

Mr. C. Lance Terry
TU Electric
Senior Vice President & Principal Nuclear Officer
ATTN: Regulatory Affairs Department
P.O. Box 1002
Glen Rose, Texas 76043

October 7, 1998

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON THE PROPOSED
CONVERSION TO THE IMPROVED STANDARD TECHNICAL
SPECIFICATIONS FOR COMANCHE PEAK STEAM ELECTRIC STATION,
(CPSES), UNITS 1 AND 2 (TAC NOS. M98778 AND M98779)

Dear Mr. Terry:

The Nuclear Regulatory Commission staff is reviewing TU Electric's proposed license amendment to convert the current technical specifications for the Comanche Peak Steam Electric Station (CPSES), Units 1 and 2, to the Improved Standard Technical Specifications. TU Electric 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 3.8, Subsections 3.8.1, 3.8.2, 3.8.3, 3.8.9, and 3.8.10, Electrical Power Systems, as discussed in the enclosure. The request for additional information was electronically transmitted to your staff on October 5, 1998, to expedite the review process. Two questions have been modified since the electronic transmittal. Question 3.8.2-03 has been modified to correct typographical errors and question 3.8.3 was identified as a Beyond Scope Item and has been eliminated since it is now in the current licensing basis.

To assist the staff in maintaining its review schedule, please respond to the questions within 30 days of the date of this letter. If you have any questions regarding the RAI, please contact me at (301) 415-1038. 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, Jack Dcnohew at (301) 415-1307.

Sincerely,

ORIGINAL SIGNED BY:

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

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Docket Nos. 50-445
and 50-446

Enclosure: Request for Additional
Information

cc w/encl: See next page

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NAME	TPolich <i>TP</i>	WBeckner
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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 7, 1998

Mr. C. Lance Terry
TU Electric
Senior Vice President & Principal Nuclear Officer
ATTN: Regulatory Affairs Department
P.O. Box 1002
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SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON THE PROPOSED
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To assist the staff in maintaining its review schedule, please respond to the questions within 30 days of the date of this letter. If you have any questions regarding the RAI, please contact me at (301) 415-1038. 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, Jack Donohew at (301) 415-1307.

Sincerely,

A handwritten signature in cursive script, appearing to read "Timothy J. Polich".

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

Docket Nos. 50-445
and 50-446

Enclosure: Request for Additional
Information

cc w/encl: See next page

Mr. C. Lance Terry
TU Electric Company

Comanche Peak, Units 1 and 2

cc:

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Glen Rose, TX 76403-2159

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Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

3.8.1, AC Sources - Operating

3.8.1-01	CP CW(3.8.1-01) WC(3.8.1-01)	ITS 3.8.1 Required Actions A.2 and B.2 ITS 3.8.1 Note for Required Action B.2 Bases for ITS 3.8.1 Required Action A.2, STS Bases markup page B 3.8-5 Bases for ITS 3.8.1 Required Action B.2, STS Bases markup page B 3.8-8 Bases for STS 3.8.1 Required Actions A.2 and B.2 Reviewer's Notes CTS 3/4.8.1.1 Action c
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Required Actions A.2 and B.2 for ITS 3.8.1 specify to declare required feature(s) with no offsite power available or supported by the inoperable DG inoperable when its required redundant feature(s) is inoperable. The Bases for STS 3.8.1 Required Actions A.2 and B.2 contain the same Reviewer's Note. The Reviewer's Notes address when the turbine driven auxiliary feedwater pump (TDAFWP) is required to be considered a redundant required feature. The Note associated with Required Action B.2 states, "In Modes 1, 2, and 3, the TDAFWP is considered a required redundant feature." Required Action A.2 does not have this Note. The Bases for Required Action A.2 states, "Single train systems, such as the steam driven (turbine driven) auxiliary feedwater pump, are not included." This is a proposed difference with the Bases for Required Action A.2 for STS 3.8.1.

Comment: Not having a Note associated with Required Action A.2 for ITS 3.8.1 that addresses the TDAFWP appears to be inconsistent with Required Action B.2, and not in conformance with the STS Bases Reviewer's Notes. Revise the submittal to provide the explanation/justification for this apparent inconsistency and nonconformance, or add a Note addressing the TDAFWP to Required Action A.2.

No justification has been provided to support the proposed Bases difference. Revise the submittal to provide the appropriate justification or expand the Bases to address including the TDAFWP as a redundant required feature.

Licensee Response:

3.8.1-02	CP DC(3.8.1-03)	DOC 01-03-LS CTS 3/4.8.1.1 Action e
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Action e for CTS 3/4.8.1.1 requires demonstrating the Operability of two diesel generators separately by performing Surveillance Requirement 4.8.1.1.2a.4 within 8 hours unless the DGs are already operating. This requirement has not been retained in corresponding ITS 3.8.1 in conformance with the STS.

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

Comment: DOC 01-03-LS does not address this proposed change. Revise the submittal to provide the appropriate justification for the proposed change.

Licensee Response:

3.8.1-03 CP CTS Table 3.3-2, item 11.a, Action 26
 ITS 3.8.1 Completion Time for Required Action F.1

Action 26 for item 11.a for CTS Table 3.3-2 requires restoring the inoperable channel to Operable status within 6 hours. The Completion Time for Required Action F.1 for corresponding ITS 3.8.1 is 12 hours.

Comment: The proposed change is not shown on the CTS markup, and no justification has been provided to support the proposed change. Revise the submittal to provide the appropriate justification for the proposed change, or conform to the CTS.

Licensee Response:

3.8.1-04 CP ITS 3.8.1 Condition H and Required Action H.1
 STS 3.8.1 Condition H and Required Action H.1
 CTS 3/4.8.1.1 Actions

Condition H for STS 3.8.1 addresses three or more AC sources inoperable. Required Action H.1 for STS 3.8.1 requires to enter LCO 3.0.3 with a Completion Time of immediately. This requirement has been adopted as Condition H and Required Action H.1 for corresponding ITS 3.8.1, which is a proposed change relative to the Actions for corresponding CTS 3/4.8.1.1.

Comment: The CTS markup does not show this proposed change, and no justification has been provided to support the proposed change. Revise the submittal to provide the appropriate justification.

Licensee Response:

3.8.1-05 CP ITS 3.8.1 Condition I and Required Action I.1
 Bases for ITS 3.8.1 Required Action I.1, STS Bases markup page
 B 3.8-14

Condition I for ITS 3.8.1 addresses one Blackout Sequencer inoperable. Required Action I.1 specifies to declare the associated DG inoperable with a Completion Time of immediately. The Bases for Required Action I.1 for ITS 3.8.1 states, "The Blackout sequencers is an essential

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

support system to both the offsite circuit and the DG associated with a given ESF bus."

Comment: Required Action I.1 does not specify any action with respect to the offsite circuit. This appears to be in conflict with the Bases for Required Action I.1. Revise the submittal to provide the justification for not addressing the offsite circuit in the Required Actions associated with Condition I, or revise the Required Actions to also address the offsite circuit.

Licensee Response:

3.8.1-06	CP CW(3.8.1-03) DC(3.8.1-14) WC(3.8.1-03)	ITS SR 3.8.1.3 Note 4 STS SR 3.8.1.3 Note 4 CTS 4.8.1.1.2.a.5
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Note 4 for STS SR 3.8.1.3 states, "This SR shall be preceded by and immediately follow without shutdown a successful performance of SR 3.8.1.2 or SR 3.8.1.7." This has been adopted as Note 4 in corresponding ITS SR 3.8.1.3, and is a proposed change relative to corresponding CTS 4.8.1.1.2.a.5.

Comment: The CTS markup does not show this proposed change, and no justification has been provided to support the proposed change. Revise the submittal to show the proposed change on the CTS markup, and provide the appropriate justification.

Licensee Response:

3.8.1-07	CP WC(3.8.1-04)	DOC 01-51-LS CTS 4.8.1.1.2.a.3 ITS SR 3.8.6 Bases for ITS SR 3.8.6, STS Bases markup page B 3.8-18 Bases for STS SR 3.8.1.6
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CTS 4.8.1.1.2.a.3 requires verifying the fuel transfer pump starts and transfers fuel from the storage system to the day tank at least once per 31 days on a Staggered Test Basis. A 92 day Frequency has been proposed for corresponding ITS SR 3.8.1.6. DOC 01-51-LS merely restates the proposed change. The Bases for STS SR 3.8.1.6 states that the design of fuel transfer systems is such that pumps that operate automatically or must be started manually in order to maintain an adequate volume of fuel oil in the day tank during or following DG testing, a 31 day Frequency is appropriate.

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

Comment: DOC 01-51-LS does not explain why the proposed change is acceptable. Additionally, the proposed change appears to be in conflict with the STS Bases. Revise the submittal to retain the CTS Frequency of 31 days.

Licensee Response:

3.8.1-08	CP DC(3.8.1-15)	DOC 01-20-LG CTS 4.8.1.1.2.a.6 ITS 3.8.1
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CTS 4.8.1.1.2.a.6 requires verifying that the diesel generator is aligned to provide standby power to the associated emergency buses. This requirement has not been retained in corresponding ITS 3.8.1, in conformance with the STS. DOC 01-20-LG states that this requirement is being moved to a licensee controlled document.

Comment: DOC 01-20-LG should be designated as a relocated item. Revise the submittal to identify the licensee controlled document that will be receiving this requirement.

Licensee Response:

3.8.1-09	CP DC(3.8.1-16)	DOC 01-20-LG CTS 4.8.1.1.2.f.1 ITS 3.8.1
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CTS 4.8.1.1.2.f.1 requires subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service. This requirement has not been retained in corresponding ITS 3.8.1, in conformance with the STS. DOC 01-20-LG states that this requirement is being moved to a licensee controlled document.

Comment: DOC 01-20-LG should be designated as a relocated item. Revise the submittal to identify the licensee controlled document that will be receiving this requirement.

Licensee Response:

3.8.1-10	CP DC(3.8.1-18)	DOC 01-18-LS CTS 4.8.1.1.2.f.2 ITS SR 3.8.1.10
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CTS 4.8.1.1.2.f.2 requires verifying the generator's capability to reject a load of 7000 kW

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

without tripping. Corresponding ITS SR 3.8.1.10 requires verifying that each DG does not trip following a load rejection of ≥ 6300 kW and ≤ 7000 kW.

Comment: DOC 01-18-LS does not explain why the proposed change is acceptable. Revise the submittal to provide the appropriate justification for the proposed change.

Licensee Response:

3.8.1-11	CP	DOC 01-20-LG CTS 4.8.1.1.2.f.12 ITS 3.8.1
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CTS 4.8.1.1.2.f.12 requires verifying that specific diesel generator lockout features prevent diesel generator starting. This requirement has not been retained in corresponding ITS 3.8.1, in conformance with the STS. DOC 01-20-LG states that this requirement is being moved to a licensee controlled document.

Comment: DOC 01-20-LG should be designated as a relocated item. Revise the submittal to identify the licensee controlled document that will be receiving this requirement.

Licensee Response:

3.8.1-12	CP	CTS 4.8.1.1.2.g ITS SR 3.8.1.20
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CTS 4.8.1.1.2.g requires verifying that both diesel generators accelerate to at least 441 rpm. This requirement has not been retained in corresponding ITS SR 3.8.1.20, in conformance with the STS.

Comment: This proposed change is not shown on the CTS markup, and no justification has been provided to support this proposed change. Revise the submittal to provide the appropriate justification for the proposed change.

Licensee Response:

3.8.1-13	CP	CTS 4.8.1.1.2.f.11
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CTS 4.8.1.1.2.f.11 requires verifying that the fuel transfer pump transfers fuel from the fuel storage tank to the day tank of its associated diesel via the installed lines, at least once per 18 months, during shutdown. This requirement has not been retained in corresponding ITS 3.8.1,

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

in conformance with the STS.

Comment: This proposed change is not shown on the CTS markup, and no justification has been provided to support this proposed change. Revise the submittal to provide the appropriate justification for the proposed change.

Licensee Response:

3.8.1-14	CP DC(3.8.1-22)	DOC 01-20-LG CTS 4.8.1.1.2.f.8 ITS 3.8.1
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CTS 4.8.1.1.2.f.8 requires verifying that the auto connected loads to each diesel generator do not exceed the continuous rating of 7,000 kW. This requirement has not been retained in corresponding ITS 3.8.1, in conformance with the STS. DOC 01-20-LG states that this requirement is being moved to a licensee controlled document.

Comment: DOC 01-20-LG should be designated as a relocated item. Revise the submittal to identify the licensee controlled document that will be receiving this requirement.

Licensee Response:

3.8.1-15	CP	ITS SR 3.8.1.15 CTS 4.8.1.1.2.f.4.b CTS 4.8.1.1.2.f.7
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ITS 3.8.1.15 states, "Verify each DG starts and achieves, in ≤ 10 seconds, voltage ≥ 6480 V, and ≤ 7150 V and frequency ≥ 58.8 Hz and ≤ 61.2 Hz." Corresponding CTS 4.8.1.1.2.f.4.b states, "Verifying the diesel starts on the auto-start signal, energizes the emergency buses with permanently connected loads within 10 seconds, energizes the auto-connected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady-state voltage and frequency of the emergency buses shall be maintained at 6900 ± 690 volts (≥ 6480 and ≤ 7150 volts) and 60 ± 1.2 Hz during this test.

Comment: The proposed change appears to be less restrictive. The proposed change is not shown on the CTS markup, and no justification has been provided to support the proposed change. Revise the submittal to show the proposed change on the CTS markup, and provide the appropriate justification for the proposed change.

Licensee Response:

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

3.8.1-16 CP CTS Table 4.3-2, Table Notations 3 and 4
 ITS SR 3.8.1.22

Table Notations 3 and 4 for CTS Table 4.3-2 state that setpoint verification is not applicable, and that actuation of final devices is not included. These allowances have not been retained in corresponding ITS SR 3.8.1.22.

Comment: The proposed changes are not shown on the CTS markup, and no justification has been provided to support the proposed changes. Revise the submittal to show the proposed changes on the CTS markup, and provide the appropriate justification for the proposed changes.

Licensee Response:

3.8.1-17 CP DOC 01-63-LG
 CTS 4.8.1.1.2.a.4 footnote **
 ITS SRs 3.8.1.2 and 3.8.1.7
 Bases for ITS SRs 3.8.1.2 and 3.8.1.7

Footnote ** for CTS 4.8.1.1.2.a.4 states, "During performance of surveillance activities as a requirement for Action statements, the air roll test shall not be performed." This requirement has not been retained in corresponding ITS SRs 3.8.1.2 and 3.8.1.7. DOC 01-63-LG states that this requirement is being moved to the Bases.

Comment: This material could not be found in the Bases for ITS SRs 3.8.1.2 and 3.8.1.7. Revise the submittal to conform to DOC 01-63-LG.

Licensee Response:

3.8.1-18 CP Bases for ITS 3.8.1 Required Action A.2, STS Bases markup
 page B 3.8-6
 Bases for STS 3.8.1 Required Action A.2

The Bases for Required Action A.2 for ITS 3.8.1 states, "... with a train with no offsite power available, and ..." This is a proposed difference relative to the Bases for Required Action A.2 for corresponding STS 3.8.1.

Comment: No justification has been provided to support this proposed difference. Revise the submittal to provide the appropriate justification for the proposed difference.

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

Licensee Response:

3.8.1-19 CP ITS 3.8.1 Note for Required Action F.1
 Bases for ITS 3.8.1 Required Action F.1, STS Bases markup
 page B 3.8-13

The Note for Required Action F.1 for ITS 3.8.1 states, "One required SI sequencer channel may be bypassed for up to 4 hours for surveillance testing provided the other channel is Operable." The Bases for Required Action F.1 for ITS 3.8.1 does not address this Note.

Comment: Expand the Bases to address the Note.

Licensee Response:

3.8.1-20 CP Bases for ITS SR 3.8.1.8, STS Bases page 3.8-19
 DC(3.8.1-33) Bases for STS SR 3.8.1.8
 WC(3.8.1-17) Bases for ITS SR 3.8.1.9, STS Bases page 3.8-20
 Bases for STS SR 3.8.1.9
 Bases for ITS SR 3.8.1.10, STS Bases page 3.8-21
 Bases for STS SR 3.8.1.10
 Bases for ITS SR 3.8.1.11, STS Bases page 3.8-23
 Bases for STS SR 3.8.1.11
 Bases for ITS SR 3.8.1.12, STS Bases page 3.8-24
 Bases for STS SR 3.8.1.12
 Bases for ITS SR 3.8.1.13, STS Bases page 3.8-25
 Bases for STS SR 3.8.1.13
 Bases for ITS SR 3.8.1.14, STS Bases page 3.8-26
 Bases for STS SR 3.8.1.14
 Bases for ITS SR 3.8.1.16, STS Bases page 3.8-27
 Bases for STS SR 3.8.1.16
 Bases for ITS SR 3.8.1.17, STS Bases page 3.8-28
 Bases for STS SR 3.8.1.17
 Bases for ITS SR 3.8.1.18, STS Bases page 3.8-29
 Bases for STS SR 3.8.1.18
 Bases for ITS SR 3.8.1.19, STS Bases page 3.8-30
 Bases for STS SR 3.8.1.19

The Bases for ITS SRs 3.8.1.8, 3.8.1.9, 3.8.1.10, 3.8.1.11, 3.8.1.12, 3.8.1.13, 3.8.1.14, 3.8.1.16, 3.8.1.17, 3.8.1.18, and 3.8.1.19 state, "This Note does not prohibit the application of LCO 3.0.5 or the performance of this SR to restore equipment Operability." These are proposed differences relative to the Bases for STS SRs 3.8.1.8, 3.8.1.9, 3.8.1.10, 3.8.1.11,

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

3.8.1.12, 3.8.1.13, 3.8.1.14, 3.8.1.16, 3.8.1.17, 3.8.1.18, and 3.8.1.19.

Comment: The Notes for ITS SRs 3.8.1.8, 3.8.1.9, 3.8.1.10, 3.8.1.11, 3.8.1.12, 3.8.1.13, 3.8.1.14, 3.8.1.16, 3.8.1.17, 3.8.1.18, and 3.8.1.19 do not provide any exceptions. The proposed Bases differences appear to be in conflict with the Notes. No justification has been provided to support the proposed differences. Revise the submittal to provide the appropriate justification, or conform to the STS.

Licensee Response:

3.8.1 No Beyond Scope items

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

3.8.2, AC Sources - Shutdown

3.8.2-01	CP CW(3.8.2-01) WC(3.8.2-01)	JFD 3.8-45 ITS LCO 3.8.2 STS LCO 3.8.2 Bases for ITS LCO 3.8.2.1, STS Bases markup page B 3.8-35, second paragraph Bases for STS LCO 3.8.2.1
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STS LCO 3.8.2 refers to the onsite Class 1E AC electrical power distribution subsystem(s) required by LCO 3.8.10. ITS LCO 3.8.2 refers to subsystem not subsystem(s). The Bases for ITS LCO 3.8.2.1 refers to when the second train of AC electrical power distribution is needed to support redundant required systems, equipment, and components.

Comment: ITS LCO 3.8.2 seems not to provide all of the requirements needed for the Applicability. JFD 3.8-45 does not explain why the proposed difference is acceptable. Revise the submittal to provide the appropriate justification for the proposed difference, or conform to the STS.

Licensee Response:

3.8.2-02	CP	B-PS ITS SR 3.8.1.12
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What is the justification for deleting parts d & e of this NUREG's surveillance?

Comment: The licensee should provide an adequate justification, or retain the NUREG language.

Licensee Response:

3.8.2-03	CP	DOC 3.8-22 ITS SR 3.8.1.14
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DOC 3.8-22 references RG 1.9, Rev. 3, but this RG does not appear on the list of references.

Comment: The licensee should justify why they reference both RG 1.9, Rev. 3 and Safety Guide 1.9 in the same document.

Licensee Response:

**Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10**

3.8.2-04	CP	JFD 3.8-45 LCO 3.8.2, Condition A
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Required Action A.1 is an allowance to declare effected required features inoperable. This allowance, however, is based on two trains of AC being required.

Comment: The LCO, as proposed, only requires one train of AC. Therefore, Action A.1 is inappropriate and should be deleted.

Licensee Response:

3.8.2-05	CP CW(3.8.2-02) DC(3.8.2-01) WC(3.8.2-02)	DOC 01-44-LG CTS 3/4.8.1.2 Action ITS 3.8.2
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The Action for CTS 3/4.8.1.2 states, "... or crane operation with loads over the spent fuel pool." This material is not being retained in corresponding ITS 3.8.2 in accordance with the STS. DOC 01-44-LG states that this material is being moved to licensee controlled documents.

Comment: DOC 01-44-LG does not provide an adequate justification for relocating the CTS requirements regarding crane operation with heavy load over the spent fuel pool. Revise the submittal to specify which licensee controlled documents will be receiving this material.

Licensee Response:

3.8.2-06	CP	DOC 01-01-A ITS 3.8.2 CTS 3/4.8.1.2 Actions b and c
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Action b for CTS 3/4.8.1.2 addresses the fuel oil storage system total particulate contamination not within limits. Action c for CTS 3/4.8.1.2 addresses new fuel oil properties not within limits. These Actions have not been adopted in corresponding ITS 3.8.2 in conformance with the STS.

Comment: DOC 01-01-A does not address the proposed changes. Revise the submittal to provide the appropriate justification for the proposed changes.

Licensee Response:

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

3.8.2-07	CP CW(3.8.2-03) DC(3.8.2-03) WC(3.8.2-03)	DOC 01-47-LS CTSs 4.8.1.2, 4.8.1.1.1.b and 4.8.1.1.2.g ITS SRs 3.8.2.1, 3.8.1.8 and 3.8.1.20 Bases for ITS SR 3.8.2.1, STS Bases markup page B 3.8-38
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CTS 4.8.1.2 states that CTSs 4.8.1.1.1.b and 4.8.1.1.2.g are applicable in Modes 5 and 6. ITS SR 3.8.2.1 states that corresponding ITS SRs 3.8.1.8 and 3.8.1.20 are not applicable in Modes 5 and 6, in conformance with the STS.

Comment: DOC 01-47-LS does not explain why the proposed changes are acceptable. Revise the submittal to provide the appropriate justification for the proposed changes.

Licensee Response:

3.8.2-08	CP CW(3.8.2-05) WC(3.8.2-06)	Bases for ITS LCO 3.8.2.1, STS Bases markup page B 3.8-35 Bases for STS LCO 3.8.2.1
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The Bases for ITS LCO 3.8.2.1 states, "... when the second train of AC electrical power distribution is needed to support redundant required systems, equipment, and components, an offsite circuit must also support the second AC electrical power distribution train to the extent necessary to power the redundant required systems, equipment, and components." This is a proposed difference relative to the Bases for STS LCO 3.8.2.1.

Comment: The Bases does not address the DG support that is required when the second AC electrical power distribution train is needed to support redundant required systems, equipment, and components. Revise the submittal to expand the Bases to address this issue.

Licensee Response:

3.8.2-09	CP	Bases for ITS LCO 3.8.2.1, STS Bases markup page B 3.8-38 Bases for STS LCO 3.8.2.1
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The Bases for STS LCO 3.8.2.1 states, "... but actual performance is not required during periods when the DG and offsite circuit is required to be Operable." The Bases for ITS LCO 3.8.2.1 has not adopted, "... during periods when the DG and offsite circuit is required to be Operable."

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

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

Licensee Response:

3.8.2-10 CP Bases for ITS LCO 3.8.2.1, Table B 3.8.2-1, STS Bases markup
page B 3.8-37
Bases for STS LCO 3.8.2.1

The Bases for ITS LCO 3.8.2.1 provides Table B 3.8.2-1, Scope of SR 3.8.2.1. This is a proposed difference relative to the Bases for STS LCO 3.8.2.1.

Comment: Revise the submittal to add an appropriate column heading for the fourth column of the Table.

Licensee Response:

3.8.2 No Beyond Scope items

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

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

3.8.03-01	CP	DOC 01-48-M
	CW(3.8.03-4)	ITS SR 3.8.3.4
	DC(3.8.03-05)	STS SR 3.8.3.4
	WC(3.8.03-05)	ITS 3.8.3 Condition E
		Bases for ITS 3.8.3 Required Action E.1

STS SR 3.8.3.4 requires verifying each DG air start receiver pressure. This requirement has been adopted as corresponding ITS SR 3.8.3.4 which requires verifying the air start receiver pressure is ≥ 180 psig. Condition E for ITS 3.8.3 addresses one or more DGs with required starting air receiver pressure < 180 psig and ≥ 172 psig. These are proposed changes relative to the CTS.

Comment: DOC 01-48-M does not provide specific technical justification for these values. Revise the submittal to provide the justification for these values.

Licensee Response:

3.8.03-02	CP	ITS LCO 3.8.3
		STS LCO 3.8.3

STS LCO 3.8.3 states, "The stored diesel fuel oil, lube oil, and starting air subsystem shall be within limits for each required diesel generator (DG)." This requirement has been adopted as corresponding ITS LCO 3.8.3. This is a proposed change relative to the CTS.

Comment: This proposed change is not shown on the CTS markup, and no justification has been provided to support this proposed change. Revise the submittal to show the proposed change on the CTS markup, and provide the appropriate justification.

Licensee Response:

3.8.03-03	CP	Bases for ITS 3.8.3 Required Action B.1, STS
		Bases markup page B 3.8-41
		Bases for STS 3.8.3 Required Action B.1

The Bases for STS 3.8.3 Required Action B.1 refers to maintaining at least a 6 day supply of lube oil. This has not been adopted in the Bases for corresponding ITS 3.8.3 Required Action B.1 which states, "...that maintain at least a level one inch above the bottom of the lube oil dipstick. This level is above where vortexing occurs."

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

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

Licensee Response:

3.8.03-04	CP	Bases for ITS SR 3.8.3.3, STS Bases markup page B 3.8-44 Bases for STS SR 3.8.3.3
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The Bases for STS SR 3.8.3.3 states, "These tests are to be conducted prior to adding the new fuel to the storage tank(s), but in no case is the time between receipt of the new fuel and conducting the tests to exceed 31 days.". This has not been adopted in the Bases for corresponding ITS SR 3.8.3.3.

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

Licensee Response:

3.8.03-05	CP	Bases for ITS SR 3.8.3.4, STS Bases markup page B 3.8-45 Bases for STS SR 3.8.3.4
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The Bases for STS SR 3.8.3.4 states, "[A start cycle is defined by the DG vendor, but usually is measured in terms of time (seconds of cranking) or engine cranking speed.] This subject has not been addressed in the Bases for corresponding ITS SR 3.8.3.4.

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

Licensee Response:

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

3.8.9, Distribution Systems - Operating

3.8.9-01	CP	JFD 03-08-44 ITS 3.8.9 Condition A and Required Action A.1 STS 3.8.9 Condition A and Required Action A.1 CTS 3/4.8.3.1 Action a Bases for ITS 3.8.9 Action A.1, STS Bases markup page B 3.8-77 Bases for ITS 3.8.9 Table B 3.8.9-1 footnote *, STS Bases markup page B 3.8-83
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Condition A and Required Action A.1 for STS 3.8.9 require that with one AC electrical power distribution subsystem inoperable, restore the AC electrical power distribution subsystem to Operable status with a Completion Time of 8 hours. Condition A and Required Action A.1 for corresponding ITS 3.8.9 require that with one or more AC electrical power distribution subsystems inoperable, restore the AC electrical power distribution subsystem(s) to Operable status with a Completion Time of 8 hours. Footnote * for Table B 3.8.9-1 in the Bases for ITS 3.8.9 states, "Each train of the AC and DC electrical power distribution systems is a subsystem. Action a for corresponding CTS 3/4.8.3.1 requires, "With one of the required trains of AC emergency buses not fully energized, reenergize the train within 8 hours. JFD 03-08-44 states not used.

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

3.8.9-02	CP	JFD 03-08-44 ITS 3.8.9 Condition B and Required Action B.1 STS 3.8.9 Condition B and Required Action B.1 CTS 3/4.8.3.1 Action b Bases for ITS 3.8.9 Action B.1, STS Bases markup page B 3.8-79, first and second paragraphs
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Condition B and Required Action B.1 for STS 3.8.9 require that with one AC vital bus inoperable, restore the AC vital bus subsystem to Operable status with a Completion Time of 2 hours. Condition B and Required Action B.1 for corresponding ITS 3.8.9 require that with one or more AC vital bus subsystems inoperable, restore the AC vital bus subsystem(s) to Operable status with a Completion Time of 2 hours. Action b for corresponding CTS 3/4.8.3.1 requires, "With one AC instrument bus or two AC instrument buses (consisting of one protection channel and one vital bus of the same train) deenergized, reenergize the AC instrument bus(es) within 2 hours ..." JFD 03-08-44 states not used.

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

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

Licensee Response:

3.8.9-03	CP	JFD 03-08-44 ITS 3.8.9 Condition C and Required Action C.1 STS 3.8.9 Condition C and Required Action C.1 CTS 3/4.8.3.1 Action d Bases for ITS 3.8.9 Action C.1, STS Bases markup page B 3.8-80
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Condition C and Required Action C.1 for STS 3.8.9 require that with one DC electrical power distribution subsystem inoperable, restore the DC electrical power distribution subsystem to Operable status with a Completion Time of 2 hours. Condition C and Required Action C.1 for corresponding ITS 3.8.9 require that with one or more DC electrical power distribution subsystems inoperable, restore the DC electrical power distribution subsystem(s) to Operable status with a Completion Time of 2 hours. Action d for corresponding CTS 3/4.8.3.1 requires, "With one DC bus not energized from its associated station battery, reenergize the DC bus from its associated station battery within 2 hours ..." JFD 03-08-44 states not used.

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

Licensee Response:

3.8.9-04	CP CW(3.8.9-02)	Bases for ITS LCO 3.8.9, STS Bases markup page B 3.8-77, second paragraph Bases for STS LCO 3.8.9
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The Bases for STS LCO 3.8.9 discusses tie breakers. This discussion has not been adopted in the Bases for corresponding ITS LCO 3.8.9.

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

Licensee Response:

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

3.8.9-05	CP	JFD 3.01-LG ITS LCO 3.8.9 CTS 3.8.3.1 items a and b
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CTS 3.8.3.1 specifies the transformers that are associated with the Train A and Train B AC emergency buses. This material has not been retained in corresponding ITS 3.8.9. JFD 3.01-LG states that the list of required electrical buses, batteries, and chargers would be moved to the Bases.

Comment: JFD 3.01-LG does not address the transformers. No justification has been provided to support this proposed change. Revise the submittal to provide the appropriate justification to support the proposed change.

Licensee Response:

3.8.9	No Beyond Scope items
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Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

3.8.10, Distribution Systems - Shutdown

3.8.10-01	CP CW(3.8.10-01) DC(3.8.10-01) WC(3.8.10-01)	DOC 03-06-LS JFD 3.8-45 ITS LCO 3.8.10 STS LCO 3.8.10 CTS 3.8.3.2 Bases for ITS LCO 3.8.10, STS Bases markup page B 3.8-85
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STS LCO 3.8.10 specifies, "The necessary portion of the AC, DC, and AC vital bus electrical power distribution subsystems ..." Corresponding ITS LCO 3.8.10 specifies, "The necessary portion of the Train A or Train B AC, DC, and AC vital bus electrical power distribution subsystems ..." JFD 3.8-45 states that the power distribution systems have been revised to retain the CTS requirement that one train shall be operable when shutdown. Corresponding CTS 3.8.3.2 states, "As a minimum, the following divisions of electrical buses shall be energized in the specified manner: ..." DOC 03-06-LS merely restates the proposed change.

Comment: This LCO does not seem to be consistent with the Bases for LCO 3.8.10 or LCO 3.8.2. The LCO indicates that one train of AC, DC, or AC vital bus electrical power is required. However, the Bases for LCO 3.8.10 as well as 3.8.2 indicate that a second train of AC, DC, or AC vital bus electrical power may be required. This inconsistency needs to be addressed. Also, Action A.1 is an allowance to declare required features inoperable that is based on two trains of electrical power being required. Action A.1 is not appropriate for the LCO as written. JFD 3.8-45 and DOC 03-06-LS does not explain why the proposed difference is acceptable. Revise the submittal to provide the appropriate justification for the proposed difference.

Licensee Response:

3.8.10-02	CP CW(3.8.10-02) WC(3.8.10-02)	DOC 03-06-LS JFD 3.8-45 ITS LCO 3.8.10 STS LCO 3.8.10 CTS 3.8.3.2 Bases for ITS LCO 3.8.10, STS Bases markup page B 3.8-85, last two paragraphs
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STS LCO 3.8.10 states, "... shall be Operable to support equipment required to be Operable." Corresponding ITS LCO 3.8.10 states, "... shall be Operable to support one train of equipment required to be Operable." JFD 3.8-45 also refers to "one train of equipment required to be Operable." Corresponding CTS 3.8.3.2 does not contain any reference to supported equipment required to be Operable. DOC 03-06-LS refers to "... equipment required to be operable in this

Comanche Peak Improved TS Review Comments
ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

plant condition ..." The Bases for ITS LCO 3.8.10 refers to providing support for redundant required systems.

Comment: There appears to be a discrepancy between ITS LCO 3.8.10 and the Bases for ITS LCO 3.8.10. Confirm that only one train of supported equipment is required to be Operable in Modes 5 and 6, or revise ITS LCO 3.8.10 to conform to the STS.

Licensee Response:

3.8.10-03	CP CW(3.8.10-03) DC(3.8.10-02) WC(3.8.10-03)	DOC 03-03-LS CTS 3/4.8.3.2 Action ITS 3.8.10 Condition A and Required Action A.2.4 STS 3.8.10 Condition A and Required Action A.2.4
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Condition A for STS 3.8.10 addresses, "One or more required AC, DC, or AC vital bus electrical power distribution subsystems inoperable." This has been adopted as Condition A for corresponding ITS 3.8.10, and is a proposed change relative to the Action for corresponding CTS 3/4.8.3.2 which states, "With any of the above required electrical buses not energized in the required manner..." Required Action A.2.4 for STS 3.8.10 states, "Initiate actions to restore required AC, DC, and AC vital bus electrical power distribution subsystems to Operable status." This requirement has been adopted as Required Action A.2.4 for corresponding ITS 3.8.10, and is a proposed change relative to the Action for corresponding CTS 3/4.8.3.2 which states, "... initiate corrective action to energize the required electrical buses in the specified manner..."

Comment: DOC 03-03-LS does not address these proposed changes. Revise the submittal to provide the appropriate justification for these proposed changes.

Licensee Response:

3.8.10-04	CP CW(3.8.10-05) WC(3.8.10-05)	Bases for ITS LCO 3.8.10, STS Bases markup page B 3.8-85 Bases for STS LCO 3.8.10
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The Bases for ITS LCO 3.8.10 states that when the second DC electrical power distribution train or the second subsystem of AC vital bus electrical power distribution is needed to support redundant required systems, equipment and components, the second train may be energized from any available source. This is a proposed difference with the Bases for corresponding STS LCO 3.8.10.

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

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ITS Section 3.8, Electrical Power Systems
3.8.1, 3.8.2, 3.8.3, 3.8.9, 3.8.10

STS. The justification shall include an evaluation of all of the events identified in the USAR that are postulated to occur during the Applicability, with a determination of the acceptability of not requiring the second DC train and the second subsystem of AC vital bus to be energized by their respective associated sources. The evaluation should confirm that all of the equipment that is assumed to operate to mitigate the various postulated events can still be relied on to operate with this proposed change.

Licensee Response:

3.8.10 No Beyond Scope items
