APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-445/83-44

Docket: 50-445 Category: A2

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

Facility Name: Comanche Peak Steam Electric Station (CPSES), Unit 1

Inspection At: Glen Rose, Texas

Inspection Conducted: October 1-November 30, 1983

Inspector: Dennis L. Kelley 1/12/84
D. L. Kelley, Senior Resident Inspector Date

Approved: D M Hunnicutt 1/19/84
D. M. Hunnicutt, Chief Date
Reactor Project Section A

Inspection Summary

Inspection Conducted October 1-November 30, 1983 (Report 50-445/83-44)

Areas Inspected: Routine, announced inspection of (1) Initial Startup Procedures; (2) Preoperational Test Performance; (3) Re-evaluation of Preoperational Test Results; (4) Plant Tours; and (5) Plant Status. The inspection involved 120 inspector-hours by one NRC inspector.

Results: Within the five areas inspected, no violations or deviations were identified.

Details

1. Persons Contacted

Principle Licensee Employees

*J. T. Merritt, Assistant General Project Manager
*J. C. Kuykendall, Manager, Nuclear Operations
*R. A. Jones, Manager, Plant Operations
*R. E. Camp, Startup Manager
*D. E. Deviney, Operations Quality Assurance Supervisor
*T. L. Gosdin, Public Relations Coordinator
*J. C. Smith, TUGCO Quality Assurance
*C. H. Welch, TUGCO Quality Assurance Startup Turnover Surveillance Supervisor
*H. P. Miller, Lead Startup Engineer

The Senior Resident Reactor Inspector (SRRI) also interviewed other licensee employees during the inspection period.

*Denotes those persons present during the exit interview.

2. Initial Startup Test Procedure Review

The SRRI reviewed and commented on five draft initial startup test procedures. The procedures will be reviewed in their final form after approval by the station operations review committee (SORC). When the preoperational tests are performed, a brief review will be conducted of the latest revision to note any changes that may affect the test results.

The procedures are reviewed with specific emphasis on the following:

a. Management review.

b. Format clearly defines testing to be performed.

c. Test objectives are clearly stated.

d. Prerequisites are identified.

e. Special conditions (if any) are specified.

f. Acceptance criteria are identified and requirements are specified for comparison of results with the acceptance criteria.

g. Source of acceptance criterion is identified.

h. Initial test conditions are specified.

i. Reference to appropriate FSAR sections, drawings, specifications, and codes are included.

j. Reactor operating mode and applicable Technical Specifications are identified.

k. Step-by-step instructions of sufficient detail are included to ensure that conduct of the test will result in valid conclusions.

l. Provisions for documenting that required steps have been performed and space for recording data are included.

m. Temporary circuit changes, installation of jumpers, and restoration of circuits after testing are properly documented.

n. Technical Specification "Special Testing Exceptions" are listed.

o. Independent verification of critical steps or parameters is addressed.

During this reporting period, the following draft procedures were reviewed and returned with no comments:

ISU-202A	Calibration of Feedwater and Steam Flow Instrumentation at Power
ISU-220A	Turbine Generator Initial Synchronization
ISU-263A	Large Load Reduction Test
ISU-280A	100% Reactor Power Sequence
ISU-281A	NSSS Acceptance Test
ISU-284A	Dynamic Response to Full Load Rejection and Turbine Trip

No violations or deviations were identified during this review.

3. Preoperational Test Performance

The SRRI observed portions of the polar crane preoperational test (PT-81-03). The containment polar crane was designed, constructed, and rigged for construction loads. It was "proof" tested for construction in excess of 400 tons. The polar crane was re-rigged for operational loads (175 tons) prior to the preoperational test. The test requires testing at 125% of the maximum operational load. A polar crane "proof" test was performed at 125% of a 175 ton lift load. The results of this "proof" test are being reviewed and evaluated.

The licensee requested that a variance from the requirement for a 360^{o} bridge rotation and full traverse of the trolley at test loads. Since this was mainly to demonstrate structual integrity of the crane and had been "proofed" at construction loads, a variance was granted by NRR. The variance calls for a bridge movement of 10 feet and a trolley movement of 5 feet under operational test load.

The SRRI verified that the procedure had been changed and approval and that the specific steps had been completed. Additional portions of the static load lift were observed and the following verified:

a. the test was being conducted using the approved procedure,

b. Changes to the test were acccomplished in accordance with approved procedures, and

c. the performance of the test was controlled and conducted in such a manner as to yield valid test results.

There were no apparent test discrepancies. No violations or deviations were identified.

4. Re-evaluation of Preoperational Test Results

The SRRI has re-reviewed the first of several preoperational tests and randomly selected work packages. The review is to compare the test and its results with work performed on the system after the tests were complete. The first test to be re-reviewed was PT-57-01, "Safety Injection Pump Performance."

The startup work authorization (SWA) and associated documents reviewed were:

SWA-9526
NCR M-5840-S; CMC 87630; Base/weld Metal Inspection Report 2009; Weld Data Card 753064 (includes Visual Examination Checklist; MT/PT Report (2 sheets); and Weld Filler Material Log.

SWA-10613
Inspection Report ET-4643 (2 sheets); Inspected Item Removal Notice E-0683; and Inspection Report E-24571.

SWA-11904
NCR M-55975; Weld Data Card 82996; and Multiple Weld Data Card 82474 (2 sheets).

SWA-13491
Inspection Report 13724.

SWA-14042
NCR 10, 487R-1; NCR 10, 487R-2; Drawing BRP-SI-1-YD-003, Revision 8; UT Thickness Report A-4055; and Weld Data Card 707486.

The SRRI's review consisted of:

a. An evaluation of any test steps that may have been effected by the individual SWAs.

b. An evaluation of the over all test results, including acceptance criteria, to determine the effect, if any, that the SWAs may have had.

c. Determine if the SWAs had been done in accordance with approved procedures.

d. Determine if all the document required were retrievable to rebuild the work packages.

The results of the review were that the tests results for PT-57-01 were not affected by the associated SWAs; the retrievability of the documents was adequate; and the work was accomplished in accordance with approved procedures.

The SRRI is re-reviewing several other preoperational tests in the same manner. This item will remain open pending completion of the reviews.

No violations or deviations were identified.

5. Plant Tours

During this reporting period, the SRRI conducted several inspection tours of Unit 1. In addition to the general housekeeping activities and general cleanliness of the facility, specific attention was given to areas where safety-related equipment is installed and where activities were in progress involving safety-related equipment. These areas were inspected to ensure that:

a. Work in progress was being accomplished using approved procedures.

b. Special precautions for protection of equipment was implemented, where required, and additional cleanliness requirements were being adhered to, where required, for maintenance, flushing, and welding activities.

c. Installed safety-related equipment and components were being protected and maintained to prevent damage and deterioration.

Also during these tours, the SRRI reviewed the control room and shift supervisors' log books. Key items noted in the log review were:

a. Plant status

b. Changes in plant status

c. Tests in progress

d. Documentation of problems which arise during operating shifts

No violations or deviations were identified.

6. Plant Status

The following is a status of TUGCO manning levels for operations and plant testing activities as of November 30, 1983:

a. Operations Manning Status

Authorized Personnel Level (including maintenance, operations, administration, quality assurance, and engineering) - 486

Number Presently Onboard 455

b. Plant Testing Status

Total Number of Preoperational Tests - 150
Number of Preoperational Tests Through Draft - 147
Number of Preoperational Test Approved Joint Test Group (JTG) - 140

Total Number of Acceptance Tests - 48
Number of Acceptance Test Through Draft - 48
Number of Acceptance Test Approved - 48

Test Completion Status

Preoperational Tests - 81
Acceptance Tests - 43

No violations or deviations were identified.

7. Exit Interview

An exit interview was conducted November 30, 1983, with licensee representatives (identified in paragraph 1). During this interview, the SRRI reviewed the scope and discussed the inspection findings.