APPENDIX B

U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

NRC Inspection Report: 50-445/84-40
50-446/84-15

Dockets: 50-445; 50-446 Construction Permits: CPPR-125
CPPR-126

Licensee: Texas Utilities Electric Company (TUEC)
Skyway Tower
400 North Olive Street
Lock Box 81
Dallas, Texas 75201

Facility Name: Comanche Peak Steam Electric Station (CPSES)
Units 1 and 2

Inspection at: Glen Rose, Texas

Inspection conducted: October 21, 1984 through December 18, 1984

Inspector: D M Hunnicutt for J. E. Cummins, Senior Resident Reactor Inspector Construction 12/28/84 Date

NRC Contract Personnel: R. P. Evans, Project Engineer, EG&G Idaho

Approved: D M Hunnicutt D. M. Hunnicutt, Section Chief Reactor Projects Branch 2 12/28/84 Date

Inspection Summary

Inspection Conducted October 21, 1984, through December 18, 1984 (Report 50-445/84-40)

Areas Inspected: Routine, announced inspection of plant status, action on previous NRC inspection findings, action on licensee identified design/construction deficiencies (10 CFR 50.55(e) reports), CPSES inspection force personnel meeting, and plant tours. The inspection involved 144 inspector-hours onsite by one NRC inspector and one NRC contract person.

Results: Within the five areas inspected one violation was identified (failure to follow procedural requirements for assigning a unique identifier to a 10 CFR 50.55(e) item, paragraph 4).

Inspection Summary

Inspection Conducted October 21, 1984 through December 18, 1984 (Report 50-446/84-15)

Areas Inspected: Routine announced inspection of plant status, action on licensee identified design/construction deficiencies (10 CFR 50.55(e) reports), CPSES inspection force personnel meetings and plant tours. The inspection involved 17 inspector-hours onsite by one NRC inspector.

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

DETAILS

1. Persons Contacted

B. R. Clements, Vice President, Nuclear Operations TUGCO
*J. T. Merritt, Assistant Project General Manager
*A. Vega, Site Quality Assurance Manager
R. Baker, Staff Engineer,
W. Katness, Quality Engineer, Brown & Root (B&R)
O. B. Jones, Unit 2, TF Engineer, TUGCO
C. R. Hooton, Civil/Structural Engineer Supervisor, TUGCO
P. Chang, Pipe Support Engineer Supervisor, TUGCO
J. Wythe, I&C Engineer, TUGCO
J. D. Hicks,

The NRC inspectors also contacted other plant personnel during this inspection period.

*Denotes those attending one or more exit interviews.

2. Plant Status

Unit 1

At the time of the inspection, construction of Unit 1 was 98 percent complete. The fuel loading date for Unit 1 is pending the results of ongoing NRC reviews. The licensee continues to complete and turnover systems and areas from construction to operations. The turnover process is accomplished in two phases. The first phase is accomplished when construction completes a system or area and turns that system or area over to the startup group. The turnover process is completed for a system or area where operations makes final acceptance of the system or area from the startup group. The table below shows the status, as of December 13, 1984, of the 422 distinct areas identified by the licensee for turnover from construction to operations:

Total number of areas	422
Number of areas submitted to startup	403
Number of areas accepted by startup	403
Number of areas submitted to operations	403

Numbers of areas accepted by operations 117

The table below shows the status, as of December 13, 1984, of the 332 distinct subsystems identified by the licensee for turnover from construction to operations:

Total number of subsystems	332
Number of subsystems submitted to startup	332
Number of subsystems accepted by startup	332
Number of subsystems submitted to operations	307
Number of systems accepted by operations	253

Unit 2

At the time of this inspection construction of Unit 2 was approximately 68 percent complete with fuel loading scheduled for approximately 18 months after Unit 1 fuel loading.

3. Action on Previous NRC Inspection Findings

a. (Closed) Unresolved Item 445/8408-04: Tack welding of polar crane seismic connection shims.

Licensee's DCA 9872 was revised (Rev 4) to modify a note allowing the tack welding on one or both sides of the shims in the seismic connection.

The licensee actions appeared to be acceptable.

b. (Open) Severity Level IV Violation (Supplement 11.D) 445/8408-01: Gaps on Unit 1 polar crane bracket and seismic connections exceed design requirements.

Licensee's DCA 9872 was revised (Rev 4) to add the following statement: "A review of these existing conditions has been performed and the gaps are acceptable without further action. Observations show the gaps tend to have marginal movement. These changes in gap width and location are minor and are able to open only as wide as the bolted connection allows." The NRC inspector reviewed Gibbs & Hill, Inc., letter (GTT-10457) dated August 3, 1984, which substantiated the DCA revision to the extent that the existing conditions were acceptable. This item will remain open pending further review during a subsequent inspection.

c. (Open) Deviation (50-445/8408-03): Failure to Implement any Locking Device to Prevent Nut Backoff - The NRC inspector reviewed DCA 1090 Rev 1, which allows the use of multi process epoxy coating to prevent nut backoff. An in-place inspection of Platform OP-11 by the NRC inspector was performed. This item will remain open pending further review during a subsequent inspection.

4. Action on Licensee Identified Design/Construction Deficiencies (10 CFR Part 50.55(e) Report

a. The 10 CFR Part 50.55(e) reports discussed below were reviewed for content, compliance with NRC requirements for reporting, appropriate evaluation, and adequacy and implementation of corrective action. Each 10 CFR 50.55(e) report is identified and tracked by the unique licensee assigned number shown at the beginning of each discussion.

(1)CP 84-09 Insufficient lubrication of Delaval turbocharger thrust bearings could cause potential problems. Licensee letter TXX-4227 dated July 12, 1984, reported to the NRC that evaluation of this deficiency had determined that it was not reportable.

Corrective action was to rework the oil drip system in accordance with Transamerica Delaval's Drawing 102675. Inspection Report I-1-0054304 documents completion of this work.

(2)CP 84-16 Several of the main steam relief valves may not have been qualified for actual loading conditions. Licensee letter TXX-4330 dated October 8, 1984, reported to the NRC that evaluation of this deficiency had determined that it was not reportable. The licensee had subjected the valves to an operability test, which the valves passed. This testing was reported in Valve Testing Test Report #A-655-84 (September 14, 1984.)

(3)CP 84-17 Potential flooding problems due to overflow of the sumps. Licensee letter TXX-4263 dated August 16, 1984, reported to the NRC that evaluation of this deficiency had determined that it was reportable. The licensee's corrective action was to modify the sumps such that sump drains were isolated to preclude backflow. The corrective action is documented by DCA 21075, Revision 0, and Startup Work Authorization 23205. In addition, a complete reanalysis of flooding as a result of backflow from sumps is being performed by the licensee.

(4)CP 84-18 Electric motors on four motor operated valves were not as specified nor were they qualified to the required specifications. Licensee letter TXX-4308 dated September 28, 1984, reported to the NRC that evaluation of this deficiency had determined that it was reportable. The licensee had replaced the unqualified motors with qualified motors. NCR E-84 100064 acts to track this replacement.

(5)CP 84-19 Transamerica Delaval, Inc., reported to the NRC on a Part 21, the failure of a valve spring in a diesel generator on a non-nuclear, marine engine application. Licensee letter TXX-4270 dated August 20, 1984, reported to the NRC that evaluation of the Part 21 information had determined that it was not reportable since the failure of the spring was an isolated case of material surface damage and not generic.

(6)CP 84-20 Transamerica Delaval, Inc., reported to the NRC on a Part 21, the failure of a fuel injection pump, a component of a standby diesel generator, at another nuclear site. Licensee letter TXX-4309 dated September 21, 1984, reported to the NRC that evaluation of this deficiency had determined that it was not reportable. Failure Analysis Report FA 84-007 indicated that this was an isolated case not affecting the licensee.

(7)CP 84-21 Some piping was found by the licensee not to meet the required specifications in that insufficient ultrasonic testing (UT) had been performed by the vendor. Licensee letter TXX-4292 dated August 30, 1984, reported to the NRC that evaluation of this deficiency had determined that it was not reportable. The licensee conducted the required additional UT, documented on NCRs M-14730N through M-14741N, on the installed piping. The UT indicated no problems in the installed piping and therefore would not have affected adversely the safety of operation.

(8)CP 84-25 Certain of the air-operated valve assemblies had natural frequencies less than that specified by the equipment specification. Licensee letter TXX-4318 dated September 27,1984, reported to the NRC that evaluation of this deficiency had determined that it was not reportable. The licensee reanalyzed the stress problems documented in letters CPPA-40664 through CPPA-40668, in which these valves were used and concluded valve operability was not impaired.

(9)CP 83-11 Component Cooling Water System was determined not to have auto isolation. Licensee letter TXX-3690 dated June 21, 1983, reported to the NRC that evaluation of this deficiency had determined that is was reportable. Licensee corrected action, documented in OEI-I-251, Revision 0, was to add controls to sense depletion of the surge tank and to upgrade components to maintain seismic integrity.

b. Selected NRC inspector findings in the area of 10 CFR 50.55(e) reporting documentation are discussed below:

The NRC inspector determined from a review of TUGCO documentation that on June 15, 1983, Texas Utilities received notification from Transamerica Delaval, Inc., of a potential problem with the RTE-Delta potential transformer tiltout subassemblies which are used in the emergency generator control panels. RTE-Delta had originally reported the problem as a 10 CFR Part 21 report to the NRC on April 21, 1982. On July 6, 1983, TUGCO issued a significant deficiency analysis report (SDAR), number CP-83-17, to tract this potential deficiency. On July 11, 1983, SDAR CP-84-17 was voided and SDAR number CP-84-17 was later assigned to a different unrelated deficiency. Section 3.4 of TUGCO procedure Cp-QP-16.1, Revision 5, Significant Construction Deficiencies, states that the SDAR number is a "unique sequential identifier". The reassigning of SDAR number CP 83-17 to a second SDAR is an apparent violation of this procedural requirement. (445/8440-01). In addition, there was no documentation made available to the NRC inspector to indicate that TUGCO had taken any subsequent action to evaluate the potentially deficient condition or that any corrective action had been taken. In October 1984, when the NRC inspector pursued the matter, the item was added to the Master Data Base. This is an unresolved item (445/8440-02) pending the determination as to what corrective action is required (if any) to correct the potential deficiency.

5. Meeting of CPSES Inspection Force Personnel

On December 14, 1984, the NRC inspector attended a meeting between B. R. Clements, TUGCO Vice President for Nuclear Operations, and CPSES inspection force personnel. Mr. Clements had held similar meetings in an attempt to discuss and clarify the reporting of deficiencies in the plant. Mr. Clements stated the following to the attendees:

a. They should write a nonconformance report (NCR) if they identified anything wrong and should question any NCR evaluation if they did not think the evaluation adequately addressed the problem.

b. There is an ombudsman on site to discuss any problem they may have, and his office had been relocated to make it more accessible and to provide more privacy to any employee wishing to talk to him. The ombudsman's name and his office location were provided.

c. They could contact the Nuclear Regulatory Commission (NRC) and discuss any problems they have.

d. A "safe team" will soon be onsite. The "safe team" is going to be an independent group whose function will be to investigate any employee concerns while providing confidentiality to the employee.

The attendees were provided an opportunity to ask questions and to discuss any concerns or problems they had. After the meeting, the NRC inspector toured the offices that have been built for the "safe team". The offices are located adjacent to the route the majority of the construction employees have to use when entering and leaving the CPSES site.

No violation or deviations were identified.

6. Plant Tours (Units 1 and 2)

At various times during the inspection period, the NRC inspector conducted general tours of the reactor building, fuel building, safeguards building, electrical and control building, and the turbine building. During the tours, the NRC inspector observed housekeeping practices, preventive maintenance on installing equipment, ongoing construction work, and discussed various subject with personnel engaged in work activities.

No violations or deviations were identified.

7. Exit Interviews

The NRC inspectors met with members of the TUEC staff (denoted in paragraph 1) at various times during the course of the inspection. The scope and findings of the inspection were discussed. The licensee acknowledged the findings.