

Log # TXX-96089 File # 10130 IR 96-02 Ref. # 10CFR2.201

April 3, 1996

C. Lance Terry Group Vice President

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, D.C. 20555 APR - 5 1996

SUBJECT:

COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) - Unit 1

DOCKET NO. 50-445

NRC INSPECTION REPORT NO. 50-445/96-02

RESPONSE TO NOTICE OF VIOLATION

REF:

- TU Electric letter logged TXX-96044 from C.L. Terry to the NRC dated February 12, 1996 (LER 445/96-001-00)
- TU Electric letter logged TXX-96045 from C.L. Terry to the NRC dated February 21, 1996 (LER 445/96-002-00)

#### Gentlemen:

TU Electric has reviewed the NRC's letter dated March 4, 1996, concerning the inspections conducted by Messrs. A. Gody, Jr., D. Graves, and Ms. V. Ordaz-Purkey, on January 17-30, 1996. Attached to the report was a Notice of Violation.

TU Electric hereby responds to the Notice of Violation (445/96-02) in the attachment to this letter. Should you have any comments or require additional information, please do not hesitate to contact Obaid Bhatty at (817)-897-5839 to coordinate this effort.

Sincerely

C. L. Terry

OB:ob Attachment

cc: Mr. L. J. Callan, Region IV Ms. L. J. Smith, Region IV Resident Inspectors

96-1095

## NOTICE OF VIOLATION (445/9602-02)

Technical Specification 6.8.1 requires, "... written procedures be established, implemented, and maintained...," covering a list of activities including the applicable procedures recommended in Appendix A of Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)." dated February 1978. Section 5 of Appendix A to Regulatory Guide 1.33 indicates that procedures for abnormal, off normal, or alarm conditions be established.

Licensee Procedure ODA-205, "Preparation of Alarm Procedures," Revision 8, dated April 7, 1993, specified that, "... each alarm procedure shall be sufficiently detailed for a licensed individual to perform the necessary manipulations of a system or its components to correct an off-normal condition...."

Contrary to the above, inadequate alarm response and abnormal operating procedures resulted in repeated failures to place the plant in a condition to prevent a Unit 1 trip and safety injection on January 17, 1996, and a Unit 1 trip on January 22, 1996, as evidenced by the following examples:

- (1) On January 17, the licensee restored power to the 118 Vac protection Bus 1PC2 using Procedure ABN-603, "Loss of Protection of Instrument Bus," Revision 2. Section 2.3, Step 6 of Procedure ABN-603 directed operators to reenergize Bus 1PC2 by moving the manual transfer switch to the alternate power supply. Upon reenergization of Bus 1PC2, an electrical spike occurred, which resulted in an automatic safety injection and unit trip.
- (2) On January 22, licensee personnel utilized alarm response Procedure ALM-0102A, "Alarm Procedure 1-ALB-10B," Revision 7, to determine the cause of the abnormal 118 Vac instrument bus Inverter IV1EC1 operation. The procedure did not provide sufficient guidance for operators to place the inverter in a condition to allow replacement of a blown fuse on the DC to DC converter card without causing a loss of instrument Bus 1EC1 that resulted in requiring a manual reactor trip.

## RESPONSE TO NOTICE OF VIOLATION (445/9602-02)

TU Electric accepts the violation and the requested information follows:

### 1) REASON FOR VIOLATION

The violation cited two examples of 'inadequate' alarm and abnormal operating procedures which resulted in 'repeated' failures to place the plant in a condition to prevent a Unit 1 trip and safety injection on January 17, 1996, and a Unit 1 trip on January 22, 1996 [emphasis added].

TU Electric believes that these were two separate events with separate causes, and were not 'repeated' failures. Additionally, TU Electric's evaluation concluded that the procedures cited in the violation were written based on: a) information provided by the vendor; b) available industry experience; c) credible failures; d) CPSES events; e) simulator response; and f) engineering judgements. Based on the aforementioned criteria, it was deemed that the procedures were adequate. However, they were not comprehensive enough to anticipate and prevent the events reported in reference 1 and 2 (Unit 1 Licensee Event Reports).

For the first example cited by the violation, TU Electric's evaluation concluded that the procedure did not include steps to; 1) defeat the selected T<sub>ave</sub> prior to reenergizing Bus 1PC2; and 2) verify the status of the C-7 (signal for loss of load interlock) interlock because the January 17, 1996 event was not considered as a credible event. Additional contributing factor was that previous industry experience was not available due to uniqueness of CPSES N-16 design.

For the second example cited by the violation, TU Electric's evaluation concluded that the procedure did not include steps to place the inverter manual transfer switch in the maintenance bypass position prior to starting troubleshooting efforts. This step was not included since it was not believed to jeopardize the inverter loads. Moreover, it was not until the event, and during the course of conversations with the inverter vendor that TU Electric recognized that; the design of the inverter does not guarantee that the static switch will remain in the bypass to load position when the DC-DC converter board is reenergized. From this TU Electric concluded that the installation of a fuse while the inverter is energized is not an event for which the Elgar Inverter has a completely predictable response. Placing the inverter manual transfer switch to the maintenance bypass position would have prevented the loss of power to the 1EC1 distribution panel.

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Based on the above, TU Electric has concluded that the procedures cited in the violation, were "less than adequate" and contributed to the event.

# 2) CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

As stated in reference 1 and 2, the applicable procedures have been revised. The cited procedures now include the steps which address the conditions that were previously not considered.

## 3) CORRECTIVE STEPS TO PREVENT RECURRENCE

TU Electric management established a task team to review the January 17 and 21, 1996 events. This task team is developing lessons learned from the event, which will be available to the operation's staff. TU Electric believes that the revisions to the procedures will prevent recurrence.

## 4) DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance has been achieved.