

June 16, 1998

Mr. Otto L. Maynard  
President and Chief Executive Officer  
Wolf Creek Nuclear Operating Corporation  
Post Office Box 411  
Burlington, Kansas 66839

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON THE PROPOSED  
CONVERSION TO THE IMPROVED STANDARD TECHNICAL  
SPECIFICATIONS FOR WOLF CREEK NUCLEAR GENERATING  
STATION, UNIT NO. 1 (TAC NO. M98738)

Dear Mr. Maynard:

The Nuclear Regulatory Commission staff is reviewing the Wolf Creek Nuclear Operating Corporation's proposed license amendment to convert the current technical specifications for Wolf Creek Nuclear Generating Station, Unit No. 1 to the Improved Standard Technical Specifications. Wolf Creek Nuclear Operating Corporation provided their proposed license amendment request by letter dated May 15, 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 3.5, Emergency Core Cooling Systems (ECCS); Section 3.9, Refueling Operations; and Section 4.0, Design Features, as discussed in the enclosure. Also included in the enclosure is one general comment that applies to all sections. 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 the Wolf Creek Nuclear Generating Station, Unit No. 1 as identified in the table within the enclosure.

To assist the staff in maintaining its review schedule, please respond to the questions pertaining to Wolf Creek Nuclear Generating Station, Unit No. 1 within 30 days of the date of this letter. If you have any questions regarding the RAI, please contact me at (301) 415-1362. 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 WILLIAM BATEMAN FOR:  
Kristine M. Thomas, Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Docket No. 50-482

Enclosure: Request for Additional Information

cc w/encl: See next page

Document Name: WCITS.RAI

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Docket	OGC
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PDIV-2 Reading	PGwynn, RIV
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**FLOG IMPROVED TS REVIEW COMMENTS**  
**SECTION 3.5 - ECCS**

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**3.5.1 Accumulators**

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3.5.1.-1      DOC 1-02 A  
                 JFD PS  
                 CTS 4.5.1.B  
                 STS SR 3.5.1.4  
                 ITS SR 3.5.1.4

The STS wording for the second Frequency of SR 3.5.1.4 provides an option for specifying number of gallons or percent of indicated level. ITS SR 3.5.1.4 uses percent, but the phrase "of indicated level" has not been adopted. This change is not consistent with Diablo Canyon, the other licensee who chose to use percent.

**Comment:** Make ITS SR 3.5.1.4 consistent with the STS and with Diablo Canyon ITS SR 3.5.1.4 by adding the phrase "of indicated level" or provide a plant-specific reason for not adopting the STS wording.

**FLOG Response:**

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3.5.1-2      CTS 3.5.1 Action b  
                 STS 3.5.1 Action B  
                 JFD 3.5-2

The CTS markup for 3.5.1 is based on a pending license amendment request (LAR). The change in the completion time for STS Action B is beyond the scope of the conversion review. If the pending LAR is not issued by the time the conversion amendment draft safety evaluation is prepared, the change in the completion time will have to be withdrawn from the conversion submittal.

**Comment:** No action necessary at this time.

**FLOG Response:**

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3.5.1-3      DOC 1-01 M  
                 CTS 3.5.1.b & 3.5.1.d

DOC 1-01M states, "These changes are administrative as there are no technical differences in these numbers." If the changes are administrative, then why are they classified as more restrictive? Also, it is not true that there are no "technical differences" in the numbers. The pressure range changes from 603-693 psig in CTS 3.5.1.d to 623-644 psig in ITS SR 3.5.1.3.

**Comment:** It appears that the two changes captured by this DOC should be separated. The change to the requirements for borated water volume should be an administrative change since



it only involves a change in units of measurement. The change to the nitrogen cover pressure requirements appears correctly classified as a more restrictive change, since the range has gotten tighter, assuming an explanation of why the tighter range is necessary can be provided. Otherwise, the change could be considered out of the scope of the conversion.

**FLOG Response:**

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3.5.1-4	DOC 1-04 LS-8 CTS 3.5.1 Action a ITS 3.5.1 Action A
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The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** The NSHC for this change appears to provide the needed justification. Therefore, please incorporate the information contained in the NSHC into the subject DOC.

**FLOG Response:**

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3.5.1-5	DOC 1-05 LS-9 CTS 3.5.1 Action b ITS 3.5.1 Action B
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The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** The NSHC for this change appears to provide the needed justification. Therefore, please incorporate the information contained in the NSHC into the subject DOC.

**FLOG Response:**

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3.5.1-6	DOC 1-07 LG CTS 4.5.1.1.b (DC, CA, WC) CTS 4.5.1.b (CP) ITS SR 3.5.1.4
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The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** Please revise the DOC to include additional justification as to why this detail is not necessary in the ITS.

**FLOG Response:**



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3.5.2 ECCS - Operating

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3.5.2-1      DOC 2-01 LG  
                 CTS 3.5.2 LCO  
                 ITS 3.5.2 LCO

The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** Please revise the DOC to include additional justification as to why this detail is not necessary in the ITS.

**FLOG Response:**

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3.5.2-2      DOC 2-09 LG  
                 CTS 4.5.2.c

The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** Please revise the DOC to include additional justification as to why this surveillance is not necessary in the ITS.

**FLOG Response:**

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3.5.2-3      DOC 2-11 TR-1  
                 CTS 4.5.2.e  
                 ITS SR 3.5.2.5 & SR 3.5.2.6

The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** The NSHC for this change appears to provide the needed justification. Therefore, please incorporate the information contained in the NSHC into the subject DOC.

**FLOG Response:**

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3.5.2-4      DOC 2-12 LG  
                 CTS 4.5.2.f  
                 ITS SR 3.5.2.4

The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** Please revise the DOC to include additional justification as to why this detail is not necessary in the ITS.

**FLOG Response:**

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3.5.2-5	DOC 2-15 LG CTS 4.5.2.h
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The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** Please revise the DOC to include additional justification as to why this surveillance is not necessary in the ITS.

**FLOG Response:**

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3.5.2-6	DOC 2-16 LG CTS 4.5.2.i ITS SR 3.5.2.3
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The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** Please revise the DOC to include additional justification as to why this detail is not necessary in the ITS.

**FLOG Response:**

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3.5.2-7	DOC 2-17 A CTS 4.5.2.e.1 ITS SR 3.5.2.5
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The Conversion Compariosn Table identifies this change as applicable to Comanche Peak and the change is included in the ITS; however, the CTS markup does not include this change.

**Comment:** Please revise the CTS 3/4.5.2 markup to reflect this change.

**FLOG Response:**

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3.5.2-8      DOC 2-19 LG  
                 CTS 4.5.2.e

The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** Please revise the DOC to include additional justification as to why this detail is not necessary in the ITS.

**FLOG Response:**

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3.5.2-9      ITS B3.5.2 Bases SR 3.5.2.3

The Diablo Canyon STS Bases markup appears to be a markup of the Comanche Peak markup of the STS Bases, rather than a direct markup of the STS Bases. See the referenced section for an example.

**Comment:** Please confirm that the STS Bases are the starting point for the 3.5 Bases markup and *not* the Comanche Peak ITS Bases.

**FLOG Response:**

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3.5.3 ECCS - Shutdown

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3.5.3-1      DOC 3-01 LG  
                 CTS LCO 3.5.3  
                 ITS LCO 3.5.3

The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** Please revise the DOC to include additional justification as to why this detail is not necessary in the ITS.

**FLOG Response:**

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3.5.3-2      DOC 3-03 LS-5  
                 CTS 3.5.3 Action a  
                 ITS 3.5.3 Actions A & C

DOC 3-03 LS-5 discussed two distinct changes. The first change involves movement of the descriptive information to the Bases. The second change is an increase in the completion time to reach Mode 5 from 20 to 24 hours.



**Comment:** The first change, movement of the descriptive information to the Bases, should be separated out and justified as an "LG" change, consistent with other similar changes in this section. The increase in the completion time to reach Mode 5 from 20 to 24 hours is correctly justified as an "LS" change and the justification provided in DOC 3-03 LS-5 is acceptable.

**FLOG Response:**

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3.5.3-3	DOC 3-04 LG CTS 3.5.3 Action b ITS 3.5.3 Action B
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DOC 3-04 LG discussed two distinct changes. The first change involves a change in the wording of the Action requirement. The second change is movement of the instructions to maintain temperature using alternate heat removal methods to the Bases.

**Comment:** The first change to the wording of the Action requirement should be separated out and justified as an "A" change. The movement of the instructions to the Bases is correctly justified as an "LG" change, but the justification provided in DOC 3-03 LS-5 is not adequate. Please revise the DOC to include additional justification as to why this detail is not necessary in the ITS.

**FLOG Response:**

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3.5.3-4	DOC 3-06 A CTS LCO 3.5.3 ITS LCO 3.5.3 Note
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This change is categorized as an administrative change even though it provides an exception to the LCO requirements that does not exist in the CTS. The DOC states that the note is only to "provide clarification."

**Comment:** Despite licensees' individual interpretations of the CTS, the CTS themselves do not contain the allowance provided in the ITS Note. Therefore, this change should be reclassified as a less restrictive change and an appropriate justification provided.

**FLOG Response:**

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3.5.3-5	DOC 3-10 LS-6 CTS 4.5.3.1.1 (DC), CTS 4.5.3.1 (All others) ITS 3.5.3
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The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the ITS.

**Comment:** The NSHC for this change appears to provide the needed justification. Therefore, please incorporate the information contained in the NSHC into the subject DOC.

**FLOG Response:**

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3.5.4 Refueling Water Storage Tank (RWST)

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3.5.4-1      DOC 5-04 LS-12  
                 CTS 3.5.5 Actions a & b  
                 ITS 3.5.4 Action A

The referenced DOC describes the change to the CTS but does not provide any justification for making the change other than that it is consistent with the STS.

**Comment:** The NSHC for this change appears to provide the needed justification. Therefore, please incorporate the information contained in the NSHC into the subject DOC.

**FLOG Response:**

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3.5.5 Seal Injection Flow

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3.5.5-1      Section 3.4 DOC 6-21 LS-35  
                 Section 3.5 JFD 3.5-4  
                 CTS 3.4.5.2 Action b (CP)  
                 CTS 3.4.6.2 Action b (DC)  
                 ITS 3.5.5 Action A

This change is a change to both the CTS and the STS and is beyond the scope of the conversion review and is generic. DOC 6-21 states that this change is consistent with WOG-84.

**Comment:** Please provide the current status of WOG-84. If WOG-84 is not approved by the TSTF, then this change should be withdrawn from the conversion submittal at the time of the TSTF rejection. If WOG-84 has not been acted on by the TSTF, or is approved by the TSTF, but not approved by the NRC by the time the draft safety evaluation is being prepared, then it should be withdrawn from the conversion submittal at that time. This change will not be reviewed on a plant-specific basis.

**FLOG Response:**

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3.5.5-2      Section 3.4 DOC 6-28 LG  
                 CTS 3.4.6.2.e & 4.4.6.2.1.c  
                 STS 3.5.5

This change is a change to both the CTS and the STS and is beyond the scope of the conversion review and is generic. In addition, it is not consistent with the conversion submittals for Comanche Peak and Diablo Canyon.

**Comment:** Please revise the conversion submittal to include an LCO equivalent to STS 3.5.5, "Seal Injection Flow." The information provided in DOC 6-28 is not sufficient justification for moving these requirements to a licensee controlled document. Also, please see comment 3.5.5-1 related to ITS 3.5.5 for Comanche Peak and Diablo Canyon to assist in preparing the specification for seal injection flow.

**FLOG Response:**



### 3.5 RAI APPLICABILITY

RAI NO.	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
3.5.1-1		X		
3.5.1-2			X	
3.5.1-3		X		
3.5.1-4	X			
3.5.1-5	X			
3.5.1-6	X	X	X	X
3.5.2-1	X	X	X	X
3.5.2-2	X	X	X	X
3.5.2-3	X	X	X	X
3.5.2-4	X	X	X	X
3.5.2-5	X	X	X	X
3.5.2-6	X	X	X	X
3.5.2-7		X		
3.5.2-8			X	X
3.5.2-9	X			
3.5.3-1	X	X	X	X
3.5.3-2	X	X	X	X
3.5.3-3	X	X	X	X
3.5.3-4	X	X	X	X
3.5.3-5	X	X	X	X
3.5.4-1	X			
3.5.5-1	X	X		
3.5.5-2			X	X

**FOUR LOOP GROUP (FLOG) IMPROVED TS REVIEW COMMENTS  
SECTION 3.9 - REFUELING OPERATIONS**

**3.9-1 General**

A great majority of the DOCs state that the reasons for the relocation and for the proposed changes including deletions, additions, and revisions, are made to be consistent with NUREG-1431. While this is a valid statement, additional justifications are still required in order to support the proposed relocations and the CTS changes. The DOCs should be expanded to include additional justifications for the relocation and/or changes.

**Comment:** Revise those DOCS which do not provide technical justifications for the proposed relocations and changes, and indicate which DOCs are being revised under this comment.

**FLOG Response:**

**3.9-1 CTS 3.9.1**  
DOC 1-01-A  
ITS 3.9.1, LCO 3.9.1  
JFD 3.9-15

**a. (Comanche Peak, Callaway, and Wolf Creek)**

The CTS and ITS are proposed to be revised by adding "when connected" preceding "Reactor Coolant System." The DOC provides a generic explanation, but it does not provide any specific technical justification for this addition. This revision is considered an administrative enhancement and a generic change to the ITS. Therefore, it must be reviewed and approved via the TSTF process before it may be adopted as the standard ITS language. Furthermore, Diablo Canyon does not include the proposed addition, "when connected," in its CTS markup.

**Comment:** Either remove this item from the submittal and adopt the ITS language, or submit a TSTF for this generic change. Also, provide explanation why Diablo Canyon is not adopting the proposed language, "when connected."

**FLOG Response:**

**b. (Callaway only)**

The CTS is revised by changing "refueling canal" to "refueling pool." The DOC stated that it is adding the filled portion of the "refueling cavity." The change is not consistent with what was stated in DOC, nor was there any explanation in addressing these terminologies.

**Comment:** Revise DOC by providing explanation to these discrepancies or make the appropriate corrections.

**FLOG Response:**

**3.9-2 CTS 3.9.1 Action b**  
**DOC 1-11-LS19**  
**ITS 3.9.2 Action A4**

The time required to verify that the boron concentration is within its limits has been changed from 1 hour to 4 hours in CTS. While "4 hours" is consistent with ITS, the explanation that was provided, "The 4 hour requirement is a reasonable estimate of the time requirement to measure the boron concentration by chemical analysis," does not address any technical justification for this change.

**Comment:** Revise DOC by providing specific technical justification for this relaxation and the impact which may affect CPSES in terms of plant operation, design and licensing basis.

**FLOG Response:**

**3.9-3 CTS 3.9.2**  
**DOC 2-01-LS**  
**DOC 2-01-LS-21 (Wolf Creek)**

The requirements related to indication provided by the source range detectors, "each with continuous visual indication the control room and one with audible indication in the containment and control room", is proposed to be deleted from the LCO of CTS in accordance to NUREG-1431, Rev 1 and TSTF-23. While TSTF-23 is still under review, it cannot be adopted until it is approved.

**Comment:** Revise the submittal by including the above phrase or provide further technical justification to support the proposed deletion.

**FLOG Response:**

**3.9-4 CTS 4.9.2 b and c**  
**CTS 4.9.2 b, c and Footnote \* (Diablo Canyon)**  
**DOC 2-03-LS3**

Surveillance requirements 4.9.2 b and c for Analog Channel Operational Test are proposed to be deleted in CTS to be consistent with NUREG-1431, Rev. 1. ITS does not include these requirements. DOC 2-03-LS3 discusses the reasons for deletion, but it does not address the associated impact in regard to plant operation and design basis, and whether these surveillances would be moved to plant procedures or relocated to the UFSAR.

**Comment:** Revise DOC to justify as to why this is acceptable based on licensing and design basis. If these SRs should be relocated, identify the plant document that includes the CTS requirements.

**FLOG Response:**



**3.9-5 CTS 3/4.9.3  
DOC 3-01-R**

The CTS requirements in 3/4.9.3 have been entirely relocated to an unspecified licensee controlled document. Though Conversion Comparison Table provides the new location of this item, it is still necessary to address where the CTS requirements have been relocated to in the DOC. In addition, the specific technical justification for the relocation is not addressed in the DOC.

**Comment:** Revise DOC by providing justification as to why the relocation is acceptable and identify the licensee controlled document to which the CTS requirements would be relocated.

**FLOG Response:**

**3.9-6 CTS 4.9.4.2  
DOC 4-05-LG**

The DOC states that this surveillance, which requires the verification of the trip setpoint concentration value for the containment purge monitors is reset during CORE ALTERATIONS or other movement of irradiated fuel in containment, is to be moved. There is no justification provided in the DOC in regards to this move: why it is moved, where it is moved to, and what are the technical and licensing impacts associated with the move.

**Comment:** Revise the DOC and include the justification for the move: why it is moved, where it is moved to, what are the technical and licensing impacts associated with the move, and why it is considered acceptable.

**FLOG Response:**

**3.9-7 CTS 3.9.4 c 1) Footnote \*\* (Comanche Peak)  
CTS 3.9.4 c 1) Footnote \*\* and 4.9.4.1 Footnote \*\* (Callaway)  
CTS 3.9.4.c and 4.9.4 Footnote \* (Diablo Canyon)  
CTS 3.9.4.c Footnote \*\* and 4.9.4 Footnote \*\* (Wolf Creek)  
DOC 4-10-LS-20  
ITS 3.9.4 NOTE and SR 3.9.4.1  
JFD 3.9-11**

In DOC 4-10-LS-20 and JFD 3.9-11, it was stated that this change is consistent with traveler WOG-76.

**Comment:** Revise DOC by providing the TSTF number associated with WOG-76 and when the associated TSTF was approved. If WOG-76 has not made it to the TSTF process or the TSTF has not yet been approved, remove this item from the submittal since the inclusion of this footnote will be pending on the approval of the TSTF change.

**FLOG Response:**

3.9-8 CTS 4.9.4 a (Diablo Canyon and Wolf Creek)  
CTS 4.9.4 a.1 (Comanche Peak)  
CTS 4.9.4.1 (Callaway)  
DOC 4-03-LS-5  
ITS SR 3.9.4.2

The frequency to verify the occurrence of containment ventilation isolation is proposed to be changed from 7 days to 18 months. Other than the statement that this change is consistent with NUREG-1431, Rev. 1, the DOC does not address any specific technical justifications associated with this change.

**Comment:** Revise the DOC to include specific technical justifications for this change.

**FLOG Response:**

3.9-9 CTS 3/4.9.5  
DOC 5-01-R

CTS 3/4.9.5 is proposed to be relocated to an unspecified licensee controlled document. The DOC does not provide any technical justification supporting this relocation.

**Comment:** Revise the DOC by providing additional justification for the relocation and identify the licensee controlled document containing this requirement. This requirement shall be relocated to a licensee controlled document controlled by 10 CFR 50.59.

**FLOG Response:**

3.9-10 CTS 3/4.9.6  
DOC 6-01-R

CTS 3/4.9.6 would be entirely relocated to an unspecified licensee controlled document. The DOC does not have sufficient justification to support the relocation.

**Comment:** Provide additional justification as to why this relocation is acceptable and identify the name of the licensee controlled document containing this requirement. This requirement shall be relocated to a licensee controlled document controlled by 10 CFR 50.59.

**FLOG Response:**

3.9-11 CTS 3/4.9.7  
DOC 7-01-R

CTS 3/4.9.7 is proposed to be relocated to an unspecified licensee controlled document. The DOC does not provide any technical justification supporting this relocation.

**Comment:** Provide additional justification as to why this relocation is acceptable and identify the name of the licensee controlled document containing this requirement. This requirement shall be relocated to a licensee controlled document controlled by 10 CFR 50.59.

**FLOG Response:**

3.9-12 CTS 3.9.8.1 Footnote \* (Comanche Peak and Callaway)  
CTS 3.9.8.1 Footnote \* and \*\* (Diablo Canyon)  
CTS 4.9.8.1 Footnote \* (Wolf Creek)  
DOC 8-03-LS-6

The CTS requirement, which allows RHR loop to be removed from operation during the performance of CORE ALTERATIONS in the vicinity of the reactor vessel hot leg, is proposed to be deleted. The DOC does not address any technical justification but states that this change would allow increased flexibility for core mapping and isolation valve testing, and that this change is consistent with NUREG-1431, Rev. 1. In addition, there is not any discussions on the possible increase in risk associated with decay heat removal.

**Comment:** Revise the DOC by providing the justification as to why this deletion is acceptable and how it relates to the current licensing and design bases. Was there any risk assessment performed in regards to this issue? If so, what were the conclusions that would support the proposed change?

**FLOG Response:**

3.9-13 CTS 3.9.8.2 Footnote \*  
DOC 8-04-A

The CTS footnote regarding the option of securing RHR prior to initial criticality is proposed to be deleted entirely. This change is acceptable because it is a relaxation provided in the guidance of NUREG-1431, Rev. 1. However, the categorization is in error. This change is not an administrative change, but it is a more restrictive change.

**Comment:** Provide a revised "L" DOC.

**FLOG Response:**

3.9-14 CTS 3.9.9  
DOC 9-01-A

It is stated in the DOC that the requirements of this LCO would be incorporated into ITS 3.9.4, "Containment Penetrations" or would be addressed by ITS LCO 3.0.3 and 3.0.4. It is not clear exactly which one of these designations would address the requirements.



**Comment:** Revise the DOC to identify where, specifically, the requirements would be addressed in the ITS and provide the justification for the incorporation.

**FLOG Response:**

**3.9-15 CTS 3.9.9 Action a**  
**DOC 9-02-LS-7**

The CTS requirement to close each purge valve when the containment ventilation system is inoperable is proposed to be deleted. The only statement made in the DOC related to this deletion is that "The ITS only requires that core alterations and irradiated fuel movement be suspended." There was not any technical discussion with respect to this proposed deletion, or how the deletion affects plant operation, licensing and design bases, and why it is acceptable.

**Comment:** Revise the DOC by providing technical justification to support why it is acceptable.

**FLOG Response:**

**3.9-16 CTS 4.9.9**  
**DOC 9-03-LS-8**  
**DOC 9-03-LS-8 and 9-03-LS-5 (Callaway)**  
**ITS 3.9.4.1 and 3.9.4.2**  
**See also question 3.9-8**

The CTS requirement is proposed to be incorporated into ITS 3.9.4. The DOC states that this has the effect of changing the SR frequency from once per 7 days and within 100 hours prior to CORE ALTERATIONS to once per 18 months. However, there is no provision added in ITS 3.9.4, including 3.9.4.1 and 3.9.4.2, to change the SR frequency within 100 hours as it is stated in CTS 4.9.9. The same question in 3.9-8 also applies to this question.

**Comment:** Revise the DOC by providing justification and explanation as to why the within 100 hours provision is not included. Also, incorporate the response to question 3.9-8 as well.

**FLOG Response:**

**3.9-17 CTS 3/4.9.9, Control Rods**  
**DOC 10-01-R**

According to the DOC, the CTS requirements in 3/4.9.7 would be entirely relocated to an unspecified licensee controlled document. In addition, the DOC does not address adequate justification as to why the relocation is acceptable.

**Comment:** Provide additional justification as to why this relocation is acceptable and identify the name of the licensee controlled document containing this requirement. This requirement shall be relocated to a licensee controlled document controlled by 10 CFR 50.59.

**FLOG Response:**

**3.9-18 CTS 3.9.9.1 Applicability  
DOC 10-03-LS18**

CTS requires movement of unirradiated fuel when there is irradiated fuel in the core. The licensee proposes to revise the applicability such that it applies only when irradiated fuel is moved. There is not any technical discussion provided in the DOC to justify this change.

**Comment:** Please provide technical justification in the DOC as to why this is technically acceptable and how it applies to current licensing basis.

**FLOG Response:**

**3.9-19 CTS 3/4.9.10 and 3.9.10.1 Action**

Revisions were made to these requirements without any DOC. These revisions include changing "Reactor Vessel" to "Refueling Pool" in CTS 3/4.9.10, and adding the word "immediately" before "suspend all operations", and adding the word "irradiated" before "fuel assemblies", and changing "reactor vessel" to "containment". These changes need to be addressed in the DOC.

**Comment:** Add these revisions to the DOC and include justifications for these changes.

**FLOG Response:**

**3.9-20 CTS 3.9.10.1 Action**

Revisions were made to this requirement without any discussions provided in the DOC. These revisions include the addition of the word "irradiated" before "fuel assemblies," and deleting the word "reactor vessel" before "containment." These changes need to be addressed in the DOC.

**Comment:** Provide a discussion in the DOC to justify these changes.

**FLOG Response:**

3.9-21 CTS 3.9.10 Applicability and 4.9.10 (Comanche Peak)  
CTS 3.9.11 and 4.9.11 (Callaway)  
CTS 3.9.11 Applicability and 4.9.11 (Diablo Canyon)  
CTS 3.9.11 and 4.9.11 (Wolf Creek)  
DOC 11-01-LG

The CTS requirement, applicable to whenever irradiated fuels are in the fuel storage racks, is proposed to be relocated to an unspecified licensee controlled document. The DOC does not provide any technical justification related to this relocation.

**Comment:** Revise the DOC by including the justification for the relocation and identify the licensee controlled document containing this requirement. This requirement shall be relocated to a licensee controlled document controlled by 10 CFR 50.59.

**FLOG Response:**

3.9-22 CTS 3.9.11 Action a  
CTS 3.9.10 Action a (Comanche Peak)  
DOC 11-04-LG

According to the DOC, the CTS requirement regarding restriction on crane operation is proposed to be moved to an unspecified licensee controlled document. In addition, the DOC does not provide specific justification as to why this relocation is acceptable.

**Comment:** Revise the DOC to include specific justification to this relocation and identify the licensee controlled document containing this requirement. This requirement shall be relocated to a licensee controlled document controlled by 10 CFR 50.59.

**FLOG Response:**

3.9-23 ITS 3.9.7 Applicability and Action A  
JFD 3.9-10

The licensee is proposing to delete ITS 3.9.7, Applicability, which states, "During CORE ALTERATIONS, except during latching and unlatching of control rod drive shafts." JFD 3.9-10 states, the reason for this revision is that this requirement is a duplication of a relocated technical specification requirement for reactor vessel water level during movement of control rods (relocated CTS 3.9.9.2). ITS 3.9.7 Applicability is not an exact duplication of CTS 3.9.9.2; further technical and licensing justifications are required for this deletion.

**Comment:** Provide technical and licensing bases justification for this proposed deletion from ITS. Why does the inclusion of the ITS requirement pose a hardship?

**FLOG Response:**



**3.9-24 ITS 3.9.1 LCO 3.9.1 Note**  
**JFD 3.9-14**

A note, "While this LCO is not met, entry into MODE 6 from MODE 5 is not permitted" is added to LCO 3.9.1. JFD states that this restriction would prevent a transition from MODE 5 to MODE 6 if boron concentration limit for MODE 6 is not met. While the intent of this note is understandable, why this note is in ITS 3.9, Refueling Operations, is not clear since the plant would already be in MODE 6 for refueling operations.

**Comment:** Provide detailed technical discussion in JFD addressing the significance of this note, and why this note should be included.

**FLOG Response:**

**3.9-25 CTS 3/4.9.13 and Figure 3.9-1**  
**DOC 15-01-R**

The CTS requirements in 3/4.9.13 are proposed to be entirely relocated to an unspecified licensee controlled document. Though it is addressed in the Conversion Comparison Table where this item is being relocated to, it is necessary to address this in the DOC. In addition, the DOC does not contain any justification as to why the relocation is acceptable.

**Comment:** Revise the DOC by including the justification for the relocation and identify the licensee controlled document in which the CTS requirements would be relocated.

**FLOG Response:**

# RAI APPLICABILITY

RAI NO.	DIABLO CANYON	COMANCHE PEAK	WOLF CREEK	CALLAWAY
3.9-i	X	X	X	X
3.9-1a		X	X	X
3.9-1b				X
3.9-2		X		
3.9-3		X	X	X
3.9-4	X	X	X	X
3.9-5	X	X	X	X
3.9-6				X
3.9-7	X	X	X	X
3.9-8	X	X	X	X
3.9-9		X		
3.9-10	X	X		
3.9-11	X	X		
3.9-12	X	X	X	X
3.9-13	X	X	X	
3.9-14	X		X	X
3.9-15	X		X	X
3.9-16	X		X	X
3.9-17	X	X		
3.9-18	X	X		
3.9-19				X
3.9-20			X	
3.9-21	X	X	X	X
3.9-22	X	X	X	X
3.9-23	X	X	X	X
3.9-24	X	X	X	X
3.9-25	X			

**FOUR LOOP GROUP (FLOG) IMPROVED TS REVIEW COMMENTS**  
**SECTION 4.0 - DESIGN FEATURES**

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**4.0 DESIGN FEATURES**

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**4.3.2 DRAINAGE**

The ISTS for this section is as follows:

The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation [23 ft].

**Comment:** This section for all four FLOG plants are the same as the ISTS above. Each has a plant specific elevation for the bracket instead of the 23 ft. They are: Callaway 2040 ft; Wolf Creek 2040 ft; Comanche Peak 845 ft; Diablo Canyon 133 ft. Provide explanations that these elevation levels are at 23 ft above the spent fuel in the pool.

**FLOG Response:**



**FOUR LOOP GROUP (FLOG) IMPROVED TS REVIEW COMMENTS**

**GENERAL RAI APPLICABLE TO ALL SECTIONS WITH BASES**

**G-1 General**

There have been a number of instances that the specific changes to the STS Bases are not properly identified with redline or strikeout marks.

**Comment:** Perform an audit of all STS Bases markups and identify instances where additions and/or deletions of Bases were not properly identified in the original submittal.

**FLOG Response:**