

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-445/91-06 Operating License: NPF-87
50-446/91-06 Construction Permit: CPPR-127

Dockets: 50-445
50-446

Licensee: TU Electric
400 North Olive Street, L.B. 81
Dallas, Texas 75201

Facility Name: Comanche Peak Steam Electric Station (CPSES)

Inspection At: CPSES, Glen Rose, Texas

Inspection Conducted: January 22-25, 1991

Inspector: J. Barnes 2-8-91
for L. E. Ellershaw, Reactor Inspector, Materials Date
and Quality Programs Section, Division of
Reactor Safety

Approved: J. Barnes 2-8-91
I. Barnes, Chief, Materials and Quality Date
Programs Section, Division of Reactor Safety

Inspection Summary

Inspection Conducted January 22-25, 1991 (Report 50-445/91-06)

Areas Inspected: No inspection of Unit 1 was conducted.

Results: Not applicable.

Inspection Conducted January 22-25, 1991 (Report 50-446/91-06)

Areas Inspected: Routine, unannounced inspection of the procurement and receiving inspection activities with respect to Unit 2.

Results: The Unit 2 procurement and receiving inspection activities appeared to be adequately defined and, in general, effectively implemented. Organizationally and individually, there appeared to be a strong commitment to perform to the requirements of the written program. There was, however, one instance identified in which certain technical and quality requirements had not been incorporated into a purchase order for transmittal to the vendor. This condition was identified (paragraph 2) as a noncited violation.

DETAILS

1. PERSONS CONTACTED

TU ELECTRIC

- ** W. Cahill, Executive Vice President
- ** J. Ayres, Operations Quality Assurance (QA) Manager
- ** C. Bhatti, Licensing Coordinator
- ** R. Byrd, Operations Quality Control (QC) Manager
- ** J. Gallman, Trend Analysis Supervisor
- * J. Hicks, Unit 2 Licensing Manager
- ** T. Hope, Technical Support Compliance Supervisor
- * C. Hutchins, Material Management Operation (MMO) Engineering Coordinator
- ** J. Kelley, Plant Manager
- * C. Killough, MMO Procurement QA Manager
- * D. Leigh, MMO Procurement Compliance Supervisor
- *** D. Pendleton, Unit 2 Assistant Project Manager
- F. Powers, MMO Procurement Engineering Manager
- *** T. Robertson, MMO Unit 2 Manager
- ** A. Scott, Vice President, Nuclear Operations
- * J. Simmons, MMO Procurement Quality Engineering (QE) Supervisor
- ** W. Stendebach, Technical Support Compliance
- ** P. Stevens, Manager, Technical Support
- * F. Stobaugh, Manager, Purchasing
- ** L. Strops, Trend Analyst
- * J. Taylor, MMO Procurement Engineer
- ** C. Terry, Director, Nuclear Overview
- ** J. Uehlein, Operations QA Specialist
- *** L. Walker, Unit 2 Licensing Engineer
- ** C. Welch, Senior QA Specialist

CASE

- *** E. Ottney, Project Manager
- * O. Thero, Consultant

NRC

- *** I. Barnes, Section Chief, Materials & Quality Programs Section
- ** D. Graves, Resident Inspector
- *** R. Latta, Senior Resident Inspector
- ** W. McNeill, Reactor Inspector
- ** T. Reis, Project Engineer

The inspector also interviewed other licensee personnel during the inspection.

- * Denotes those attending the exit interview conducted on January 24, 1991.
- ** Denotes those attending the exit interview conducted on January 25, 1991.
- *** Denotes those attending both exit interviews.

2. PROCUREMENT, RECEIVING, AND STORAGE (35065)

This inspection was conducted to determine whether equipment procurement specifications included applicable QA and technical requirements identified in the safety analysis report and whether receipt inspection activities were conducted in compliance with QA program requirements. Storage activities were not inspected and will be reviewed during a subsequent inspection.

It was ascertained from discussions with licensee personnel and review of procurement, receipt inspection, and vendor audit procedures (see Attachment 1) that the procurement program has undergone a number of changes since July 1989 with respect to the purchase of safety-related items. All procurement documents for safety-related items are now generated by the licensee rather than by on-site contractors. A Pre-Engineered Item Data Sheet (PEIDS) program has also been initiated in which all identified spare and replacement parts and their technical and quality requirements are delineated by item or by material grouping with common technical requirements. This action was undertaken in order to reduce the repetitive research and potential errors that could occur each time the same item was ordered. This program has been automated by inclusion in the Purchasing and Materials Management System Data Base computer system. At the time of this inspection, there had been in excess of 1400 PEIDSs developed. A six level procurement system was established and implemented for ease of identification between safety and nonsafety-related items. It also appeared that the establishment of a six level procurement system would provide consistency with respect to defining quality requirements. A program for the development of verification plans (VPs) had been initiated which was initially under the responsibility of the Procurement QA group. The VPs contain the characteristics which were established as requiring verification during the receipt inspection process. The responsibility for VP development was transferred from QA to Procurement Engineering in order to provide for more engineering involvement. It was noted that an additional objective to be accomplished during 1991 was the development of standardized VPs for various item groupings.

With respect to procurement of replacement and spare parts, the inspector was informed that significant activity had been initiated in this area in September 1990. The inspector requested a printout from the data base computer program showing all safety-related procurements made since that time. The printout provided purchase order (PO) numbers, item identifications (unique stock numbers), item descriptions, quantities, quality levels, and the receipt inspection dates. There were a total of 126 stock numbers of various quantities ordered on 49 POs. A VP number was used to identify all documentation applicable to each stock number/PO combination, or, in the case of multiple line items, to stock numbers of common item groups/PO combination. The inspector requested the procurement and receipt inspection documentation, including the initiating purchase requisitions (PRs), associated with 15 stock numbers identified by 11

VP numbers (see Attachment 2). The inspector noted that each PO incorporated the applicable technical and quality requirements and the documentation requirements through the use of attachments (i.e., Attachment 1 - Technical & Quality Assurance Requirements (TQAR) and Attachment 2 - Summary Of Required Documents (SORD)). Each PO, TQAR, and SORD was reviewed to assure that, as a minimum, the applicable requirements of Appendix B to 10 CFR Part 50 and 10 CFR Part 21 had been imposed and that documentation showing compliance was required. In addition, each PR was reviewed and compared to the resulting PO to assure that all technical and quality requirements specified in the PR had been incorporated into the PO. Procurement QA is procedurally required to review the PRs and POs to verify that this has been accomplished. In every case, requirements with respect to Appendix B to 10 CFR Part 50 were specified. With the exception of two POs (i.e., S0010009 and S0008870), 10 CFR Part 21 had been imposed. However, it was noted that those two POs, both placed with Texas Valve & Fitting Co., referenced Specification 2323-MS-625, Revision 5. The licensee informed the inspector that not all TQARs had been revised to delineate the requirements of 10 CFR Part 21; however, those requirements were part of the specification. Review of the specification confirmed that the requirements of 10 CFR Part 21 were addressed. It was further confirmed, by telephone communication and facsimile transmission, that Texas Valve & Fitting Co., had possession of Revision 5 to the identified specification. It was also noted during review of documentation submitted by Texas Valve & Fitting Co., that certifications attesting to compliance with the specification did exist.

During review of PRs and their corresponding POs, it was noted that, with one exception, all technical and quality requirements had been identified and incorporated. The PRs (6M70925 and 6M70927) for the studs which were procured on PO S0009183752 dated November 20, 1990, stated that paragraph 7.2.1 of the material specification (SA-453) was not required. This paragraph addresses stress-rupture requirements for those materials which will be used in applications where the design temperature exceeds 800°F. It further stated that materials not stress-rupture tested shall be permanently stamped NR. The PRs also imposed Supplementary Requirement S1.1 of SA-453, which requires the material grade and manufacturer's identification symbols to be applied to one end of those studs which are greater than 1/4-inch in diameter. The inspector noted that the PO had been signed by QA on November 27, 1990, signifying that the appropriate reviews had been performed, as required by paragraph 6.1.5 in Procedure NQA 6.02, which states, "Upon receipt of a purchase order or contract package, perform a review of the procurement documents to assure that technical, quality assurance, and documentation requirements have been approved. The purchase order and contract is then reviewed against the requisition to assure that the correct information will be transmitted to the vendor." However, neither the PO nor its TQAR contained or referenced these PR requirements. The licensee informed the inspector that the studs had arrived and were awaiting receipt inspection. Observation of a sample of each of the two different sized studs revealed that each had been stamped NR and each was identified with the material grade and manufacturer's symbol at one end. There was not adequate time to ascertain how the missing requirements became known to the manufacturer.

On January 25, 1991, MMO management issued an office memorandum to each individual in the affected MMO groups (i.e., Buyers, Procurement Engineering Group, and the Procurement Quality Engineers). These memoranda iterated the responsibilities of each group in assuring that all technical and quality assurance requirements are included in the PO and/or its TQAR for transmittal to the vendor. In addition, Change Order 6055432 was issued to correct the existing PO, and the applicable TQAR was revised to incorporate permanently those requirements to preclude this particular condition from recurring. Further, the MMO Manager and Procurement QA Manager initiated actions to begin sampling 10 percent of all Q1 and Q2 (safety-related) procurements made since October 1, 1990, to assure that this was an isolated case. The failure to perform a review which would assure that all technical and QA requirements would be incorporated into the PO for transmittal to the vendor is an apparent violation of Procedure 6QA 6.02. A Notice of Violation is not being issued because the criteria of Section V.A. of the NRC's Enforcement Policy have been met.

The inspector reviewed the completed VPs for the 12 other identified stock numbers, all of which had been accepted through receipt inspection. Each of the VPs was compared to its corresponding PO, including the TQAR and SORD, to verify that the specified requirements had been reviewed during the receiving inspection process. It was noted that the VPs were quite extensive and provide a comprehensive receipt inspection. There were no concerns identified with respect to the documentation associated with the receiving inspection process. The inspector also interviewed one of the receiving inspectors whose name was prominent with respect to the reviewed documentation. He exhibited considerable knowledge regarding his responsibilities and the actions he would take under given situations pertaining to accept/reject conditions.

During review of the 11 VPs and POs, it was noted that six vendors had been used for the procurements. The inspector requested the applicable vendor files containing audit information and the basis for having and maintaining the vendor on the Approved Vendor List (AVL). Each of the vendors was on the AVL of record at the time the POs were placed. The inspector reviewed each of the vendor audits which formed the basis for the vendor being on the AVL (see Attachment 3). It was also learned that TU Electric is a member of the Nuclear Procurement Issues Group (NUPIC) and participates in, and takes credit for, vendor audits conducted by the group. It was noted that correspondence associated with NUPIC identified findings (i.e., vendor corrective action commitments and close out of findings) was included in the files, even though TU Electric had not actually participated. The inspector reviewed the applicable audit plans, audit checklist worksheets, frequencies, and schedules. The vendor audit activities were well defined and were being performed as required by the implementing procedures.

3. EXIT INTERVIEW

An exit interview was conducted on January 24, 1991, with those personnel denoted in paragraph 1, in which the inspection findings were summarized. In addition, the inspector participated in an exit interview which was conducted on January 25, 1991, in order to provide an information update with respect to inspection activities performed subsequent to the January 24, 1991, exit interview. The personnel attending the January 25 exit are also identified in paragraph 1. No information was presented to the inspector that was identified by the licensee as proprietary.

ATTACHMENT 1

DOCUMENTS REVIEWED

- Quality Assurance Manual, Section 7.0, "Control of Purchased Material, Equipment, And Services," Revision 2
- Quality Assurance Manual, Section 4.0, "Procurement Document Control," Revision 1
- Nuclear Overview Department Procedure NQA 3.09-11.03, "Receipt Inspection," Revision 6 through Document Change Notice (DCN) 1
- Nuclear Overview Department Procedure NQA 3.07, "Quality Assurance Audit Program," Revision 6 through DCN 3
- Nuclear Overview Department Procedure NQA 3.14, "Control of Vendor Activities," Revision 7
- Nuclear Overview Department Procedure NQA 6.02, "Quality Review of Procurement Documents," Revision 5
- Design Engineering Organization Procedure ECE 6.02-01, "Procurement of N/NV Stamped Components From Sources Other Than Prime Vendors," Revision 1 through EDCN 03
- Procedure MMO (Materials Management Organization) 4.01, "Receiving and Examination of Material, Parts, And Components," Revision 2 through MDCN 01
- Procedure MMO 6.04, "Master Parts List (MPL)," Revision 2 through MDCN 01
- Procedure MMO 6.02-05, "Technical And Quality Assurance Requirements," Revision 0 through MDCN 01
- Procedure MMO 6.02-02, "Procurement Engineering Review of Procurement Documents," Revision 4
- Procedure MMO 6.02-01, "Procurement Levels," Revision 0
- Procedure MMO 6.02, "Procurement Engineering Processing of Procurement Documents," Revision 3

ATTACHMENT 2

| <u>VP NUMBER</u> | <u>STOCK NUMBER</u> | <u>ITEM DESCRIPTION</u> | <u>PO</u> |
|------------------|---------------------|---|-------------|
| 90-528 | 277028 | Transformer, Type BYZ | S00054837SA |
| 90-560 | 361168 | Linkage Pins | S00063147SA |
| 90-581 | 106481 | Pressure Transmitters | S00060097SA |
| 90-691 | 358737 | Trip Actuator | S00070607SA |
| 90-718 | 368559 | Control Relays | S00066857SA |
| 90-1111 | 357788 | Pipe, Schedule 40, Carbon Steel, ASME Section III, Class 2 | S0009237 |
| 90-1164 | 380447 | Fitting, Tube, 90 degree elbow, 316 SS | S0010009 |
| 90-1250 | 296458 | Tubing, Structural, Carbon Steel, ASME Section III, NF | S00094767S2 |
| 90-995 | 357797 | Fitting, Pipe, 90 degree elbow, ASME SA-105, 1-1/2-inch, 3000 lb | S00084607S2 |
| | 364582 | Fitting, Pipe, 90 degree elbow, ASME SA-105, 1/20inch, 3000 lb | |
| | 364820 | Fitting, Pipe, Insert, ASME SA-105, 1-1/2-inch x 3/4-inch, 3000 lb | |
| 90-1245 | 373847 | Stud, 1-1/2 inch 8UN x 9-3/4-inch, SA-453 GR 660, ASME Section III, Class 2 | S00091837S2 |
| | 373847 | Stud, 1-1/2-inch 8UN x 10-inch, SA-453 GR 660, ASME Section III, Class 2 | |
| | 373333 | Nut, Hvy Hex, SS, ASME SA-194 GR 6, 1-1/2-inch 8UNC, ASME Section III, Class 2 | |

90-1066

352460

Fitting, Tube, 90 degree
elbow, male, SS, 1-inch
Tube x 3/4-inch NPT, ASME
Section III, Class 2

S0008870751

ATTACHMENT 3

REVIEWED AUDITS

| VENDOR | AUDIT NO. | DATE |
|--|---------------------------|--------------|
| Westinghouse Electric Corp. NATD and NSD Pittsburg and Monroeville, PA | NUPIC 90-052 | May 1990 |
| | TU Electric TWH-89-44 | May 1989 |
| | TU Electric TWH-89-45 | May 1989 |
| ASEA Brown Boveri Sanford, FL | TU Electric TBBC-89-05 | June 1989 |
| Texas Valve & Fitting Co. Dallas, TX | TU Electric TTV-88-02 | August 1988 |
| Rosemount, Inc. Eden Prairie, MN | NUPIC 89-33 | June 1989 |
| | NUPIC 90-08 | October 1990 |
| HUB, Inc | NUPIC VA 90-06 | April 1990 |
| Dubose Steel, Inc Roseboro, NC | NUPIC 89-150 | August 1989 |