



**TXU Energy**  
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**C. Lance Terry**  
Senior Vice President &  
Principal Nuclear Officer

Ref: 10CFR50.90

CPSES-200201164  
Log # TXX-02073  
File # 00236

April 15, 2002

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

**SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)  
DOCKET NOS. 50-445 AND 50-446  
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION TO  
LICENSE AMENDMENT REQUEST (LAR) 01-008: REVISION TO  
TECHNICAL SPECIFICATION (TS) 3.3.2. ESFAS  
INSTRUMENTATION AND 3.3.6, CONTAINMENT VENTILATION  
ISOLATION INSTRUMENTATION  
(TAC NO. MB2810)**

**REF: TXU Electric Letter logged TXX-01092, from C. L. Terry to the NRC  
dated August 24, 2001**

**Gentlemen:**

Pursuant to 10CFR50.90, TXU Generation Company LP (TXU Energy) requested, via Reference, an amendment to the CPSES Unit 1 Operating License (NPF-87) and CPSES Unit 2 Operating License (NPF-89) by incorporating a change to the CPSES Units 1 and 2 Technical Specifications (TS) 3.3.2 and 3.3.6.

The proposed change will revise TS 3.3.2 entitled "ESFAS Instrumentation" and TS 3.3.6 entitled "Containment Ventilation Isolation Instrumentation". The proposed change will revise the CPSES Units 1 and 2 Technical Specifications to change the surveillance frequency for Westinghouse type AR relays, used as Solid State Protection System slave relays or auxiliary relays, from quarterly to refueling outage frequency. Surveillance Requirements (SR) 3.3.2.6 and 3.3.6.5 would be revised to change the frequency from "92 days" to "92 days OR 18 months for Westinghouse type AR relays."

The purpose of this letter is to respond to the NRC Staff Requests for Additional Information (RAIs).

A member of the **STARS** (Strategic Teaming and Resource Sharing) Alliance

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*DO29*

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This communication contains no new licensing basis commitments regarding CPSES Units 1 and 2.

Should you have any questions, please contact Mr. Robert A. Slough at (254) 897-5727.

I state under penalty of perjury that the foregoing is true and correct.

Executed on April 9, 2002.

Sincerely

C. L. Terry

By: 

David R. Moore  
Plant Manager

RAS  
Attachment

c - E. W. Merschoff, Region IV  
W. D. Johnson, Region IV  
D. H. Jaffe, NRR  
J. N. Donohew, NRR  
Resident Inspectors, CPSES

Mr. Arthur C. Tate  
Bureau of Radiation Control  
Texas Department of Public Health  
1100 West 49<sup>th</sup> Street  
Austin, Texas 78704

**RESPONSE TO  
REQUEST FOR ADDITIONAL INFORMATION  
REGARDING LICENSE AMENDMENT REQUEST 01-008**

The following are questions on the application dated August 24, 2001, (CPSES-200101191), for Comanche Peak Steam Electric Station (CPSES), that proposed changes to Technical Specifications (TS) 3.3.2 and 3.3.6 to change the surveillance frequency for Westinghouse type AR relays, used as Solid State Protection System slave relays or auxiliary relays, from quarterly to refueling outage frequency.

**Question 1:**

**The licensee's submittal states, "The report can also be applied to ARD relays (DC coils) which are not used as slave relays, but are used in interposing relay applications." It should be noted that the Westinghouse Owner's Group Topical report (WCAP-13877) does not cover AR relays with DC coils. Therefore, if AR relays with DC coils are to be included in the extension request, please provide the basis for extending the applicability of the topical report to these relays. Such basis should be similar to the analysis for the AC relays.**

**TXU Energy Response:**

Due to the expenditure of resources required in order demonstrate the applicability of the topical report to AR relays with DC coils, TXU Energy elects to revise our request to exclude AR relays with DC coils. Therefore, TXU Energy requests that the NRC withdraw the ARD relay from consideration in the proposed amendment request. TXU Energy's proposed amendment request will continue to apply to Westinghouse Type AR relays with AC coils used in both SSPS slave relay and interposing relay applications, but will not include any DC relay applications at this time. This revised scope has been reflected in markups of the original proposed text for TS Surveillance Requirements (SR) 3.3.2.6 and 3.3.6.5. and associated Bases. These markups are provided in Attachments 2 and 4. The revised TS and TS Bases pages which incorporate the marked-up information are provided in Attachments 3 and 5.

**ATTACHMENT 2 to TXX-02073**

**MARKUP OF TECHNICAL SPECIFICATION PAGES**

**Pages 3.3-27  
3.3-50**

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE  | FREQUENCY  |
|---|--|
| SR 3.3.2.4 Perform MASTER RELAY TEST.   | 31 days on a STAGGERED TEST BASIS  |
| SR 3.3.2.5 Perform COT.   | 92 days  |
| SR 3.3.2.6 Perform SLAVE RELAY TEST.  | 92 days<br><div style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block;">                     OR<br/>                     18 months for Westinghouse type AR relays with AC coils                 </div> |
| SR 3.3.2.7 -----NOTES-----<br>1. Verification of relay setpoints not required.<br>2. Actuation of final devices not included<br>-----<br>Perform TADOT.                           | 31 days  |
| SR 3.3.2.8 -----NOTE-----<br>Verification of setpoint not required for manual initiation functions.<br>-----<br>Perform TADOT.  | 18 months  |
| SR 3.3.2.9 -----NOTE-----<br>This Surveillance shall include verification that the time constants are adjusted to the prescribed values.<br>-----<br>Perform CHANNEL CALIBRATION. | 18 months  |

(continued)

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE                             | FREQUENCY  |
|--|--|
| SR 3.3.6.2 Perform ACTUATION LOGIC TEST. | 31 days on a STAGGERED TEST BASIS  |
| SR 3.3.6.3 Perform MASTER RELAY TEST.    | 31 days on a STAGGERED TEST BASIS  |
| SR 3.3.6.4 Perform COT.                  | 92 days  |
| SR 3.3.6.5 Perform SLAVE RELAY TEST.     | 92 days<br><div style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block;">                     OR<br/>                     18 months for Westinghouse type AR relays with AC coils                 </div> |
| SR 3.3.6.6 Not Used.                     |  |
| SR 3.3.6.7 Perform CHANNEL CALIBRATION.  | 18 months  |

**ATTACHMENT 3 to TXX-01092**

**RETYPE TECHNICAL SPECIFICATION PAGES**

**Pages 3.3-27  
3.3-50**

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE   | FREQUENCY  |
|--|--|
| SR 3.3.2.4 Perform MASTER RELAY TEST.  | 31 days on a<br>STAGGERED<br>TEST BASIS  |
| SR 3.3.2.5 Perform COT.  | 92 days  |
| SR 3.3.2.6 Perform SLAVE RELAY TEST.   | 92 days<br><br><u>OR</u><br><br>18 months for<br>Westinghouse<br>type AR relays<br>with AC coils |
| SR 3.3.2.7 -----NOTES-----<br>1. Verification of relay setpoints not required.<br>2. Actuation of final devices not included<br>-----<br>Perform TADOT.                              | 31 days  |
| SR 3.3.2.8 -----NOTE-----<br>Verification of setpoint not required for manual initiation<br>functions.<br>-----<br>Perform TADOT.  | 18 months  |
| SR 3.3.2.9 -----NOTE-----<br>This Surveillance shall include verification that the time<br>constants are adjusted to the prescribed values.<br>-----<br>Perform CHANNEL CALIBRATION. | 18 months  |

(continued)

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE                             | FREQUENCY   |
|--|---|
| SR 3.3.6.2 Perform ACTUATION LOGIC TEST. | 31 days on a STAGGERED TEST BASIS   |
| SR 3.3.6.3 Perform MASTER RELAY TEST.    | 31 days on a STAGGERED TEST BASIS   |
| SR 3.3.6.4 Perform COT.                  | 92 days   |
| SR 3.3.6.5 Perform SLAVE RELAY TEST.     | 92 days<br><u>OR</u><br>18 months for Westinghouse type AR relays with AC coils |
| SR 3.3.6.6 Not Used.                     |   |
| SR 3.3.6.7 Perform CHANNEL CALIBRATION.  | 18 months   |

**ATTACHMENT 4 to TXX-02073**

**MARKUP OF TECHNICAL SPECIFICATION BASES PAGES  
(For Information Only)**

**Pages B 3.3-115  
B 3.3-168**

BASES

SURVEILLANCE  
REQUIREMENTS  
(continued)

SR 3.3.2.5

SR 3.3.2.5 is the performance of a COT.

A COT is performed on each required channel to ensure the entire channel will perform the intended Function. Setpoints must be found within the Allowable Values specified in Table 3.3.2-1.

The difference between the current "as found" values and the previous test "as left" values must be consistent with the drift allowance used in the setpoint calculation. The setpoint shall be left set consistent with the assumptions of the current unit specific setpoint calculation.

The Frequency of 92 days is justified in Reference 6.

SR 3.3.2.6

SR 3.3.2.6 is the performance of a SLAVE RELAY TEST. The SLAVE RELAY TEST is the energizing of the slave relays. Contact operation is verified in one of two ways. Actuation equipment that may be operated in the design mitigation mode is either allowed to function, or is placed in a condition where the relay contact operation can be verified without operation of the equipment. Actuation equipment that may not be operated in the design mitigation mode is prevented from operation by the SLAVE RELAY TEST circuit. For this latter case, contact operation is verified by a continuity check of the circuit containing contacts operated by the slave relay. This test is performed every 92 days. The Frequency is adequate, based on industry operating experience, considering instrument reliability and operating history data.

16

For ESFAS slave relays and auxiliary relays which are Westinghouse type AR relays, the SLAVE RELAY TEST is performed every 18 months. The Frequency is based on the slave relay reliability assessment presented in Reference 10. This reliability assessment is relay specific and applies only to Westinghouse type AR relays with AC coils. Note that, for normally energized applications, the relays may require periodic replacement in accordance with the guidance given in Reference 10.

16

SR 3.3.2.7

SR 3.3.2.7 is the performance of a TADOT every 31 days. This test is a check of the Loss of Offsite Power Function.

The SR is modified by a Note that excludes verification of setpoints for relays. Relay setpoints require elaborate bench calibration and are

(continued)

BASES

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SURVEILLANCE  
REQUIREMENTS  
(continued)

SR 3.3.6.5 (continued)

16

For ESFAS slave relays and auxiliary relays which are Westinghouse type AR relays, the SLAVE RELAY TEST is performed every 18 months. The Frequency is based on the slave relay reliability assessment presented in Reference 3. This reliability assessment is relay specific and applies only to Westinghouse type AR relays with AC coils. Note that, for normally energized applications, the relays may require periodic replacement in accordance with the guidance given in Reference 3.

SR 3.3.6.6

Not Used.

SR 3.3.6.7

A CHANNEL CALIBRATION is performed every 18 months, or approximately at every refueling. CHANNEL CALIBRATION is a complete check of the instrumenting loop, including the sensor. The test verifies that the channel responds to a measured parameter within the necessary range and accuracy.

The Frequency is based on operating experience and is consistent with the typical industry refueling cycle.

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REFERENCES

1. 10 CFR 100.11.
2. NUREG-1366, July 22, 1993.
3. WCAP-13877-P-A, Revision 2, August 2000.

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**ATTACHMENT 5 to TXX-02073**

**RETYPE TECHNICAL SPECIFICATION BASES PAGES  
(For Information Only)**

**Pages B 3.3-115  
B 3.3-168**

BASES

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SURVEILLANCE  
REQUIREMENTS  
(continued)

SR 3.3.2.5

SR 3.3.2.5 is the performance of a COT.

A COT is performed on each required channel to ensure the entire channel will perform the intended Function. Setpoints must be found within the Allowable Values specified in Table 3.3.2-1.

The difference between the current "as found" values and the previous test "as left" values must be consistent with the drift allowance used in the setpoint calculation. The setpoint shall be left set consistent with the assumptions of the current unit specific setpoint calculation.

The Frequency of 92 days is justified in Reference 6.

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SR 3.3.2.6 is the performance of a SLAVE RELAY TEST. The SLAVE RELAY TEST is the energizing of the slave relays. Contact operation is verified in one of two ways. Actuation equipment that may be operated in the design mitigation mode is either allowed to function, or is placed in a condition where the relay contact operation can be verified without operation of the equipment. Actuation equipment that may not be operated in the design mitigation mode is prevented from operation by the SLAVE RELAY TEST circuit. For this latter case, contact operation is verified by a continuity check of the circuit containing contacts operated by the slave relay. This test is performed every 92 days. The Frequency is adequate, based on industry operating experience, considering instrument reliability and operating history data. | 16

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SR 3.3.2.7

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The SR is modified by a Note that excludes verification of setpoints for relays. Relay setpoints require elaborate bench calibration and are

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BASES

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SURVEILLANCE  
REQUIREMENTS

SR 3.3.6.5 (continued)

16

For ESFAS slave relays and auxiliary relays which are Westinghouse type AR relays, the SLAVE RELAY TEST is performed every 18 months. The Frequency is based on the slave relay reliability assessment presented in Reference 3. This reliability assessment is relay specific and applies only to Westinghouse type AR relays with AC coils. Note that, for normally energized applications, the relays may require periodic replacement in accordance with the guidance given in Reference 3.

SR 3.3.6.6

Not Used.

SR 3.3.6.7

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REFERENCES

1. 10 CFR 100.11.
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