TU ELECTRIC

Log # TXX-89779
File # 903.9
10010

December 12, 1989

William J. Cahill, Jr.
Executive Vice President

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NOS. 50-445 AND 50-446
RESPONSE TO CONFIRMATORY ISSUES FROM THE PUMP AND VALVE OPERABILITY REVIEW TEAM AUDIT

Gentlemen:

On August 22 through August 25, 1989, the NRC conducted a Pump and Valve Operability Review Team Audit at CPSES. During subsequent discussions with the NRC staff two confirmatory issues were identified. To facilitate closure of these confirmatory issues, TU Electric's response is attached. If you have any questions regarding this submittal please contact Carl Corbin at 214-812-8859.

Sincerely,

William J. Cahill, Jr.

William J. Cahill, Jr.

By: Roger D. Walker
Roger D. Walker
Manager, Nuclear Licensing

CBC/cbc
Attachment

c - Mr. R. D. Martin, Region IV
Resident Inspectors, CPSES (3)

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Issue 1:

A comparison of Revision 3 of the Inservice Testing (IST) Program Plan (August 21, 1989) and the safety-related valves of FSAR Table 3.9B-10 indicated that some of the valves in the FSAR are not reflected as tested in the IST.

Response:

Interim Change Request No. ICR-R3-001 to the IST Program Plan, Revision 3, was submitted to the NRC by TXX-89734, dated November 15, 1989. This change to the IST resolves the valve list discrepancies between the IST and the FSAR as summarized below.

1AF-009: This valve has been added to the IST Program Plan. The valve is installed in the fill path for the Condensate Storage Tank and is required to prevent the tank from draining.

1PV-4552: 1PV-4553 These Control valves have been added to the IST Program Plan and are given a fail safe test.

1DD-064: 1DD-066 These valves have been added to the IST Program Plan. The valves are installed in the fill path for the Reactor Make-up Water Storage Tank and are required to prevent the tank from draining.

1PS-500: thru 1PS-503 At the time of the NRC's audit, the valve numbers had been changed in the FSAR (as shown below) but not in the IST Program Plan. ICR-R3-001 has changed valve numbers in the IST Program Plan to match the valve numbers in the FSAR.

Old Number	New Number
1PS-193	1PS-500
1PS-194	1PS-503
1PS-195	1PS-501
1PS-196	1PS-502

Issue 2:

Assure that applicant is testing safety-related Borg Warner valves (motor or air actuated) gate valves against design basis flow or pressure as applicable. Specifically, would the problem identified by Information Notice 89-61, dated August 21, 1989, "Failure of Borg Warner Gate Valves to Close Against Differential Pressure," have been discovered by TU Electric's program.

Response:

Information Notice 89-61, "Failure of Borg Warner Gate Valves to Close Against Differential Pressure", is closely related to the issues discussed in IE Bulletin No. 85-03 (IEB 85-03), "Motor-Operated Valve Common Mode Failures During Plant Transients due to Improper Switch Settings." IEB 85-03 discusses several events in which improper switch settings resulted in valves being unable to open or close at their designed differential pressures. Information Notice 89-61 discusses that improper switch settings and actuator sizing can result from the use of an incorrect valve factor. As described in the notice, "The valve factor is the term which is multiplied by the valve seat area and the differential pressure across the valve to calculate one of the parameters used in the standard valve thrust formula. If a low valve factor is used when sizing the valve air or motor actuator, the calculated required valve thrust will also be low. This results in low torque switch settings being specified and, in some cases, can result in undersized air or motor actuators." IEB 85-03 requirements included implementing a program to test high pressure coolant injection/core spray and emergency system valves. Generic Letter (GL) 89-10 expanded the scope of IEB 85-03 to include all safety related MOV's.

The MOV's in the CPSES surveillance program described in the response to IEB 85-03, include four Borg Warner 4 inch gate valves which are stroked closed against approximately 1600 psi differential pressure. If a valve fails during GL 89-10 testing, an evaluation will be performed to determine the probable cause of the failure and the appropriate corrective action to be taken.

Determination of the actual valve factor is not required when demonstrating valve operability by testing valves at or near maximum operating conditions. Testing to determine valve factor is not planned as part of these programs. If the cause of a failure is suspected to be an improper valve factor, appropriate corrective action will be taken.

It should be noted that CPSES does not have any safety-related Borg Warner air actuated valves.