APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Inspection Report: 50-445/92-36
50-446/92-36

Operating License: NPF-87

Construction Permit: CPPR-127

Licensee: TU Electric
400 North Olive Street, L.B. 81
Dallas, Texas 75201

Facility Name: Comanche Peak Steam Electric Station, Units 1 and 2

Inspection At: Glen Rose, Texas

Inspection Conducted: August 17-20, August 31 through September 3, 1992

Inspectors: L. D. Gilbert, Reactor Inspector, Materials and Quality Programs Section, Division of Reactor Safety

L. E. Ellershaw, Reactor Inspector, Materials and Quality Programs Section, Division of Reactor Safety

Approved: I. Barnes 9-11-92
I. Barnes, Chief, Materials and Quality Programs Section, Division of Reactor Safety — Date

Inspection Summary

Areas Inspected: Routine, announced inspection of the Unit 2 facility to compare the as-built plant to the system description in the Final Safety Analysis Report, and to assess quality assurance program controls for storage of safety-related items. No inspections were performed of the Unit 1 facility

Results:

- The results of the inspection showed that there was good correlation between the as-built plant and the Final Safety Analysis Report system description (paragraph 2).
- Quality assurance controls for storage activities were strong, in that procedures were comprehensive, well defined, and effectively implemented (paragraph 3).

Summary of Inspection Findings:

- No inspection findings were opened or closed during this inspection.

Attachment:

- Attachment - Persons Contacted and Exit Meeting

DETAILS

1 PLANT STATUS

During this inspection period, the Unit 1 plant was operating and Unit 2 was undergoing preoperational testing.

2 COMPARISON OF AS-BUILT PLANT TO FSAR DESCRIPTION (37301)

The description of specific plant systems in the Final Safety Analysis Report (FSAR) and Technical Specifications was compared to the as-built plant drawings and hardware. The Unit 2 systems selected for the inspection included the reactivity control systems, the emergency core cooling systems, and the containment systems. A portion of Inspection Procedure 37301 was previously performed and documented in Inspection Report 50-445/92-26; 50-446/92-26.

2.1 Reactivity Control Systems

The inspectors performed a walk-down of one train of the Unit 2 reactivity control systems described in Technical Specification 3/4.1.2 for the boration systems. The walk-down included the boric acid transfer pump and blender, centrifugal charging pump, regenerative heat exchanger, and associated piping for the Unit 2 portion of the chemical and volume control system flow path from the boric acid tank to the centrifugal charging pump and inside the reactor building from containment penetration 2MII-0006 to the regenerative heat exchanger. The walk-down inspection verified that the valves, pumps, heat exchanger, and branch connections were installed in the as-built plant as described in Section 9.3 of the FSAR. No problems were noted during performance of this activity.

2.2 Emergency Core Cooling Systems

The inspectors performed a walk-down of one train of the Unit 2 emergency core cooling system flow path described in Technical Specification 3/4.5.2. The walk-down included the safety injection pump, the residual heat removal pump and heat exchanger, and associated piping for the Unit 2 flow path of the safety injection and residual heat removal systems from the refueling water storage tank to the reactor coolant system. The walk-down inspection verified that the valves, pumps, heat exchanger, and branch connections were installed in the as-built plant as described in Section 6.3 of the FSAR. No problems were noted during performance of this activity.

2.3 Containment Systems

The inspectors compared the containment spray system described in the current FSAR with the latest copy of the containment spray system flow diagrams (M2-0232-A, Revision CP-3, and M2-0232-0, Revision CP-5), and corresponding construction drawings, and open design changes specified in the Affected

Document Update Report. Three containment spray system flow paths were selected from those designated in Technical Specification 3/4.6.2 of the Combined Technical Specifications for Comanche Peak Units 1 and 2, Proof and Review Version, which consisted of the flow paths from the refueling water storage tank, the chemical additive tank, and the containment sump using two containment spray pumps and a heat exchanger to the containment spray nozzles. The containment spray system as described in FSAR Section 6.2.2 was found to be consistent with the containment spray system flow diagrams with the exception of the following anomalies:

- FSAR Figure 6.2.2-1 Sheet 1 did not show vent valve 2CT-0176 and associated 3/4 inch piping as shown on Drawing M2-0232-0.

- FSAR Figure 6.2.2-1 Sheet 2 did not show relief valve 2CT-0309 and associated 3/4 and 1 inch piping as shown on Drawing M2-0232-A.

For the first anomaly, the licensee informed the inspectors that the above vent line had been removed from the FSAR figure during the 1990 effort to reduce the amount of detail. Subsequently, the licensee decided to reinstate vents, but missed the pump suction vent line. LDCR SA-92-775, a licensing document change request, has been initiated to amend the FSAR figure to show the pump suction vent line and valve. Although the vent was not shown on the FSAR figure for the containment spray system, the figure was considered functionally correct.

For the second anomaly, the licensee informed the inspectors that Design Modification 89-303 had been issued to install a relief valve on the bonnet of each sump isolation valve. The basis for the design modification was discussed in TU Electric Comanche Peak Engineering Design Basis Document, Containment Spray System, DBD-ME-232, Revision 3 for Comanche Peak Steam Electric Station Units 1 and 2. The design modification has been completed for Unit 2 and is scheduled for installation in Unit 1 during the next refueling outage, which begins in October 1992. LDCR SA-92-775 also changed the FSAR figure to show the relief valve as a unit difference until installation of the relief valve into Unit 1.

The inspectors also performed a walk-down of one train of the Unit 2 containment spray system flow path described in Technical Specification 3/4.6.2 for depressurization and cooling of the containment building. The walk-down included the containment spray pumps, heat exchanger, and recirculation sump and associated piping for the Unit 2 flow path from the refueling water storage tank via a branch connection off the safety injection system piping to the last valve in containment spray system piping that feeds the spray headers. The walk-down inspection verified that the valves, pumps, heat exchanger, and branch connections were installed in the as-built plant as described in Section 6.2.2 of the FSAR. No problems were noted during performance of this activity.

2.4 Conclusions

The results of the inspection showed that there was good correlation between the as-built plant and the FSAR system description.

3 QUALITY ASSURANCE PROGRAM CONTROLS OF RECEIPT INSPECTION (35747B)

The objectives of this part of the inspection were limited to determining whether the licensee had developed and implemented quality assurance program controls relating to the storage of safety-related items. Other elemerts of Inspection Procedure 35747B were inspected and documented in Inspection Report 50-445/92-15; 50-446/92-15.

3.1 Storage

The licensee established written administrative controls in Procedure MMO 4.09, "Receipt, Storage, Issues and Shipping of Construction Material, Parts and Components," Revision 5 through Materials Document Change Notice 3, dated March 30, 1992. The controls were detailed and provided for assignment of responsibilities, storage area access, identification and control of items, protection, environmental conditions and levels of storage, shelf life, and maintenance of items. A requirement for conducting surveillances of warehouse activities was specif ed; however, the details for implementing this requirement were contained in Procedure MMO 4.11, "Warehouse Surveillance," Revision 0, dated June 1, 1992. Prior to the establishment of this procedure, surveillances of warehouse activities were controlled by Procedure NQA 3.23, "Surveillance Program," Revision 6, with the major difference pertaining to the assigned responsibility for performing the surveillances.

The inspectors reviewed Surveillance Reports PQAS-92-01, PQAS-92-02, PQAS-92-03 (performed by Procurement Quality Assurance under Procedure NQA 3.23), 92-003, 92-008, 92-010, and 92-025 (performed by the warehouse supervisor under Procedure MMO 4.11). The surveillances were performed on a monthly basis using detailed checklists that addressed all of the controls specified in Procedure MMO 4.09.

The inspectors toured the paint warehouse and warehouses A and B, which were found to be well organized, neat, and clean. The paint warehouse and the storage level A section of warehouse B were environmentally controlled and equipped with currently calibrated temperature and humidity chart recorders. The inspectors reviewed the computerized Purchasing and Material Management System (PMMS) data sheet, which maintained control over the receipt, storage conditions, status, quantities, and distribution of inventory. From the data sheets, the inspectors selected a sample of seven safety-related items, including two mechanical items, two electrical components, one consumable item (weld rod), and two items with shelf-life requirements (O-ring kits). Each of the items was found to be stored in accordance with the conditions specified in the PMMS, including controlled environment, identification with evidence of quality assurance acceptability, and established shelf-life dates.

3.2 Conclusions

Qual..y assurance controls for storage activities were strong, in that procedures were comprehensive, well defined, and effectively implemented.

ATTACHMENT

1 PERSONS CONTACTED

TU ELECTRIC

*J. Ayres, Operations Quality Assurance Manager
*M. Blevins, Director of Nuclear Overview
*L. Bradshaw, Stipulation Secretary
*W. Cahill, Group Vice President
*J. Conly, Licensing Engineer
*J. Greene, Licensing Engineer
*T. Hope, Unit 2 Licensing Manager
*I. Hughes, Assistant Project Construction Engineer
*L. Hurst, Project Manager
*J. Kelley, Plant Manager
B. Maycheck, Warehouse Superintendent
*D. Pendleton, Regulatory Services Manager
*C. Rau, Unit 2 Project Manager
P. Smith, Warehouse Coordinator
*J. Snyder, Startup Staff
*C. Terry, Chief Engineer
*J. Wren, Construction Quality Assurance Manager

Citizens Association for Sound Energy

*O. Thero, Consultant

NRC

*D. Graves, Senior Resident Inspector
*C. Johnson, Project Engineer
R. Latta, Resident Inspector
*W. McNeill, Reactor Inspector
*D. Powers, Senior Reactor Inspector

*Denotes personnel that attended the exit meeting. In addition to the personnel listed above, the inspectors contacted other personnel during this inspection period.

2 EXIT MEETING

An exit meeting was conducted on September 3, 1992. During this meeting, the inspectors reviewed the scope and findings of this report. The licensee did not identify as proprietary any of the materials provided to, or reviewed by, the inspectors during this inspection.