TEXAS UTILITIES GENERATING COMPANY
2001 BRYAN TOWER, DALLAS, TEXAS 75201-3050

R. J. GARY
EXECUTIVE VICE PRESIDENT
AND GENERAL MANAGER

December 28, 1983
TXX-4091



Mr. E. H. Johnson, Chief
Reactor Project Branch 1
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76012

Docket Nos.: 50-445
50-446

COMANCHE PEAK STEAM ELECTRIC STATION
TRANSMITTER CALIBRATIONS
QA FILE: CP-83-21, SDAR-123
FILE NO.: 10110

Dear Mr. Johnson:

In accordance with 10CFR50.55(e), we are submitting the enclosed report of actions taken to correct a deficiency regarding the calibration technique of pressure transmitters.

Supporting documentation is available at the CPSES site for your Inspector's review.

Very truly yours,

R. J. Gary

RJG:ln

cc: NRC Region IV - (0 + 1 copy)

Director, Inspection & Enforcement (15 copies)
U.S. Nuclear Regulatory Commission
Washington, DC 20555



IE-27

ATTACHMENT

TRANSMITTER CALIBRATIONS

Description

The supplier of pressure transmitters (Westinghouse) advised of additional calibration checks performed by the manufacturer (Barton) as a result of a report of excessive errors during abnormal temperature conditions.

The manufacturer's calibration technique for temperature compensation was found to result in previously undefined errors at both abnormal and accident temperatures. As part of the compensation process, the zero output of the transmitter was elevated in order to be able to observe negative errors. This procedure introduced false temperature errors which were then incorporated into the transmitter compensation. The units were not checked at the elevated temperatures after the original zero was restored and, therefore, they were shipped with excessive temperature compensation. The evaluation showed that the resultant error would always be positive. This compensation technique results in an overall change in the specified accuracy that was assumed for these transmitters. The accuracy deviation that results from this procedure potentially affects safety-related transmitters (Barton Model 763).

During the investigation process, the manufacturer also discovered an electrical leakage path through the wiper arm and shaft of the zero and span calibration potentiometers to the instrument case. This path only creates significant errors at high temperatures and is only of concern during accident conditions.

Safety Analysis

In the event the accuracy deviation had not been detected, improper operator action could result due to erroneous instrumentation and control data.

Corrective Action

To correct the temperature deviation, a revised setpoint (1829 PSIG) will be incorporated into the CPSES I&C Equipment List for pressurizer pressure safety injection. In addition, TUGCO (Operations) I&C will change the bistable setpoints for transmitters PB-455D, PB-456D, PB-457D and PB-458D to correspond to the revised SI actuation setpoint.

Regarding the electrical leakage path, the supplier has advised the issue does not warrant immediate corrective action. The transmitters will be replaced or reworked per the manufacturer's recommendations.

These modifications will be completed no later than June 1, 1984.