

GOVERNMENT ACCOUNTABILITY PROJECT

1555 Connecticut Avenue, N.W., Suite 202  
Washington, D.C. 20036

Reg 4 - 84 - 32

(202) 232-8550

February 25, 1985

Ms. Jane Axelrod, Director  
Office of Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555


Dear Ms. Axelrod:

On February 15, 1985 Region IV issued two Severity Level IV violations to Texas Utilities Electric Company (TUEC). (A copy of the inspection report is enclosed.)

Our review of this document leaves us astounded that such serious violations of the 10 C.F.R. Appendix B could be dismissed as lightly as they have been by Region IV.

Frankly, GAP has long held the view that the Nuclear Regulatory Commission's failure to enforce compliance with regulations has been one of the chief causes of plants such as Comanche Peak being completed in essentially indeterminate condition. This inspection report represents a prime example of the type of "hand patting regulation" which has led to your agency's lack of respect by the utility industry and the public alike.

Just as significantly this report points out a problem which the agency has apparently ignored: Who is running the ship at Comanche Peak anyway?

In this letter, Region IV has pre-empted the Technical Review Team (TRT) by issuing level IV violations on issues which have admittedly been part of the TRT's efforts. 

The "whipsaw" approach of hitting TUEC with both Region IV findings, violations, and required responses, at the same time similar issues are under investigation and review by the TRT, is both counter-productive and confusing to any reasonable regulation program for Comanche Peak.

Since my last letter to you regarding Catawba remains unanswered for over five months now, I respectfully request that you phone me in the near future with an immediate response to whether or not you have the ability or authority to review an already issued Notice of Violation (such as the enclosed) for escalated enforcement.

7  
ED0  
14585  
2.206  
FOIA-85-55

8606250216 860611  
PDR FOIA  
GARDE85-59

PDR

V/101

EDO --- 000377

Ms. Jane Alford  
February 27, 1966  
Page Two

We are particularly concerned on whether there is any involvement by your staff in an escalated enforcement program to deal with the findings of the TRT, or whether this pattern of Region IV's dribbling out minor violations for a decade of serious violations can be expected to continue.

Thank you for your prompt response to my inquiry.

Sincerely,

*Billie Pirner Garde*  
Billie Pirner Garde

Enclosures as stated

cc: Robert Martin

TRT

In Reply Refer To:  
Dockets: 50-445/84-32  
50-446/84-11

FEB 15 1985

Texas Utilities Electric Company  
ATTN: M. D. Spence, President, TUGCO  
Skyway Tower  
400 North Olive Street  
Lock Box 81  
Dallas, Texas 75201

Gentlemen:

This refers to the inspection conducted under the Resident Inspection Program by Mr. H. S. Phillips of this office and NRC contract personnel during the period August 20, 1984, through September 20, 1984, of activities authorized by NRC Construction Permits CPPR-126 and CPPR-127 for the Comanche Peak facility, Units 1 and 2, and to the discussion of our findings with Mr. D. Chapman and other members of your staff at the conclusion of the inspection.

Areas examined during the inspection included a review and evaluation of how effectively Texas Utilities Electric Company management has implemented the corporate quality assurance (QA) program for design, procurement, and construction activities. Special emphasis was placed on evaluating the management of the audit program; management's action to regularly review the status and adequacy of the QA program; and followup on findings pertinent to program management identified by previous NRC and consultant inspection teams. Within these areas, the inspection consisted of selective examination of procedures and representative records, interviews with personnel, and observations by the inspectors. These findings are documented in the enclosed inspection report.

During this inspection, it was found that certain of your activities were in violation of NRC requirements. Consequently, you are required to respond to this violation, in writing, in accordance with the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Your response should be based on the specifics contained in the Notice of Violation enclosed with this letter.

These violations may be related to findings identified by the NRC Technical Review Team (TRT). If the issues are considered to be similar, you may respond to the items separately or as part of the Comanche Peak Response Team Action Plan.

RRI *slv*  
SPhillips/lt  
2/12/85

TL/TF *slv*  
DHunnicuttt.  
2/12/85

D/DRS&S  
RBangart  
1/ /84

*slv*  
C/RPB2  
DHunter  
2/12/85

*slv*  
D/DRS&P  
RDenise  
2/12/84

NRR *slv*  
Noonan  
12/20/84

IE01

~~8542204325~~ 2pp.

Texas Utilities Electric Company

-2-

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

"Original Signed by:  
D. M. HUNNICUTT"

D. R. Hunter, Chief  
Reactor Project Branch 2

Enclosure:

1. Appendix A - Notice of Violation
2. Appendix B - NRC Inspection Report  
50-445/84-32  
50-446/84-11

cc w/enclosure:

Texas Utilities Electric Company  
ATTN: B. R. Clements, Vice  
President, Nuclear  
Skyway Tower  
400 North Olive Street  
Lock Box 81  
Dallas, Texas 75201

Texas Utilities Electric Company  
ATTN: J. W. Beck, Manager  
Nuclear Services  
Skyway Tower  
400 North Olive Street  
Lock Box 81  
Dallas, Texas 75201

bcc to DMB (IE01)

bcc distrib. by RIV:

RPB1  
RPB2  
EP&RPB  
R. Martin, RA  
C. Wisner, PAO  
R. Denise, DRSP  
RIV File  
MIS System

RRI-OPS  
RRI-CONST.  
R. Bangart  
J. Gagliardo  
D. Hunnicutt  
✓TRT (CPSES) (2)  
S. Treby, ELD  
D. Eisenhut, NRR

TX State Dept. Health  
Juanita Ellis  
Renea Hicks  
Billie Pirner Garde  
S. Phillips



APPENDIX A  
NOTICE OF VIOLATION

Texas Utilities Electric Company  
Comanche Peak Steam Electric Station, Units 1 and 2

Dockets: 50-445/84-32  
50-446/84-11

Construction Permits: CPPR-126  
CPPR-127

Based on the results of an NRC inspection conducted during the period of August 20, 1984, through September 20, 1984, and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C), 49 FR 8583, dated March 8, 1984, the following violations were identified:

1. Failure to Regularly Review the Status and Adequacy of the QA Program

Criterion II of Appendix B to 10 CFR 50, as implemented by the Preliminary Safety Analysis Report (PSAR) and the Final Safety Analysis Report (FSAR), Section 17.1, "Quality Assurance Program," and ANSI N45.2-1971, requires that the quality assurance program shall provide for the regular review by the management participating in the program, of the status and adequacy of the part of the quality assurance program for which they have designated responsibility.

Contrary to the above, the applicant did not establish quality assurance procedures to regularly review the status and adequacy of the construction quality assurance program; nor did the applicant appear to have reviewed the status and adequacy of the construction quality assurance program.

This is a Severity Level IV Violation. (Supplement II) (445/8432-02; 446/8411-02)

2. Failure to Establish and Implement a Comprehensive System of Planned and Periodic Audits

Criterion XVIII of Appendix B to 10 CFR 50, states, in part, "A comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program." The requirements are addressed in the PSAR and FSAR, Section 17.1, "Quality Assurance Program," which references Regulatory Guide 1.28 (ANSI N45.2) and ANSI N45.2.12 (Draft 3, Revision 4). Those commitments require that a comprehensive system of planned audits be performed on an annual frequency.

Contrary to the above, the following examples were identified which demonstrate the failure to establish and implement a comprehensive system of planned and periodic audits of safety-related activities as required, as noted below:

~~8542244334~~

300.

- a. Annual audits were not adequately addressed by the audit implementation procedures.
  - TUGCO Procedure DQP-CS-4, Revision 0, dated August 9, 1978, only required two audits of vendors fabricating reactor coolant pressure boundary components, parts, and equipment; one audit of vendors fabricating engineered safeguards components, parts, and equipment; and audits of balance of plant (safety-related) as required by the quality assurance manager.
  - TUGCO Procedure DQP-CS-4, Revision 2, dated April 16, 1981, required only that organizations will be audited on a regularly scheduled basis.
  - TUGCO Procedure DQP-CS-4, Revisions 2 and 10, did not specify auditing frequencies for design, procurement, construction, and operations activities.
  - TUGCO Procedure DQP-CS-4, Revision 10, based audit requirements on Regulatory Guide 1.33, Revision 2, February 1978. This commitment did not fully address the requirements of the construction quality assurance program.

The above procedure and subsequent revisions failed to describe and require annual audits in accordance with commitments and requirements. Earlier audit procedures were not available to determine if they met requirements.

- b. Planning and staffing to perform 1983 audits was inadequate to assure that a comprehensive system of audits was established and implemented to verify compliance with all aspects of the quality assurance program, in that, of 656 safety-related procedures (which control safety-related activities) the NRC review revealed that the applicant sampled only 165, or 25 percent, during the 1983 audit program. Consequently, significant aspects of the safety-related activities were not adequately audited.
- c. The Westinghouse site organization, established in 1977 to perform Nuclear Steam System Supply (NSSS) engineering services, was not audited by TUGCO during the years of 1977, 1978, 1979, 1980, and 1981.
- d. Audits of vendors that manufacture or fabricate parts, components, and equipment for reactor coolant pressure boundary and engineered safeguards systems have not been conducted annually dating back to August 9, 1978.

This is a Severity Level IV Violation. (Supplement II) (445/8432-03; 446/8411-03)

3. Failure to Properly Certify a Vendor Compliance Inspector

Criterion V of 10 CFR 50, Appendix B, states, in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

TUGCO Procedure DQP-VC-4, Revision 6, dated January 5, 1984, requires that Level II inspectors (Corporate QA) shall attend and satisfactorily complete nondestructive testing courses including eddy current testing.

Contrary to the above, one of six inspector's files had no documentation to show that the inspector had attended and completed an eddy current testing course. Subsequent discussions revealed that he had been certified without meeting this requirement. The vendor compliance supervisor stated that this inspection skill is not needed since there is no present vendor work activity which would require this skill; therefore, this procedure was revised and the requirement omitted during this inspection.

This is a Severity Level V Violation. (Supplement II) (445/8432-05; 446/8411-05)

Pursuant to the provisions of 10 CFR 2.201, Texas Utilities Electric Company is hereby required to submit to this office, within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

Dated: \_\_\_\_\_

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION  
REGION IV

NRC Inspection Report: 50-445/84-32  
50-446/84-11  
Dockets: 50-445  
50-446

Construction Permit: CPPR-126  
CPPR-127  
Category: A2

Licensee: Texas Utilities Electric Company  
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: Dallas Corporate Office, Dallas, Texas

Inspection Conducted: August 20, 1984 through September 20, 1984

Inspector:

*H. S. Phillips*

H. S. Phillips, Senior Resident Reactor  
Inspector Construction

*11/11/85*  
Date

NRC Contract Personnel:

B. Freed, Senior Project Engineer, EG&G Idaho, Inc.  
G. Thomas, Quality Engineer, EG&G Idaho, Inc.

Approved:

*D. M. Hunnicutt*

D. M. Hunnicutt, Team Leader  
Region IV Task Force

*11/23/84*  
Date

Inspection Summary

Inspection Conducted August 20 through September 20, 1984 (Report 50-445/84-32;  
50-446/84-11)

~~8502200334~~

24pp.

Areas Inspected: Routine, announced inspection to determine how effectively corporate management has implemented the QA program for controlling design, procurement, and construction activities; and to determine how site management interfaces with corporate management. The inspection involved 74 inspector-hours by one NRC inspector and 176 inspector-hours by two NRC contract personnel at the corporate office and the site.

Results: Within the two areas inspected, three violations were identified (failure to regularly review the status and adequacy of the QA program - paragraph 2b.; failure to establish/implement a comprehensive system of planned and periodic audits - paragraphs 2c.(1) and 2d.(3)(a); and failure to properly certify a Level II vendor compliance inspector, - paragraph 2d.(3)(f).

DETAILS

1. Persons Contacted

W. Clements, Vice President Nuclear Operations, Texas Utilities  
Generating Company (TUGCO)  
\*D. M. Chapman, Manager, Quality Assurance (QA), TUGCO  
\*R. G. Spangler, Supervisor, QA Services, TUGCO  
\*D. L. Anderson, Supervisor, QA Audits, TUGCO  
A. H. Boren, Supervisor, Vendor Compliance, TUGCO  
\*S. L. Spencer, QA Auditor, TUGCO  
D. Z. Hathcock, QA Auditor, TUGCO  
H. R. Napper, QA Auditor, TUGCO  
A. Vega, Site QA Manager, TUGCO  
L. M. Bielfeldt, Supervisor, Quality Engineering, TUGCO  
C. Welch, Supervisor, QA, TUGCO  
J. H. Roberts, Supervisor, Construction/Startup, TUGCO  
J. T. Merritt, Assistant Manager, Engineering and Construction, TUGCO  
R. Gentry, Manager, Project Support Services, TUGCO  
F. Peyton, Supervisor, Purchasing, TUGCO  
M. Strange, Supervisor, Engineering Support, TUGCO  
R. Baker, Staff Engineer, TUGCO  
H. Harrison, Supervisor, Technical Services, TUGCO  
G. Krishnan, Supervisor Stress Analysis Group, TUGCO  
R. Williams, Drafting Supervisor, TUGCO  
G. Purdy, Site QA Manager, Brown & Root Inc. (B&R)  
R. L. Moller, Site Manager, Westinghouse

\*Denotes those attending one or more exit interviews.

2. Texas Utilities Management of QA Activities

a. Introduction

The objective of this inspection was to determine the status of the construction QA program and the effectiveness of implementation of the corporate QA program for ongoing design, procurement, and construction activities.

The NRC inspectors reviewed the QA commitments described in Section 17.1, "Quality Assurance During Design and Construction." Texas Utilities Electric Company (TUEC), as the applicant, has delegated to Texas Utilities Generating Company (TUGCO) the responsibility and authority for engineering, design, procurement, construction, operation, and QA activities at Comanche Peak Steam Electrical Station (CPSES). Gibbs & Hill Inc. (G&H), is the Architect-Engineer (AE) and provides TUGCO with design, engineering, and procurement services as requested. Westinghouse (W) is the Nuclear Steam Supply System (NSSS) supplier and provides TUGCO with the design, engineering, procurement and fabrication services for the NSSS and the initial supply of nuclear fuel. Brown and Root, Inc.



(B&R) is the Construction Manager/Constructor and provides construction services at the site, including the QA program for ASME Division 1 Code work.

b. Organization

The TUGCO corporate management structure and responsibilities were described in the Final Safety Analysis Report (FSAR); and the various TUGCO QA manuals and procedures described how FSAR requirements were implemented to control design, procurement, and construction activities. Recent organizational changes pertaining to the QA program were described in FSAR figures 17.1-1, 17.1-2, 17.1-3, 17.1-4, and 17.1-5 which were included in Amendment 50 dated July 13, 1984.

Recently, there have been three important QA personnel changes. A new site QA manager reported in March 1984, a new site quality engineering supervisor reported in August 1984, and a new vendor compliance supervisor was recently selected. These organizational changes were made to replace individuals who were reassigned or promoted to other positions, and these changes were reported to the NRC. The independence and effectiveness of the QA effort do not appear to be adversely affected by these changes.

The assistant project general (APG) manager reports to both the VP of engineering and construction and to the TUGCO Executive VP of operations. Discussions with the APG manager confirmed this and that he was supervised by both. This management practice is questionable. The CPSES QA Plan Section 1.2, paragraph 1.2.1, does not describe the APG manager's interface with or the responsibility to the VP nuclear operations. Subsequent discussions with TUGCO QA personnel revealed that this position was discussed in the startup QA manual. This item is considered unresolved pending clarification of the QA plan and further review during a subsequent inspection. (445/8432-01; 446/8411-01)

c. QA Program

TUGCO QA Program Plan and subtier procedures for design, construction, engineering, and procurement described the control of all related project and quality activities. A sample of these procedures were reviewed and documented in NRC Inspection Report No. 50-445/84-22; 50-446/84-07.

The Quality Assurance Program (described in the FSAR) provided the delegation of design, engineering, construction, and procurement functions to prime contractors, subcontractors, and vendors. It stated that the TUGCO audit program assured that these organizations had adequate QA programs and verified implementation of the overall QA program within TUGCO.

The inspectors reviewed the QA program procedures and any objective evidence to determine if the applicant regularly reviewed the status and adequacy of the QA program as required by Criterion II of Appendix B to 10 CFR 50, the PSAR and FSAR, and ANSI N45.2-1971. Reviews and discussions revealed no documented requirements or evidence that the QA program status and adequacy had been reviewed by the applicant. In order to determine if the QA program had been assessed, the inspectors reviewed additional information. In late 1981 and 1982 audits were performed by a consultant (Fred Lobbin), by Sargent and Lundy (using INPO criteria), and by TUGCO (using INPO criteria). Each of these audits evaluated limited aspects of the QA program. In 1983 Cygna evaluated the design program.

The Lobbin Report (February 4, 1982) R-82-01, contained four major findings:

- level of experience within the TUGCO QA organization is low; i.e., commercial nuclear plant design and construction QA experience;
- staffing for the audit and surveillance functions is inadequate;
- the number and scope of design and construction audits conducted by TUGCO QA to date has been limited; and
- QA management has not defined clearly the objectives for the surveillance program resulting in a program which, in the author's (Lobbin) opinion "is presently ineffective."

The TUGCO QA manager responded to these findings in an office memorandum (QBC-18), dated February 23, 1982. This response basically concurred with these findings.

The response committed to recruit nuclear experienced individuals, to increase the number and scope of site audits, and to more effectively use the surveillance program. Two program reports (QBC-25 and 29) regarding these matters were issued from the QA manager to the VP nuclear operations on May 21 and August 31, 1982, respectively.

Following the Lobbin Report, the NRC performed a CAT inspection (IR 445/83-18; 446/83-12 dated April 11, 1983) and included a review of the TUGCO audit program at the corporate offices. The inspection included a review of 18 audits (conducted between 1978 and early 1983), auditor qualifications, audit planning and scheduling, audit reporting and followup, and audit program effectiveness. The report concluded that weaknesses existed in the established QA audit program and included the scheduling and frequency of audits, the lack of effective monitoring of the construction program, and the lack of effective resolution of certain audit findings. The inspection also indicated that the QA program should have been more effective.

Based on the findings in the Lobbin report, and the findings in the NRC CAT report, the QA program continues to exhibit weaknesses. The continuing weaknesses in the QA program over a significant period of time reinforce the need for the applicant to routinely assess the status and adequacy of the QA program routinely to ensure that the areas are identified and adequate and timely corrective action is taken to correct the QA program weaknesses.

The failure to regularly review the status and adequacy of the QA program as required is a violation of Criterion II of Appendix B to 10 CFR 50. (445/8432-02; 446/8411-02)

d. Management of the TUGCO Audit Program

(1) Program Requirements

FSAR Subsections 17.1.2, "QA Program," and 17.1.18, "Audits," require internal audits of (TUGCO corporate and site activities) and external audits (prime contractors, subcontractors and vendors) to evaluate the effectiveness of the QA program by verifying conformance with design requirements; compliance with established requirements, methods and procedures; and implementation of corrective action. These commitments require the establishment and implementation of a comprehensive system of planned and periodic audits of all aspects of the QA program.

The TUGCO audit program consisted of internal and external audits of design, construction, engineering, and procurement activities. TUGCO also retained responsibility for the external audits that were usually delegated to the AE and NSSS organizations; i.e., audit of vendors. In addition to construction and vendor audits, the TUGCO audit group was also responsible for performing preoperational/startup and plant operation audits.

TUGCO committed to the audit requirements of ANSI N45.2.12-1973, Draft 3, Revision 0, Section 3, "Audit System," and these program management objectives are:

- to determine that a QA program has been developed and documented in accordance with applicable requirements;
- to verify that the program has been implemented,
- to assess program effectiveness;
- to identify program nonconformance; and
- to verify program correction where appropriate.

This section also stated that to achieve these ANSI standard objectives full management backing, manpower, funding, and facilities shall be available to implement the system of audits.

(2) NRC Evaluation of Planning/Implementation of Program

The NRC inspector reviewed and evaluated the applicant's plans, procedures, and number of audits performed (see paragraph 2e below) and determined that planning was inadequate. This audit effort was too large for the four available TUGCO auditors in 1981, even though additional specialists were utilized to assist with the audit activities.

- (a) The inspector reviewed and evaluated planning documents (formal and informal) used by the TUGCO QA manager, supervisor QA services, and supervisor QA audits. The review and discussions with these individuals revealed that annual audit plans were based on the audit of organizations rather than activities. TUGCO Audit Procedure DQP-CS-4, Revision 0, dated August 9, 1978 required:

- semiannual internal audits,
- semiannual construction audits,
- annual AE audits,
- annual NSSS audits, and
- annual plant operation audits.

However, for vendor audits the procedure required:

- first audit at 15 percent; and second audit at 60 percent "item completion" by reactor coolant pressure boundary vendors;
- one audit of engineered safeguards vendors at 25 percent item completion; and
- audit of balance of plant (other safety-related) vendors as determined by the manager QA.

This does not meet the requirements of paragraphs 3.4.1 and 3.4.2 "Scheduling," of ANSI N45.2.12 which requires, "Auditing be initiated as early in the life of the activity as practicable . . . applicable elements of the QA program shall be audited at least annually or at least once within the life of the activity whichever is shorter."

Furthermore, Audit Procedure DQP-CS-4, Revision 2, April 16, 1981, and Revision 10, June 4, 1984, have further reduced the (scheduling) frequency of audits. Revision 10 now states, in part, "3.2.1, The following organizations will be audited on a regularly scheduled basis but in accordance with Regulatory Guide (RG) 1.33, Revision 2, January 1978, Regulatory Position 4: a. AE; b. NSSS; c. constructor; d. TUGCO Internal; e. Preoperational/Startup; f. Plant Operations; g. Subcontractor. . . 3.2.1 In lieu of regularly scheduled audits of vendors TUGCO QA will perform the following: a. Monitor the individual vendor ratings which are based on vendor performance . . . b. for those vendors who cannot be evaluated based on vendor ratings . . . regularly scheduled audits will be performed based on level of activity." The NRC inspector discussed with TUGCO management the fact that RG 1.33 is for operations and does not fully address the requirements of the construction QA program.

This failure to develop audit program procedures which adequately address and describe QA program requirements and commitments is a violation of Appendix B, 10 CFR Part 50, Criterion XVIII (445/8432-03a; 446/8411-03a).

- (b) In addition to evaluating to determine if annual audits were planned, the NRC inspector requested objective evidence which would demonstrate that planning for audits for calendar years 1983 and 1984 included a method to verify compliance with all aspects of the QA program and to determine the effectiveness of the QA program. The review of the objective evidence revealed that the planning was not adequate, particularly regarding the audit basis, status, and tracking. The only objective evidence available consisted of a listing of planned audits of internal organizations and contractors each year and a summary of 1983 audit results and criteria audited; however, this data in many cases did not list the criteria audited and while reviewing older audits it was noted that an "after the fact" review resulted in identifying the applicable criteria covered for various organizations.

The inspector requested a listing of selected site procedures which were in effect in 1983 that were representative of site safety-related activities and subject to audit by TUGCO corporate QA. The review of the listings provided and the 1983 audits revealed the following information:



<u>Audits of Procedures</u>	<u>Total Procedures</u>	<u>Procedures Audited/Referenced</u>	<u>% Audited in 1983</u>
TUGCO Quality Documents Index (December 20, 1983)	295	71	24
TUSI Engineering Instruction Index (December 2, 1983)	65	16	25
TUSI Nuclear Engineering Procedures/Instructions Index (September 26, 1983)	26	18	69
TUSI Engineering Procedures Index (November 4, 1983)	30	12	40
B&R Quality Document Index (November 22, 1983)	51	20	39
B&R Construction Procedures Index (June 20, 1983)	<u>189</u>	<u>28</u>	<u>15</u>
Total	656	165	25

Only 25 percent of the procedures (specific safety-related activities) were audited in 1983. Although audits on a sampling basis are acceptable, there was no evidence that all safety-related areas were audited. The audits did not encompass all aspects of the QA program in order to determine effectiveness.

The failure to properly plan or produce evidence of adequate planning for a comprehensive audit program to verify compliance with all aspects of the QA program resulted in the failure to audit significant parts of the QA program is a violation of Criterion XVIII of Appendix B to 10 CFR 50 (445/8432-03b; 446/8411-03b).

The NRC inspector contacted the Westinghous (W) site manager to review the procedure listing for safety-related activities which TUGCO had audited. As indicated below, no audits of NSSS site activities were performed in 1983. Discussions with the (W) site manager revealed that no audits had been performed by TUGCO QA in 1977, 1978, 1979, 1980, or 1981. This was discussed with the TUGCO audit staff and QA manager who did not disagree with the stated audit frequency.



(W) Site Organization

<u>External Procedures</u>	<u>Total Procedures</u>	<u>Procedures Audited/Referenced</u>	<u>% Audited in 1983</u>
Westinghouse (W) Site Applicable Procedure, QA Manual, May 1983	18	-0-	-0-
PPD Procedures	14	-0-	-0-
Installation Procedures	29	-0-	-0-

The failure to audit (W) procedures (safety-related activities) annually as required by ANSI N45.2.12, Draft 3, Revision 0, of the QA program is a violation of Criterion XVIII of Appendix B to 10 CFR Part 50, (445/8432-03c; 446/8411-03c).

- (c) The NRC inspector discussed The staffing of the Audit Program with TUGCO QA management the findings of the Lobbin Report and the NRC CAT Team Report regarding the staffing of the audit functions. The discussions revealed that the TUGCO audit staff had been increased from 4 to the present number of 12 between 1982 and 1984, and TUGCO management has been looking for 3 or 4 additional nuclear experienced auditors to further increase the audit staff. However, it was also revealed that management had not determined the total audits required nor the manpower needed to accomplish the audits.

This matter is an unresolved item pending the determination of the number of audits and auditors that will be needed to effectively implement the audit program (445/8432-04; 446/8411-04).

- (d) The NRC inspector determined through review of charts and procedures that current organization provided organizational freedom from cost and schedule.
- (e) The NRC inspector evaluated audit personnel qualifications by reviewing 14 personnel files of lead auditors and auditors. This included presently employed and formerly employed auditors. These personnel were qualified as required by TUGCO Procedure DQI-QA-2.1, Revision 7, and ANSI N45.2.23-1978, "Qualification of Quality Program Audit Personnel for Nuclear Power Plants."
- (f) The NRC inspectors reviewed TUGCO Audit Procedures DQP-CS-4, Revision 10 (June 4, 1984), and DQI-CS-4.6, Revision 7 (April 13, 1984). As previously discussed in paragraph 2.C(1), DQP-CS-4 does not include adequate commitments to perform annual audits and failed to address both design and construction and plant operations audit requirements.

e. Implementation of the TUGCO Audit Program

The NRC inspectors selected three areas of the audit program to review and evaluate implementation. Results of this evaluation are discussed in the following paragraphs.

- (1) Internal Audits of Site Activities - The NRC inspector reviewed the index which showed all site audits and found that Audits TCP-1 through TCP-112 had been performed between March 1978 and August 1984. The number per year are: (1) 4 in 1978; (2) 3 in 1979; (3) 10 in 1980; (4) 11 in 1981; (5) 30 in 1982; (6) 29 in 1983; and (7) 22 during the first 8 months of 1984. After the audit program was found inadequate in the consultant's report (Lobbin), the number of audits increased from less than 1.0 per month in 1982 to 2.5 per month in 1982. After the NRC CAT inspection report in 1983 this number increased to 2.7 per month for the first 8 months of 1984. This indicates that positive action concerning these reported weaknesses was taken; however, as previously discussed objective evidence was not available that the required number of audits and auditors has been identified. This item was previously identified above as unresolved.

The 1983 and 1984 audit schedule included each audit scheduled, cancelled, and any additional audits planned or performed. Where audits were cancelled, they were rescheduled and other audits were added and performed. This effort was well documented.

In 1983 the TUGCO audit group performed 158 audits. Sixty-five internal audits of site activities are as follows:

- construction/QC/ engineering - 33 audits;
- startup - 5 audits; and
- operations - 27 audits.

The NRC inspector selected and reviewed 31 TCP 1983 audits of site activities. The audit files included notification to the organization audited, an audit plan, checklists, an audit report, audit response, and evaluation/closeout of findings. Audit reports reflected good preparation and execution. Substantial findings generally resulted and were resolved.

Several lead auditors were interviewed concerning the management of the TUGCO audit program. They stated that the audit program had weaknesses or deficiencies in 1978 but they had witnessed dramatic improvements and were confident that the audit program was currently working well.

- (2) Assurance of Design Control - TUGCO management verified that design was controlled in accordance with the QA program requirements and procedures through administering an effective audit program. The design control functions were delegated to the AE and (W); however, TUGCO was designated the engineering organization responsibility for plant design.

The NRC inspector reviewed and evaluated the results documented in 15 TUGCO internal and external audit reports which specifically relate to Criterion III of 10 CFR Part 50, Appendix B, design and applicable procedures. These represent all audits design and consisted of 8 audits of TUGCO, 3 of (W), and 4 of G&H, engineering organizations. All audit findings, concerns, and deficiencies were closed through correspondence and were later verified through subsequent audits. Management involvement was evident as the VP nuclear operations was on concurrence and was furnished status reports by the QA manager.

In October 1982, TUGCO initiated a special audit effort to review design using the Institute of Nuclear Power Operations (INPO) performance objectives and criteria. Sargent & Lundy personnel were used to perform this audit. This audit identified 13 findings and TUGCO audit No. TNO-2, dated June 1983, verified corrective action.

- (3) Assurance Control of Procurement Activities - TUGCO management elected to retain procurement responsibilities except for certain functions delegated to the AE and NSSS. The NRC inspector selected several functions retained by TUGCO to determine if their audit program effectively monitored or verified that procurement activities were accomplished in accordance with the QA program and applicable procurement procedures. Management involvement with procurement documents, bid/source evaluation, and specific QA inputs were reviewed by the inspector. The vendor audits and evaluation of vendors were a large work effort. The following are the results of this review and evaluation.

The NRC Comanche Peak Special Review Team Report dated July 13, 1984, at the site identified a potential violation, i.e., failure to perform annual audits of vendors. The report documented an inspection of the procurement effort at site and part of this inspection included determining the frequency of vendor audits. As a result of the special inspection, the TUGCO QA manager approved an FSAR change request, dated August 3, 1984, which asked that TUGCO be allowed to adopt NRC RG 1.144 audit requirements in lieu of ANSI N45.2.12, Draft 3, Revision 0, for construction and ANSI N45.2.12, Draft 4, Revision 2 for operations. This requested change would not change the requirement to perform internal audits annually but

would reduce the requirement to perform annual audits of suppliers. Considering this requested QA program change which had not been approved by the NRC, the following are the inspection results:

- (a) The NRC inspector reviewed the TUGCO vendor audit program for 1983 to determine compliance with commitments (FSAR Section 17, paragraph 17.1.18), ANSI N45.2.12 and TUGCO procedures DQP-CS-4 and DQI-CS-4.5.

The annual audit schedule revealed that 60 vendor audits were scheduled during 1983. Audit TCLC-2 was cancelled (lack of activity with Purchase Order CPC-307) and audit TBS-3 was rescheduled (delayed by 1 week) as a result of NRC CAT Team inspection findings. The NRC inspector selected 3 vendor audit files, TVO-1, TMM-3, and TBF-2, for review to determine the extent of the audits as applicable to the audit plan checklist, noted deficiencies, concerns, and comments. Also included in this review were the corrective actions and/or preventive action documented in writing by the vendor in response to the applicable audit findings. Documents in file closed the audit findings and indicated that followup on corrective action would be verified during the next audit.

The NRC inspector reviewed the vendor audit frequency to determine if TUGCO established a schedule to annually audit vendors. The licensee commitment to ANSI N45.2.12, Draft 3, Revision 0, requires annual audits or at least once within the life of the activity. Neither procedural requirements were established, nor were vendors audited annually.

The failure to establish procedural requirements and to perform annual vendor audits is a violation of Criterion XVIII of 10 CFR Part 50, Appendix B and ANSI N45.2.12, Draft 3, Revision 0 (445/8432-03d; 446/8411-03d).

- (b) The NRC inspector reviewed the approved vendors list (AVL) program for 1983 to verify that methods used by TUGCO to qualify vendors to supply safety-related materials, parts, and services were consistent with the QA plan, procedural requirements, and commitments described in ANSI N45.2.13-1976. A review of supplemental memos and preaward survey files and revisions 9 through 12 of the AVL verified that the AVL was current. This review showed 33 additions, 40 status changes, and 1 deletion to the AVL for the period January 24, 1983, through December 20, 1983. The preaward survey files reviewed were consistent with



Procedures DQP-CS-4, Revision 10, and DQI-CS-4.2, Revision 3, December 1, 1982. During the review of preaward survey files, the inspector confirmed that formal identification letters, the survey date, and the scope of the survey (checklist) were consistent with the vendor QA program. Also, the corrective action responses by the supplier concerning noted deficiencies, concerns, and comments were reviewed, and followup action verified in a subsequent audit.

- (c) The NRC inspector reviewed the vendor performance evaluation (VPE) system to determine compliance with commitment and procedural requirements. TUGCO Procedure DQP-CS-4.3, paragraph 1.1 stated that the purpose of the evaluation was to establish a comprehensive method of identifying system weaknesses in vendor QA programs through acceptable/unacceptable hardware information generated as a result of vendor release inspections. The VPE files included release inspection trip report cover sheets, vendor rating sheets, releases, and the inspection checklists as required by TUGCO Procedure DQI-CS-4.3, Revision 4, paragraph 3.1.

The NRC inspector reviewed 3 VPE packages to determine that the quality assurance services (QAS) group's review was consistent with procedural requirements. One vendor file (Paul Monroe Hydraulic) was still active pending engineering review and evaluation on the O-ring discrepancy identified during release inspection at Remo Hydraulics (Purchase Order CPF-11436-S issued to Paul Monroe Hydraulics) for 20 hydraulic snubber assemblies. As required by DQP-VC-3, one vendor package (Meddco Metals) was being held on a yellow flag sheet to alert TUGCO auditors of next request for release so that TUGCO auditors could accompany the TUGCO vendor compliance inspector to resurvey the vendor. One other vendor (Volumetrics) performance evaluation record was reviewed and it showed a vendor rating of greater than 90. The NRC inspector interviewed the QA audit supervisor to determine what objective evidence (as required by referenced TUGCO Procedure DQI-CS-4.3, paragraph 3.2) was used to perform the vendor evaluation and support vendor ratings. Preaward surveys, previous audits, and receiving inspection reports were used as objective evidence to give the rating.

The NRC inspector reviewed the receiving inspection activity for previous release inspection shipments relative to the aforementioned vendors. Receipt inspection consisted of shipping damage inspection, receipt of documentation, identification, and quality assurance release.

- (d) The NRC inspector reviewed the method by which the licensee performed source selection to determine that procedural requirements were met. QA plan Section 4.0, Revision 4, July 31, 1984, required that a purchase order for safety-related items not be issued to a vendor unless TUGCO QA had reviewed and accepted the purchase order; i.e., QA determines whether QA provisions are adequate and determines that a preaward evaluation recommends selection of the vendor.

When procurement solicited bids outside the AVL, TUGCO QA requested that an uncontrolled copy of the vendors quality assurance manual be sent with the bid response. In the event of a positive bid response from the unapproved supplier, the TUGCO procurement group forwards the QAM and a request for QA program evaluation, Form QA-VE, to the TUGCO QA audit group supervisor to initiate a preaward survey per QA Procedure DQT-CS-4.4, paragraph 3.1. However, until the preaward survey is completed and a supplemental memo has been issued by the audit group supervisor, no further procurement action was taken.

The NRC inspector reviewed the actions taken when an acceptable bidder takes exceptions to the purchase order or subcontract. Upon receipt of the exception, procurement filled out an expediting request, assigns a procurement log number, and forwarded this request to the field requisition originator for engineering review and evaluation. Should the engineering group allow the exception, the necessary actions; i.e., design charges, were initiated. The expediting request was returned to procurement accompanied by a field requisition documenting the change with the approval signatures of engineering and QA.

- (e) The NRC inspector reviewed the method by which TUGCO performed vendor item acceptance of safety-related materials, parts, and components. TUGCO Procedure DQP-VC-1, Revision 8, June 4, 1984, paragraph 1.1, specified that the purpose was to establish guidelines for performing final inspection and release of TUGCO purchased equipment and applies to both safety-related and nonsafety-related equipment. This procedure allowed for a waiver, in which case the inspection checklist applicable to the procurement specification became the responsibility of CPSES receiving inspection as described in B&R CPSES Procedure CP-QAP-8.1, Revision 8, June 11, 1984, paragraph 3.4.1
- (f) The NRC inspector reviewed six vendor compliance inspector's files to determine if training/certification



records met the requirements of ANSI N45.2.6-1978 and TUGCO Procedure DQP-VC-4, "Guidelines for Certifying Vendor Compliance Personnel." Section 3.2.2 states that a Level II inspector shall attend and satisfactorily complete the nondestructive examination (NDE) courses. One inspector had not completed all of the NDE courses but had been certified. This finding was discussed with the vendor compliance supervisor who stated that there is no real need for certification in eddy current testing since inspectors do not utilize this NDE technique and the requirements would therefore be deleted from the procedure. The NRC inspector verified the deletion of this requirement and procedural revision during this inspection.

The failure to certify the inspector in accordance with the procedure is a violation of Criterion V of Appendix B to 10 CFR 50 (445/8432-05; 446/8411-05).

No other violations or deviations were identified.

3. TUGCO Corporate QA - Site QA Activities Interface

Appendix B to 10 CFR Part 50 requires TUGCO to establish proper organizational and management interfaces, and procedures must describe how various organizations coordinate and communicate design, procurement, engineering, construction, and QA/control activities and information. The following paragraphs describe inspection of this requirement.

a. Site Organization

TUGCO Procedure CP-QP-3.0, Revision 15, July 30, 1984, described the site QA organization for design and construction. This organization consisted of a site QA manager, QA supervisor, and a QC supervisor. The site group performed no audit function, however, they did perform QA surveillances. The site group consisted of 13 QA/QC managers and more than 150 lead/QC inspectors and quality engineers. These personnel inspected non-ASME work.

B&R QA manual and implementing Procedure CP-QAP-03.01, Revision 6, described their responsibilities for QA/QC and construction activities pertaining to ASME work. This organization consisted of a QA manager, QE supervisor, and a QC supervisor. The total QA/QC work force involved with design/construction activities was approximately 100.

Several other site subcontractors such as Bahnson, Brand Industrial Services, Inc., and Chicago Bridge and Iron, have small QA groups on site and, as is the case with B&R, these organizations were audited by their respective corporate offices.

The NRC inspector interviewed the TUGCO site QA manager to determine how the site QA group interfaced with the corporate QA office. He stated that daily conversations occur between managers of these organizations, however, he did not make written summary reports. Quarterly trending reports which analyze reported nonconformances and deficiencies are sent to the corporate QA manager.

b. Site Surveillances

The NRC inspector noted that surveillances were briefly mentioned in TUGCO Procedure DQP-CS-4, Revision 10; however, there was no mention of how or if the surveillances would be used to complement the audit program. During discussions with the QA manager and other personnel, it was revealed that procedures were not tracked to assure that all were audited. The present audit staff could not audit all site procedures annually. The NRC inspector pointed out that the surveillance function may complement and be used to (1) check that all procedures are implemented; (2) identify nonconforming trends; and (3) to feed potentially deficient or weak areas to the audit group which could, in turn, factor this information into the audit program. Audit priorities could then be established and the audit personnel could be more effectively used.

TUGCO Surveillance Procedures CP-QP-11.2, 19.3, 19.4, 19.5, 19.6, 19.7, 20.0, and 27.0 described the surveillances of specific activities; however, no general procedure which describes the overall surveillance program was provided. The present program did not appear to have sufficient purpose, direction, coordination, and feedback in relationship with the overall QA program. Furthermore, the inspection revealed that the surveillance staff had been reduced from a supervisor and eight technical personnel to four technical personnel. Considering the Lobbin Report this reduction of surveillance effort may not be a prudent action.

As noted in the findings in the Lobbin Report; i.e., QA management had not clearly defined the objectives and scope of the surveillance program, it appeared that TUGCO needed to strengthen the surveillance program. The TUGCO management decision to commit to a surveillance program was a strength, but this lack of purpose and direction and support was a program weakness.

Additionally, the surveillance group was no longer observing work in Unit 1 but will now place most of their effort on Unit 2 construction activities.

This matter is considered unresolved pending clarification of the audit and surveillance program effort, and further review during a subsequent inspection (445/8432-06; 446/8411-06).

The NRC inspector randomly selected and reviewed 28 surveillances performed in 1982, 1983, and 1984. Findings and resolutions of these findings were reviewed and in each case, written responses and corrective action were adequate.

c. Site Design Activities

The NRC inspector reviewed and evaluated selected site activities pertaining to design verifications, design changes, design inputs, and control of vendor drawings as follows:

- (1) Design Verification - The NRC inspector interviewed the TUGCO supervisor of engineering, support, and other engineering personnel to determine how design verifications were performed, and examined the related procedures, logs, and design verification packages. Authorized design verifiers were maintained on lists and an automated tracking system was in place to assure that all design changes, i.e., design change authorizations/component modification cards (DCA/CMC) were verified. Three design verification reports were reviewed to assure that the design verifier was on the authorized list. Design verifiers were not to be involved in the original design review to assure an independence. It was noted that each DCA/CMC was being reviewed for verification. If there was no authorized signoff, then the design was verified.

Audit TGH-23, conducted during August 1984, concentrated on Unit 1 quality related activities for which onsite G&H design review team had responsibility. The audit involved evaluation of the program established and implemented for site review and processing of changes (CMA and DCC) associated calculations and 287 design review packages were reviewed. No major technical problems were identified during this audit.

- (2) Design Changes - The NRC inspector interviewed engineers and draftsmen in TUGCO engineering to determine how design changes were processed and examined the related procedures, files, reports, and tracking systems. A master list was maintained identifying those individuals who were authorized to approve design changes and G&H updates this list by memo. The NRC review of three design review files verified that the reviewers were on the authorized list.

The NRC inspector also reviewed the method used to incorporate field changes (DCA/CMC) into related drawings and the subsequent review, approval, and incorporation of changes into as-built drawings. One observation required additional discussions. The drafting supervisor's (piping support) authority to incorporate a change into a drawing was transmitted and signed by a clerk. This was clarified as being acceptable by management because it

was in accordance with established procedure (CP-EI 4.6-8, paragraph 3.3) and also, as a final control, the as-built drawing was reviewed and approved by an authorized project engineer prior to release.

The NRC inspector examined how the TUGCO administrative services group handled NRC IE Bulletins, Circulars, and Information Notices. These documents were coordinated by the operations support department and were distributed to the appropriate TUGCO engineering group for action. Design changes resulting from these inputs were processed in accordance with established design control procedures. Responses from personnel receiving these reports were reviewed to verify that the reports were adequately addressed. Summary reports and log sheets are used to keep management current as to the status of the responses.

An INPO audit of the operating experience review program in 1982 noted the following good practice, "The procedures for handling industry experience are excellent and are expected to provide a firm base for developing an effective industry experience program."

TUGCO QA audit Report TUG-41 was conducted in December 1983 to review implementation of the operations support program for evaluating and responding to NRC IE Bulletins, IE Notices, IE Circulars, and generic letters. The auditors found the program in compliance with procedural requirements and the overall effectiveness of the program appeared to be adequate.

- (3) Design Document Control - Two packages were reviewed and these contained evidence of vendor data checklists, indexes, approval letters, and the vendor stamp on drawings was observed.

d. Site Procurement Activities

The NRC inspector determined that the TUGCO procurement function was delegated to the TUGCO site organization. The major procurements occurred several years ago; however, present procurement activities associated with items procured offsite for installation were performed by TUGCO or were contracted to G&H, (W), or B&R who were evaluated and qualified by TUGCO QA. Procurement documents were reviewed, approved, and controlled; and receipt inspection of safety-related items on site was performed in accordance with written procedures and checklists.

The NRC inspector selected two procurement actions for review:

- P.O. CPF-1233-S issued to Combustion-Engineering for the procurement of a heated junction thermocouple system.
- CPF-10469-S issued to Paul Monroe Hydraulics to refurbish four Rockwell International actuators.



Both the procurement actions were reviewed to determine that technical requirements were commensurate with the scope of the procurement and was authenticated by engineering review in accordance with TUGCO engineering division Procedure CP-EP-3.0, Section 2.0(d). Both procurement actions reflected the necessary QA review signatures, as required by TUGCO engineering division Procedure CP-EP-5.0, paragraph 3.1.2; QA Procedure DQP-CS-2, paragraph 3.1.8; and instruction QI-QP 5.0.1. All field requisitions initiated to generate a supplement to the aforementioned purchase orders were reviewed and documented as required by Procedure CP-EP-5.0. Reporting requirements set forth by 10 CFR Part 21 were included in the purchase order. The NRC inspector reviewed and verified that both purchase orders specified that the supplier shall establish provisions for imposing similar QA requirements on applicable subtier vendors.

No violations or deviations were identified.

4. Unresolved Items

Unresolved items are matters about which more information is required in order to determine whether they are acceptable items, items of noncompliance, or deviations. Unresolved items are identified in this report in paragraphs 2.a, 2.c.(2) and 3.b.

5. Exit Interview

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

INSPECTOR'S REPORT  
Office of Inspection and Enforcement

H.S. PHILLIPS

REVIEWER

D.M. HUNNICUTT

INSPECTORS  
H.S. PHILLIPS

LICENSEE/VENDOR

TRANSACTION  
TYPEDOCKET NO. (8 digits) OR LICENSE  
NO. (BY PRODUCT) (13 digits)

REPORT

NEXT INSP. DATE

NO. SEQ. MO. YR.

TEXAS UTILITIES  
ELECTRIC COMPANY☒ I - INSERT  
M - MODIFY  
D - DELETE  
R - REPLACE05000445  
050004468432  
8411A  
B  
C  
D

PERIOD OF INVESTIGATION/INSPECTION

INSPECTION PERFORMED BY

ORGANIZATION CODE OF REGION/HQ CONDUCT-  
ING ACTIVITY (See IEMC 0530 "Manpower Report-  
ing—Weekly Manpower Reporting" for code)

FROM TO

1 - REGIONAL OFFICE STAFF

OTHER

2 - RESIDENT INSPECTOR

3 - PERFORMANCE APPRAISAL TEAM

REGION DIVISION BRANCH

4

2

3

MO. DAY YR. MO. DAY YR.

082084092084

3 25 28 31

REGIONAL ACTION  
(Check one box only)

TYPE OF ACTIVITY CONDUCTED (Check one box only)

1 - NRC FORM 581

☒ 2 - REGIONAL OFFICE LETTER☒ 02 - SAFETY

03 - INCIDENT

04 - ENFORCEMENT

05 - MGMT. AUDIT

06 - MGMT. VISIT

07 - SPECIAL

08 - VENDOR

09 - MAT. ACCT.

10 - PLANT SEC.

11 - INVENT. VER.

12 - SHIPMENT/EXPORT

13 - IMPORT

14 - INQUIRY

15 - INVESTIGATION

INSPECTION/INVESTIGATION FINDINGS  
(Check one box only)TOTAL NUMBER  
OF VIOLATIONS AND  
DEVIATIONSENFORCEMENT CONFERENCE  
HELDREPORT CONTAIN 2,790  
INFORMATION

LETTER OF REPORT TRANSMITTAL DATE

A B C D

1 - CLEAR

2 - VIOLATION

3 - DEVIATION

4 - VIOLATION &amp; DEVIATION

A B C D A B C D

0303

1 - YES

A B C D

1 - YES

MO. DAY YR.

MO. DAY YR.

FEB 10 1985

FEB 10 1985

MODULE INFORMATION

MODULE INFORMATION

REC. ORD.		MODULE NUMBER INSP.					PRIORITY	DIRECT INSP. TIME/REPORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED	TO DATE	STATUS	MODULE REQ. FOLLOWUP					REC. ORD.	MODULE NUMBER INSP.					PRIORITY	DIRECT INSP. TIME/REPORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED	TO DATE	STATUS	MODULE REQ. FOLLOWUP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
TYPE	NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	PHASE						MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	TYPE	NUMBER		PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	PHASE						MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
B	1	2	3	0	7	0	3	A	1.0							B																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</

CIRCLE SEQUENCE IF  
VIOLATION OR DEVIATION



**INSPECTOR'S REPORT**  
(Continuation)

Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)		REPORT		MODULE NUMBER		VIOLATION SEVERITY OR DEVIATION		SITE RELATED	
		NO.	SEQ.						
05000445		8432	A	235060		1 2 3 4 5 6		SAC	
05000446		8411	B					SBO	
			C						
			D						

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 50 characters each.)

- 1.
2. Contrary to the requirements of Criterion II of 10CFR Part 50, the applicant failed to review the status and adequacy of the QA program.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- 21.
- 22.
- 23.
- 24.
- 25.
- 26.
- 27.
- 28.
- 29.
- 30.
- 31.
- 32.
- 33.
- 34.
- 35.
- 36.
- 37.
- 38.
- 39.
- 40.

INSPECTOR'S REPORT  
(Continuation)

Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE  
NO. (BY PRODUCT) (13 digits)

05000445  
05000446

REPORT

NO.

SEQ.

8432

A

8411

B

C

D

MODULE NUMBER

235060

II. D.

VIOLATION SEVERITY OR DEVIATION

1 2 3 4 5 6

X

SITE  
RELATED

S A C

J B D

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 50 characters each.)

1.  
2. Contrary to the requirements of Criterion XVIII of  
3. 10CFR Part 50, the applicant failed to establish  
4. and implement a comprehensive system of  
5. planned and periodic audits.  
6.  
7.  
8.  
9.  
10.  
11.  
12.  
13.  
14.  
15.  
16.  
17.  
18.  
19.  
20.  
21.  
22.  
23.  
24.  
25.  
26.  
27.  
28.  
29.  
30.  
31.  
32.  
33.  
34.  
35.  
36.  
37.  
38.  
39.  
40.  
41.  
42.  
43.  
44.  
45.  
46.  
47.  
48.

INSPECTOR'S REPORT  
(Continuation)  
Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)		REPORT		MODULE NUMBER	SITE RELATED																
		NO.	SEQ.																		
0	5	0	0	0	4	4	5	8	4	3	2	A	2350601						II E		
0	5	0	0	0	4	4	6		8	4	1	1	B	1 2 3 4 5 6						S A C	
													C							S B C	
													D								

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 50 characters each.)

1. Contrary to the requirements of Criterion V of  
2. 10CFR Part 50 the applicant failed to  
3. certify one of six vendor compliance inspectors  
4. as required by TUGCO procedure DOP-VC-A  
5. Revision 6, January 5, 1984.  
6.  
7.  
8.  
9.  
10.  
11.  
12.  
13.  
14.  
15.  
16.  
17.  
18.  
19.  
20.  
21.  
22.  
23.  
24.  
25.  
26.  
27.  
28.  
29.  
30.  
31.  
32.  
33.  
34.  
35.  
36.  
37.  
38.  
39.  
40.  
41.  
42.  
43.  
44.  
45.  
46.  
47.  
48.

ANSWER to REG 4 Rpt H. Civermore

TEXAS UTILITIES GENERATING COMPANY

SKYWAY TOWER • 400 NORTH OLIVE STREET, L.B. #1 • DALLAS, TEXAS 75201

BILLY R. CLEMENTS  
VICE PRESIDENT, NUCLEAR OPERATIONS

February 28, 1985  
TXX-4429

Dorwin R. Hunter, Chief  
Reactor Project Branch 2  
U.S. Nuclear Regulatory Commission  
Office of Inspection & Enforcement  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76011

Docket Nos.: 50-445  
50-446

COMANCHE PEAK STEAM ELECTRIC STATION  
RESPONSE TO NRC NOTICES OF VIOLATION  
INSPECTION REPORT 84-26  
FILE NO.: 10130

Dear Mr. Hunter:

We have reviewed your letter dated January 18, 1985 on the special inspection of the Safeguards and Auxiliary Building conducted by C.R. Oberg, M.E. Skow, and W.R. Bennett of activities authorized by NRC Construction Permit CPPR-125 for Comanche Peak Unit 1.

In a conversation between David Chapman and Doyle Hunnicutt, an extension of the response time was granted to March 1, 1985.

We are providing a partial response to the findings listed in Appendix A of that letter. To aid in the understanding of our response, we have repeated the Notices of Violation followed by a summary of our corrective actions. The specific corrective action for each item identified is available at CPSES for your Inspector's review. ~~The generic implications of these items are being evaluated by the team established to develop our Technical Review Team (TRT) Action Plan.~~

If you have any questions, please advise.

Very truly yours,

*Richard E. Kahler*

Billy R. Clements

for

BRC:tlg

Attachment

FOIA-85-59

V/102

86φ1φ2φ4φ6

A DIVISION OF TEXAS UTILITIES ELECTRIC COMPANY

7pp.

cc: - NRC Region IV (0 + 1 copy)

Director, Inspection & Enforcement (15 copies)  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Mr. V.S. Noonan ✓



APPENDIX A  
NOTICE OF VIOLATION

Texas Utilities Electric Company  
Comanche Peak Steam Electric Station

Docket: 50-445/84-26  
Construction Permit: CPPR-126

Based on the results of an NRC inspection conducted during the period of July 16 through September 28, 1984, and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C), 49 FR 8583, dated March 8, 1984, the following violations were identified:

A. Failure to Provide QC Inspection Criteria and Minimum Separation

10 CFR Part 50, Appendix B, Criterion V states, in part, "... Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

IEEE-384 provides separation criteria of Class IE equipment and circuits. The Comanche Peak Steam Electric Station Electrical Erection Specification 2323-ES-100 provides for the implementation of the criteria of IEEE-384 (1974).

Section 4.4.6 of 2323-ES-100 states in part, "In no case shall any part of the conduit or the conduit support system come in direct contact with uninsulated equipment in the piping system or with pipe restraints or anchors."

QI-QP-11.3-29.1, Revision 16, paragraph 3.1.7, states in part, "In no case shall any part of the raceway or raceway support system come in direct contact with uninsulated equipment in the piping system or with pipe restraints or anchors unless otherwise approved by the owner."

QI-QP-11.1-28, Revision 25, paragraph 3.3.4.2, states in part, "There shall be an air gap (i.e., no contact) between electrical conduit/conduit supports and piping component supports."

Section 4.11.3.2 of 2323-ES-100 specifies separation between conduits of different trains which, for the examples listed, is a minimum of one inch.

QI-QP-11.3-23, Section 3.9, specifies conduit separation per drawing 2323EI-1702-02, including several detailed sketches.

Contrary to the above,

1. Specifications and QC inspection procedures do not contain specific acceptance criteria for separation of redundant trains of flexible conduits.
2. The separation requirements between conduits as contained in the erection specifications ES-100 and implementing procedures had not been met.

The following conditions were identified:

1. Flexible conduits in the Safeguards and Auxiliary Buildings do not maintain the required one inch minimum separation between trains. For example, flexible conduit C13G20208 contacts C13011132, and the 1" airspace is not maintained between C13007415 and C13G07413.
2. Flexible conduits in the Safeguards and Auxiliary Buildings come in direct contact with uninsulated equipment in the piping system or with pipe restraints or anchors. Examples include:

<u>Flexible Conduit Number</u>	<u>Item Description</u>
• C13G07743	Flex rests on pipe bracket next to valve 1-HV-5365.
• C13G07744	Flex rests on pipe next to valve 1-HV-5365.
• C14021161	Flex rests on pipe support for 1-MS-030 and 1-MS-268.
• C13G12499	Flex rests on support for JB1S 455G.
• C13G03781	Flex touches corner of support for valve 1-HV-4179.
• C12005387	Flex touches pipe at elbow passing near valve 1-HV-8106.
• C13015915	Flex resting on top of actuator for valve 1-HV-2188.
• C13G21323	Flex touching flange of support next to valve 1-FV-2196.
• C13G06734	Flex rests against unistrut below valve 1-FV-4537.
• C12G04690	Flex conduit rests on fire pipe.
• C13G06834	Flex wraps around adjacent support.
• C14G20503	Flex rests on valve body.
• C12002856	Flex contacts 1-HV-2480.

This is a Severity Level IV Violation (Supplement II.D) (445/8426-01)

### Corrective Action Summary

DCA 20,721, Revision 1, dated September 18, 1984 has been issued against drawing E1-1702-02. This DCA contains an approved method for maintaining minimum separation distance between flex conduits of different trains/channels. This action was completed prior to the walkdowns described below.

Generic NCR's for the items identified by the NRC have been issued and dispositioned. One NCR was issued for each of the following buildings: Safeguards, Reactor Containment, Service Water Intake, Control, Auxiliary and Fuel. The disposition included a walkdown by Engineering, QC and craft personnel to identify any specific cases where flexible conduits could inadvertently be moved and cause the minimum separation criteria to be less than allowable. QC will document these instances on an electrical Separation Deficiency Report in accordance with QI-QP-11.3-29. Engineering will provide a disposition for each deficiency report. Upon completion of the walkdown, the dispositioned Separation Deficiency Reports for each building will be attached to the appropriate building NCR.

#### B. Failure to Properly Inspect

10 CFR Part 50, Appendix B, Criterion X requires that the inspection program of activities affecting quality shall be established and conducted in a manner to verify conformance with the documented instructions, procedures, and drawings.

Procedure QI-QP-11.10-2, Revision 28, "Cable Tray Hanger Inspection," specifies the inspection attributes for inspection assembly, configuration, location, welding, etc., for conformance with design drawings and documents.

Procedure QI-QAP-11.1-28, Revision 25, "Fabrication and Installation Inspection of Safety Class Component Supports," specifies the inspection attributes for inspecting fabrication, installation, material, dimensional control, welding, etc., for conformance with design drawings and documents.

Contrary to the above:

1. The NRC inspector identified one cable tray hanger, CTH 639, that was missing the diagonal brace called for on drawings 2323-E1-0601-01-S and 2323-S-901.
2. The NRC inspector identified one cable tray hanger, CTH 12416, that had the horizontal legs aligned north-south vice east-west as specified on drawing 2323-E1-0601-01S and FSE-00159 sheet 12416.
3. The NRC inspector identified one pipe support that was missing two welds as specified on drawing CT-1-014-015-S42K.

The following is a compilation of additional deficiencies by general category and the drawing or component where it was found.

<u>Category</u>	<u>Component or Drawing</u>	<u>Number of Items</u>
Welding	MS-1-026-010-S75K	1
	AF-1-026-005-S33R	1
	Inst. Rack CPL-EIPRLI-31	2
Dimensions	AF-1-026-003-S33R	1
	MS-1-026-010-S75K	1
	MS-1-025-009-R75K	1
	CC-1-043-013-A43K	1
	CC-1-234-700-C53R	1
	CC-1-238-004-C53R	1
	CC-1-236-700-C53R	1
	CS-1-A8-208A-001	2
	CS-1-564-706-A33R	1
	AF-1-035-037-Y33R	1
	AF-1-035-034-Y33R	1
	MS-1-028-047-S43K	1
	CC-1-011-034-A63K	1
General Workmanship	AF-1-103-036-S53K	1
	Inst. Rack CPL-EIPRLI-31	1
	1-FT-2458	1
	C1401C056-2	1
TOTAL ITEMS		22

The above are examples identified by the NRC inspectors where items were installed by the craft to conditions other than those specified by the identified design documents, QC inspections had been completed, and the QC inspectors failed to identify these conditions. The inspection report details these findings.

This is a Severity Level IV Violation. (Supplement II.D) (445/8426-02)

#### Corrective Action Summary

In summary, the corrective actions that have been taken are listed below. (Note: Each item below refers to the corresponding item as numbered in the Notice of Violation).

1. NCR M84-100470 was issued and subsequently closed on October 1, 1984. Disposition included the addition of the diagonal brace.
2. NCR M84-100476 was issued and subsequently closed on October 2, 1984. Disposition included the issuance of CMC 48850, Revision 2 which shows correct orientation.
3. NCR M-14722 was issued and subsequently closed on August 22, 1984. Disposition included installation of the two welds.

The remaining twenty-two items have been addressed by revision to drawings or Vendor Certified Drawings (VCD's), issuance and disposition of nonconformance reports (NCR), correction through normal inspection process performance of an engineering evaluations or performance of an additional review that indicated no corrective action was required. Specifically the resolution of each item is as follows:

<u>Component or Drawing</u>	<u>Resolution</u>
MS-1-026-010-S75K	Review indicates no corrective action required
AF-1-026-005-S33R	Review indicates no corrective action required
Inst. Rack CP1-EIPRLI-31	NCR issued
AF-1-026-003-S33R	Engineering evaluation indicates no corrective action required
MS-1-026-010-S75K	NCR issued
MS-1-025-009-R75K	Drafting error, NCR issued
CC-1-043-013-A43K	Review indicates support was acceptable, however NCR issued and VCD revised
CC-1-238-004-C53R	NCR issued
CC-1-236-700-C53R	Drafting error, NCR issued
CC-1-234-700-C53R	Drafting error, NCR issued
CS-1-AB-208A-001	Review indicates support was acceptable, however NCR issued and VCD revised
CS-1-564-706-A33R	NCR issued and VCD revised
AF-1-035-037-Y33R	NCR issued and VCD revised
AF-1-035-034-Y33R	NCR issued and VCD revised
MS-1-028-047-S43K	NCR issued and VCD revised
CC-1-011-034-A63K	NCR issued and VCD revised
AF-1-103-036-S53K	Review indicates support was acceptable, however NCR issued and VCD revised
Inst. Rack CP1-EIPRLI-31	Support identification should be
1-FT-2458	AF-1-103-026-S53K, NCR issued
C14010056-2	NCR issued
	Corrected during normal inspection process, see IR I-1-0054504
	NCR issued