U. S. NUCLEAR REGULATORY COMMISSION

OFFICE OF SPECIAL PROJECTS

NRC Inspection Report:

50-445/88-41 50-446/88-37

Permits: CPPR-126 CPPR-127

Dockets: 50-445 50-446 Category: A2

Construction Permit Expiration Dates: Unit 1: August 1, 1988 Unit 2: Extension request submitted.

Applicant: TU Electric Skyway Tower 400 North Olive Street Lock Box 81 Dallas, Texas 75201

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

Inspection At: Comanche Peak Site, Glen Rose, Texas Inspection Conducted: June 8 through July 6, 1988

Inspector: A H Levenuor -for C. J. Hale, Reactor Inspector

7-15-8 Date

Consultants: J. Birmingham, Parameter (paragraph 2.e.) V. Wenczel, EG&G (paragraphs 2.a-d and 4.)

HA Livermore -

Reviewed by:

7-15-8 Date

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Inspection Summary:

Inspection Conducted: June 8 through July 6, 1988 (Report 50-445/88-41; 50-446/88-37)

<u>Areas Inspected</u>: Unannounced, resident safety inspection of applicant's actions on previous inspection findings, acticn on 10CFR Part 50.55(e) deficiencies, FSAR Amendment 7?, and general plant areas (tours).

<u>Results</u>: Within the areas inspected no violations, deviations, or unresolved items were identified. No significant strengths or weaknesses were noted.

DETAILS

- 1. Persons Contacted
 - G. Kast, Equipment Qualification Program Project Engineer, Impell
 - B. G. Schuler, NCR Review Task Coordinator, Stone and Webster Engineering Corporation
 - R. Shetty, Raceway Manager, Ebasco

D. L. Vandergrift, NCR Group Supervisor, TU Electric

- K. W. Van Dyne, Engineering Assurance, TU Electric
- J. E. Wren, Quality Services Supervisor, TU Electric

The NRC inspectors also interviewed other applicant employees during this inspection period.

2. Applicant Action on Previous Inspection Findings (92701)

a. (Closed) Open Item (445/8716-0-07; 446/8713-0-06): This item pertained to the processing and resolution of four deficiency reports (DRs) which were: C87-2660, C87-2922, C87-3172, and C87-4808 (transferred from Construction Deficiency Report 87-7780).

The NRC inspector reviewed each DR to determine that processing was in accordance with the requirements of Procedure NEO 3.06, Revision 1, "Reporting and Control of Deficiencies."

DR C87.4808 was determined to be invalid based on an evaluation performed by the applicant. Each issue raised by the DR was assessed individually. The justification for invalidation identified why each issue was not in conflict with prescribed requirements. The disposition of the DR, prior to approval and closure, was presented to the initiator who did not react unfavorably. After the disposition was approved and the DR was closed, the report was mailed to the initiator who was no longer on site. Based on the NRC's review of the DR's processing, disposition, and the type of feed back given to the initiator, the inspector concurs with the applicant's actions and conclusion that a deficient condition did not exist.

The disposition of DR C87-2660 resulted in the issuance of a design change authorization (DCA). The NRC verified

that the DCA had been properly implemented. Further review of the DR disclosed it was properly processed by engineering and QA/QC to closure.

The disposition and actions to prevent recurrence were accomplished to resolve the issues identified in DRs CJ7-2922 and C87-3172. QA/QC concurred with the disposition and verified implementation of actions to prevent recurrence.

In summary, the NRC inspector verified that the above four DRs were properly dispositioned and actions to prevent recurrence were taken in accordance with NEO 3.06. This item is closed.

b. (Closed) Open Item (445/8716-0-03; 446/8713-0-02): This item concerned the methods used in transferring the responsibility for engineering review of nonconformance report (NCR) dispositions from the Stone and Webster Engineering Corporation (SWEC) NCR review group evaluation effort to other engineering groups (e.g. HVAC Reverification Program-Ebasco). Specifically, methods did not provide accountability of these NCRs or assure that all NCRs would be evaluated consistent with the SWEC NCR review group's program. The three other engineering organizations involved were SWEC Pipe Support Engineering Group, Ebasco, and Impell.

In response to this concern, each of the three organizations developed a procedure to perform NCR review efforts which were consistent with the requirements of the SWEC NCR review group's program. The NCR review group's Procedure PP-041, "Nonconformance Evaluation Procedure" provides, among other things, the means for tracking nonconformance documents sent to the other engineering organizations for evaluation. The procedures to control the evaluation and tracking by the three engineering organizations are:

- SWEC Pipe Support Engineering: CPSP-35, "NCR Review"
- . Ebasco: EB-NCR-001, "Procedure for Review of Nonconformance Reports"
- . Impell: IMT-EQ-16-1, "Equipment Qualification NCR Reverification Program"

The NRC inspector examined 17 completed NCR reviews to verify procedural compliance. The reviews were determined to be consistent with the established procedures. Review by the NRC inspector of the SWEC Pipe Support Engineering Group, Ebasco, and Impell accountability functions disclosed that mechanisms were in place to identify those reviews which were complete and those yet to be completed. Transmittals of completed work to the SWEC NCR review group had been accomplished by interoffice memorandum with attached listings of completed work. At the end of the engineering validation effort, each organization will be able to account for work received and work performed. Based on the foregoing, this item is closed.

c. (Closed) Open Item (445/8716-0-05; 446/8713-0-04): Multiple discrepancies (items) listed on a NCR. For example, a HVAC seismic support could have four potential nonconformances on one NCR; such as, Hilti bolts with unacceptable gaps under the nut, another with questionable embedment, an undersized weld, and an excessive base metal reduction adjacent to a weld. The NRC inspector was concerned that: (1) when more than one item requires a disposition, the dispositions may not all be the same category, and (2) if any, or all but one of the items were deemed invalid, the fact that at least one item is valid will prevent the NCR (or DR) from being returned to the initiator.

The NRC inspector found that TU Electric QA Procedure NQA 3.05, Revision 0, "Reporting and Control of Nonconformances" does not preclude the use of dispositions from different categories from items listed on a NCR, which indeed is done under some circumstances. This procedure also requires that a NCR be returned to the initiator if any item on the NCR was invalidated or dispositioned "Use-as-is" and designated "this is not a nonconforming condition." The NRC inspector reviewed the Invalid/Nonconformance Transmittal Log which substantiated that NCRs with invalid conditions were returned to initiators as required.

Based on the foregoing, the NRC inspector considers this item closed.

d. (Closed) Open Item (446/8713-0-05): Review of DR C87-2446 dispositioning. This DR was initiated to resolve the questionable disposition of DR C87-1783. The cause of DR C87-1783 was stated as being a misinterpretation of the traveler, but no action was taken to correct or prevent recurrence of the deficiency.

The NRC found that the processing of DR C87-2446 caused DR C87-1783 to be reopened and redispositioned. The TU Electric evaluation determined that the stated cause of the DR C87-1783 deficiency (violation of QC holdpoint) was not a misinterpretation of the traveler, but craft error.

Regarding actions to prevent recurrence, DR C87-1783 stated none were required based on recent training given to craft personnel. With the issuance of CI-CPM-15.1, Revision 4, "Hold Points, NCR Tags, and Deficiency Documents," electrical craft personnel had been instructed in the requirements concerning the observation of hold points. This training was accomplished as verified by the NRC inspector's review of training records. In addition, the person responsible for the QA concurrence on the original disposition of DR C87-1783 was involved in the reopening and redispositioning of the DR, thereby making him aware of his error in the original disposition.

Based on the foregoing actions taken by the applicant and the NRC inspector's verification of these actions, this item is closed.

(Closed) Unresolved Item (445/8718-U-03; 446/8714-U-02): e. The NRC inspector had identified three concerns relative to the disposition of NCR M-2320. NCR M-2320 provided for the installation of shimming material on certain Unit 1 and Unit 2 steam generator hold-down bolts. The NRC inspector's concerns were: (1) was the installation of shims to fill the gaps under the hold-down bolts reviewed and approved as a design change, and if so, was the installation of the shims incorporated into the original design document, (2) based on the date of the vendor's documents concerning heat treatment and mechanical testing was the sequence of heat treatment and mechanical testing on the bolt material conducted in the proper order; and (3) since they were not recorded on the vendor's documents, were the test parameters used during magnetic particle testing (MT) correct.

The steam generator hold-down bolts are part of the nuclear steam supply system furnished for CPSES by Westinghouse. To resolve the above concerns TU Electric requested Westinghouse to respond to these concerns. The Westinghouse response stated: (1) the installation of the shims did not significantly alter the form, fit or function of the components and therefore, consistent with Westinghouse engineering practices, was not a design change; (2) since the installation of the shims was not a design change, they were not incorporated into the original design document; (3) the deviations in testing documentation were, in fact, not test deficiencies but isolated errors in the completion of paperwork and do not affect the quality of the hardware. The NRC inspector has reviewed the Westinghouse response and all available documentation relative to these concerns. The documents reviewed included: (1) the Westinghouse purchase order to the bolt manufacturer; (2) the certification of heat treatment; (3) the test reports for the MT, performed in accordance with Southern Bolt and Fastener Corporation Procedure MT-1-75, Revision 3; (4) the heat treatment and test records for the bolts; (5) the results of two Westinghouse QA surveillances performed during the MT examination of two lots of CPSES steam generator hold-down bolts. Documents reviewed relative to the installation of shim material under the 3" steam generator hold-down bolts included: (1) the construction operation travelers for the installation of the steam generators; (2) the Westinghouse field deficiency reports (FDR) specifying the installation of the shim material; (3) the NCR documenting the installation of the shim material; and (4) the Westinghouse FDR responding to the TU Electric request for information.

Based on the review of these documents, the NRC inspector finds acceptable from the Westinghouse perspective their determination that the installation of shim material under the 3" steam generator hold-down bolts did not significantly alter the form, fit or function of the bolts and therefore, per Westinghouse engineering practice, was not required to be identified as a design change. From the TU Electric perspective the use of these shims is being documented in response to violation (50-445/8718-V-02; 50-446/8714-V-01) which the NRC inspector will be following and documenting in a future inspection report. Additionally, the Southern Bolt certification of magnetic particle examination of the 3' steam generator hold-down bolts specifies that the MT was performed in accordance with the required procedure, MT-1-75, Revision 3, which specifies the parameters of the examination. Westinghouse QA surveillance of the Southern Bolt magnetic particle examination further verified the examinations were conducted in accordance with MT-1-75, Revision 3.

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Based on the above, the NRC inspector concurs with the Westinghouse determination that the failure to record the above test parameters on the MT test reports was an isolated error and does not affect the quality of the bolts. As regards to the sequence of heat treatment and mechanical testing, the dates on these documents were not intended to reflect the date the activities were accomplished, rather the date the documents were completed. The item is closed.

3. Action on 10 CFR Part 50.55(e) Deficiencies Identified by the Applicant (92700)

During this inspection period the NRC inspector reviewed the files of nine items identified by TU Electric as potentially reportable. In each case the TU Electric evaluation concluded that none of the items met the reportability requirements of the regulations. The nine files inspected by the NRC were:

- . CP-76-03: Calibration services provided by an unqualified vendor.
- . CP-76-04: A stop work order was violated.
- . CP-77-01: Concrete pour record falsified.
- . CP-84A: A vendor falsified eye exams.
- . CP-84B: A vendor provided noncomplying material.
- . CP-85-16: Minimum wall violations in vendor supplied pipe and tubular steel.

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- . CP-85-23: Vendor applied allowable stress limits incorrectly.
- . CP-86-09: Defective valve springs in diesel generators.
- . CP-86-20: Vendor processed a nonconformance report improperly.

In every case the NRC inspector found the information in the files supported the nonreportable conclusion; e.g., the hardware was not affected, the hardware was inspected and found not impacted, or the problem was administrative and did not relate to installed or procured hardware.

No deviations or violations were identified and no further inspection of these issues is planned.

4. Inspection of FSAR Amendment 71 (35061)

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Sections 17.1 and 17.2 were revised in FSAR Amendment 71 to reflect the consolidation of several QA documents into the TU Electric Comanche Peak Steam Electric Station Quality Assurance Manual. The NRC inspector reviewed this portion of Amendment 71 to assure that no reduction in QA commitments had occurred.

The NRC inspector found no reduction in QA commitments, but made one observation. On page 17.1-38 the Permanent Plant Records Vault was deleted as the TU Electric permanent records

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storage facility. The FSAR was revised stating that records would be stored in a specially constructed facility; however, the rSAR does not identify this facility. This omission was discussed with the Director of QA who committed to add the omitted information in a future amendment.

No deviations or violation were identified.

5. Plant Tours (92700)

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The NRC inspectors made frequent tours of Unit 1 and common areas of the facility to observe items such as housekeeping, equipment protection, and in-process work activities. No violations or deviations were identified and no items of significance were observed.

6. Exit Meeting (30703)

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An exit meeting was conducted July 6, 1988, with the applicant's representatives. No written material was provided to the applicant by the inspectors during this reporting period. The applicant did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection. During this meeting, the NRC inspectors summarized the scope and findings of the inspection.