CPSES ITS B3.6.7 Bases - BACKGROUND. Since ITS changes to the STS Bases were made based on changes to the STS on plant specific system design, or on current licencing basis as specified in the CTS, the deletion does not seem to fall into any of these categories. The paragraph provides a description of how the Spray Additive System operates when activated, and is applicable to CPSES.

Comment: Revise the ITS markup to include this paragraph modified to specify plant specific parameters or provide a discussion and justification for its deletion based on system design, operational constraints or current licensing basis.

FLOG response:

3.6.7-13 STS B3.6.7 Bases - APPLICABLE SAFETY ANALYSES
ITS B3.6.7 Bases - APPLICABLE SAFETY ANALYSES

The fourth paragraph of STS B3.6.7 Bases - APPLICABLE SAFETY ANALYSES has been extensively modified in DCPP ITS B3.6.7 Bases. The modifications make the paragraph incomprehensible and nonsensical.

Comment: Revise the ITS markup to correct the errors and provide a discussion and justification for the modifications.

FLOG response:

3.6.7-14 STS B3.6.7 Bases - SR 3.6.7.1
ITS B3.6.7 Bases - SR 3.6.7.1

See Comment Number 3.6.3-52.

Comment: See Comment Number 3.6.3-52.

FLOG response:

3.6.7-15 ITS SR 3.6.7.2 and Associated Bases

DCPP ITS B3.6.7 Bases - SR 3.6.7.2 states the following: "The required volume may be surveilled using an indicated level band of 50 to 88% for the Spray Additive Tank which corresponds to the LCO 3.6.7 minimum and maximum limits adjusted conservatively for instrument accuracy of ± 0.3%." ITS SR 3.6.7.2 specifies the minimum and maximum limits as 46.2 and 91.9% respectively. The ITS SR and ITS Bases numbers do not seem to correlate even when instrument accuracy is taken into account.

Comment: Provide a discussion to show that the ITS SR and ITS Bases numbers are equivalent.

FLOG response:

3.6.7-16 ITS B3.6.7 Bases- SR 3.6.7.5

CPSES ITS B3.6.7 Bases SR 3.6.7.5 adds the following sentences: "Flow of between 50 and 100 gpm through the eductor test loops (supplied from the RWST) simulates flow from the Chemical Additive Tank. The flow rate through the eductors is not critical because the entire Chemical Additive Tank contents is injected prior to isolation." The latter sentence is confusing. In one sense it implies that the SR is not needed - "flow rate...not critical." In another sense it implies that even if the flow rate is substantially less than 50 gpm, the contents of the tank will be injected before the system isolates. See Comment Number 3.6.7-17 for a related concern.

Comment: Provide a discussion and justification for this change based on system design, operation constraints or current licensing basis. See Comment Number 3.6.7-17.

FLOG response:

3.6.7-17 STS B3.6.7 Bases - SR 3.6.7.5
ITS B3.6.7 Bases - SR 3.6.7.5

STS B3.6.7 Bases - SR 3.6.7.5 states the following: "This SR provides assurance that the correct amount of NaOH will be metered into the flow path upon Containment Spray System initiation." ITS B3.6.7 Bases - SR 3.6.7.5 deletes this sentence. Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, this change with regards to the discussion in Comment Number 3.6.7-16 does not seem to fall into any of these categories and should be retained.

Comment: Retain the STS sentence or provide a discussion and justification based on system design, operational constraints or current licensing basis for its deletion.

FLOG response:

3.6.8 Hydrogen Recombiners

3.6.8-1 DOC 13-01 LS-17
JFD B
CTS 3.6.4.2 ACTIONS
STS 3.6.8 ACTION B and Associated Bases
ITS 3.6.8 ACTION B and Associated Bases

A new ACTION has been added to CTS 3.4.6.2. This ACTION describes the required actions to be taken for two hydrogen recombiners inoperable. Whereas CTS 3.6.4.2 would require immediate entry into CTS 3.0.3, STS/ITS 3.6.8 ACTION B allows up to 7 days to restore one hydrogen recombiner to OPERABLE status, based on the availability of the Containment Hydrogen Purge System. The reviewer's Note in STS B3.6.8 Bases - ACTIONS B.1 and B.2 states that "This condition is only allowed for units with an alternate hydrogen control system acceptable to the Technical Staff." Other than stating that there is a Hydrogen Purge System in ITS B3.6.8 Bases, no description is provided on this system. In addition, ITS 3.6.3 and its associated Bases only describes a Containment Purge System, not a Hydrogen Purge System and its associated purge valves. There is no discussion or justifications to show Containment Purge System and the Hydrogen Purge System are the same system or separate independent systems or that the Containment Purge System has been approved by the staff as an alternate means of hydrogen control. See Comment 3.6.8-6 regarding additional concerns in this area.

Comment: Provide appropriate discussion and justification to show that the Containment Purge System or the Hydrogen Purge System has been approved by the Staff as an alternate means of hydrogen control or delete ITS 3.6.8 ACTION B.

FLOG response:

3.6.8-2 DOC 13-03 LG
CTS 4.6.4.2.a
CTS 4.6.4.2.b.2
CTS 4.6.4.2.b.3
ITS B3.6.8 Bases - SR 3.6.8.1
ITS B3.6.8 Bases - SR 3.6.8.2
ITS B3.6.8 Bases - SR 3.6.8.3

The descriptive information on the hydrogen recombiners in CTS 4.6.4.2.a, 4.6.4.2.b.2, and 4.6.4.2.b.3 has been moved to ITS B3.6.8 Bases - SR 3.6.8.1, SR 3.6.8.2 and SR

3.6.8.3 respectively. DOC 13-03 LG justifies the relocation based on consistency with the wording and detail present in NUREG-1431. Consistency with NUREG-1431 is not an acceptable justification for relocating material from the CTS to a licensee controlled document. See Comment Numbers 3.6.8-3 and 3.6.8-4.

Comment: Provide additional discussion and justification for this Less Restrictive change.

FLOG response:

3.6.8-3 DOC 13-03 LG
CTS 4.6.4.2.a
ITS B3.6.8 Bases SR 3.6.8.1

CTS 4.6.4.2.a specifies for the Hydrogen Recombiner functional test that the heater air temperature increases to ≥ 1150°F within five hours. DOC 13-03 LG states that this information has been relocated to the Bases. The ITS equivalent of CTS 4.6.4.2.a is ITS SR 3.6.8.1. However, ITS B3.6.8 Bases - SR 3.6.8.1 states that "This SR verifies that the minimum heater sheath temperature increases to ≥ 700°F in ≤ 90 minutes. After reaching 700°F, the power is increased to maximum power for approximately 2 minutes and the power is verified to be ≥ 60 KW." The ITS does not conform to the CTS nor is any justification provided for changing requirements. This change would be considered as a beyond scope of review item for this conversion.

Comment: Revise ITS B3.6.8 Bases - SR 3.6.8.1 to be consistent with CTS 4.6.4.2.a.

FLOG response:

3.6.8-4 DOC 13-03 LG
CTS 4.6.4.2.b.2
ITS B3.6.8 Bases - SR 3.6.8.2

The descriptive information specified in CTS 4.6.4.2.b.2 on abnormal conditions within the recombiner enclosure is to be moved to the Bases. The staff cannot find this information in ITS B3.6.8 Bases - SR 3.6.8.2 which is the corresponding ITS SR for CTS 4.6.4.2.b.2.

Comment: Describe where this relocated information can be found.

FLOG response:

3.6.8-5 DOC 13-04 LG
CTS 4.6.4.2.b.1

CTS 4.6.4.2.b.1 requires a CHANNEL CALIBRATION be performed on the hydrogen recombiner instrumentation and controls at least once every 18 months. DOC 13-04 LG states that this surveillance is being relocated to a licensee controlled document. Enclosure 6B "Conversion Comparison Table - Current TS 3/4.6" specifies for Diablo Canyon that this information is being relocated to the "ECGS." While the other FLOG utilities are relocating this item to a 10 CFR 50.59 controlled document, no information is provided as to the change control process for the ECGS.

Comment: Describe the ECGS change control process. If the change control process is not 10 CFR 50.59, provide a discussion and justification for this Less Restrictive (LS) change of deletion of details from regulatory control.

FLOG response:

3.6.8-6 STS B3.6.8 Bases - ACTION B.1 and B.2
ITS B3.6.8 Bases - ACTION B.1 and B.2

STS B3.6.8 Bases - ACTION B.1 and B.2 states the following: "It does not mean to perform the Surveillances needed to demonstrate OPERABILITY..." ITS B3.6.8 Bases - ACTION B.1 and B.2 modifies this sentence as follows: No surveillances or other testing are needed to demonstrate OPERABILITY..." . Since ITS changes to the STS Bases were made based on changes to the STS, on plant specific system design, or on current licensing basis as specified in the CTS, the changes made to this sentence do not seem to fall into any of these categories. The staff believes that these changes could be generic and beyond the scope of review of this conversion. See Comment Number 3.6.-2.

Comment: Delete this change.

FLOG response:

3.6.8-7 STS B3.6.8 Bases - APPLICABLE SAFETY ANALYSES
STS B3.6.8 Bases - REFERENCES
ITS B3.6.8 Bases - APPLICABLE SAFETY ANALYSES
ITS B3.6.8 Bases - REFERENCES

STS/ITS B3.6.8 Bases - APPLICABLE SAFETY ANALYSES second paragraph, last sentence states the following: "Conservative assumptions recommended by Reference 3 are used to maximize the amount of hydrogen calculated." STS B3.6.8 Bases - References identifies Reference 3 as "Regulatory Guide 1.7, Revision 2." ITS B3.6.8 Bases - References deletes STS Reference 3 and makes STS Reference 4 "FSAR

Section 6.2.5, Reference 3. The FSAR does not recommend assumptions to be used, but specifies the assumptions used to design the facility.

Comment: Correct this discrepancy and provide any necessary discussion and justification.

FLOG response:

3/4.6.4.1 Hydrogen Monitors

3/4.6.4.1-1 CTS 3/4.6.4.1

CTS 3/4.6.4.1 Hydrogen Monitors has been moved from CTS 3/4.b to ITS 3.3.3. No justification has been provided for this Administrative change to CTS 3/4.6.

Comment: Provide a discussion and justification for this Administrative change.

FLOG response:

RAI APPLICABILITY

RAI NO.	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
3.6.0-1	X	X	X	X
3.6.0-2	X	X	X	X
3.6.1-1	X	X	X	X
3.6.1-2	X	X	X	
3.6.1-3	X	X	X	X
3.6.1-4				X
3.6.1-5	X	X		
3.6.1-6	X	X	X	X
3.6.1-7				X
3.6.1-8	X			
3.6.1-9				X
3.6.1-10	X	X		
3.6.2-1	X	X	X	X
3.6.2-2		X		
3.6.2-3	X	X		
3.6.2-4	X	X	X	X
3.6.2-5	X	X	X	X
3.6.2-6	X	X	X	X
3.6.2-7	X	X	X	X
3.6.2-8	X	X	X	X
3.6.2-9	X	X	X	X
3.6.2-10		X	X	X
3.6.2-11			X	
3.6.2-12	X			
3.6.2-13		X		
3.6.2-14	X			

RAI NO.	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
3.6.3-1	X	X	X	X
3.6.3-2		X		
3.6.3-3		X		
3.6.3-4	X	X	X	X
3.6.3-5	X			
3.6.3-6	X	X	X	X
3.6.3-7	X		X	X
3.6.3-8	X	X	X	X
3.6.3-9	X			
3.6.3-10	X		X	X
3.6.3-11	X	X	X	X
3.6.3-12	X			
3.6.3-13			X	X
3.6.3-14		X		
3.6.3-15	X		X	X
3.6.3-16	X			
3.6.3-17	X	X	X	X
3.6.3-18	X			
3.6.3-19		X		
3.6.3-20		X		
3.6.3-21			X	X
3.6.3-22			X	X
3.6.3-23	X	X	X	X
3.6.3-24			X	X
3.6.3-25			X	X
3.6.3-26			X	X

RAI NO.	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
3.6.3-27	X	X	X	X
3.6.3-28	X	X	X	X
3.6.3-29	X	X	X	X
3.6.3-30		X		
3.6.3-31			X	
3.6.3-32			X	X
3.6.3-33			X	X
3.6.3-34	X	X		X
3.6.3-35		X	X	X
3.6.3-36		X		
3.6.3-37			X	X
3.6.3-38	X			
3.6.3-39	X			
3.6.3-40	X			X
3.6.3-41	X	X	X	X
3.6.3-42	X	X	X	X
3.6.3-43	X	X		
3.6.3-44	X			
3.6.3-45				X
3.6.3-46				X
3.6.3-47		X		
3.6.3-48	X			
3.6.3-49	X			X
3.6.3-50				X
3.6.3-51			X	
3.6.3-52	X	X	X	X

RAI NO.	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
3.6.3-53		X		
3.6.3-54			X	X
3.6.3-55	X			
3.6.3-56	X	X		
3.6.3-57			X	
3.6.3-58		X		
3.6.5-1	X	X	X	X
3.6.5-2		X		
3.6.5-3	X	X		
3.6.5-4	X		X	
3.6.6-1		X		
3.6.6-2	X			
3.6.6-3	X	X	X	X
3.6.6-4	X		X	X
3.6.6-5	X		X	X
3.6.6-6				X
3.6.6-7	X		X	X
3.6.6-8	X			
3.6.6-9			X	X
3.6.6-10			X	X
3.6.6-11	X		X	
3.6.6-12	X			
3.6.6-13	X		X	X
3.6.6-14			X	
3.6.6-15	X		X	X
3.6.6-16				X

RAI NO.	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
3.6.6-17	X			
3.6.6-18				X
3.6.6-19	X			
3.6.6-20	X			
3.6.6-21				X
3.6.6-22	X	X	X	X
3.6.6-23			X	X
3.6.6-24	X	X		
3.6.7-1	X			
3.6.7-2	X		X	
3.6.7-3				X
3.6.7-4	X			
3.6.7-5	X	X	X	
3.6.7-6	X			
3.6.7-7			X	
3.6.7-8			X	
3.6.7-9	X			
3.6.7-10				X
3.6.7-11			X	
3.6.7-12		X		
3.6.7-13	X			
3.6.7-14	X	X	X	
3.6.7-15	X			
3.6.7-16		X		
3.6.7-17		X		
3.6.8-1	X		X	X

RAI NO.	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
3.6.8-2	X	X	X	X
3.6.8-3			X	
3.6.8-4	X	X	X	
3.6.8-5	X			
3.6.8-6			X	X
3.6.8-7	X			
3/4.6,4.1-1	X	X		