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

REGION IV

Report No. 50-445/78-21; 50-446/78-21

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: November 20-22, 1978

Inspector: _____ 12-8-78
J. I. Tapia, Reactor Inspector, Engineering Support Section Date

Reviewed: for _____ 12/11/78
R. G. Taylor, Resident Inspector, Projects Section Date

Approved: _____ 12/11/78
W. A. Crossman, Chief, Projects Section Date

_____ 12/11/78
R. E. Hall, Chief, Engineering Support Section Date

Inspection Summary:

Inspection on November 20-22, 1978 (Report No. 50-445/78-21; 50-446/78-21)
Areas Inspected: Routine, unannounced inspection of construction activities including observation of work and review of quality assurance documentation related to concrete placement in the Unit 1 Safeguards Building; Auxiliary Feedwater and Safety Injection Pumps (Unit 1); and Containment Liner Plate (Unit 2). The inspection involved eighteen inspector-hours on site by one NRC inspector.
Results: No items of noncompliance were identified in the three areas inspected.

DETAILS

1. Persons Contacted

Principal Licensee Personnel

*R. G. Tolson, TUGCO, Site QA Supervisor
*H. O. Kirkland, TUSI/B&R, Project General Manager
*J. George, TUSI, Project General Manager
R. V. Fleck, TUGCO/G&H, Civil QC Supervisor
*J. V. Hawkins, TUGCO/G&H, Product Assurance Supervisor
*D. E. Deviney, TUSI, QA Technician
G. Clancy, TUGCO, Nuclear Power Plant Technician

Other Personnel

M. Jeffers, Project Welding & QA Supervisor, Chicago Bridge & Iron (CB&I)
S. Wilson, Civil QC Inspector, Brown & Root (B&R)
P. Van Teslaar, Field Representative, Westinghouse
M. Wuestefeld, Field Representative, Westinghouse

*denotes those present at the exit interview.

2. Site Tour

The IE inspector toured the various areas of the site to observe construction activities in progress, including housekeeping.

No items of noncompliance or deviations were identified.

3. Concrete Placement

The removal of improperly consolidated concrete in the slab at elevation 852 of the Unit 1 Safeguards Building was observed by the IE inspector. The nonconforming material was documented in concrete placement Inspection Report No. 105-7852-004 as having been caused by the failure of the vibrators to penetrate deeper than four inches into the first lift of concrete. Discussions with the Civil QC Supervisor indicated that a nonconformance report would be issued that would identify excessive congestion of the reinforcing steel at the bottom of the slab and the use of three-quarter inch aggregate as factors which led to the inability of the vibrators to adequately consolidate the concrete. In order to eliminate the possibility of recurrence, a concrete

mix using a maximum aggregate size of three-eights of an inch was designed and qualified according to ACI 301-72, "Specifications for Structural Concrete for Buildings." The plot of compressive strength versus water-cement ratio for the trial mixtures was reviewed for conformance of the proportions selected with the field controls in use during placement No. 105-8873-004. Portions of this 260 cubic yard roof slab placement in the Unit 1 Safeguards Building were observed by the IE inspector. Concrete placement techniques observed and field records of concrete temperature, air content, and slump were found to be in conformance with the requirements of Gibbs and Hill Specification No. 2323-SS-9, Rev. 4, "Concrete," and the Concrete Mix Proportion Data report.

No items of noncompliance or deviations were identified.

4. Containment Liner Plate

Unit 2 containment liner plate, rings twelve through seventeen, were released by CB&I to Brown & Root for the initiation of reinforcing steel placement during this inspection. The record drawing for the twelfth and thirteenth rings, from azimuth 0 to 180 degrees, was reviewed by the IE inspector. Two weld joints were randomly selected from the drawing and reviewed for satisfaction of the testing requirements and for proper documentation of the welds with respect to welder identification and physical testing results. The Radiographic Examination and the Vacuum Box Test reports for each weld were reviewed. The Welders Qualification Test reports for the two welders involved were also reviewed. All items reviewed were found to be consistent and in accordance with Gibbs & Hill Specification No. 2323-SS-14, Rev. 3, "Containment Steel Liners."

No items of noncompliance or deviations were identified.

5. Pumps

Two motor driven and one turbine driven auxiliary feedwater pumps and one high pressure safety injection (HPSI) pump, of Unit 1, were inspected for proper in-place storage. The quality assurance documentation packages were reviewed to verify compliance with the American Society of Mechanical Engineer's Boiler and Pressure Vessel Code, Section III requirements for design specification contents as delineated in paragraph NA-3250 of Section III. The documents reviewed included Certificates of Compliance, Material Test Reports, Inspection Records, and the design specifications. Inspection of the in-place equipment verified conformance with Brown & Root Construction Procedure No. 35-1195-MCP-10, Rev. 2, "Storage and Storage Maintenance of Mechanical and Electrical Equipment."

No items of noncompliance or deviations were identified.

6. Exit Interview

The IE inspector met with licensee representatives (denoted in paragraph 1) and with Mr. R. G. Taylor, the NRC Resident Inspector, at the conclusion of the inspection on November 22, 1978, in order to discuss the purpose, scope and findings of the inspection.