

December 9, 2002

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-02-076

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region IV staff on this date.

**Facility**

TXU Energy  
Comanche Peak Steam Electric Station Unit 1  
Glen Rose, Texas 76043

Docket: 50-445  
License: NPF-87

**Licensee Emergency Classification**

Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

**SUBJECT: SHUTDOWN TO REPLACE CONTROL ROD DRIVE MECHANISM COILS AND REPAIR CONTROL ROD DRIVE MECHANISM CANOPY SEAL WELD**

**DESCRIPTION:**

On November 30, 2002, Control Rod G13, in shutdown Bank B, dropped into the core. Unit 1 reduced power from 100 percent to 48 percent. Troubleshooting was initiated to determine the cause. The problem was believed to be in the control rod drive mechanism (CRDM) coils. On December 3, the licensee decided to shut down to Mode 3 and continue troubleshooting before proceeding to Mode 5. Unit 1 entered Mode 3 on December 4. While continuing to troubleshoot the CRDM problem in Mode 3, a leak was observed around the CRDM housing. The licensee decided to take the unit to Mode 5 without further troubleshooting activities. The licensee found that the leak was from an intermediate CRDM canopy seal weld. Water apparently entered the CRDM coils, causing coil failure. Boric acid crystals were found around the leak, on the vessel head insulation, and on the reactor vessel head. The unit had very little operation time since completing a refueling outage on November 18, with a subsequent shutdown and cooldown for maintenance on November 23-27.

The canopy weld was repaired with a weld overlay. The boric acid deposits on the CRDM, the head insulation, and the head were cleaned. No reactor coolant pressure boundary degradation was found. Another head inspection is scheduled after completion of the CRDM work. In Mode 3, the CRDM area above the reactor vessel insulation will be inspected again.

Region IV received notification of the dropped rod by telephone from the resident inspectors on November 30, 2002. Region IV has informed EDO/NRR/PA. The state of Texas has been informed.

This information has been discussed with the licensee and is current as of 11 a.m. on December 9, 2002.

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