APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

Report:

50-445/82-16

Docket:

50-445

Category: A2

Licensee:

Texas Utilities Generating Company

2001 Bryan Tower Dallas, TX 75201

Facility Name: Comanche Peak, Unit 1

Inspection At: Comanche Peak, Unit 1

Inspection Conducted: July 1-31, 1982

Inspector:

Resident Reactor Inspector

Westerman, Chief, Reactor Project Section A

Inspection Summary

Inspection Conducted During the Period July 1-31, 1982 (NRC Report 50-445/82-16)

Areas Inspected: Routine, announced inspection by the Senior Resident Reactor Inspector (Operations), including: (1) Preoperation Test Procedure Review; (2) Secondary Cold Hydro; (3) Primary Cold Hydro; (4) Plant Tour; and (5) Plant Status. The inspection involved 129 inspector-hours by one NRC inspector.

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

DETAILS

Persons Contacted

*J. C. Kuykendali, Manager, Nuclear Operations

*J. Roberts, Startup Turnover, Level I Surveillance Technician

*G. D. Smith, Lead Startup Engineer (EDS)
*R. A. Jones, Manager, Plant Operations

*H. A. Lancaster, Startup Quality Assurance Specialist

R. B. Seidle, Operations Supervisor

S. M. Franks, Preoperational Test Supervisor EDS

J. C. Collins, System Test Engineer EDS B. J. Browing, System Test Engineer EDS

D. E. Diviney, Operations Quality Assurance Supervisor

G. L. Kunkle, Startup Quality Assurance Supervisor

R. Moller, Westinghouse Site Manager

2. Preoperational Test Procedure Review

The following preoperational tests were reviewed in draft form:

1CP-PT-02-04 Independence of Redundant Class 1E Trains

1CP-PT-47-02 Refueling Cavity Purification

1CP-PT-49-06 Boron Addition and Control System

This review was made to determine if the following had been addressed:

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

^{*}Denotes those persons present during the exit interview.

- j. Step-by-step instructions of sufficient detail are included to ensure that conduct of the test will result in valid conclusions.
- k. Provisions for documenting that required steps have been performed and space for recording data are included.
- Temporary circuit changes, installation of jumpers, and restoration of circuits after testing are properly documented.
- m. Independent verification of critical steps or parameters is addressed.

No violations or deviations were identified during this review.

Secondary Cold Hydro

On July 9, 1982, the applicant performed a Hydrostatic Test of sections secondary plant. These sections included portions of systems that are safety-related. They are:

- a. Main Steam System from the main steam isolation valves (MSIV) to and including the steam generators.
- b. The main feedwater system from the main feed containment isolation valve to and including the steam generators.
- Auxiliary feedwater system from the containment isolation valve to the steam generators.

The NRC inspector conducted a review of the test procedure (CP-CPM 6.9I, Rev. 5, "Pressure Testing") to ascertain the testing procedure addressed:

- a. The applicable codes for acceptance criteria.
- b. The test boundary was defined.
- c. The proper valve lineup and checklists were included.
- d. Also, that the procedure, when performed, would result in viable and accurate data.

The NRC inspector witnessed the test and has reviewed the test results. The results were:

- a. One leaking steam generator tube was discovered.
- b. Five pin hole leaks were discovered in seal welds at the steam generator tube sheets.

Note: The leaks were very small and were of the slow dripping type.

There were no other weld joint leaks identified. The six leaks will be repaired by plugging the steam generator tubes associated with each of the six leaks. The applicant is also going to do a 100% eddy current test of the tubes in all four steam generators prior to plugging.

During the conduct of the test, five gagged steam generator safety valves leaked past their seats. These valves will be removed and inspected.

No violations or deviations were identified.

4. Primary System Hydro

On July 31, 1982, the applicant performed a hydrostatic test on the primary system.

Prior to the test, the NRC inspector reviewed the following:

- a. 1CP-PT-55-1, Rev. O, "Reactor Coolant System Cold Hydrostatic Test".
- b. System drawings which described the test boundary.

The test procedure was approved by the Joint Test Group on June 18, 1982, and authorized to be performed on July 22, 1982, by the Lead Startup Engineer. The NRC inspector monitored the performance of the test to verify that:

- a. The test was being performed in accordance with the procedure,
- Changes to the test were accomplished in accordance with approved procedure, and
- c. The performance of the test was controlled and conducted in a way to accomplish valid test results.

On July 30, 1982, the applicant had completed all steps leading to pressurization of the plant to test pressure (3127 psig + 30 psig-opsig). The test pressure was reached in the early morning hours of July 31, 1982. The NRC inspector witnessed pressurization to the 2400 psig point. The NRC inspector also made an inspection of portions of the test boundary between 1000 psig and 1300 psig.

The test results indicate the test met the acceptance criteria of the test procedure. The only leakage identified was from valve packing and bonnets. A total of 14 gpm was attributed to this source. There was no other identifiable leakage.

No violations or deviations were identified.

5. Plant Tours

Several plant tours were conducted. During these tours the NRC inspector observed the following:

- a. The general housekeeping activities.
- b. Special precautions and cleanliness requirements in effect for maintenance, flushing, and welding.
- c. Installed safety-related equipment and components were protected to prevent damage and deterioration.

No violations or deviations were identified.

6. Plant Status

The tollowing is a status report of manning levels for operation and plant testing as of July 31, 1982:

a. Operations Manning Level

Authorized personnel level (includes maintenance, operations, administration, quality assurance, and engineering) - 440.

The actual number presently onboard - 286.

b. Plant Testing Status

Total Preoperational Tests - 129

Preoperational Tests thru Draft - 66.6% Preoperational Test Approved (JTG) - 9 Total Acceptance Tests - 40

Acceptance Tests thru Draft - 70% Acceptance Test Approved - 1

Testing completion status

Preoperational Tests - 1 Acceptance Tests - 0

7. Exit Interview

An exit interview was conducted July 30, 1982, with applicant representatives (identified in paragraph 1). During the interview, the NRC inspector reviewed the scope and discussed the inspection findings.

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PRINCIPAL INSPECTOR (Name, last, first, and middle initial)

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