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October 5, 1999

Mr. E. W. Merschoff  
U. S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Dr., Suite 400  
Arlington, TX 76011

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) -  
UNIT 1  
DOCKET NOS. 50-445  
LOOSE PARTS DETECTION SYSTEM REPORT  
SPECIAL REPORT NO. 1-SR-99-001-00

Enclosed is a 10 day Special Report titled, "Loose Part Detection System Channel Calibration" submitted in accordance with the CPSES Technical Requirement Manual TR 13.4.31 "Loose Part Detection System", Required Action B.1.

There are no new licensing basis commitments in this communication for CPSES Unit 1. Should have any questions or require additional information please contact Obaid Bhatti at 254-897-5839 to coordinate this effort.

Sincerely,

  
C. L. Terry

OAB/oab  
Attachment

cc: Mr. J. I. Tapia, Region IV  
Resident Inspectors, CPSES  
Document Control Desk, NRC

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**TXU ELECTRIC  
COMANCHE PEAK STEAM ELECTRIC STATION - UNIT 1  
SPECIAL REPORT NO. 1-SR-99-001-00**

**LOOSE PART DETECTION SYSTEM CHANNEL CALIBRATION**

**1.0 Report Requirements**

This special report is submitted in accordance with Comanche Peak Steam Electric Station (CPSES) Unit 1 Technical Requirement Manual (TRM) 13.4 REACTOR COOLANT SYSTEM. Specifically TRM section 13.4.31 "Loose Part Detection System", requires that the Loose – Part Detection System be OPERABLE in Modes 1 and 2. TRM Action A for this requirement is that if one or more required Loose – Part Detection System channels are inoperable, Action (A.1) requires that the channels be restored to Operable status. Additionally, TRM Action B requires that if the required Action A.1 can not be met, prepare and submit a 10 day Special Report.

**2.0 Event Description**

Pursuant to the requirements of Technical Requirement Surveillance (TRS) 13.4.31.3, a channel calibration is performed every 18 months on the Loose Parts Detection System channels. On October 22, 1999, at approximately 3:00 p.m., CDT, (Unit 1 was in MODE 6) it was discovered that loose part channel calibration could not be performed. During the seventh refueling outage for CPSES Unit 1 (1RF07), an incore thimble guide tube was withdrawn from the reactor core to seal its guide tube, which was a part of the corrective action for a previously identified leak. This action significantly raised the general area radiation levels in this room. The dose rate in the vicinity of the sensors was estimated to be 100 R per hour. Loose parts TRM channel calibration entails verification of twenty sensors placed within various locations in the plant. Two of the sensors (1-VE-LL017 and 1-VE-LL018) required to be calibration verified are mounted on flux thimble guide tubes under the reactor vessel where the radiation levels were increased and the channel calibration could not be verified.

**3.0 Corrective Actions**

The current calibration is valid until March 8, 2000, which includes a 25% extension allowance. At that time, the sensors would become administratively inoperable due to TRS 13.4.31.3 not being current. TXU Electric has administratively declared sensors 1-VE-LL017 and 1-VE-LL018 inoperable on October 27, 1999. However, TXU Electric believes the sensors are functional as stated in Section 4 below.

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TXU Electric will perform TRS 13.4.31.3 on sensors 1VE-LL017 and 1-VE-LL018 during the next refueling outage, which is the eighth refueling outage of Unit 1 (1RF08). Surveillances TRS 13.4.31.1 (CHANNEL CHECK - 24 hours) and TRS 13.4.31.2 (CHANNEL OPERATIONAL TEST - 31 days) will continue to be performed on the two sensors (1-VE-LL017 and 1-VE-LL018) even though they are considered administratively inoperable. Alarms received via these sensors will be evaluated, and required actions will be implemented as required.

**4.0 Evaluation Results**

TXU Electric has confidence that the two sensors are within the allowable calibration band based on historical performance data of these sensors.