NOTICE OF VIOLATION

TU Electric
Comanche Peak Steam Electric Station
Units 1 and 2

Docket Nos.: 50-445
50-446
License Nos.: NPF-87
CPPR-127

During the U.S. Nuclear Regulatory Commission's (NRC) Configuration Management Inspection conducted November 18 through December 13, 1991, five violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action," 10 CFR Part 2, Appendix C (Enforcement Policy), the violations are listed below:

1. 10 CFR Part 50, Appendix B, Criterion III, requires that design control measures be established for verifying or checking the adequacy of design and for assuring that applicable regulatory requirements and the design basis are correctly translated into specifications, drawings, procedures, and instructions. TU Electric Quality Assurance Manual Chapter 3 implements the requirement for verification and checking of the adequacy of the design.

   Contrary to the above, the following are examples of failure to implement adequate design control measures:

   (a) Westinghouse Calculation ID2-015Z was inadequate in that incorrect design temperature and pressure values were used for vendor-provided Class 1 piping analyses for the emergency core cooling system (ECCS). Vendor Calculation 2-015Z used design temperature and pressure values of 300°F and 2735 psig, respectively, that differed from the correct values of 650°F and 2485 psig listed in the TU Electric "ACCESS" database and as provided by Westinghouse Letter WPT-12394.

   (b) The Class 1E 125 Vdc short circuit calculation (Calculation 2-EE-0016, Revision 1) failed to consider the full contribution of the battery charger by incorrectly assuming a limiting amperage during the initial fault current surge.

   (c) The Class 1E 125 Vdc protective device coordination study (Document EE-CA-0008-128, Revision 2) showed a lack of coordination because of a failure to properly account for the battery charger and battery short circuit contributions.

   (d) Analyses had not been performed to determine the voltage drop to critical components required to mitigate a main steam line break outside the containment in accordance with the requirements of DBD-EE-31, "Environmental Qualification of Safety-Related Electrical Equipment," and DBD-EE-52, "Cable Philosophy and Sizing Criteria."

   (e) The residual heat removal cooldown analysis, Calculation FRSS-TBX-107b, incorrectly assumed a constant temperature for the ultimate heat sink for the duration of the cooldown period. This assumption was incorrect in that the heat sink temperature would increase during the accident.

(f) The backup protective relay (Device 51 V) calculation (TNE-EE-CA-0008-267, Revision 1) incorrectly used a 2000 kVA transformer per unit impedance instead of the emergency diesel generator impedance.

(g) The seismic support calculation (Ebasco Calculation Volume IV, Book 52) for the battery room heater used an erroneous input weight of 900 pounds rather than the weight of 1160 pounds indicated on Vendor Drawing 66L.

This is a Severity Level IV violation. (Supplement II) (445/91202-01; 446/91201-01)

2. Criterion X of Appendix B to 10 CFR Part 50, requires that inspections of quality activities be performed to verify conformance with design drawings.

Atwood and Morrill Co. Drawing 18-120-02, "Actuator Bailey Positioner," Revision 1, depicted the instrument air line routing from the middle of the associated air accumulator with a drain off the bottom.

Contrary to the above, the inspection team determined that the instrument air lines from air accumulators to component cooling water (CCW) Control Valves X-PCV-H116A and -B for Trains A and B uninterruptible power supply (UPS) air conditioning system were installed incorrectly. The air lines from the accumulators to the pilot valves of the control valve operators were connected to the bottom and the drains were routed from the middle of the accumulator. This installation had been QC accepted.

This is a Severity Level V violation. (Supplement II)(445/91202-02; 446/91201-02)

3. 10 CFR Part 50, Appendix B, Criterion V, requires that procedures appropriate to the circumstances for activities affecting quality shall be established and followed.

The following are examples of failure to follow established procedures:

(a) Construction Specification CPES-M-20003 and Procedure CP-SAP-24, "System Cleanliness Requirements and Control," specify material cleanliness criteria for in-plant and equipment storage areas.

Contrary to the above requirements: (1) a wall mounting plate for CCW Seismic Snubber CC-2-028-411-S33K was required to be stored under controlled conditions; however, the support was lying uncontrolled in the corner of Room 63 of the Safeguards Building, (2) the containment spray pump room was not maintained to Housekeeping Zone 2, cleanliness Level B requirements, as required by Procedure CP-SAP-24, and (3) uncovered and unprotected piping, instrument lines, unlabeled equipment, trash and food were found outside the Unit 2 equipment hatch in a safety-related storage area.

(b) Welding Procedure Specification (WPS) 18013, Revision 8/ICN0, specified a maximum amperage of 80 amperes.

Contrary to the above, the actual amperage was observed by the inspector to be 92 amperes during welding being done under this specification.

(c) Weld Technique Sheet (WTS) 11032, Revision 9/ICN 1, required a minimum preheat temperature of 200°F.

Contrary to the above, a minimum temperature of 174°F was observed during welding on Support AC-2-135-408-C41K.

This is a Severity Level IV violation. (Supplement II) (446/91201-03)

4. Criterion XI of Appendix B to 10 CFR Part 50, requires, in part, that test prerequisites are satisfactorily met.

Procedure CDP-ME-102-3 requires that temporary supports be installed to maintain unsupported pipe spans within the maximum limitations as a prerequisite to the conduct of flushing operations.

Contrary to the above, during performance of the RHR system Flush Tests 2RH-5800-0A and -B, the team identified that a number of rigid pipe supports and spring hangers were missing. The supports were removed after the system had been verified adequately supported by the pipe stress analysis engineers and released to the startup group for testing. Some instances were also noted in which temporary supports had not been installed to maintain unsupported pipe spans within the maximum limitation.

This is a Severity Level IV violation. (Supplement II) (446/91201-04)

5. 10 CFR Part 50, Appendix B, Criteria XVI, requires that corrective measures shall assure that the cause of a deficient condition is corrected sufficiently to preclude repetition.

TU Electric Quality Assurance Manual, Section 16, states that corrective measures shall assure that the deficient condition is corrected sufficiently to preclude repetition. Concrete expansion anchor (Hilti bolt) crevice corrosion problems had been previously identified in Significant Deficiency SD-CP-91-003 and Analysis Report SDAR-91-993 for both Units 1 and 2. The Unit 1 Hilti bolts had been environmentally sealed to resolve the problem.

Contrary to the above, as of December 13, 1991, the licensee failed to take adequate corrective action for a condition adverse to quality in that the Unit 1 emergency diesel generator exhaust muffler support Hilti bolts on the Safeguards Building roof were found improperly sealed. The impermeable material used as an environmental seal had shrunk and standing water was present to induce Hilti bolt crevice corrosion.

This is a Severity Level IV violation. (Supplement I) (445/91202-03)

Pursuant to the provisions of the 10 CFR Part 2.201, TU Electric is hereby required to submit a written statement of explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555, with a copy to the Regional Administrator, Region IV, and a copy to the NRC Resident Inspector at the facility that is the subject of the Notice of Violation (Notice), within 30 days of the date of the letter transmitting this Notice. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. If an adequate reply is not received within the time specified in this Notice, an order may be issued to show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Dated at Arlington, Texas,
this 31st day of March 1992