Log # TXX-4522
File # 10130

TEXAS UTILITIES GENERATING COMPANY

SKYWAY TOWER • 400 NORTH OLIVE STREET, L.B. 81 • DALLAS, TEXAS 75201

July 30, 1985

WILLIAM G. COUNSIL
EXECUTIVE VICE PRESIDENT

Mr. Dorwin R. Hunter
Chief, Reactor Project Branch 2
U. S. Nuclear Regulatory Commission
Region IV
Office of Inspection and Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION
DOCKET NO. 50-445/84-45
SUPPLEMENTAL RESPONSE TO NRC
NOTICE OF VIOLATION 50-445/8445-02

Dear Mr. Hunter:

Texas Utilities letter TXX-4458 dated April 15, 1985 provided the response to NRC Notice of Violation 50-445/8445-02.

In accordance with your request dated July 1, 1985 the attached information is provided as a supplement to our response of April 15, 1985.

Should you have additional questions in this matter, please contact this office.

Sincerely,

W. G. Counsil

W. G. Counsil

By: D. R. Woodlan

D. R. Woodlan
Licensing Supervisor

BSD/grr
Attachment

c: Region IV - (0 + 1 copy)
Director, Inspection and Enforcement (15 copies)
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. V. S. Noonan

IE-10 4/85

ATTACHMENT TO TXX-4522

Supplemental Response to NRC Notice of Violation 50-445/8445-02

The corrective action stipulated in the initial response dated April 15, 1985 implied that only a limited scope of transmitters had been evaluated for similar potential problems. In actuality, all pressure, flow and level transmitters installed in the plant, where the normal process is greater than 500 psig, 200 degrees F, or radiological, were evaluated.

All pressure and flow transmitters were evaluated to determine which valves needed labeling to prevent a similar accident from occurring. As a result of this evaluation, it was determined that none of the valves associated with pressure and flow transmitters required labeling. This determination is based on the following:

a. Pressure and flow transmitters are vented, filled, and calibrated by manipulation of valves on the high (H) or low (L) pressure sides of the transmitter which are adequately marked.

b. The venting and filling of pressure and flow transmitters is adequately covered by existing procedures.

c. The calibration of pressure and flow transmitters is adequately covered by existing calibration procedures or instructions.

d. The existing procedures and instructions adequately identify the necessary radiological coverage for venting, filling, and calibration of these transmitters.

All level transmitters were evaluated to determine which valves needed labeling to prevent a similar accident from occurring. The 27 level transmitters identified for tagging are the only ones which could possibly be involved in a situation similar to that described by the violation. The justification for this determination is as follows:

a. These 27 transmitters are the only ones which have condensing pots on the reference leg and to which the phrases "reference leg" and "process leg" are applicable.

b. All other level transmitters are vented, filled and calibrated by reference to the high (H) side or low (L) side of the transmitter which is adequately marked.

c. The venting, filling and calibration of all level transmitters is adequately covered by existing procedures or instructions.

d. The existing procedures and instructions adequately identify the necessary radiological coverage for venting, filling, and calibration of these transmitters.

The physical arrangement of the piping and the layout of valves for the 27 level transmitters is such that it was necessary to tag only the "reference leg" valves. Once this was done, the process leg valves did not need to be labeled.

TEXAS UTILITIES GENERATING COMPANY

SKYWAY TOWER • 400 NORTH OLIVE STREET, L.B. 81 • DALLAS, TEXAS 75201

BILLY R. CLEMENTS
VICE PRESIDENT, NUCLEAR OPERATIONS

April 15, 1985
TXX #4458

Docket Nos. 50-445
50-446

Mr. Dorwin R. Hunter
Chief, Reactor Project Branch 2
U.S. Nuclear Regulatory Commission
Region IV
Office of Inspection and Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Dear Mr. Hunter:

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION
RESPONSE TO NRC NOTICE OF VIOLATION
INSPECTION REPORT NO.: 50-445/84-45

We have reviewed your letter dated March 21, 1985 concerning the inspection conducted by Messrs. D. L. Kelley and W. F. Smith of activities authorized by NRC Construction Permit CPPR-126 for Comanche Peak, Unit 1. We have responded to the findings listed in Appendix A of that letter.

To aid in the understanding of our response, we have repeated the Notice of Violation followed by our response. We feel the enclosed information to be responsive to the Inspectors' findings. If you have any questions, please advise.

Yours truly,

Billy R Clements

BRC:kh

Enclosure

c: Region IV - (0 + 1 copy)
Director, Inspection and Enforcement (15 copies)
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. V. S. Noonan

IE-025/85

NOTICE OF VIOLATION
445/8445-02

Failure to provide adequate procedures appropriate to circumstances

10CFR50, Appendix "B", Criterion V requires that, "activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

Contrary to the above, an Instrument and Control (I&C) technician received a first degree thermal burn on his forearm while attempting to fill the reference leg on a pressurizer level detector (1-LT-0460) during hot plant conditions using a procedure that did not contain sufficient detail to accomplish the task. The I&C technician was using Instruction No. ICI-2007, "Filling and Venting Level Transmitters and Level Indicating Switches (Wet Leg)" which is a generic procedure that provides general guidelines for filling and venting level instruments. This use of a generic procedure is inappropriate for the circumstances, and appears to have directly contributed to the technician receiving thermal burns because he connected the low pressure fill equipment incorrectly and manipulated the wrong valves. This action resulted in the low pressure fill equipment being blown off and releasing hot reactor coolant to the containment atmosphere. The I&C technician received thermal burns to his arm from the hot reactor coolant.

Discussion

ICI-2007, "Filling and Venting Level Transmitters and Level Indicating Switches (Wet Leg)" was the governing procedure. The ICI-2007 "PURPOSE" states in part ". . . to provide basic guidelines for filling and venting . . ." both operational and non-operational systems. In this incident the system was operational and the key procedural guidelines were:

a. Inspect for leaks (11.1.1)
b. Vent the transmitter (11.1.4)
c. Check reference leg pressure with a Heise gauge (11.1.10)
d. Fill reference leg IAW 11.1.15 (high pressure fill rig) if system pressure is greater than 15 psig or IAW 11.1.8 (low pressure fill rig) if system pressure is less than 15 psig.

The pressurizer reference leg has a readily accessible vent valve on the upper level near the condensing pot; consequently, the technician intended to isolate the reference leg root valve and fill the reference leg from the transmitter up through the vent valve. The technician briefed the Shift Supervisor on the evolution and requested that the reference leg root valve be closed (Operations) and the transmitter be isolated (IC)*. Following isolation, the system was inspected and one of the drain valves was noticed to be leaking (it was tightened). The transmitter was vented then lined up for normal operation to see if the problem had been corrected. The transmitter was still indicating incorrectly, but the drain valve leak had been stopped.

* NOTE: All instrument valves down stream of the root valve are I&C's

Response to violation 445/8445-02 (continued)

The I&C technician had Operations close the reference leg root valve again while he isolated the transmitter by shutting both isolation valves and both cutout valves (see attached drawing). The vent valve cap was removed and the vent valve cracked open to depressurize the reference leg and to verify that the reference leg root valve was not leaking. The technician hooked up his low pressure fill rig to the process side test fitting instead of the reference side. The technician opened the process isolation valve instead of the reference isolation valve and was pumping up the fill rig when he noticed pressure was increasing (both cutout valves had been shut in previous steps). The technician then opened the process cutout valve instead of the reference leg cutout valve and the fill hose blew off the test fitting. The hot water struck him on the upper arm causing a minor first degree burn approximately 2" in diameter. The technician shut the process isolation valve and notified the Shift Supervisor of the problem.

The contributing factors to the incident were:

1. The reference leg valves were not adequately identified.

2. The procedure did not require the technician to verify system pressure prior to hooking up the low pressure fill rig.

Corrective Action:

Positively identify all reference leg instrument valves on Barton and Rosemount non-capillary electronic level transmitters for which normal system operating pressure is greater than 500 psig or normal system operating temperature is greater than 200°F. Specifically, hang metal tags that read "REF LEG" or "REFERENCE LEG" on the applicable valves for the following transmitters:

1-LT-0519	1-LT-0553
1-LT-0517	1-LT-0554
1-LT-0518	1-LT-0501
1-LT-0527	1-LT-0501F
1-LT-0528	1-LT-0502
1-LT-0529	1-LT-0502F
1-LT-0537	1-LT-0503
1-LT-0538	1-LT-0504
1-LT-0539	1-LT-0459
1-LT-0547	1-LT-0459F
1-LT-0548	1-LT-0460
1-LT-0549	1-LT-0461
1-LT-0551	1-LT-0462
1-LT-0552	

Preventive Action:

Revise ICI-2007 to require sequential performance of the procedure and to specifically apply to Barton transmitters on pressurizer and steam generator level instruments.

Conduct training on the revised ICI-2007 following approval.

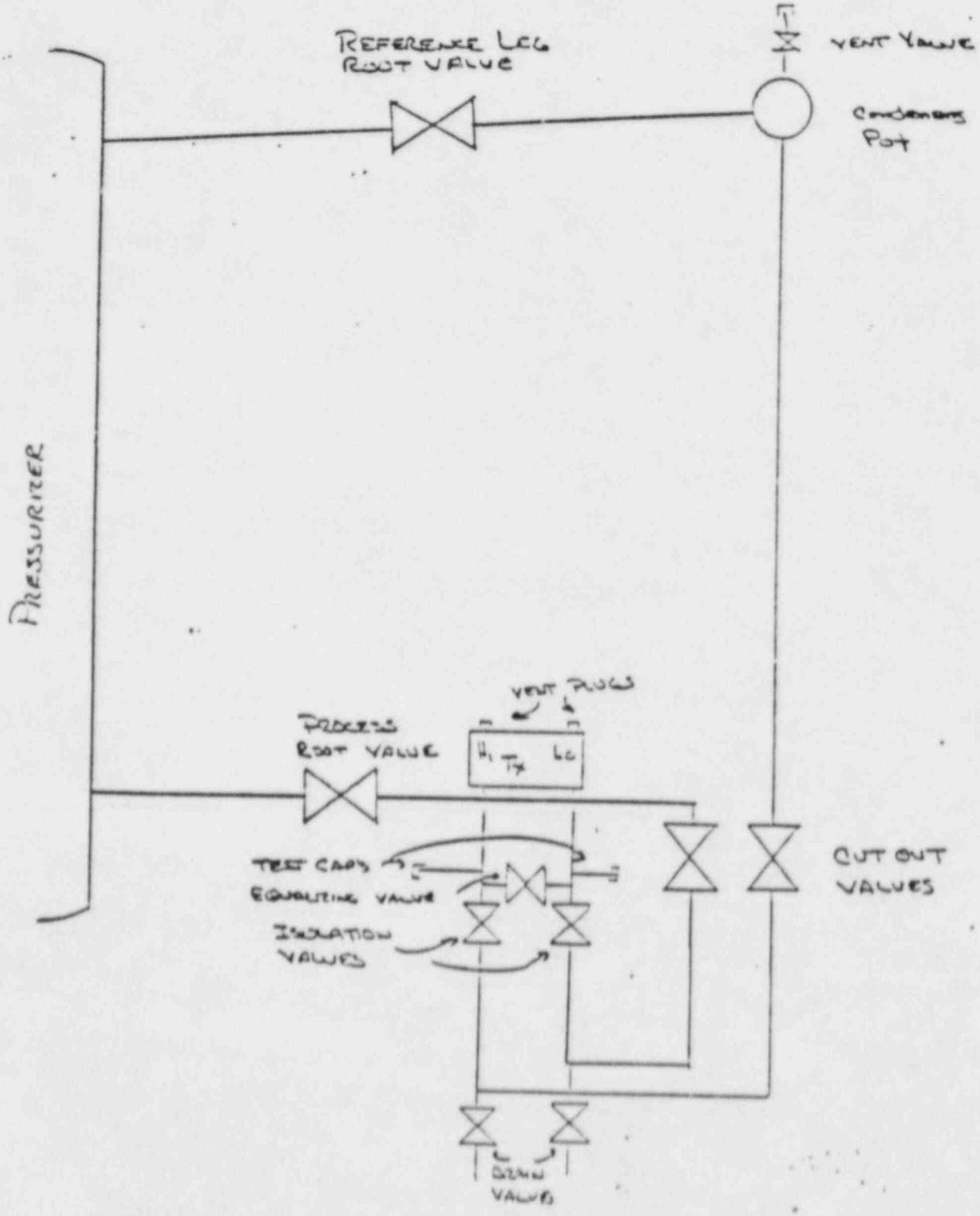
In addition to the above preventive action, the following procedures were reviewed to determine if similar procedural problems existed:

ICI-2004 through ICI-2009
ICI-2020 through ICI-2029
ICI-2040
INC-7322A and INC-7725A
INC-7757A and INC-7760A

There were no other procedural errors that would result in a similar incident.

Implementation Date:

(a) The corrective action specified above was completed 1/24/85.
(b) The preventive action specified above will be complete by 4/26/85.


REFERENCE LEG
ROOT VALVE
VENT VALVE
CONDENSING
POT
PRESSURIZER
VENT PLUGS
PROCESS
ROOT VALVE
HI
LO
TEST CAPS
EQUALIZING VALVE
ISOLATION
VALVES
CUT OUT
VALVES
DRAIN
VALVES