U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION IV

Report No. 50-445/78-23; 50-446/78-23

Docket No. 50-445; 50-446 Category A2

Licensee: Texas Utilities Generating Company
2001 Bryan Tower
Dallas, Texas 75201

Facility Name: Comanche Peak, Units 1 & 2

Inspection at: Comanche Peak Site, Glen Rose, Texas

Inspection conducted: December 18-20, 1978

Inspectors: A. B. Rosenberg — 1/4/79
A. B. Rosenberg, Reactor Inspector, Engineering Support Section (Paragraphs 1, 2, 3 & 4) Date

A. B. Beach — 1/4/79
A. B. Beach, Reactor Inspector, Engineering Support Section (Paragraph 3) Date

Reviewed: for W. A. Crossman — 1/4/79
R. G. Taylor, Resident Inspector, Projects Section Date

Approved: W. A. Crossman — 1/4/79
W. A. Crossman, Chief, Projects Section Date

R. E. Hall — 1-4-79
R. E. Hall, Chief, Engineering Support Section Date

Inspection Summary:

Inspection on December 18-20, 1978 (Report No. 50-445/78-23; 50-446/78-23)
Areas Inspected: Routine, unannounced inspection of construction activities related to an overall review and inspection of the licensee's site QA program implementation. Specific areas inspected included the QA/QC organization, document control, design control, procurement control, equipment installation control and audits. The inspection involved forty-five inspector-hours on site by two NRC inspectors.
Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

Principal Licensee Personnel

*D. E. Deviney, TUSI, QA Technician
*H. O. Kirkland, TUSI/B&R, Project General Manager
*J. T. Merritt, TUSI, Resident Manager
*R. G. Tolson, TUGCO, Site QA Supervisor

Other Personnel

R. Backer, Procurement Vendor Surveillance, Brown & Root (B&R)
J. Davis, QA Supervisor, B&R
R. V. Fleck, Civil Inspection Supervisor, Gibbs & Hill (G&H)
C. W. Killough, Site Surveillance Coordinator, B&R
R. Murray, Field Support Design Group, B&R
R. M. Osborne, Senior QC Supervisor, B&R
R. C. Scott, Site QA Manager, B&R
K. W. Silverthorne, QC Engineer-Mechanical, B&R
R. Taylor, Document Control Supervisor, B&R

The IE inspectors also interviewed other licensee and contractor personnel during the course of the inspection.

*denotes those present at the exit interview.

2. Site Tour

The IE inspectors toured the various areas of the site to observe construction activities in progress and to inspect housekeeping.

No items of noncompliance or deviations were identified.

3. Mid Term Construction Permit QA Inspection

The mid term QA inspection is performed to determine whether the establishment and implementation of the site quality assurance program for past, current and upcoming site related activities in the areas of design, procurement, and construction are consistent with the status of the project and the Quality Assurance program described in the Safety Analysis Report. The specific areas inspected included: QA/QC organization; QA manual-document control; procurement control; control of equipment installations; and audits. Mr. R. G. Taylor (NRC Resident Inspector) performed a portion of the mid term QA inspection concerning Qualty Assurance manuals review. The manuals review of the inspection is documented in inspection report No. 50-445/78-20; 50-446/78-20.

a. QA/QC Organization

Brown & Root is the designated constructor for Comanche Peak Steam Electric Station (CPSES). The B&R QA and QC Managers report directly to the TUGCO Site QA Supervisor. The TUGCO Site QA Supervisor also has three non-B&R supervisors reporting directly to him (Civil Inspection, Product Assurance and Records Management).

The IE inspector determined that personnel were assigned responsibility for: (1) continuing development of QA/QC procedures; (2) inspections; (3) audits and site surveillance; and (4) management of the site QA/QC program implementation.

b. QA Manual Document Control

The QA manual and QA manual procedures were reviewed with two individuals that were assigned unrelated QA/QC activities. The civil discipline manual and the civil quality procedures were reviewed with the Civil Inspection Supervisor. The ASME mechanical discipline manual and the mechanical quality procedures were reviewed with the QC Mechanical Engineer. Each individual discussed in general the QA/QC document control portions of their respective manuals and their responsiblities in relation to QA/QC activities.

Several procedures from the QA/QC manual documents were selected and were made available by each of the individuals. The individual then verified that the documents were not superseded by a later revision. The Civil Inspection Supervisor verified the following procedures were to the most current revision:

Q1-QP-11.0-1	Cadweld Inspection Activities
CP-QP-11.0	Civil Inspection Activities

The QC Mechanical Engineer verified the following procedures were to the most current revision:

Q1-QAP-10.3-2	Welder Surveillance
CP-QAP-10.1	Field Inspection

c. Design Control

Site-originated design activities are controlled by CPP-EP-1. This procedure was reviewed with the Field Support Design Supervisor, as were the field documents used for site-originated design changes. This review included a discussion as to how the requirements of CPP-EP-1 were being implemented within the design activities being followed at the site. A general sampling of five design changes indicated timely resolution and close out.

Licensee surveillance records of site-design activities were also reviewed. Surveillance records, specifically audits TGH-4 and TGH-8, indicated timely surveillance and audits are being performed by the licensee as prescribed by ANSI N45.2.11.

d. Drawing Control

Drawing control procedures for both on-site and off-site originated drawings were reviewed. The Document Control Supervisor reviewed his responsibilities in relation to the Brown & Root and/or TUSI QA manual provisions for the Document Control Center. A sampling of approximately ten drawings were reviewed to verify that reproducibles were available and to verify that the drawings were to the most current revision. The individual then reviewed the procedures used in the Document Control Center to ensure that a drawing revision was consistent with the revision number indicated on the drawing being used.

Facilities relating to storage and control of both working and design drawings were physically examined. Microfilm and card facilities were also toured.

e. Procurement Control

Site-originated procurement activities are controlled by the Brown & Root and/or TUSI QA manual. These procedures were reviewed with the Vendor Surveillance Supervisor. The Vendor Surveillance Supervisor reviewed the QA manual provisions relative to his job function. Facilities used for the storage and control of all procurement documents were physically examined. A general description of how documents were reviewed for quality input and checked to ascertain compliance with the specifications was then explained by the Vendor Surveillance Supervisor.

Two separate procurement packages were investigated; one was selected for structural support materials (AFCO Steel, Job Number 35-1195-18627), and one was selected for weld rod materials (Chemtron, Job Number 35-1195-20726). The proper standards were specified and the proper material certifications were provided. Each supplier had been prequalified, and all of the activities investigated were performed as required by the applicable procedures.

From a review of audits TCP-1 and TCP-2, it was verified that surveillance and audits were being performed of site-procurement activities.

f. Control of Equipment Installations

The IE inspector reviewed the installation documentation for four components: pressurizer; diesel generators; positive displacement pumps (chemical and volume control system); and ventilation exhaust filter racks. These components were in various stages of installation from stored-in-place to preliminary alignment. Mechanical and electrical hook-ups were not complete. The rigging and mechanical installation travelers were reviewed and found to reflect a logical sequence for the installations. Quality Control routinely verifies that the approved traveler, which includes the specific installation procedures is available at the installation. Where portions of the installations were complete, the travelers were appropriately signed off. In the case of the diesel generator, the travelers reflected the installation requirements of the manufacturer.

g. Audits

The IE inspector reviewed the licensee and constructors audit and site surveillance activities. The specific topics discussed in the audits and site surveillance activities include procurement, document control, receiving inspection, concrete construction, piping and cable trays. Each of the eighteen quality assurance criteria of 10 CFR 50, Appendix B were reviewed on an annual basis or more frequently. The records reviewed for six audits indicated that findings were consistently corrected and followed up.

No items of noncompliance or deviations were identified.

4. Exit Interview

The IE inspectors met with licensee representatives (denoted in paragraph 1) and Mr. R. G. Taylor (NRC Resident Inspector) at the conclusion of the inspection on December 20, 1978. The IE inspectors summarized the purpose, scope and findings of the inspection.