

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-445/83-52

Docket: 50-445

Construction Permit: CPPR-126

Licensee: Texas Utilities Electric Company (TUEC)
Skyway Tower
400 N. Olive Street
L.B. 81
Dallas, Texas 75201

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

Inspection At: Glen Rose, Texas

Inspection Conducted: December 20, 1983-January 30, 1984

Inspector: C. R. Oberg 2/17/84
C. R. Oberg, Reactor Inspector
Reactor Project Section A Date

Approved: D. M. Hunnicutt 2/17/84
D. M. Hunnicutt, Chief
Reactor Project Section A Date

Inspection Summary

Inspection Conducted December 20, 1983-January 30, 1984 (Report 50-445/83-52)

Areas Inspected: Special, unannounced inspection of alleged poor electrical cable tray clamping practices and other concerns expressed by an individual who requested confidentiality. The inspection involved 42 inspector-hours onsite by one NRC inspector.

Results: Of the four concerns regarding poor construction practices, one was found to be unsubstantiated; one was found to be substantiated, but had no technical merit; and two were found to be related to internal Brown & Root, Inc. (B&R) administration and policy matters over which the NRC has no direct jurisdiction or responsibility.

DETAILS1. Persons ContactedTexas Utilities Services Incorporated (TUSI)

*R. G. Tolson, Site QA Manager

Brown & Root (B&R)

Individual A - Supervisor

Individual B - Employee (not interviewed)

Individual C - Employee

C. Randall, QC Supervisor

M. Warner, Staff Engineer

*Present at exit meeting

2. Alleged Poor Construction Practices and Other Concerns

Four concerns were identified to the NRC inspector by Individual A, the alleged. They were identified during discussions and a followup tour of the area of concern in the Safeguards Building. They are:

a. Untrained Electrician Used in Safety-Related Work

A pipe fitter (identified as Individual B) was hired as an electrician. His work in the 810'6" level of the Safeguards Building had to be done over due to his inexperience. A portion of the rework had to be done by the alleged, Individual A. The alleged indicated that supervision and management continued to use Individual B even after becoming aware of his lack of training in the electrical area.

b. Undue Pressure and Restrictions

The foreman (Individual C) of Individual A applied "pressure" to get assigned rework done, but restricted Individual A by: (1) not allowing him to get materials for his work; (2) not permitting him to go to the Fab Shop; and (3) not providing any needed documentation such as drawings, sketches, or component modification cards (CMC). Only verbal instructions were given to the alleged.

c. Threatened With "Firing"

The alleged was threatened with "firing" for looking around and "scrounging" for materials for use in his work.

d. Unsatisfactory Cable Tray Attachments

The alleged, Individual A, had stated that he had a "problem" with 60 or 70 cable tray hangers on elevation 810' in the Safeguards Building. The cable tray attachments were not done in accordance with DCAs and CMCs. (All of the 60 or 70 cable tray hangers were not identified to the NRC inspector.)

3. Inspection Results

On December 20, 1983, Individual C was interviewed by the NRC inspector. Individual C said he knew Individual A and that he had worked for him. He stated that Individual A was not an outstanding worker and was limited in his knowledge. He felt that the primary problem was a personality conflict with Individual A. He also stated that Individual A had quit, but was now back onsite working in Cable Spreading Room 2, Unit 2. Individual C could not identify the specific items on which Individual A had worked. Individual A did not assemble any cable tray supports, but he did work on backfit problems and on the identification of supports in the Unit 1 Safeguards Building, 810' level.

On January 3, 1984, the NRC inspector interviewed Individual A, the alleged. He stated he had worked in the 810'6" level, east side, Safeguards Building, Unit 1. He said that with the appropriate prints he could identify the specific areas and cable tray hangers that he had worked on. He said that primarily he worked on finding the correct identifying number of the hangers. His concern regarding Individual B was that Individual B did not know the electrical trade. He stated that Individual B had quit work and was no longer on the site. (This was confirmed by contacting the B&R employment office.)

January 16, 1984, the NRC inspector again interviewed Individual A. He identified the two areas where he worked from Drawing FSE 00195 - Electrical Area, Cable Tray Support Plan, 810'6" elevations: (1) "Big Room" Area, areas bounded by: G3-G2, G2-D/E3, D/E3-D/E2, and D/E2-G3 and (2) "East Hallway" (areas bounded by: A1-B1, B1-B2, B2-B1, and B1-A1). In the "Big Room" area he corrected supports worked on by Individual B, as well as doing some of his own. This is also the area where Individual C prevented him from obtaining materials. Individual A stated he did not use any unauthorized materials, but when faced with a lack of materials, he went onto something else for which he did have materials. Individual A said that he was not given site work authorization (SWA). In addition, Individual C would not answer questions and that Individual C withheld information deliberately in order to give him a reason to fire Individual A. (Individual A was never told this directly.) Pressure to increase work output was applied to Individual A. He also states that B&R supervision was "covering up" Individual B's work by having it redone by someone qualified. Later, Individual B quit because he was not able to do the work, according to Individual A. Individual A said he corrected all problems found wrong in any "rework."

On January 16, 1984, Individual A, in company with the NRC inspector, walked through the areas of concern in the Safeguards Building. He pointed out some of the specific supports that he and Individual B had worked. The specific tasks involved fastening the cable trays to the supports with bolts and nuts and inserting beveled washers, hardened washers, and other hardware items where necessary. Some holes had to be drilled. In the switchgear room, Hangers 12493, 12494, 1587, 1586, 1452, and 1453 were identified as having been worked on. In the Passageways 1548, 1549, 1552, and 1551 were worked on for identification of numbers. He did not work on any cable tray supports. Individual A made the statement that it looked as if the hangers had been reworked. He saw "nothing wrong with them now."

The following pertinent information was obtained by review of B&R personnel records:

- a. Individual A was employed by B&R from March 7, 1983, to September 13, 1983. He had quit to work "elsewhere." Individual A was rehired on October 20, 1983, and is currently working in Unit 2 of CPSES. He had a "good" rating for rehiring.
- b. Individual B was hired as an electrician's helper on June 10, 1983. He left on September 2, 1983, to work elsewhere. He had 7-years experience as a pipefitter.
- .. Individual C was made a foreman in February 1983 and is currently working onsite in Unit 1.

4. Discussion

The NRC inspector reviewed the requirement for attaching cable trays and reports regarding the general area of cable tray fasteners.

On July 19, 1983, a 10 CFR Part 50.55(e) construction deficiency report was sent to Region IV identifying a generic problem with cable tray clamps. It was reported that mild steel bolts (ASTM-A-307) had been used in place of the designed high strength bolts (ASTM-A-325). It was determined that the mild steel bolts were acceptable for regular cable tray support clamps. Other applications where A-325 bolts are required will be verified by site QC. Rework will be done as required. The corrective action on this construction deficiency includes verifying the correctness of bolting practices.

Twenty-one separate nonconformance reports (NCR) have been issued by site QA covering all areas of Units 1 and 2. Closure of an NCR will utilize requirements of QI-QP-11.10-2, described below. The specific NCR covering the area in the Safeguards Building, Unit 1, is identified as M-83-01670 (below 831' level).

A more general and overall inspection is done under the cable tray hanger inspection procedure. QI-QP-11.10-2, "Cable Tray Hanger Inspection," provides inspection criteria, attribute and inspection frequencies to be

used when inspecting Class 1E cable tray components. These components include splice plates, side plates, heavy duty clips, and other miscellaneous tray components. Specifically, paragraph 3.1.7.2 covers the inspection of bolted cable tray clamps. All bolted connections are required to be documented on an inspection report. Revision 23 of this instruction requires that all previously inspected cable tray clamps are to be inspected in accordance with the provisions of paragraph 3.1.7.2. Included as part of the report is a list of applicable drawings and the applicable NCRs, DCAs, and CMCs. The cable trays are inspected to these documents.

NRC inspectors examined the cable trays in the area identified by Individual A. No discrepancies involving cable tray clamps were identified.

The following cable tray hanger inspection records were reviewed:

<u>Cable Tray Hanger Number</u>	<u>Inspection Report*</u>	<u>Inspection Results</u>
01453	ME-45500	Satisfactory
01452	ME-45499	Satisfactory
01548	ME-1-0016172	Satisfactory
01552	ME-1-00151296	Satisfactory
01586	ME-1-0016168	Satisfactory
01587	ME-1-0016169	Satisfactory

The following hangers had not been inspected by QC, but are scheduled to be inspected in the near future:

012493
012494
01551
00824
00822

*Inspection Item Description - "Inspection of Cable Tray Clamps."

5. Conclusion

a. Allegation: Untrained Electrician (Individual B) Was Used in Safety-Related Work

No safety-related discrepancies were identified as a result of the "untrained electrician" efforts. The records indicate that he had no experience as an electrician, but that he was hired as an electrician's helper. Work assigned to him was not beyond that normally assigned to a "helper." The allegation, therefore, has no technical merit, although true.

b. Allegation: Undue Pressure and Restriction

No safety-related discrepancies could be identified as a result of this allegation. Individual A had stated that when he was unable to obtain proper materials, he would leave that support and proceed to one where materials were available. The activities associated with this specific allegation thus cannot be considered within the jurisdiction of the NRC. This appears to be a problem of supervision and management within the constructor organization.

c. Allegation: Threatened With Firing

There appears that a personality problem existed between Individuals A and C. There is no direct association to safety-related functions in this allegation. Again, this appears to be a matter of management for B&R, and beyond the jurisdiction of the NRC, since Individual A is a craft worker and not a QC inspector.

d. Allegation: Unsatisfactory Cable Tray Attachments

Based on the information from QC inspection reports, actual observations by the NRC inspector and statements by the alleged, the presence of unacceptable cable tray attachments was not substantiated. No impact upon the health and safety of the public was considered to be present.

6. Exit Meeting

On January 30, 1984, the results of this inspection were discussed with the licensee representative. Individual A was contacted by the NRC inspector by telephone subsequent to the inspection. The results of this allegation were discussed with him. He stated he was satisfied with the results of the inspection.