



TXU

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Ref: 10CFR50.73(a)(2)(iv)(A)

CPSES-200301531
Log # TXX-03122
File # 10010

September 5, 2003

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NO. 50-446
ACTUATION OF REACTOR PROTECTION SYSTEM
LICENSEE EVENT REPORT 446/03-001-00

Gentlemen:

Enclosed is Licensee Event Report (LER) 03-001-00 for Comanche Peak Steam Electric Station Unit 2, " Reactor Trip Due To Loss of Reactor Coolant Pump."

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

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Sincerely,

TXU Generation Company LP
By: TXU Generation Management Company LLC,
Its General Partner

C. L. Terry
Senior Vice President and Principal Nuclear Officer

By: Roger D. Walker
Roger D. Walker
Regulatory Affairs Manager

GLM/gm

Enclosures

c - T. P. Gwynn, Region IV
W. D. Johnson, Region IV
M. C. Thadani, NRR
Resident Inspectors, CPSES

NRC FORM 366 (7-2001)			U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB NO. 3150-0104 EXPIRES 07/31/2004				
LICENSEE EVENT REPORT (LER)										
Facility Name (1) COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2						Docket Number (2) 05000446		Page (3) 1 OF 4		
Title (4) ACTUATION OF REACTOR PROTECTION SYSTEM										
Event Date (5)			LER Number (6)			Report Date (7)			Other Facilities Involved (8)	
Month	Day	Year	Year	Sequential Number	Revision Number	Month	Day	Year	Docket Numbers	
07	09	03	03	001	00	09	05	03	05000 05000	
Operating Mode (9) 1		This report is submitted pursuant to the requirements of 10 CFR : (Check all that apply) (11)								
Power Level (10) 100		20.2201(b)			20.2203(a)(3)(i)		50.73(a)(2)(i)(C)		50.73(a)(2)(vii)	
		20.2201(d)			20.2203(a)(3)(ii)		50.73(a)(2)(ii)(A)		50.73(a)(2)(viii)(A)	
		20.2203(a)(1)			20.2203(a)(4)		50.73(a)(2)(ii)(B)		50.73(a)(2)(viii)(B)	
		20.2203(a)(2)(i)			50.36(c)(2)(i)(A)		50.73(a)(2)(iii)		50.73(a)(2)(ix)(A)	
		20.2203(a)(2)(ii)			50.36(c)(1)(ii)(A)		X 50.73(a)(2)(iv)(A)		50.72(a)(2)(x)	
		20.2203(a)(2)(iii)			50.36(c)(2)		50.73(a)(2)(v)(A)		73.71(a)(4)	
		20.2203(a)(2)(iv)			50.46(a)(3)(ii)		50.73(a)(2)(v)(B)		73.71(a)(5)	
		20.2203(a)(2)(v)			50.73(a)(2)(i)(A)		50.73(a)(2)(v)(C)		OTHER	
		20.2203(a)(2)(vi)			50.73(a)(2)(i)(B)		50.73(a)(2)(v)(D)		Specify in Abstract below or in NRC Form 366A	
Licensee Contact For This LER (12)										
Name Russell A. Smith - SMART Team 1 Manager						Telephone Number (Include Area Code) (254)897-6901				
Complete One Line For Each Component Failure Described in This Report (13)										
Cause	System	Component	Manufacturer	Reportable To EPD		Cause	System	Component	Manufacturer	Reportable To EPD
				N						
Supplemental Report Expected (14)						EXPECTED SUBMISSION DATE (15)		Month	Day	Year
YES (If YES, complete EXPECTED SUBMISSION DATE)								X	NO	
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)										
<p>On July 9, 2003, Comanche Peak Steam Electric Station (CPSES) Unit 2 was in Mode 1, Power Operation, operating at 100% power. At 0109 hours, the 2-04 Reactor Coolant Pump (RCP) motor breaker opened which resulted in loss of the 2-04 RCP and an automatic reactor trip. All control rods fully inserted and all Auxiliary Feedwater pumps automatically started as expected.</p> <p>TXU Generation Company LP's (TXU Energy) evaluation of this event has determined that the 2-04 RCP motor breaker opened due to a "B" phase stator to ground short in the 2-04 RCP motor. Corrective actions include repair of the 2-04 RCP motor stator and, as previously discussed in Licensee Event Report 03-002-00 for CPSES Unit 1, an evaluation of the Predictive Analysis Program specifically for large electric motors will be performed to assess the current program scope, monitoring practices, and overall effectiveness.</p> <p>All times in this report are approximate and Central Daylight Time unless noted otherwise.</p>										

LICENSEE EVENT REPORT (LER)

Facility Name (1)	Docket	LER Number (6)			Page(3)
COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2	05000446	Year 03	Sequential Number 001	Revision Number 00	2 OF 4

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

I. DESCRIPTION OF REPORTABLE EVENT**A. REPORTABLE EVENT CLASSIFICATION**

Any event or condition that resulted in manual or automatic actuation of the Reactor Protection System (RPS) including reactor trip or reactor scram.

B. PLANT OPERATING CONDITIONS PRIOR TO THE EVENT

On July 9, 2003, Comanche Peak Steam Electric Station (CPSES) Unit 2 was in Mode 1, Power Operation, operating at 100 percent power.

C. STATUS OF STRUCTURES, SYSTEMS, OR COMPONENTS THAT WERE INOPERABLE AT THE START OF THE EVENT AND THAT CONTRIBUTED TO THE EVENT

There were no inoperable structures, systems, or components that contributed to the event.

D. NARRATIVE SUMMARY OF THE EVENT, INCLUDING DATES AND APPROXIMATE TIMES

On July 9, 2003, Comanche Peak Steam Electric Station (CPSES) Unit 2 was in Mode 1, Power Operation, operating at 100% power. At 0109 hours, the 2-04 Reactor Coolant Pump (RCP) motor breaker [EHS: (AB)(P)(MO)(BKR)] unexpectedly opened which resulted in loss of the 2-04 RCP. Operators (utility, licensed) in the Unit 2 Control Room received a "Rx > 48 percent 1 of 4 loop flow low trip" alarm which resulted in an automatic reactor trip. All control rods fully inserted, all Auxiliary Feedwater pumps [EHS: (BA)(P)] automatically started as expected, and the unit was stabilized in Mode 3.

E. THE METHOD OF DISCOVERY OF EACH COMPONENT OR SYSTEM FAILURE, OR PROCEDURAL OR PERSONNEL ERROR

Operators (utility, licensed) in the Unit 2 Control Room received a "Rx > 48 percent 1 of 4 loop flow low trip" alarm.

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NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

II. COMPONENT OR SYSTEM FAILURES**A. FAILURE MODE, MECHANISM, AND EFFECTS OF EACH FAILED COMPONENT**

TXU Energy's evaluation of this event determined that a "B" phase stator to ground short occurred in the 2-04 RCP motor.

B. CAUSE OF EACH COMPONENT OR SYSTEM FAILURE

The "B" phase stator to ground short occurred in the 2-04 RCP motor due to degradation of the stator ground wall insulation.

C. SYSTEMS OR SECONDARY FUNCTIONS THAT WERE AFFECTED BY FAILURE OF COMPONENTS WITH MULTIPLE FUNCTIONS

Not applicable – No failures of components with multiple functions were identified.

D. FAILED COMPONENT INFORMATION

Westinghouse S/N 89P969
Model #CS-VSS
7000 HP, 6600 volt, 6 pole, Reactor Coolant Pump Motor

III. ANALYSIS OF THE EVENT**A. SAFETY SYSTEM RESPONSES THAT OCCURRED**

The Reactor Protection System and the Auxiliary Feedwater System actuated as expected during the event. Both Motor Driven Auxiliary Feedwater pumps and the Turbine Driven Auxiliary Feedwater pump automatically started as expected based on Lo-Lo level in 2 of 4 Steam Generators. All control rods fully inserted and the plant response to the automatic trip was as expected.

B. DURATION OF SAFETY SYSTEM TRAIN INOPERABILITY

Not applicable -- No safety system was rendered inoperable.

LICENSEE EVENT REPORT (LER)

Facility Name (1) COMANCHE PEAK STEAM ELECTRIC STATION UNIT 2	Docket 05000446	LER Number (6)			Page(3) 4 OF 4
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NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

C. SAFETY CONSEQUENCES AND IMPLICATIONS

This event is specifically bounded by the accident analysis of the partial loss of forced reactor coolant flow discussed in Section 15.3.1 of the CPSES Final Safety Analysis Report (FSAR). The partial loss of forced reactor coolant flow is classified as an ANS Condition II event, a fault of moderate frequency. In the July 9, 2003 event, the Auxiliary Feedwater System responded as expected and maintained the necessary Steam Generator heat transfer capability. There were no other malfunctions or equipment failures which complicated the plant response or otherwise elevated risk beyond the event analysis data. There were no safety system functional failures associated with this event. Based on this analysis, it was concluded that this event did not adversely affect the safe operation of CPSES Unit 2 or the health and safety of the public.

IV. CAUSE OF THE EVENT

TXU Energy believes that the cause of the event was the opening of the 2-04 RCP motor breaker due to a "B" phase stator to ground short in the 2-04 RCP motor. The "B" phase stator to ground short occurred in the 2-04 RCP motor due to degradation of the stator ground wall insulation.

V. CORRECTIVE ACTIONS

Corrective actions include repair of the 2-04 RCP motor stator and, as previously discussed in Licensee Event Report 03-002-00 for CPSES Unit 1, an evaluation of the Predictive Analysis Program specifically for large electric motors will be performed to assess the current program scope, monitoring practices, and overall effectiveness.

VI. PREVIOUS SIMILAR EVENTS

In 1996, CPSES Unit 2 experienced a reactor trip due to the loss of a Reactor Coolant Pump (see LER 446/96-007). However, the Reactor Coolant Pump loss during the 1996 event was due to the loss of the power supply, which was different than the July 9, 2003 event.