CAS Follow-On Work if necessary

Review

- Some I marked QA/QC ; they appear to be ours.
- Others : I question mark ? Some appear new !

guys to review testimony
Add into AQs when we can.
get rest later #2

Note to: TRT Group Leaders

Subject: Useful Deposition

Attached is a list of useful allegation reviews we should depositions. Most of these depositions were made available to the TRT when we were onsite.

Look over the list (arranged by topic), if you think we have missed something, contact C. Haughney (x27297) who will obtain a copy from OELD.

R. H. Wessman

cc: w/o encl.
C. Haughney

NRC Intimidation in an Interview of an Allegor

[redacted] alleged that NRC Region IV inspectors intimidated him in an interview.

The evidence consists of:

Deposition of [redacted]

a tape recording of the alleged intimidating interview

a written transcript of that interview.

Intimidation of QC Inspector in Auxiliary Building

[redacted] for cable tray supports, yelling and shouting obscenities at a ~~QC~~ inspector for "red-tagging" too many cable tray supports.

The evidence on this incident consists of:

Deposition of [redacted]

Intimidation of Welding QC Inspector in North Valve Room

[redacted] alleged that he saw a QC inspector identify improper welding in the North Valve Room. According to [redacted] the QC inspector left, saying he was going to stop it, but later returned and did not stop the improper welding.

The evidence on this issue consists of:

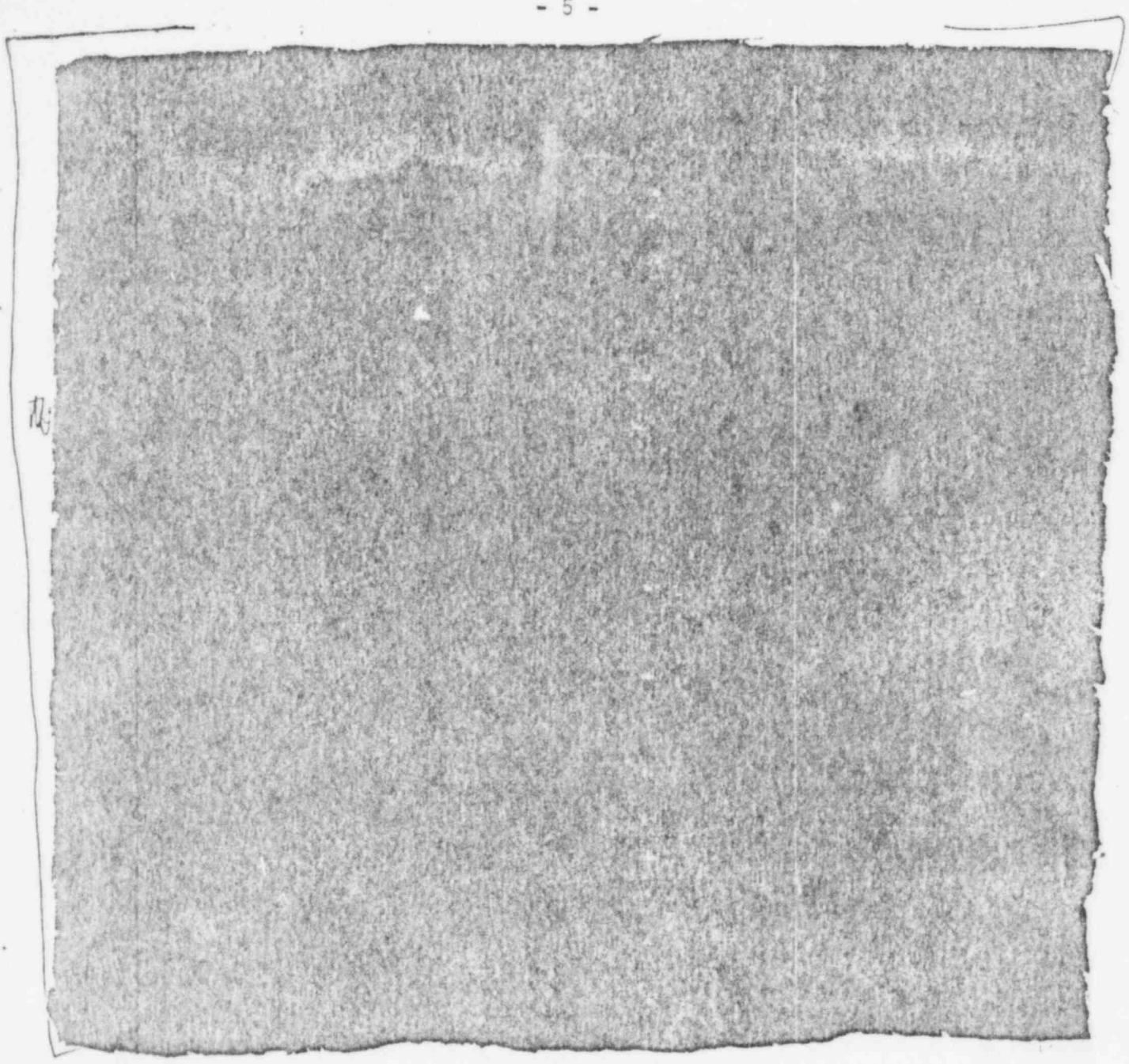
Deposition of [redacted]

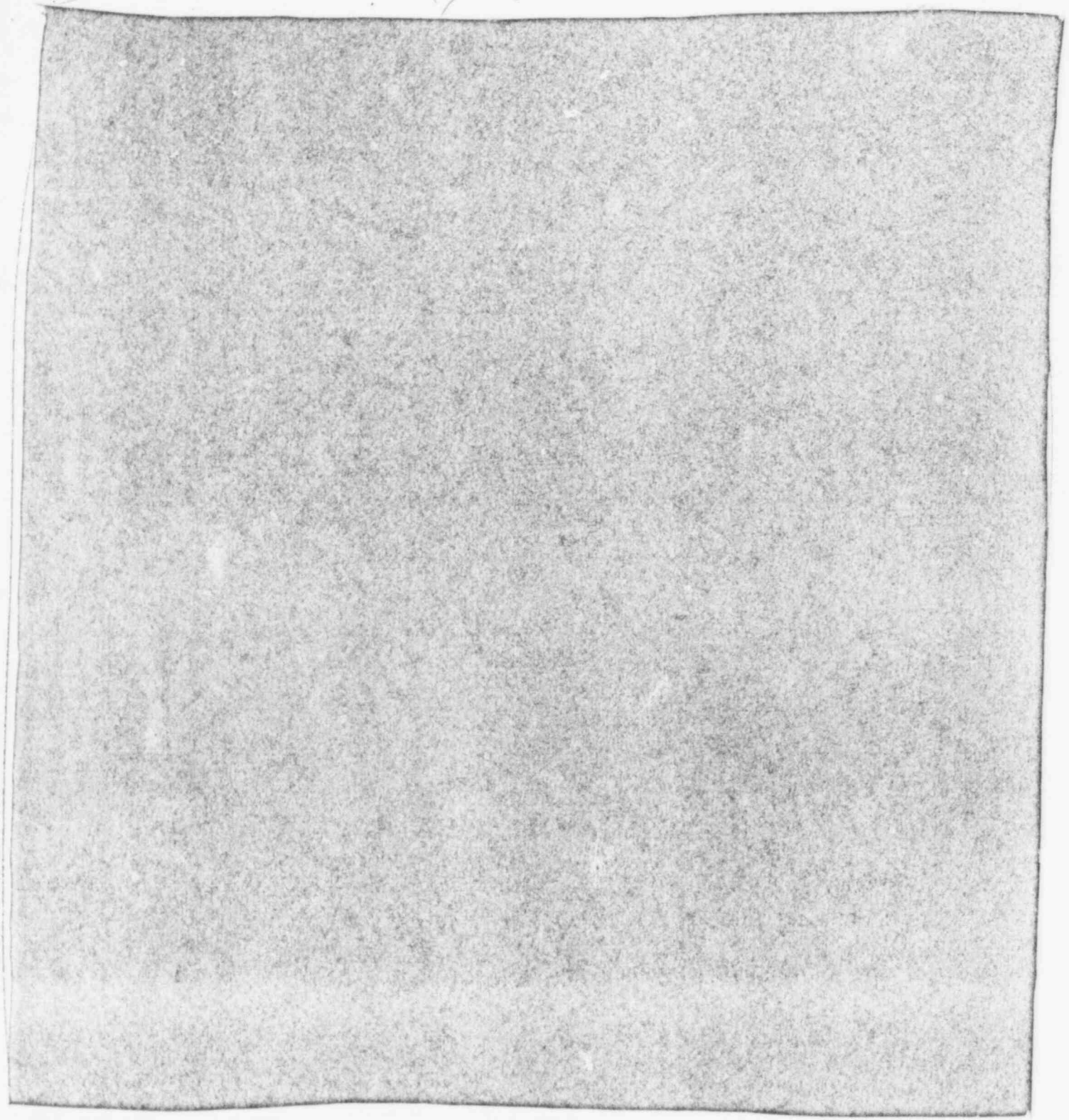
OI Report 4-84-012 (14 August 1984)

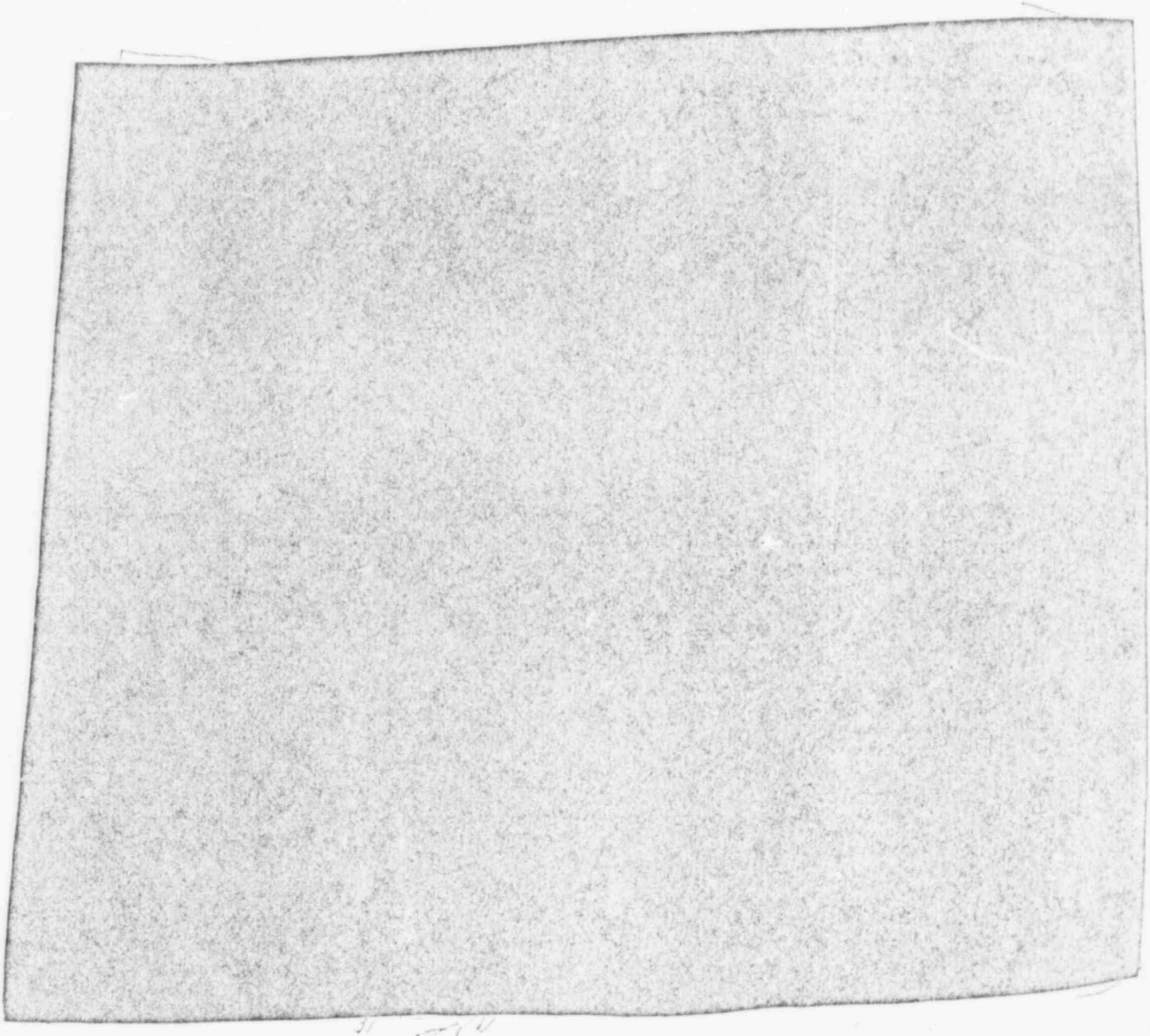
OI Report Q4-84-011 (13 March 1984)

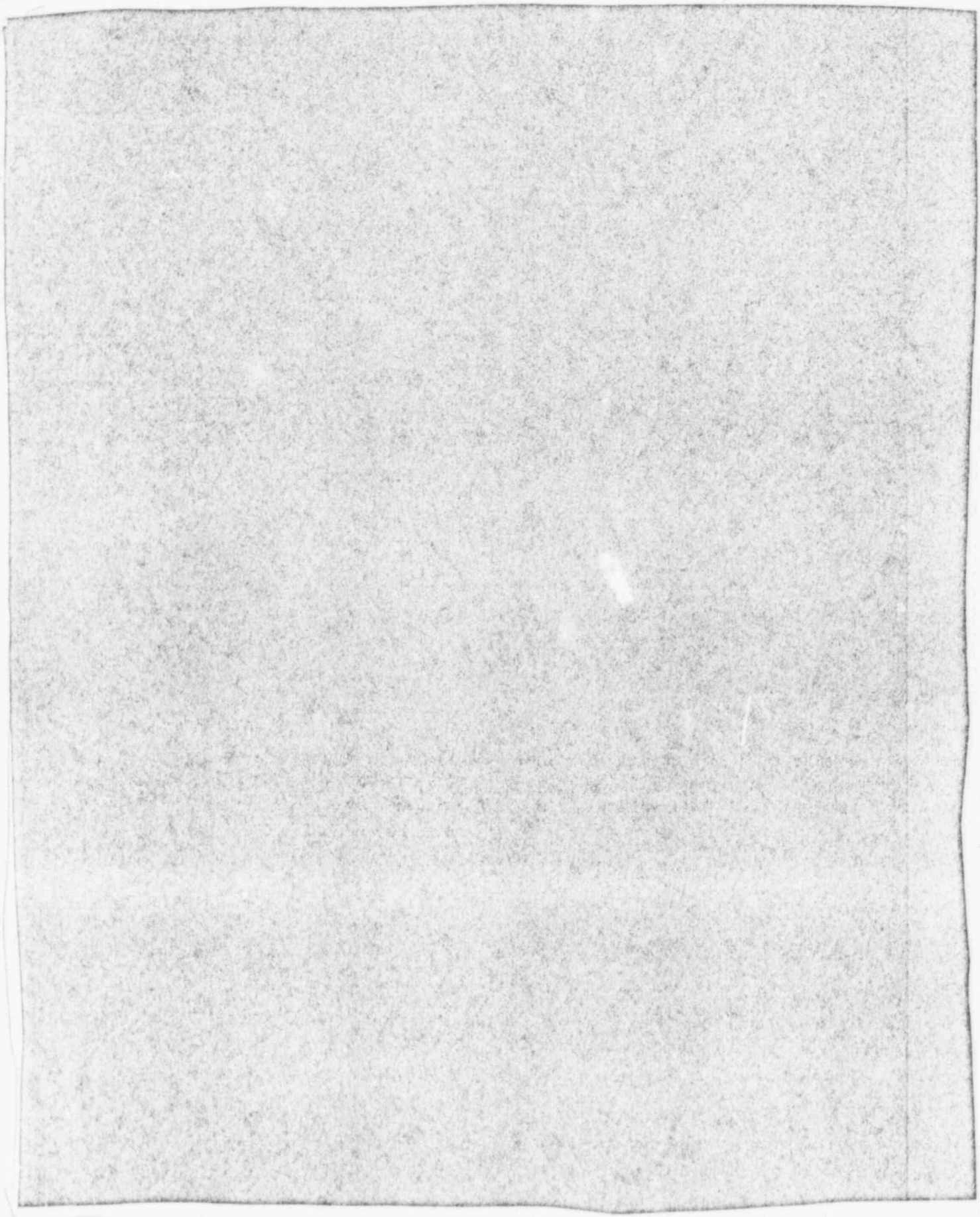
OI Report 4-84-006 at 23 (7 March 1984)

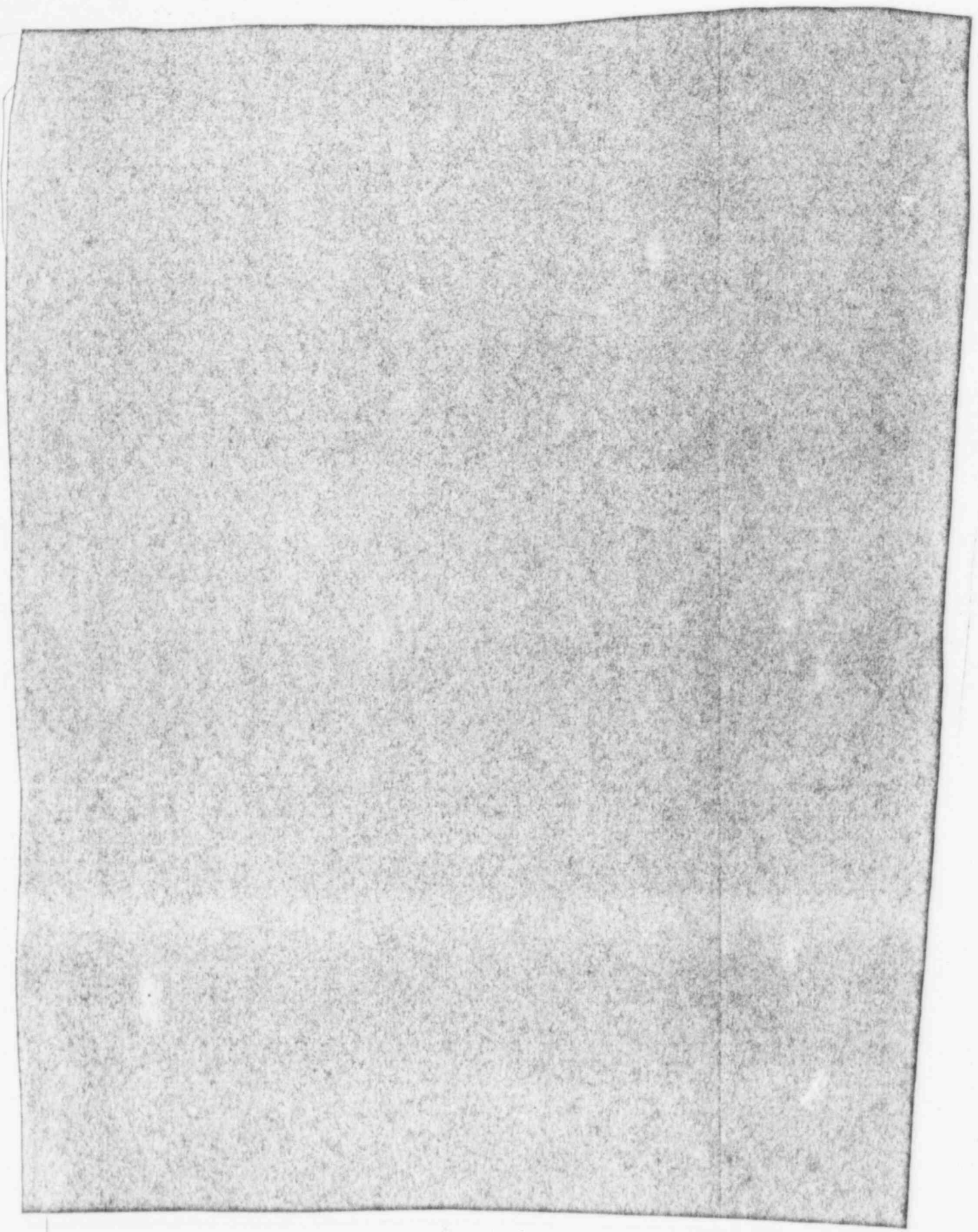
address this one. OK/QC

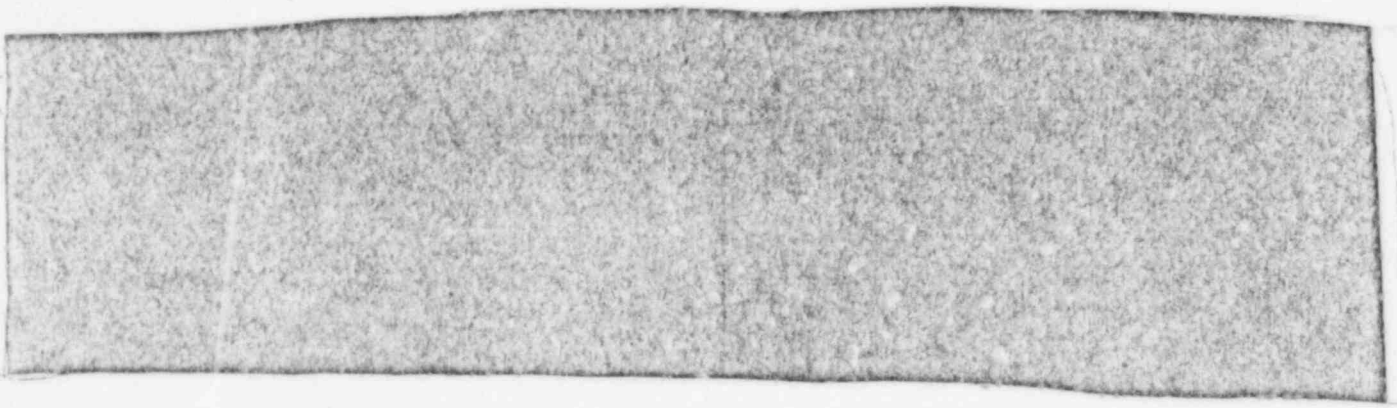












Termination of [redacted]

[redacted], a welder, alleged that he was terminated for reporting a gouge in a pipe to a QC inspector.

[redacted] allegedly discovered a gouge in a pipe near where he was welding on a pipe hanger. His foreman supposedly wanted to cover it up and witnessed [redacted] showing the gouge to [redacted] 7d Shortly thereafter [redacted] was terminated. Applicants assert [redacted] was terminated for absenteeism.

Evidentiary depositions:

7d [redacted]

Deposition of Jimmie Green; July 9, 1984 (Tr. 35,000-078)

Deposition of John Hallford; July 19, 1984 (Tr. 70,000-059)

Deposition of Fred Coleman; July 9, 1984 (Tr. 35,079-125

GA/GC 40130 addresses.

Valve disk incident

[redacted] alleged that when she brought a discrepancy in valve disk numbers to the attention of her supervisor, he told her it didn't matter, which made [redacted] "discouraged." Id

[redacted] was shown [redacted] with a valve disk number which did not match the disk number of the Data Report. When she brought this to the attention of her supervisor, Gregory Bennetzen, he told her it didn't matter and would cost too much money to check. Applicants assert that it really didn't matter and deny that cost would be a factor if the discrepancy were real.

Evidentiary depositions:

[redacted]

Deposition of Gordon Purdy; July 10, 1984 (Tr. 41,139-156; 266-267)

Testimony:

Prefiled Testimony of Gordon Purdy; Tr. 41,331-336 (8/16/84)

Prefiled Testimony of Gregory Bennetzen; pp. 16-17 (8/16/84 and 8/18/84)

Pressure on N-5 Viewers

[redacted] 7d

[redacted] 7d

Evidentiary depositions:

[redacted] 7d

Testimony:

Prefiled testimony of Gregory Rennetzen; pp. 3-16 (8/16 & 8/18/84)

Prefiled testimony of Gordon Purdy; Tr. 41,323-331 (8/16/84)

Testimony of Gordon Purdy; Tr. 16,268-307 (9/13/84)

9H/QA New one!

QES Review Sheet Incident

[redacted] 7d

[redacted] alleged that Bennetzen ordered a reviewer, Darby, to sign off on a QES cover sheet when the original was missing without having Darby do the review. Applicants assert that this is an acceptable practice.

Evidentiary depositions:

[redacted] 7d

Testimony:

Prefiled testimony of William Darby; pp. 4-12 (8/18/84)

Prefiled testimony of Gordon Purdy; Tr. 41,315-323 (8/16/84)

Testimony of Gordon Purdy; Tr. 16,243-268 (9/13/84)

QA/QC? Anyone home at this!?

Reduction of Force (ROF) Incident

[redacted] 7d

[redacted] 7d

[redacted] 7d

Testimony:

Prefiled testimony of Gordon Purdy; Tr. 41,337-355 (8/16/84)

Testimony of Gordon Purdy; Tr. 16,310-379; 16,384-387 (9/13/84)

Herb — R-III is ready to accept TUGCO's answer to NOV Items A, B + C. B is the subject of AQ-113 (cat 7). Acceptance of B would seem to deflate our point in AQ-113.

TEXAS UTILITIES GENERATING COMPANY

SKYWAY TOWER • 400 NORTH OLIVE STREET, L.B. 81 • DALLAS, TEXAS 75201

BILLY R. CLEMENTS
VICE PRESIDENT NUCLEAR OPERATIONS

November 9, 1984
TXX #4354

Docket No.: 50-445

Mr. Richard L. Bangart, Director
Region IV Comanche Peak Task Force
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Dear Mr. Bangart:

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION
RESPONSE TO NRC NOTICE OF VIOLATION
INSPECTION REPORT NO. 84-22

We have reviewed your letter dated October 11, 1984 on the inspection conducted by Mr. J. E. Cummins and Mr. H. S. Phillips of activities authorized by NRC Construction Permits CPPR-126 and CPPR-127 for Comanche Peak, Units 1 and 2. We are hereby responding to the Notice of Violation listed in Appendix A of that letter.

To aid in the understanding of our response, we have repeated the Notice of Violation followed by our response. We feel the enclosed information to be responsive to the Inspectors' findings. If you have any questions, please advise.

Yours truly,

Billy R Clements

BRC:kh

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

Director, Inspection and Enforcement (15 copies)
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. V. S. Noonan

~~8411140336~~ 8pp

APPENDIX A

NOTICE OF VIOLATION

Texas Utilities Generating Company
Comanche Peak Steam Electric
Station, Unit 2

Docket: 50-445/84-22
Construction Permit: CPPR-126

Based on the results of an NRC inspection conducted during the period of May 19, 1984 through July 21, 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 Maintain a Positive Pressure on Electrical Penetrations

10 CFR Part 50, Appendix B, Criterion V requires that, "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."

Alarm Procedure X-ALB-13B has been established in accordance with Criterion V and requires specific actions to be taken when the Unit 1 electrical penetration low nitrogen pressure alarm is received.

Contrary to the above, on June 19, 1984 the NRC inspector observed that Alarm 2.6 (which monitors Unit 1 electrical penetration nitrogen pressure) was in an alarm condition and determined that the actions required by Alarm Procedure X-ALB-13B had not been performed.

Response

Although Alarm 2.6 (X-ALB-13B) was in an alarm condition at the time of the deficiency, it should be noted that many annunciators were being tested at that time. This testing meant that many annunciators were simultaneously sounding, causing unnecessary noise in the control room. Therefore, some of the above annunciators were silenced and the annunciator for Alarm 2.6 (X-ALB-13B) was inadvertently silenced during this process.

The purpose of the positive nitrogen pressure on the seal is to prevent corrosion of the electrical assemblies due to moisture accumulation. In accordance with the Bunker Ramo Corporation vendor manual (CP-0460-001), the electrical penetrations are not required to be maintained at a positive pressure unless the penetration assembly has a surface temperature below the dew point of the surrounding air or is otherwise subjected to moisture. Given the ambient air temperature at the time of the violation and the air temperatures in the buildings adjacent to the electrical penetration, the surrounding air temperature of the penetrations could not have been below the dew point. Also, due to the relative short time that the penetrations were not under a positive nitrogen pressure, any moisture accumulation could not have occurred.

Corrective Action

The annunciator in question was verified to be correct, and the Shift Supervisor immediately took the appropriate actions to valve in a full nitrogen bottle and repressurize the penetrations on June 19, 1984. In addition, he contacted the responsible Startup Engineer for the system and was advised that it was unlikely that any moisture accumulation had occurred.

Preventive Action

In accordance with Procedure OWI-104, Revision 2, the operators are now required to check the electrical penetration nitrogen pressure once per shift. In addition, the Operations Supervisor has reminded the Shift Supervisors of the need for control room personnel to be particularly aware of all plant alarm conditions during the startup testing phase. This was an isolated incident and should not recur.

Date of Corrective Action Implementation

Corrective action was taken on June 19, 1984.

Failure to Notify the NRC as Required by 10 CFR 50.55(e)

10 CFR Part 50.55(e) requires that, "The construction holder of the permit shall notify the Commission of each deficiency found in design and construction, which, were it to have remained uncorrected, could have affected adversely the safety of operations of the nuclear power plant at any time throughout the expected lifetime of the plant, and which represents:

"A significant deficiency in construction of or significant damage to a structure, system or component which will require extensive evaluation, extensive redesign, or extensive repair to meet the criteria and bases stated in the safety analysis report or construction permit or to otherwise establish the adequacy of the structure, system or component to perform its intended safety function".

10 CFR Part 50.55(e)(2) requires that, "The holder of a construction permit shall within 24 hours notify the appropriate Nuclear Regulatory Commission Regional Office of each reportable deficiency."

Contrary to the above, between February and May of 1983, the licensee identified a common failure of three out of four of the Unit 1 safety-related inverters that necessitated a modification to the ferroresonant output transformer in each of the inverters, but the failures were not reported to the NRC until February of 1984.

Response

This issue addressess a deficiency reported in January of 1984 dealing with Westinghouse supplied GE ferroresonant transformers. The chronological course of events culminating in the issue of a potentially reportable

condition under the provisions of 10CFR50.55(e) as attached (see Attachment 2). A review of the events indicated that the condition was routinely identified in the testing program, properly evaluated to determine the actual cause and extent of the failure, and identified and dispositioned at the proper level. Considering the requests involving unique plant applications and operating history, a comprehensive evaluation concluding that the product was defective was not evident until receipt of the in-house examination results from the manufacturer.

The particular issue identified in the inspection report was controlled in accordance with the CPSES program for identification and resolution of deficiencies observed in the construction and testing phase.

C. Failure to Obtain Work Authorization to Break Brand Industrial Services, Inc. (BISCO) Seals and Reflect Actual "As-Built" Configuration on Drawing SG-873-108T-1

10 CFR Part 50, Appendix B, Criterion V requires that, "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."

Texas Utilities Generating Company (TUGCO) Quality Assurance (QA) Plan, Section 5.0, Revision 2, dated May 21, 1981, requires that construction activities be performed in accordance with documented and prescribed instructions, procedures and/or drawings.

Contrary to the above, on July 14, 1984, the NRC inspector visually inspected and determined that fire rated penetration seals had initially been properly installed by BISCO, but had subsequently been removed by unknown construction personnel who did not process a penetration seal removal request (PSRR) as required by Brown & Root, Inc. (B&R) Procedure CP-CPM-6.10, Revision 11, dated, February 16, 1984. Specifically, Internal Work Release 0217RA and "As-Built" Drawing SG-873-108T-1 show authorized rework and actual configuration on the referenced drawing; however, Seal Trace 5003 had subsequently been broken and damaged when additional cable was run through this seal. No PSRR was processed and the "as-built" drawing showed the seal as completed.

Response

This item of noncompliance deals with control of a fire-rated penetration seal which had been broken and reworked without proper adherence to the construction control program.

Corrective and Preventive Action

Concerns relative to penetration seal installations have recently been observed by project quality assurance. A recent audit of the penetration seal supplier and a corrective action report, both issued in approximately the same time frame as the NRC review, have resulted in the following

programmatic actions to assure positive control of penetration seal activities.

a. Construction reindoctrination of CPSES rules and policies. Although initiated independently by the contractor, several points in the reindoctrination effort deal with specific issues involved in the penetration seal program.

b. Penetration seal verification. Under the direction of the Unit 1 Task Force Manager, teams comprised of building management, quality control and supplier personnel have performed a walkdown of areas within the Unit 1 security boundary. The purpose of the effort was to identify for resolution recognized exceptions, violated and damaged seals. The results of this survey have been entered into the master data base for tracking and completion purposes.

c. Additional programmatic controls involving construction activities for Unit 2. The program of work packaging currently implemented for Unit 2 activities provides clearer definition, control and accountability for all construction.

These efforts represent positive actions to resolve the conditions addressed in the inspection report and preclude further concurrences. The specific process documents reflecting these actions can be reviewed by examination of CAR-038 and TUGCO QA Audit TBIS-5. We have confirmed the specific seal addressed in the tracking item (Seal Trace 5003) is included in this program (MDB Item 8930-607A).

Date of Corrective and Preventive Action Implementation

The dates of Corrective and Preventive Action Implementation will be determined by the current construction schedule.

D. Failure to Document the "As-Built" Configuration

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.

TUGCO QA Plan, Section 10.9 requires that inspections verify conformance with the documented instructions, procedures and drawings for accomplishing the activity.

Procedure QI-QAP 11.1-28, Revision 25, paragraph 3.3.1.1, dated June 11, 1984 delineates and requires that Class 1, 2 and 3 component supports be installed and inspected to assure that base plates are installed within ± 1/4".

Contrary to the above, on July 14, 1984, the NRC inspector visually inspected and measured Seismic Mechanical Shock Suppressor SI-1-071-002-S32K which is a part of the safety injection system. Specifically, nine dimensions on the support plate were found to be 1/2" to 1-5/16" out-of-tolerance.

Response

During the NRC inspection, the inspector identified nine dimensions on the base plate which were out of tolerance. In fact, the only item causing the out-of-tolerance conditions was the center line location of the I-beam attachment to the base plate.

This item has been identified on NCR M-14,557N. Review by engineering indicated that the intended safety function of the support configuration is not impaired. The NRC has been dispositioned stating the support is acceptable without repair or rework.

It has been determined that the subject support was properly inspected to the Construction and QA procedures in effect at the time of installation. The procedures in effect at the time did not require verification of finite structural dimensions which were already a part of the Engineering 79-14 As-Built Program. The support had been inspected and analyzed under this As-Built Program and had been determined to be acceptable as-built.

ATTACHMENT

DATE	DOCUMENT	DESCRIPTION
2-22-83	TDR-629	Startup report documenting transformer failure during pre-op test.
2-22-83	TDR-630	Startup report documenting transformer failure during pre-op test.
5-26-83	TDR-1217	Startup report documenting transformer failure during pre-op test.
6-29-83	SU-83,392	Startup request to engineering noting possible trend in transformer failure. Engineering requested to evaluate failure and provide corrrective action to mitigate or reduce occurrence. Note: TDRs are programmatically trended by startup and evaluated for "reportability" by engineering.
6-29-83	CPPA-31,655	Engineering requests the supplier (Westinghouse) to evaluate failures.
7-11-83	TBX-M-1047	Westinghouse response for action to facilitate review. Westinghouse notes failure rates at other facilities indicates possible unique application at CPSES lending to failure.
7-15-83	CPPA-32,053	Action initiated including shipment of transformers to manufacturer for testing.
7-28-83 8-1-83	SU-83,552 CPPA-32,354	Operating history of the transformers forwarded to supplier as requested.
1-16-84	TBX-M-1138	Supplier/manufacturer test report received by engineering. Report indicates cause of the failure is attributed to insufficient securing of internal transformer parts.
1-16-84	DRR-037	Engineering issued notice to site QA of identification of potential condition adverse to quality.
1-16-84	SDAR-CP-84-04	Deficiency reported and issued.

R-IV draft

In Reply Refer To:
Dockets: 50-445/84-22

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

Gentlemen:

Thank you for your letter of November 9, 1984, in response to our letter and Notice of Violation dated October 11, 1984. We have reviewed your reply and find it responsive to Violations A, B, and C. However, your reply is not fully responsive to Violation D. Your reply acknowledged that the NRC inspector measured the base plate and found that the dimensions exceeded the required tolerances, but it also stated that the subject supports were properly inspected. This item was discussed with Mr. C. Welch of your staff. The inconsistency requires clarification in a supplemental response.

Please provide the supplemental information within 20 days of the date of this letter.

If you have further questions, we will be glad to discuss them with you.

Sincerely,

Dorwin R. Hunter, Chief
Reactor Project Branch 2

cc:
See next page

1. Stumbled over while in OLED. 2/28/5 #1.

Copy — Reg IV Rpt

In Reply Refer To:
Docket: 50-445/84-26

JAN 18 1985

This will be included in QA QA/QC Assessment as this was part of Dick Bangart's TRT effort. #1

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 special inspection of the Safeguards and Auxiliary Building during the period of July 16, 1984, through September 28, 1984, of activities authorized by NRC Construction Permit CPPR-126 for the Comanche Peak Facility, Unit 1, and to the discussion of our findings with you and other members of your staff at the conclusion of the inspection.

This inspection was the fourth in a series of planned construction completion room/area inspections, and the primary [redacted] of this inspection was to [redacted] as-built status of the Safeguards and Auxiliary Building [redacted] ation. This inspection covered construction characteristics, such as cable separation, [redacted], and [redacted] ion, which have been the subject of allegations to the NRC; however, this inspection was not intended to achieve resolution of any specific allegation. Resolution of specific allegations may involve additional inspection in these areas, and may result in additional corrective actions.

Because the inspection [redacted] and subsequently identified significant numbers of deficiencies in the areas of electrical conduit separation, cable tray hangers, [redacted] mounting, configuration, [redacted], and instrumentation tubing, additional corrective actions are required. The deficiencies identifed by the NRC inspectors were based on a limited sample and revealed the failure [redacted] to adequately install and inspect safety-related items. Your corrective actions taken and results achieved should include a program for independent review and [redacted] as appropriate, of [redacted] safety-related systems to ensure conformance with the drawings and specifications. Nonconforming conditions identified shall be processed in accordance with established QA program procedures, including the determination of the generic implications of the deficiencies. This program should be coordinated with the actions planned and taken as a result of the Technical Review Team (TRT) findings.

TF	TF	TL/TF	C/RPB2	D/RIVTF	DRS&P
CObergjj	MSkow	DHunnicutt	DHunter	RBangart	RPDenise
1/16/85	1/16/85	1/16/85	1/16/85	1/17/85	1/17/85

NRR/D:TRT
VNoonan
1/16/85 telephone call with R. Wessman

FOIA-85-55
V/97

IE01
1/1

8502010002 850118
PDR ADOCK 05000445
Q PDR

Portions of four safety-related systems were examined during the inspection. These included the auxiliary feedwater system (AFWS), containment spray system (CSS), component cooling water system (CCWS), and the chemical volume and control system (CVCS). In addition, electrical separation was examined throughout the buildings. 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 these violations, 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.

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

Sincerely,

"Original Signed by
D. M. HUNNICUTT"

Dorwin R. Hunter, Chief
Reactor Project Branch 2

Enclosure:
1. Appendix A - Notice of Violation
2. Appendix B - NRC Inspection Report
   50-445/84-26

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
Licensing
Skyway Tower
400 North Olive Street
Lock Box 81
Dallas, Texas 75201

bcc to DMB (IE01)

bcc distrib. by RIV:

RPB1	RRI-OFS	TX State Dept. Health
RPB2	RRI-CONST.	Juanita Ellis
EP&RPB	R. Bangart, Task Force	Renea Hicks
R. Martin RA	J. Gagliardo (CPSES)	Billie Pirner Garde
C. Wisner, PAO	D. Hunnicutt, Task Force	
R. Denise, DRSP	TRT (CPSES) (2)	
RIV File	S. Treby, ELD	
MIS System	V. Noonan, NRR	

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 2323-EI-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 C13Ø11132, and the 1" airspace is not maintained between C13Ø07415 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:

Flexible Conduit Number	Item Description
• C13G07743	Flex rests on pipe bracket next to valve 1-HV-5365.
• C13G07744	Flex rests on pipe next to valve 1-HV-5365.
• C14Ø21161	Flex rests on pipe support for 1-MS-030 and 1-MS-268.
• C13G12499	Flex rests on support for JB1S 455G.
• C13G08781	Flex touches corner of support for valve 1-HV-4179.
• C12Ø05387	Flex touches pipe at elbow passing near valve 1-HV-8106.
• C13Ø15915	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.
• C12Ø02856	Flex contacts 1-HV-2480.

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

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.

Category	Component or Drawing	Number of Items
Welding	MS-1-026-010-S75K	1
	AF-1-026-005-S33R	1
	Inst. Rack CP1-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-AB-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 CP1-EIPRLI-31	1
	1-FT-2458	1
	C14Ø10056-2	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)

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: JAN 18 1985

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-445/84-26 Construction Permit: CPPR-126

Docket: 50-445 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), Unit 1

Inspection At: CPSES, Unit 1, Glen Rose, Texas

Inspection Conducted: July 16 - September 28, 1984

Inspectors: for D M Hunnicutt 1/16/85
C. R. Oberg, Reactor Inspector, RIV Task Force Date

M E Skow 1/16/85
M. E. Skow, Reactor Inspector, RIV Task Force Date

Other Accompanying Personnel: W. R. Bennett, Reactor Inspector, RIV

Approved: D M Hunnicutt 1/16/85
D. M. Hunnicutt, Team Leader, RIV Task Force Date

Inspection Summary

Inspection Conducted July 16-September 28, 1984 (Report 50-445/84-26)
Areas Inspected: Special inspection of construction inside Unit 1 Auxiliary and Safeguards Buildings of piping and pipe supports, safety-related equipment, electrical raceway and supports, as-built program, and instrumentation. Expanded inspection of the containment building included piping and pipe supports, electrical conduit and supports, and instrumentation. The inspection involved 726 inspector-hours onsite by three NRC inspectors.

Results: Within the areas inspected, two violations and one resolved item was identified. One violation was identified in the electrical area pertaining to flexible conduit separation (445/8426-01, paragraph 9) and one violation pertaining to QC inspection of pipe supports and cable tray hangers (445/8426-02, paragraph 11).

An outline of the report follows:

Region 4 Rpt.

FEB 12 1985

Comanche Peak

In Reply Refer To:
Docket: 50-445/84-31

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 by Messrs. D. L. Kelley, W. F. Smith, and NRC contract personnel of this office during the period August 1-31, 1984, of activities authorized by NRC Construction Permit CPPR-126 for the Comanche Peak Facility, Unit 1, and to the discussion of our findings with Messrs. J. T. Merritt and J. C. Kuykendall and other members of your staff at the conclusion of the inspection.

Areas examined during the inspection included: Preoperational Test Results Evaluation; Inspection of Operational Quality Assurance/Quality Control; Control Room Design Review; Preoperational Test Witnessing; and Plant Tours. These findings are documented in the enclosed inspection report. Within these areas, the inspection consisted of selective examination of procedures and representative records, interviews with personnel, and observations by the inspectors.

During this inspection, it was found that certain of your activities were in violation of NRC requirements. Consequently, you are required to respond to these violations, 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.

Seven unresolved items are identified in report paragraphs 2 and 3.

RRI	RRI	TL/TF	RPB2	NRR
DLKelley/lt	WFSmith	DHunnicutt	DRHunter	VNoonan
2 /11 /84	2 /11 /84	2 /11 /84	2/11/84	1 /25 /84

8502190308 2pp

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

Sincerely,

"Original Signed"
D. R. HUNTER

Dorwin R. Hunter, Chief
Reactor Project Branch 2

Enclosure:
1. Appendix A - Notice of Violation
2. Appendix B - NRC Inspection Report
   50-445/84-31

cc w/enclosure:

Texas Utilites Electric Company
ATTN: John Beck, Manager
Nuclear Services
Skyway Tower
400 North Olive Street
Lock Box 81
Dallas, Texas 75201

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

bcc: to DMB (IE01)

bcc distrib by RIV:

RPB1
RPB2
TPB
R. Martin, RA
R. Denise, D/RRP&EP
S. Treby, ELD
MIS SYSTEM
RIV File
TEXAS STATE DEPT OF HEALTH
Juanita Ellis
Renea Hicks
Resident Inspector OPS
Resident Inspector Const
R. Bangart, D/TF
D. Hunter, RPB2
C. Wisner, PAO
V. Noonan, TRT

APPENDIX

NOTICE OF VIOLATION

Texas Utilities Electric Company
Comanche Peak Steam Electric Station

Docket: 50-445/84-31
Permit: CPPR-126

Based on the results of an NRC inspection conducted during the period of August 1-31, 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. 10 CFR Part 50, Appendix B, Criterion V and FSAR Section 17.2.5, state in part, "Activities affecting quality shall be . . . accomplished in accordance with these instructions, procedures, or drawings."

   Contrary to the above, the applicant:

   - failed to make changes to ELM-302, Revision 0, "480V Circuit Breaker Inspection and Testing," Section 6.0 in accordance with STA-205, Revision 2, "Temporary Changes to Procedures;"

   - failed to properly perform a review of Attachment 2 to ELM-302;

   - failed to make the entries in the "Safety-Related OSD Log", as required by WHS-001, Revision 9, "Receiving and Inspection of Material, Parts and Components";

   - failed to make changes to Section 8.2 of "CPSES Protective Relay Settings (480V Safeguards Buses)" in accordance with STA-205;

   - failed to tag items in the level A storage areas as required by WHS-002, Revision 5, "Handling and Storage"; and

   - failed to include "Q" material handling equipment on the plant's periodic maintenance and inspection program as required by WHS-002, Revision 5, "Handling and Storage."

   This is a Severity Level IV Violation (Supplement II-D) (445/8431-05)

2. 10 CFR Part 50, Appendix B, Criterion VIII states, in part, that measures shall be established for the identification and control of materials, parts, and components, including partially fabricated assemblies and as identified in FSAR, Section 17.2.8, "Identification and Control of Materials, Parts, and Components," which states, in part, ". . . materials, parts, and components be identified and controlled to prevent the use of incorrect . . . items."

   Contrary to the above, the applicant stored quality and non quality material together in a "Q" material-hold area of the maintenance building.

   This is a Severity Level V Violation (Supplement II-D) (445/8431-07)

~~8502190311~~ 3pp

3. 10 CFR Part 50, Appendix B, Criterion V and FSAR Section 17.2.5, states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures or drawings. . . ."

   Contrary to the above:

   - Procedure STA-602, Revision 0, "Temporary Modifications and Bypassing of Safety Functions," did not require adequate control for temporary modifications;

   - Design control procedure NDE-201 did not adequately address the performance of emergency modifications; and

   - Record retention requirements had not been adequately established in station procedure STA-302, Revision 4, in that four Technical Specification record types were not identified for retention.

   This is a Severity Level V Violation (Supplement II-D) (445/8431-08)

4. 10 CFR 50, Appendix B, Criterion XII, states, in part that measures shall be established to assure that tools, gages, instruments, and other measuring and testing devices used in activities affecting quality an properly controlled, calibrated, and adjusted at specified periods to maintain accuracy within necessary limits.

   CPSES FSAR, Section 17.2.12, "Control of Measuring and Test Equipment," states in part, ". . . Control for measuring and test equipment include the transportation, storage, and protection of equipment.

   The Operation Administrative/QA Plan established the responsibilities for developing and implementing procedures for control of measuring and testing equipment.

   Contrary to the above, control and calibration of measuring and testing equipment was not adequately established, including assignments of responsibility for equipment checkout and transportation.

   This is a Severity Level V Violation (Supplement II-D) (445/8431-14)

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

3. 10 CFR Part 50, Appendix B, Criterion V and FSAR Section 17.2.5, states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures or drawings. . . ."

   Contrary to the above:

   - Procedure STA-602, Revision 0, "Temporary Modifications and Bypassing of Safety Functions," did not require adequate control for temporary modifications;

   - Design control procedure NDE-201 did not adequately address the performance of emergency modifications; and

   - Record retention requirements had not been adequately established in station procedure STA-302, Revision 4, in that four Technical Specification record types were not identified for retention.

   This is a Severity Level V Violation (Supplement II-D) (445/8431-08)

4. 10 CFR 50, Appendix B, Criterion XII, states, in part that measures shall be established to assure that tools, gages, instruments, and other measuring and testing devices used in activities affecting quality an properly controlled, calibrated, and adjusted at specified periods to maintain accuracy within necessary limits.

   CPSES FSAR, Section 17.2.12, "Control of Measuring and Test Equipment," states in part, ". . . Control for measuring and test equipment include the transportation, storage, and protection of equipment.

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   Contrary to the above, control and calibration of measuring and testing equipment was not adequately established, including assignments of responsibility for equipment checkout and transportation.

   This is a Severity Level V Violation (Supplement II-D) (445/8431-14)

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

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

NRC Inspection Report: 50-445/84-31

Docket: 50-445 Construction Permit: CPPR-126

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

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

Inspection At: Glen Rose, Texas

Inspection Conducted: August 1-31, 1984

Inspectors: D. M. Hunnicutt for D. L. Kelley, Senior Resident Reactor Inspector (SRRI)(paragraphs 2, 3, 4, 5 and 6) 2/11/85 Date

for D. M. Hunnicutt W. F. Smith, Resident Reactor Inspector (RRI) (paragraphs 2, 3, 5 and 6) 2/11/85 Date

Approved: D. M. Hunnicutt D. M. Hunnicutt, Team Leader, RIV Task Force 2/11/85 Date

Inspection Summary

Inspection conducted: August 1-31, 1984 (Report: 50-445/84-31)

Areas Inspected: Routine, announced inspection of: (1) Preoperational Test Results Evaluation; (2) Operational Quality Assurance/Quality Control; (3) Control Room Design Review Status; (4) Preoperational Test Witnessing; and (5) Plant Tours. The inspection involved 573 inspector-hours by two NRC inspectors and two NRC contract personnel.

~~8502190314~~ 7pp

Results: Within the five areas inspected, four violations were identified in two areas (failure to follow procedures with six examples - paragraphs 3.c and 3.g; failure to provide adequate procedures with three examples - paragraphs 3.c, 3.d, and 3.h; failure to provide adequate "Q" material storage segregation, paragraph 3.c; and failure to establish requirements for control and calibration of M&TE, paragraph 3.j).

J. Moorefield, Proced res Clerk
A. Riley, Records Clerk
T. Seidl, Warehouse Supervisor
J. Helms, Records Clerk
L. Holland, Office Assistant
T. Summers, Records Management Specialist
P. Smith, Administrative Supervisor
D. R. Stepp, Receipt Inspector
R. Coon, Purchasing Coordinator
(*1)(*2) D. E. Deviney, Operations QA Supervisor
(*1) C. Killough, Quality Surveillance Supervisor
L. A. Lamb, Jr., Senior QA Technician/Procurement Specialist
(*2) J. T. Maxwell, Quality Control Supervisor
(*2) G. S. Keeley, Principal Engineer, TUGCO Nuclear Operations
S. M. Franks, Startup Special Projects

(*1) Attended Meeting on August 20, 1984
(*2) Attended Exit Meeting on August 24, 1984

2. Preoperational Test Results Evaluation

With the assistance of supplemental inspectors provided by EG&G Idaho, Inc., under contract with the NRC, completed test packages which have been approved by the Joint Test Group (JTG) were reviewed. Attributes inspected included assuring the test results were being adequately evaluated, to assure test data met acceptance criteria, and that deviations were properly identified and resolved. An evaluation was performed on the adequacy of the applicant's administrative practices with respect to test execution and data evaluation.

The following completed test data packages were inspected:

1CP-PT-37-02, "Condensate Storage and Transfer System"

1CP-PT-37-02, "Condensate Storage and Transfer System ReDo"

1CP-PT-49-02, "Sealwater and Letdown Flow Performance"

1CP-PT-49-02, RT-1, "Sealwater and Letdown Flow Performance, Retest-1"

1CP-PT-49-02, RT-2, "Sealwater and Letdown Flow Performance, Retest-2"

1CP-PT-55-01, "Reactor Coolant System Cold Hydrostatic Test"

1CP-PT-55-10, "Pressurizer Pressure Control System

1CP-PT-64-09 "Safeguards Test Cabinets Direct Actuation Operational Test"

1CP-PT-64-09, RT-1, "Safeguards Test Cabinets Direct Actuation Operational Test, Retest-1"

1CP-PT-74-02, "Incore TC and RTD Cross Calibration"

1CP-PT-91-01, "Loose Parts Monitoring System"

The inspector had specific comments on the following completed test packages:

1CP-PT-37-02

During the test, the total discharge head (TDH) requirements for the condensate transfer pump were reduced by a change in the test procedure. The original requirements were for the pump to develop a TDH of 200 feet (+5%, -0%) at a flow of 200 gallons per minute (gpm). These requirements were changed to 200 feet, (+10 feet, -10 feet) at 200 gpm. The test was accepted with a TDH of 195 feet in the recirculation mode and 198 feet in the condensate system feed mode. The justification given for the reduction of TDH requirements was unclear, and the question of degradation of system performance was not addressed in the completed test package. The NRC inspector was unable to determine whether adequate system performance was satisfactorily verified. This item is unresolved pending further review during a subsequent inspection (445/8431-01).

1CP-PT-37-02 ReDo:

Verification of proper operation of the Condensate Transfer Pump Low Suction Pressure Alarm (AP) 1-XA-2490 was deleted by change No.6 from the test procedure when it failed to trip. The change stated that the actuation signal for this alarm was pump over-current and not low suction pressure. The test verified that the pump will trip on low suction pressure, as indicated on the test pressure gage, but there was no annunciator in the control room indicating the event. When this part of the test was done on November 1, 1982, PA 1-XA-2490 did indicate a low suction pressure trip. The reason that this feature no longer exists should be explained in the test record for the repeated test. This is an unresolved item pending further review during a subsequent inspection (445/8431-02).

1CP-PT-55-01

Paragraph 7.3.38 of the test procedure requires the weld inspection documentation package to be attached to the test procedure. The NRC

inspector reviewed this package and found no documentation of specific welds inspected, but rather, several one-line system diagrams highlighted (but not signed) to show the boundaries that might have been subjected to test pressure, a computerized line list by system, and a signoff sheet indicating that acceptance criteria of the test had been met. This package does not define what welds were inspected. This is an unresolved item pending further review during a subsequent inspection (445/8431-03).

No violations or deviations were identified.

3. Review of the Operations Quality Assurance Program

a. Quality Assurance (QA)/Quality Control (QC) Administration

The purpose of this portion of the inspection was to determine whether the applicant had: (1) defined the scope and applicability of the QA program; (2) established appropriate controls for preparation, review, and approval of quality related procedures; and (3) established a mechanism for reviewing and evaluating the QA program.

The inspectors reviewed the applicant's written program for administration and control of quality related activities as described in:

- The licensee's Corporate Quality Assurance Program
- Proposed Technical Specifications, Section 6, "Administrative Controls" (Final Draft)
- Final Safety Analysis Report (FSAR), Chapter 13, "Conduct of Operations" and Chapter 17.2,"Quality Assurance During the Operations Phase"
- Comanche Peak Steam Electric Station (CPSES) "Operations Administrative Control and Quality Assurance Plan" (OAC/QAP)
- CPSES Operations Quality Assurance Procedure QPM-003, Revision 1, "Review of Procedures, Instructions and Plans"
- QPM-006, Revision 0, "Quality Assurance Trending"
- QPM-011, Revision 0, "Preparation, Review, Approval and Revision of Quality Instructions"

- CPSES Station Administrative Procedure STA-101, Revision 1, "CPSES Organization"
- STA-201, Revision 8, "Preparation Responsibility and Content of Station Manuals"
- STA-202, Revision 9, "Preparation, Review, Approval and Revision of Station Procedures"
- STA-204, Revision 1, "Temporary Procedures"
- STA-205, Revision 3, "Temporary Changes to Procedures"
- STA-209, Revision 1, "Preparation, Review, Approval and Revision of Station Instructions"
- STA-401, Revision 6, "Station Operations Review Committee" (SORC)
- STA-404, Revision 1, "Control of Deficiencies"
- STA-405, Revision 6, "Control of Non-conforming Materials"
- STA-406, Revision 2, "Corrective Action"
- STA-412, Revision 2, "Quality Control Inspection Program"
- STA-707, Revision 1, "Safety Evaluations"
- SORC Meeting Minutes - 1984
- Selected corrective action requests (CARs)
- Selected deficiency reports (DRs)
- Selected nonconformance reports (NCRs)
- Safety evaluations associated with procedures and procedure changes
- Selected procedure/revision approval forms (STA-202-1)
- Selected procedure revision forms (STA-202-2)
- Selected quality assurance section procedure/instruction review sheets (QPM-003-1)

- Selected results engineering procedure review records

The NRC inspector conducted a review of the applicant's quality programs for CPSES and held interviews with key personnel. The written program for control of operational activities at CPSES was generally mature and settled. Many operational programs like the operational modification control program were being tried and tested so that they could be revised well before licensing. Revisions to the written program were being developed in an orderly and systematic fashion.

There was evidence of substantial involvement by Texas Utilities Generating Company (TUGCO) upper management in CPSES operational activities. This evidence was found in the distribution of key reports, the detailed nature of such reports, and the questions and responses by upper managers to information contained in the reports. Several of these managers, though normally stationed at the Dallas corporate headquarters, spend large fractions of their time at CPSES. The TUGCO President was on the station each Saturday morning for staff meetings and briefings on progress of construction, testing and preparation for operations. Additionally, the contractor inspectors conducted a general inspection of all plant areas, including containment, auxiliary building, turbine building and yard areas. There was heavy emphasis on housekeeping and cleanliness in Unit 1. Areas were brightly lighted, freshly painted, and were free of dust, debris and graffiti. The overall appearance of the Unit reflected substantial pride in the station on all levels of personnel.

The review of the QA/QC program administration for operations revealed five specific weaknesses:

(1) Safety Evaluations Associated with Procedures

The applicant's process for developing and revising procedures had several apparent deficiencies when compared to the requirements of 10 CFR 50.59, a section of NRC regulations that will apply after issuance of the facility operating license. For example:

(a) STA-707 specified how safety evaluations were to be performed, documented, approved and reviewed for procedures, procedure changes and facility modifications. The applicability section of STA-707 restricted the preparation of safety evaluations for procedures by stating, "Prior to the receipt of an operating license, this procedure becomes effective when issued only for Surveillance Test Procedures and Design Modifications." As

If evident by answer they don't intend to comply, then cite them

February 25, 1985
EN 85-18

OFFICE OF INSPECTION AND ENFORCEMENT
NOTIFICATION OF SIGNIFICANT ENFORCEMENT ACTION

Licensee: Florida Power and Light Company
Turkey Point Plant, Units 3 and 4
Docket Nos. 50-250 and 50-251

Subject: PROPOSED IMPOSITION OF CIVIL PENALTY - $25,000

This is to inform the Commission that a Notice of Violation and Proposed Imposition of Civil Penalty in the amount of Twenty-five Thousand Dollars will be issued on or about February 28, 1985 to Florida Power and Light Company. This action is based on one violation which is categorized as a Severity Level III violation. The violation identifies a failure to maintain operability of the Intake Cooling Water system as required by the facility Technical Specifications and the failure to adhere to administrative control requirements and procedures.

The Notice also includes three other violations which were categorized as three separate Severity Level IV violations. These violations involved: (1) two examples in which unreviewed safety question evaluations in accordance with the requirements of 10 CFR 50.59 were not conducted, (2) several examples of the failure to meet Technical Specification requirements for equipment operability, and (3) several examples of the failure of the Plant Nuclear Safety Review Committee to detect potential safety hazards.

It should be noted that the licensee has not been specifically informed of the enforcement action. The Regional Administrator has been authorized by the Director, Office of Inspection and Enforcement to sign this action. The schedule of issuance and notification is:

Mailing of Notice	February 28, 1985
Telephone Notification of Licensee	February 28, 1985

A news release has been prepared and will be issued about the time the licensee receives the Notice. The State of Florida will be notified.

The licensee has thirty days from the date of the Notice in which to respond. Following NRC evaluation of the response, the civil penalty may be remitted, mitigated, or imposed by Order.

Contact: B. Beach, IE 24766 J. Axelrad, IE 24909

IND.	INFO.	ACTION	INIT.
HHL	/		
TPG	/		
WTC	/		
PLH	/		
CLV			
FILE			

Distribution:

H Street	MNBB ____	Phillips ____	EW ____	Willste ____
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Comm. Bernthal	ELD		AEOD	
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PE		RII ____	RV ____	PDR
		RIII ____		

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PRELIMINARY INFORMATION - NOT FOR PUBLIC DISCLOSURE UNTIL FEBRUARY 28, 1985.

a result, many other procedures had been prepared, issued and revised without an accompanying safety evaluation and determination of whether or not an unreviewed safety question existed as defined in 10 CFR 50.59. Categories of procedures not having safety evaluations included all System Operating Procedures (SOPs), all Abnormal Conditions Procedures (ABNs), all but one Integrated Plant Operating Procedures (IPOs), all E and F series procedures in the Emergency Response Guideline Manual, and all but one Station Administrative Procedures (STAs).

(b) Revision 9 to STA-202, which was effective on August 2, 1984, added requirements to perform safety evaluations on all safety-related procedures and revisions thereto. However, this would not ensure compliance with 10 CFR 50.59, which requires such evaluations of changes to procedures as described in the FSAR (emphasis added) which may include non-safety related procedures.

(c) Safety evaluations for 25 surveillance procedures, 1 IPO and 1 STA were reviewed by the NRC inspector and were found to be inadequate, in that the safety evaluations lacked the written basis for the unreviewed safety question determination required by 10 CFR 50.59. The evaluations merely contained a statement of the conclusion that an unreviewed safety question did not exist.

(d) STA-205, section 4.1.4, stated, "All temporary procedure changes implemented in accordance with this procedure . . . do not require safety evaluations due to the intent of the procedure not changing and quality assurance requirements not being diminished." Little guidance could be found in the applicant's written program suggesting how personnel might determine if a procedure's intent were changed. 10 CFR 50.59 makes no reference to the intent of a procedure, nor does it delete the requirements for an unreviewed safety question determination for temporary changes.

Although the above weaknesses with regard to safety evaluations for procedures have no strict regulatory significance until the issuance of the CPSES facility operating license (because 10 CFR 50.59 will not apply until that time), the applicant would be in instant non-compliance, if the license were issued with the weaknesses left uncorrected.

again we don't identify weaknesses.

(2) Station Operating Review Committee (SORC) Activities

SORC activities were described in STA-401 and in proposed Technical Specifications (TS) Section 6.5.1. Although, the TS will not be effective until issuance of the facility license, interviews with SORC members and a review of SORC records revealed the following weaknesses:

(a) The SORC had developed a practice of conducting the majority of its TS required reviews as individual members outside of the committee meetings. For instance, the Engineering Superintendent, a SORC member, approved safety evaluations on behalf of the SORC outside of the committee meetings. Coincidentally, this approval was part of his normal job as Engineering Superintendent. Effectively, he was acting as a SORC subcommittee of one for review of safety evaluations. STA-401 did not describe this de facto subcommittee, nor did it describe the SORC's oversight and control of this subcommittee. SORC meeting minutes stated that the SORC reviewed lists of safety evaluations approved since the last regular SORC meeting. The lists merely contained the surveillance procedure numbers for which safety evaluations had been prepared. The lists did not contain any other information about the safety evaluation, nor did the SORC appear to have reviewed the safety evaluations, while in session, which will be a TS requirement upon licensing.

another example of bypassing an established review system.

(b) SORC review of procedures and procedure changes was conducted in a fashion somewhat similar to (a) above, although these documents were routed individually to SORC members for review, comment, or concurrence using Form STA-202-1. A review of these forms and associated comment sheets showed that many procedures received considerable review and comment and were at times subjected to multiple submittals and revision prior to approval. This entire process, including final SORC approval, took place outside of committee meetings except in rare instances when substantial staff disagreement necessitated SORC deliberation as a group. The SORC meeting minutes reflected that the SORC as a collective body reviewed lists of procedures and instructions approved since the last regular meeting. These lists consisted of procedure and instruction numbers and titles. There did not appear to be any mechanism to ensure that all SORC members were made aware of comments and resolutions of comments made by the other SORC members. The current method of SORC review and approval of procedures is such that a given procedure could have changes that the first member who

No coordination in the review system.

Para (2) indicates that there is no SORC system.

approved it had never seen. Thus he won't recognize the impact on his area of responsibility until the procedure is published and implemented.

(c) Interviews with SORC members revealed that many members had a poor understanding of the applicability and requirements of 10 CFR 50.59 and of the meaning of an unreviewed safety question.

(3) Limited Scope for the Operations Administrative Control and Quality Assurance Plan (OAC/QAP)

It is evident in (3), that the QA Plan is inadequate - vague and piecemeal. I would term it as non-compliance with a rejoinder.

The OAC/QAP was written to describe quality-related program controls applicable to Texas Utilities Generating Company (TUGCO) Nuclear Operations. Included within TUGCO Nuclear Operations was the CPSES plant organization, however, several different TUGCO corporate organizations that were outside of Nuclear Operations performed nuclear quality-related activities. Included were TUGCO Nuclear Engineering (TNE), Dallas QA, Nuclear Fuels, Licensing and Purchasing. These organizations were governed by the FSAR, and by the Corporate Quality Assurance Program which was a brief and general document. The limited scope of the OAC/QAP was particularly awkward in the case of design control in that the OAC/QAP section 8.1 placed requirements on the predecessor organization to the TNE, Texas Utilities Services, Inc., even though that organization was outside the scope of the plan, as well as TNE.

Has no business here. It is an opinion and has no basis for fact.

Another factor potentially leading to confusion about the scope and applicability of OAC/QAP requirements involved the terms "safety related," "important to safety" and "quality related". These terms were not defined in the OAC/QAP but were used throughout the plan in such a manner that they could be interpreted differently. Interviews with the Operations Quality Assurance Supervisor indicated that he had a clear notion of how these terms differed and were to be applied to CPSES. However, his conception had not been explicitly stated in the OAC/QAP and thus could not be consistently reflected in other portions of the licensee's written program. Thus, there is a need for an expansion or change in scope of the OAC/QAP. This matter is an open item pending further review in a subsequent inspection (445/8431-04).

(4) Instructions and Procedures

The applicant had developed two principal categories of documents to control activities, instructions and procedures. Interviews with applicant personnel revealed that instructions were intended

I would say (4) is in non-compliance with Crit V.

This is a good general overview review, but should be followed by a detail inspection. Sufficient detailed review of procedures, incl. S. procedures & implementation of, etc.

to apply to activities that were narrow in scope and did not affect other departments. For instance, steps necessary to calibrate a radiation detection instrument might be described in an instruction. Instructions had simpler review and approval processes than procedures. Significantly, SORC review and approval of instructions was not required by STA-209, "Preparation Review, Approval and Revision of Station Instructions".

In practice this concept did not prove to be simple, because some instructions affected more than one department and were then required to receive cross departmental review and concurrence. STA-209 was internally incpnsistant in that paragraph 4.1 stated, "Instructions shall be unique to a particular department or section," while paragraph 4.2.4 required concurrence from another department or section when affected by the instruction. This ambiguous distinction between procedures and instructions was considered a program weakness. — we don't do weaknesses . . .

(5) QA Stop Work and Resolution of Disputes

= who? Qualify? Need more details

Again this is another example of non-compliance with Crit V.

The applicant's written program clearly stated those personnel within operations QA who possessed stop work authority. However, the stop work process, including notification, controls and approval for restart, was not described. Interviews revealed that upper level personnel had a clear picture on how specific internal letters would be used to control stop work or to resolve disputes. However, interviews with lower level personnel presented a less clear picture on how such processes might take place. The lack of a written description of the stop work process was considered ~~a program weakness.~~ No.

b. QA Audit and Surveillance Programs

The purpose of this portion of the inspection was to determine whether the applicant had developed a program to audit operational activities for conformance with regulatory requirements and commitments, including regulatory guides and industry standards.

The inspectors reviewed the licensee's written description of the QA audit program as described in:

- Proposed Technical Specifications, Section 6.5.2.8 (final draft)
- FSAR, Section 17.2.18
- Dallas Quality Procedure DQP-CS-4, Revision 10, "Procedure to Establish and Apply a System of Pre-Award Evaluations, Audits and Surveillances"

- DQP-CS-7, Revision 5, "Corrective Action"
- Dallas Quality Instruction DQI-CS-4.6, Revision 7, "Conduct of Internal, Prime and Subcontractor Audits"
- DQI-CS-4.2, Revision 2, "Audits of Technical Specifications Compliance"
- Operations Review Committee Manual
- Current Audit Plans and Schedules
- Selected Audit Reports, Deficiencies, Checklists and Responses
- CPSES Station Administrative Procedure STA-402, Revision 5, "Station Quality Surveillance Program"
- Selected Quality Surveillance Checklists, Schedules, Worksheets, Reports and Responses

delete

This is a testimonial opinion with no basis for fact. No details.

A significant strength in the applicant's operations quality program was the Quality Surveillance. This program has been under development and evolution for several years and emphasized direct observation of activities as well as programmatic and records examinations. Surveillance checklists and worksheets provided detailed guidance to the QA Technicians conducting surveillances. Surveillance reports contained detailed descriptions of the results of the surveillance and were widely distributed to key station and corporate managers. This program went well beyond TS and regulatory requirements and should greatly enhance the applicant's oversight and control of CPSES operational activities.

delete its opinion

Can't understand!!! No details.

A review of the applicant's written program revealed that the applicant had established and begun to implement an operational quality assurance audit program. Audit plan and schedules reflected an increased emphasis on operational audits with a phased program to ensure adequate audit coverage for all required TS Section 6.5.2.8 audits by the time of facility licensing.

Too big a generalization for so few audits looked at and so few details!

A review of completed audit files for audits of operational activities conducted in 1984 showed audit checklists to be clear and detailed and the corresponding reports contained generally noteworthy deficiencies and comments. Responses to deficiencies appeared to be thorough and timely. Two isolated administrative weaknesses were observed in a review of ten audit reports and three complete audit files:

—e.

(a) The audit plan was missing from the file for audit TUG-51. A copy of this plan was retrieved from other applicant files within one day.

(b) In the same audit, the auditor failed to document sample sizes selected for checklist attributes requiring sampling. Sample sizes were documented in all other checklists examined. Review results and interviews conducted by the inspector reflected QA management's emphasis on record completeness and on the need for sample data as an input to their QA trending program, thus detection of this isolated documentation failure is of no generic significance.

This again is an opinion based on too few samples.

c. Maintenance

This doesn't belong under QA.

The objective of this portion of the inspection was to ascertain whether the applicant had developed a program to control maintenance activities that conformed to regulatory requirements, commitments, industry guides, and standards. Particular attention was directed toward procedures and methods of handling safety related maintenance actions. Both preventive and corrective maintenance procedures and methods were reviewed. The inspection included reviews of procedures and records, personnel interviews, a maintenance drill, facility inspections and reviews of in-progress maintenance work. Personnel contacted included representation from all levels of the maintenance organization.

The inspectors reviewed the applicant's written description of the maintenance program as described in the following documents:

- CPSES Operations Administrative Control and Quality Assurance Plan
- CPSES FSAR, Chapter 17
- MDA-101, Revision 0, "Maintenance Department Organization and Responsibilities"
- MDA-102, Revision 0, "Conduct of Maintenance"
- MDA-103, Revision 4, "MAR Processing - Maintenance Department"
- MDA-105, Revision 0, "Control of Maintenance Contractors"
- MDA-201, Revision 3, "Electrical and Mechanical Maintenance Procedures and Instructions"

- MDA-301, Revision 4, "Preventive Maintenance Program"
- EDA-305, Revision 0, "Control of Protective Relay Settings"
- STA-602, Revision 0, "Temporary Modifications and Bypassing of Safety Functions"
- STA-605, Revision 3, "Clearance and Safety Tagging"
- STA-606, Revision 3, "Maintenance Action Requests"
- STA-607, Revision 5, "Housekeeping Control"
- STA-612, Revision 0, "Cleanness Control"

The following observations were made by the NRC inspectors in the area of maintenance:

(1) A maintenance drill was conducted that included a coordinated effort between two NRC inspectors to examine activities in the areas of maintenance, maintenance planning, documentation, records, procurement and quality control inspections. The drill was designed to exercise both Electrical and Mechanical Maintenance Departments in addition to personnel within the Technical Support, Procurement, and Quality Control Departments. A containment spray heat exchanger outlet valve was simulated to have failed to properly stroke during operation and subsequent investigation would reveal damaged motor insulation. Measuring the motor winding resistance to ground would indicate zero resistance; and the valve stem was also simulated to be badly scored with extruded packing. The walk through involved discovery by the Shift Supervisor and initiation of all necessary documentation to accomplish the investigation and repair. Documentation developed included the following:

- Preparation of an electrical Maintenance Action Request (MAR).
- Preparation of a supplemental mechanical MAR.
- Preparation of Quality Control inspection reports.
- Use of procedures needed to troubleshoot and repair.
- Reference to drawings.

- Use of Clearances.
- Use of MAR addendums.
- Entries in the MAR log.
- Requisition on Purchasing Department (form PUR-001-1).
- Reference to suppliers quality assurance requirements and certificate of conformance.
- Use of nameplate data form.
- Preparation of a component items QA code classification evaluation (EDA-103-).

The following items were appended to the drill MAR that was prepared for NRC inspector review:

- Quality Control inspection report
- EMI-807, Revision 0, "MOV's/MOD's Limit and Torque Switch Adjustments"
- EMI-203, Revision 0, "Cable Termination and Splices"
- ELM-201, Revision 0, "Megger and Hi-Pot Testing"
- Motor Operated Valve 1-HV-4777 drawing 2323-EI-0049, sheet 12, Revision 7

Only Maintenance Department related items observed by the inspectors are addressed in this section of the report. Items relating to Procurement will be addressed in section 3.f of this report.

When the NRC inspector reviewed the drill MAR, the following deficiencies were noted:

- The specification for motor horsepower listed on the controlled drawing was different from the indicated horsepower on the motor nameplate.
- The MAR did not reference appropriate vendor technical manuals for removal and reinstallation of the motor. A check of the document library indicated that these manuals were available.

- The MAR package did not reference any torque specifications for installation of the motor on the operator.

- The MAR required the use of a new quality related gasket. No specifications were referenced, nor was any documentation prepared to obtain the required gasket.

(2) In addition to the drill MAR, the following completed actual MARs were reviewed:

84-2017	Safety Related
84-1677	Voided
84-1516	Safety Related
84-1403	Safety Related
84-1427	Non-safety
84-0976	Safety Related
84-0978	Safety Related
84-2019	Safety Related
84-1752	Non-safety
84-1025	Safety Related

During the review, the following significant deficiencies were noted with MAR 84-1403:

- The copy of safety related procedure, ELM-302, Revision 0, "480V Air Circuit Breaker Inspection", that was appended to the MAR, had pen and ink changes to the closing coil settings in Section 6.0, "Acceptance Criteria". A controlled copy of ELM-302, Revision 0, sighted in the vault did not reflect these changes. The changes appeared to have been made to make the procedure match the information on the data sheet used to record the voltages (Attachment 2 to ELM-302). A Review of the Temporary Change Log indicated that the temporary change procedure, STA-205, Revision 2 was not used to make the change. This failure to use STA-205 was noted by plant Quality Control personnel and a Discrepancy Report was issued. However, the corrective action on the Discrepancy Report was inadequate in that it recommended no corrective action since the

procedure was being changed to an instruction. Also, there was no apparent technical consideration given to the disparity between the approved voltage setting and the value found on the data sheet. This change is an example of failure to follow procedures and is in violation of 10 CFR 50, Appendix B, Criteria V, and FSAR Section 17.2.5 (445/8431-05a).

- o The trip coil and close coil voltages on Attachment 2 of ELM-302 appended to the same MAR appeared to have been reversed when they were entered causing one of them to be outside the acceptance criteria. This inconsistency went undetected in the review process by both the electrical supervisor and Results Engineering personnel. This oversight is a second example of failure to follow procedure (445/8431-05b).

- o The CPSES Protective Relay Settings (480V Safeguard Buses) Section 8.2 appended to the same MAR had pen and ink changes to the instantaneous trip settings with no apparent authority or basis. These changes are a third example of failure to follow procedure (445/8431-05c).

Two minor deficiencies were noted:

- o Cross-outs were not initialed on Startup Work Authorization #21269 that was appended to MAR 84-2017.

- o The classication section of MAR 84-1516 was not filled out. (i.e. emergency, 25 hour, regular, etc.).

Correction of the above minor MAR deficiencies shall be considered an unresolved item pending review during a subsequent inspection (445/8431-06).

(3) Direct observation of safety related maintenance in progress was performed by the NRC inspectors in the following areas:

(a) Disassembly of a Unit 2 Auxiliary Feed Pump

(b) Cleaning and preparation of Unit 1 reactor vessel head bolts.

(c) Cleaning and preparation of steam generator manway cover bolts

Maintenance personnel appeared to be knowledgeable and well trained. They were utilizing procedures and were following established maintenance standards. Quality Control personnel were on station and appeared to be performing required inspections. Measuring and test equipment, straps, hoists and

tools appeared to be proper for the intended functions and within calibration intervals.

(4) During a walk through of the maintenance building, the NRC inspector noted that non-quality and quality related material were both stored together in "Q" material-hold areas. This includes two specific areas; one area in the maintenance shop that contained diesel engine heads and another area adjacent to the tool crib. This practice is not in accordance with FSAR, Section 17.2.8, and is in violation of 10 CFR 50, Appendix B, Criterion VIII. (445/8431-07).

(5) During a review of the Maintenance Program described by CPSES procedures and instructions three deficiencies were noted:

- STA-606, Revision 3, "Maintenance Action Requests" and MDA-103, Revision 4, "MAR Processing - Maintenance Department" did not require the same level of supervisory review for a change to the MAR as was required for the original MAR.

  Note 2 under paragraph 4.1.5.2 of MDA-103,and the note under paragraph 4.2.2.3 of STA-606 both state, "If at any time prior to or during performance of the work, it becomes necessary to revise the work instructions on safety-related MARs, the responsible section shall make the change and notify QC so they can initial the change and revise applicable Inspection Reports."

  This practice could permit modification of a MAR that would need a welding and burning permit not previously required, or change clearance requirements, without being rerouted through the Shift Supervisor; or change the radiological considerations without being rerouted through health physics supervisory personnel. Also this practice is not consistent with Section 6.5.3.1 of the Technical Specifications, nor does it satisfy the intent of 10 CFR 50, Appendix B, Criterion VI.

- Troubleshooting guidance contained in MDA-103, Revision 4, sections 3.12 and 4.4, were inadequate.

  Section 4.4 stated that "if a procedure or instruction exists, that procedure or instruction shall be used where applicable . . ." It did not address what the requirements were if a procedure or instruction did not exist to perform the troubleshooting. This guidance could include preparation of work instructions, reference to vendor technical manuals, industry standards and codes, use of

specifications, drawings, or use of previous MARs on the same or similar equipment.

The lack of a requirement to have written procedures to perform troubleshooting appears to deviate from the FSAR which commits to ANSI 18.7 - 1976, sections 5.2.7 and 5.2.7.1 which in turn require maintenance to be preplanned and approved procedures to be available for repair of safety related equipment.

- Procedure STA-602, Revision 0,"Temporary Modifications and Bypassing of Safety Functions," did not require that temporary modifications to safety related equipment be controlled by approved procedures as required by CPSES Quality Assurance Manual, section 5.3. paragraph 2.1.

  STA-602 did not require that the proposed change be reviewed to ensure it did not involve an unreviewed safety question. 10 CFR 50.59 does not take exception to the need for an unreviewed safety question determination simply because modifications are temporary.

  The procedure did require an independent verification of installation and removal of temporary modifications as required by ANSI 18.7 - 1976, but did not address an analysis of the effect of the modification on the system and plant.

The above described deficiencies are indicative of inadequate procedures. The failure to provide adequate procedures in accordance with ANSI N18.7-1976 and TS 6.5.3.1 is a violation of 10 CFR 50, Appendix B, Criterion V (445/8431-08a).

d. Design Changes and Modifications

The purpose of this portion of the inspection was to determine whether the applicant had a program to control design changes and modifications during the facility's operational phase that was in conformance with regulatory requirements and commitments and industry guides and standards.

The inspectors reviewed applicant's program for control of design changes and modifications as described in:

- CPSES Operations Administative Control and Quality Assurance Plan

- STA-403, Revision 2, "Identification of Safety Related Equipment"
- STA-602, Revision 0, "Temporary Modifications and Bypassing of Safety Functions"
- STA-701, Revision 1, "Station Modification Control"
- STA-707, Revision 1,"Safety Evaluations"
- Engineering Department Administrative Procedure EDA-101, Revision 1, "Engineering Department Organization and Responsibilities"
- EDA-203, Revision 0, "Design Verification"
- EDA-205, Revision 2, "Modification Implementation"
- EDA-305, Revision 0, "Control of Protective Relay Settings"
- Nuclear Operations Engineering Procedure NOE-201, Revision 2, "Design Modification Control"
- NOE-201-1, Revision 1, "Design Modification Proposal"
- NOE-201-3, Revision 1, "Design Development"
- NOE-201-4, Revision 1, "Design Verification"
- NOE-201-7, Revision 0, "Design Calculation Preparation and Review"
- NOE-201-9, Revision 1, "Design Modification Tracking"
- NOE-203-1, Revision 1, "Preparation and Revision of Q-List"
- NOE-203, Revision 1, "Control of Quality Related Lists"
- Selected Operational Modification Packages (all in process, none closed out)
- Selected TUGCO Nuclear Engineering (TNE) procedures related to operational phase design changes.

A review of records and interviews revealed that the applicant had begun to process modifications to CPSES Unit 1 under the controls of the operational modification program. This practice was helpful

since it permitted staff familiarization with the modification program prior to facility licensing.

Three different organizations participated in operational design development and implementation:

- o CPSES Engineering Department, using station and engineering department administrative procedures (STAs and EDAs respectively).
- o Nuclear Operations Technical Support Engineering, using Nuclear Operations Engineering Procedures (NOEs).
- o TNE, using TNE procedures.

The latter two organizations were corporate engineering groups, but were physically located at the station.

The CPSES Engineering Department's responsibilities for modifications were primarily limited to initiation of modification requests and installation of completed modification packages. Technical Support Engineering had developed procedures for development and control of detailed design packages, but was limited in staff so that it performed detail design work primarily on minor modifications. Major modifications were normally sent by Technical Support Engineering to TNE, with possible assistance from a contract engineering firm. TNE was staffed with about 170 engineers, draftsmen and support personnel and retained responsibility for design support for construction activities at CPSES.

The NRC inspectors conducted a review of TUGCO's operational design change program. Their progress in developing and controlling a Q-list describing quality and safety levels for CPSES equipment appeared to be adequate. The list had been developed to both the system and component level, and a major effort was underway to refine the computerized Q-list to the part level. Information on the Q-list included:

- o General information including component tag number, unit, system, description and reference documents
- o Safety Class
- o Component Function Mode
- o Critical Safety Functions
- o Basic QA Requirements Level

- o In-Service Testing Requirements
- o NPRDS Report Code
- o Sustantiation for decisions made or opinions rendered for each of the items listed above
- o Documentation of all references and resources used to make decisions

Controls were established to ensure the list remained accurate as the facility was modified. Detailed training was conducted for numerous users of the list. A feedback system was available to allow plant personnel to initiate changes to the Q-list.

Three weaknesses were identified in the operational design control program, as described below:

(1) Although the station Engineering Department was responsible for implementation of completed modification packages, the STAs and EDAs did not address prerequisites for turnover of installed modifications to Plant Operations. Such prerequisites included:

(a) Drawing Update
(b) Procedure Revision
(c) Training
(d) Test Deficiency Resolution
(e) Spare Parts Considerations

Interviews revealed that station managers were aware of the need to consider these prerequisites, but no action had been taken as of the end of the inspection. This matter is an unresolved item pending further review during a subsequent inspection (445/8431-09).

(2) Similarly, the STAs and EDAs did not address procedures to be accomplished when performing emergency modifications. However, NOE-201 did address processing of emergency modifications by Technical Support Engineering, but lacked a complete description of the contents of a "limited final design package". For instance, no mention was made of a requirement to perform a safety evaluation of the emergency modification or for the Stations Operations Review Committee (SORC) to verify the absence of an unreviewed safety question prior to installation. This is a second example of inadequate procedures and is a violation Criterion V of Appendix B to 10 CFR 50 (445/8431-08b).

(3) The intended practice for processing of nonsafety related modifications was not fully described in the NOEs. Interviews revealed differing views among Technical Support personnel as to

how nonsafety-related modifications should be processed. One manager felt that all nonsafety-related modifications would be processed identically to safety related modifications while another felt that certain aspects of design control could be relaxed for nonsafety-related modifications.

e. Surveillance Testing and Calibration Control

The purpose of this portion of the inspection was to ascertain whether the applicant had developed programs for the control and evaluation of surveillance testing, calibration, and inspection as required by the Technical Specifications (TS) and for the calibration of quality-related instrumentation not specifically addressed by a TS surveillance. The applicant's surveillance and calibration programs were described in the following station procedures:

- STA-101, Revision 1, "CPSES Organization"
- STA-406, Revision 2, "Corrective Action"
- STA-504, Revision 1, "Problem Report"
- STA-608, Revision 5, "Control of Measuring and Test Equipment"
- STA-702, Revision 3, "Surveillance Test Program"
- STA-703, Revision 0, "Inservice Inspection Program"
- STA-707, Revision 1, "Safety Evaluations"
- TRA-305, Revision 2, "Results Engineering Section Training Program"
- MDA-305, Revision 1, "Inservice Inspection Program"

During the review of the surveillance and calibration program the following deficiences were noted:

- There was no master surveillance schedule reflecting the status of all planned in-plant surveillance testing as required by the FSAR, section 13.5.2.2.5.

  The program for scheduling surveillance testing at CPSES was fragmented with no one individual or department totally responsible for all scheduling. Surveillances with periodicities of greater than 7 days were the scheduling

responsibility of the Results Engineering Department. That department had a comprehensive computerized schedule that was made up from the Master Surveillance Test List (MSTL) which was a listing of all surveillances required by the TS. Surveillances which had periodicities of 7 days or less were required to be scheduled by departments responsible. STA-702, Revision 3, required a method for scheduling and ensuring completion of mode change limiting tests as well as a weekly or more frequent test. Department procedures did not specify how this was to be accomplished nor what methods for scheduling were to be used.

- Operations department had no schedule for surveillances.

- Instrumentation and Control had no schedule for mode change limiting surveillance testing.

- Changes to surveillance requirements were not being requested in writing to the Results Engineer as required by STA-702, Revision 3, Surveillance Test Program, paragraph 4.2.3. There was no form or attachment to the procedure which would facilitate requesting changes in writing.

A few isolated minor administrative problems were noted during the review of completed surveillances stored in the vault:

- Surveillances conducted on source checks in 1982 and 1983 were not always reviewed by Results Engineering. The problem was corrected by using a red stamp as an interim fix and then by a procedure revision in early 1984.

- A surveillance of safety-related station batteries conducted on March 21, 1984, on battery CP1-EPBTED-01 had no Maintenance Action Request number filled in.

- The above surveillance of safety-related batteries was initialed as reviewed on 3/27/84 but not signed as being reviewed by a qualified Results Engineer until approximately 4 months later.

- Acceptance criteria for battery surveillances was generally listed on data sheets, Attachments 3, 5, and 7 to EMP-701, Revision 0. Attachment 7 did not have acceptance criteria for battery specific gravity on the data sheet. The procedure did contain the acceptance criteria in the text.

During the review of the calibration program, one deficiency was noted in that the calibration program for the Meter and Relay group was not implemented in accordance with station procedures. Meter and Relay process instrumentation comprising about 1462 line items

were in the process of being loaded into the MODS computer system. Scheduling and overdue-for calibration information was not presently available for this equipment from the MODS system. A manual system was being maintained to provide this information but was not described by plant procedures.

Correction of deficiencies described above in the control of surveillance testing and calibration as required by the license is considered an open item pending review during a subsequent inspection (445/8431-10).

f. Procurement Control

The purpose of this portion of the inspection was to determine whether the applicant had developed a program to control procurement activities in conformance with regulatory requirements, commitments, and industry guides and standards.

The inspectors reviewed the applicant's written program for control of procurement activities as described in:

- CPSES FSAR Section 13.5.2.2.6 Material Control Procedures
- CPSES Operations Administrative Control and Quality Assurance Plan
- PUR-001, Revision 7, "Requisition of Direct Charge Items"
- PUR-002, Revision 6, "Requisition of Stores Items"
- PUR-004, Revision 1, "Refurbishable Stores Items"
- PUR-005, Revision 0, "Requisition of Petty Cash Items"
- PUR-006, Revision 0, "Transfer of Material, Parts or Components from CPSES Construction to Operations Stores Inventory/Capital Equipment"
- EDA-103, Revision 1, "Assignment of Quality Assurance Procurement Codes"
- DQP-CS-2, Revision 6, "Procurement"
- DQP-CS-4, Revision 10, "Procedure to Establish and Apply A System of Pre-award Evaluations, Audits, and Surveillances"
- DQI-CS-4.2, Revision 3, "Generating and Maintaining the TUGCO Approved Vendors List"

- o DQI-CS-4.3, Revision 4, "Vendor Performance Evaluation System"
- o DQI-CS-4.4, Revision 5, "Conduct of Vendor Pre-Award Surveys"
- o DQI-CS-4.5, Revision 7, "Conduct of Vendor Audits"
- o DQP-CS-12, Revision 1, "Vendor Evaluation Methods"

Procurement activities affected several departments at CPSES. To assist in gaining a clear perception of procurement procedures, activities, and compliance with applicable instructions, a situational walkthrough was initiated by the inspectors as part of the maintenance drill described in paragraph 3.c.(1) above.

During preparation and processing of the MAR drill documentation, responsible personnel were interviewed concerning their responsiblities, duties, and applicable procedural techniques. Qualification records and training were also reviewed for the persons performing the simulation. While conducting the simulation, the following observations were made in the area of procurement:

(1) PUR-001, paragraph 4.2, states. "A routing slip should be prepared and attached to the requisition. . ." A routing slip was not attached to the drill requisition. It was noted that the requisitions included the appropriate routing as a part of the printed matter, which was executed correctly per procedure. PUR-001 requires revision to reflect the method in use.

(2) The CPSES Purchasing Manual Procedure Index listed the title of PUR-004, Revision 0, as "Repairable Stores Items," whereas the procedure title was "Refurbishable Stores Items".

(3) PUR-001 did not directly make reference to the requirements of 10 CFR 21, "Reporting of Defects and Noncompliance." It was noted, however, that the QA reviewer attached a list of "Supplier's Quality Assurance Requirements" to the simulated requisition. This list was apparently prepared informally, since no form number appeared on the document. The list included the following supplier requirements:

   (a) Supplier has documented QA program per 10 CFR 50 Appendix B.

   (b) Purchaser shall be granted right of access to supplier's plant and records.

(c) Supplier agrees to stop work for QA or QC deficiencies.

(d) Provisions of 10 CFR 21 shall apply if appropriate.

(e) Documentation required for shelf-life limited materials.

(f) Supplier to identify special storage and handling requirements.

(g) Strict compliance with purchase order required, and "Supplier's Certificate of Conformance" must be completed.

(h) Documentation to be shipped with or before material.

(i) Other documentation.

(j) Provision for inspection hold points.

PUR-001, paragraph 4.2.3, and PUR-002, paragraph 4.4.4, suggested the inclusion, by the QA reviewer, of items similar to the above list on the requisitioning document [Stock Action Request (SAR) or Requisition on Purchasing Department respectively], but did not promulgate the detailed listing of the attachment that was used on the simulated requisition.

(4) Nameplate data was used to prepare the requisition, and showed the electrical operator as a 7.8 HP motor. Drawing 2323-E1-0049, CP-1, "Motor Operated Valve 1-HV-4777 Containment Spray Header Heat Exchanger 02 Outlet" reflected a horsepower rating for the motor of 7.9. This fact was noted by the site QA inspector assigned to review the requisition after processing and review by the requisitioner and Results Engineer. Results Engineering was notified of the discrepancy, and substantive action was initiated to detect and correct other possible drawing errors associated with Limitorque operators.

(5) Training and qualification records were reviewed for four persons in the Administrative Department that had either purchasing or procurement responsibilities. It was noted that no formal classroom training had been required for, or received by, these personnel in procurement or warehousing activities, but that the training conducted was a self-administered reading program of the applicable procedures. It was also noted that the latest revision of applicable purchasing, warehousing and station procedures reviewed, as reflected by training records, was January 1984. Several revisions had been issued to

applicable procedures since that last review. Several supervisory review signatures which were required to be in the training records were missing.

Correction of deficiencies identified in paragraphs 3.f.(1)-(5) of this report in procurement control are considered an unresolved item pending further review during a subsequent inspection (445/8431-11).

(6) Administrative controls were in place and adequate for such items as:

- o Initiation of procurement documents
- o Review and approval requirements for original and change documents
- o Making changes to procurement documents
- o Basis for designating quality classification

(7) Administrative controls were in place and were adequate for such items as the following for bidders/suppliers:

- o Qualifying procedures for vendors
- o Provisions for purchaser right of access
- o Maintenance of approved bidder's list
- o Maintenance of supplier qualification and audit records

g. Receipt, Storage, and Handling of Equipment and Materials

The purpose of this portion of the inspection was to determine whether the applicant had developed and implemented a program to control the receipt, storage, and handling of safety-related equipment and materials in conformance with regulatory requirements, commitments, and industry guides and standards.

The inspector reviewed the applicant written program for control of safety-related material receipt, storage, and handling as described in:

- o CPSES FSAR, section 17.2. under Control of Purchased Material, Equipment, and Services; Identification and

Control of Material, Parts, and Components; and Inspection.

- CPSES Operations Administrative Control and Quality Assurance Plan, sections 11.1, 11.2, 11.2; Receipt Inspection and Material Acceptance; Identification and Material Control; Storage Handling, and Issue.

- WHS-001, Revision 9, "Receiving and Inspection of Materials, Parts, and Components".

- WHS-002, "Handling and Storage".

- WHS-003, Revision 4, "Issues and Returns".

- WHS-004, Revision 0, "Packing and Shipping of Materials, Parts and Components".

- WHS-006, Revision 0, "Control of Cleaning, Preservatives, and Packaging".

The NRC inspector interviewed the Warehouse Supervisor and other personnel responsible for material receipt, storage, and handling, and observed an actual receipt inspection for safety related electronic components. Numerous purchase order files were reviewed for completeness and accuracy. All warehouse facilities were inspected in the presence of the supervisor.

During the conduct of the above inspection, the following observations were made:

(1) The CPSES warehousing manual procedure index listed the title of WHS-006, "Cleaning Preservatives and Packaging" whereas the procedure title was "Control of Cleaning, Preservatives, and Packaging". The same index reflected Revision 8 as the active procedure for WHS-001 when in fact the current procedure was Revision 9.

(2) WHS-001, "Receiving and Inspection of Material, Parts, and Components", and Receipt Inspection Instruction RII-01, "Receipt of Commercial Quality Items and Catalog Items" did not include any requirements for checking that material received was from a qualified vendor by requiring, for example, a comparison of the purchase order vendor with the vendor that actually shipped the material. This comparison was particularly important with electronic components where part numbers from different vendors could be the same.

(3) Segregated storage of quality material appeared to be adequate except in one case where non-conforming material (Purchase Order 179275-2, NCR #84-0037, Exxon-Beacon 325 gear grease; missing shelf-life documentation) was stored with other ready-for-issue material. Only one can of the three can lot was properly marked with an NCR tag. Numerous power supplies awaiting disposition concerning periodic energization were properly tagged as non-conforming, and stored with ready to issue power supplies. The marking appeared adequate to prevent issue, even though the material was stored in ready to issue space.

(4) The only warehouse spares (about 40,000 current line items) undergoing preventive maintenance were a few power supplies that contained electrolytic capacitors that were tagged by the vendor as requiring periodic energization. The tagging was noted by receipt inspectors as non-conforming since the Stock Action Request (SAR) requisitioning document did not reflect the preventive maintenance requirement. Several pumps and pump assemblies were noted by the inspector to be carried in spares, but were not undergoing any preventive maintenance. Other items such as electric motors, items charged with inert gas, and items with space heaters may have been carried as spares and require preventive maintenance in accordance with manufacturers' technical manuals and ANSI N45.2.2-1972, paragraph 6.4.2. It was noted in the review of WHS-002, "Handling and Storage", that the above standard was not referenced, although it was directly applicable.

(5) The "Safety Related OSD Log - 1984" was a master index of over, short, damaged and nonconforming material reports (OS&D's). OS&D's were issued on safety-related, non-conforming material if the problem was relatively minor and could be readily corrected. Due to numerous errors on the part of vendors, many OS&D's were generated each month and the log was an important summary of activity. Upon reviewing the log, it was noted that several entries had strikeovers, omissions, and whiteouts without any initials, dates, or final disposition. The required entries of WHS-001, "Receiving and Inspection of Material, Parts, and Components", paragraph 4.4.4.1.9.2, were not being made in the log. This is a fourth example of failure to follow procedure (445/8431-05d).

(6) During the tour of the warehouse facility, it was noted that the housekeeping material conditions in the segregated, combustible storage area for "Q" material were unsatisfactory for the following conditions:

- o Two open electrical panels, a terminal connection box and a thermostat, were observed to have no tagging or personnel protection devices. The inspector was advised that water pipes had frozen last winter and that repairs were still not complete.

- o Insulation from the water pipes noted above was adrift in the space.

- o The traveling hoist had not been currently tested or maintained. The inspector was advised that the reason the hoist was not currently tested was because it was inoperative. [see item (8)below.]

(7) Level A storage items did not have any governing instructions or procedures promulgated for temperature and humidity control within specified limits. Numerous stores items were stored in a warehouse section shared by the applicant and Brown and Root, with the segregated area under the control of the licensee. Additionally, none of the items in the Level A storage area were tagged in accordance with the station requirements of WHS-002, Revision 5, "Handling and Storage," paragraph 4.3.1.1. This is a fifth example of failure to follow procedure (445/8431-05e).

(8) "Q" material handling equipment in use at the warehouse (slings, fork lift, hoist) were not in the plant's periodic maintenance and inspection program as required by station instruction WHS-002, paragraph 4.1.5.7. The nylon type sling in use with the fork lift was observed to be badly worn. ANSI N45.2.2-1972, paragraph 7.4, provides applicable guidance. This is a sixth example of failure to follow procedure (445/8431-05f).

(9) The applicant utilized six receipt inspectors at the warehouse that were qualified as Level I or Level II inspectors, including the Warehouse Supervisor. The training of these inspectors had been conducted by site QA. The qualification records of all six inspectors, which were maintained by site QA, were reviewed by the NRC inspector for completeness and accuracy. Five of the records were noted to contain errors of missing certification for final qualification signatures, missing practical factors completion signatures, or other similar administrative errors. The NRC inspector was advised that a QA inspector had recently examined the same files for accuracy and completeness. Correction of errors and omissions in the above qualification

records is considered an open item pending further inspection during a subsequent inspection (445/8431-12).

(10) Based on the small number of items that were not ready for issue (identified by NRC), when contrasted to the large number of items received that are ready for issue, it was apparent that the station had an aggressive program for resolving discrepancies and making material ready for issue as quickly as possible.

h. Quality Records

The purpose of this portion of the inspection was to determine whether the applicant had developed a program for the control of quality records in conformance with regulatory requirements, commitments, industry guides and standards.

The NRC inspector reviewed the applicant's written program for control of quality records as described in:

- Final Draft Technical Specifications, Section 6.10, "Record Retention"
- CPSES FSAR, Section 17.2.17, "Quality Assurance Records"
- CPSES Operations Administrative Control and Quality Assurance Plan, Section 3.8, "Document Control and Records Management"
- STA-302, Revision 4, "Station Records"

During the review of the written program for records control, it was noted that Attachment 5 to STA-302 listed the generic types of records that were to be maintained in the station quality assurance records file. The attachment was simply a verbatim reproduction of Appendix A to ANSI N45.2.9-1974. This generic list of records to be retained did not include some of the items to be retained in accordance with the CPSES Technical Specifications, Section 6.10. Examples are:

- Records of sealed source and fission detector leak test and results
- Records of annual physical inventory of all sealed source material of record
- Records of in-service inspections performed pursuant to the Technical Specifications

o Records of secondary water sampling and water quality

The above list was not all inclusive. In addition, no interpretation of the station equivalent record for the items listed in Appendix A to ANSI N45.2.9-1974 was provided in STA-302 or any other procedures or instructions made available to the inspector. Thus no assistance was available to station personnel to determine which of the station records were to be retained. This is a failure to establish adequate procedures concerning record retention as required by ANSI N45.2.9-1974 and CPSES TS 6.10 is a violation of 10 CFR 50, Appendix B, Criterion V (445/8431-08c).

The NRC inspector conducted an inspection of the vault facilities and the records stored therein and made the following observations:

o A custodian was designated for the record storage facility and access to the stored records was controlled by an approved and posted access list. Visitors required continual escort.

o Records received for storage were transmitted by a formal transmittal document. These records were reviewed for completeness against the transmittal document prior to being placed in storage. If a discrepancy was noted, the sender was notified and the discrepancy corrected before the records were received in storage.

o Several records packages were reviewed to ensure they were stored in designated files and were readily retrievable. The following conditions were noted during this portion of the inspection:

(1) Some logs that were required to be retained and controlled at CPSES were physically located in the vault, but not on the Master Records Index. Examples are: 1) Station Operating Log, period 2300, April 9, 1984 to 2300, June 8, 1984, maintained by the Shift Supervisor, and 2) Control Room Reactor Operator Log, March 16, 1984 to June 1, 1984.

(2) Records were not readily retrievable from the vault if the requestor asked for the records by noun name. The inspector attempted to verify that a sampling of the records required by STA-302 were being retained. This effort was not possible, because the records indices were listed by station form number or other such titles that prevent noun name retrieval. For example, Off-Site Environmental Monitoring Survey Results were filed under a form receipt verification document. The record indices in use by the applicant did not generally reflect the record content, thus retrieval was difficult.

(3) STA-302 defined the "Record File Index" as that index which, ". . .gives the specific record file location for all record types which are stored in the records center. . ." The record file index did not fulfill the function of giving the specific location in the vault, and in fact, no such mapping diagram existed. Storage appeared to be a matter of convention. The custodian interviewed, however, knew exactly where requested records were located.

(4) The checkout method for records consisted of a three-part speedletter, with the person checking out the record signing the letter. It was noted that numerous records had been checked out of the vault by the custodian on duty at the time of the request. Paragraph 4.9.3 of STA-302 states that "No record, after it has been filed in the Records Center, may be removed without the express permission of the Records Supervisor or his designated alternate." It appeared that the intent of this requirement was to minimize the numbers and the time that records were absent from the vault. A large number of records were observed to be checked out for long periods of time by persons other than the Records Supervisor.

(5) The station records vault was observed to have a temperature of 68 degrees Fahrenheit and relative humidity of 62% on the day of the inspection, and the recorder was noted to have exceeded 50% humidity for the duration of the chart (one week total time). ANSI N45.2.9-1974, paragraph 5.4.3, requires film to be stored in accordance with manufacturer's recommendations. Paragraph 6.1.2 of ANSI PH1.43-1979 requires a 30-50% relative humidity range for the type of radiography films stored in the vault, with a recommended value of 30% for archival storage environment for several types of film storage. Numerous films and magnetic tapes were on file in the vault. The Administrative Department requested correction of the problem through correspondence dated 15 August 1983, (TIM-83742), but as noted above, the problem had not been corrected. Additionally, no administrative procedures had been published concerning monitoring of temperature and humidity values or controls, or concerning corrective action for abnormal readings.

(6) Training and qualification of records personnel were found to be adequate, and the records custodian demonstrated an adequate knowledge of policies and procedures that governed this area.

Correction of deficiencies in the station records vault is an unresolved item pending further inspection during a subsequent inspection (445/8431-13).

Any opinion with detailed facts? No basis for statement

i. Tests and Experiments

The purpose of this portion of the inspection was to determine whether the applicant had developed a program to control tests and experiments during plant operations that conformed with regulatory requirements, commitments, and industry guides and standards.

The inspector reviewed the applicant's written program for control of testing during operations as described in:

- STA-202, Revision 9, "Preparation, Review, Approval and Revision of Station Procedures".
- STA-204, Revision 1, "Temporary Procedures."
- STA-205, Revision 2, "Temporary Changes to Procedures".
- STA-401, Revision 5, "Station Operations Review Committee".
- STA-403, Revision 2, "Identification of Safety Related Equipment".
- STA-602, Revision 0,"Temporary Modification and Bypassing of Safety Functions".
- STA-707, Revision 1, "Safety Evaluations".
- QPM-003, Revision 1, "Review of Procedures, Instructions, and Plans".
- HPA-124, Revision 2, "ALARA Job Planning Program".
- EDA-105, Revision 2, "Engineering Department Surveillance Test Procedures".
- EDA-106, Revision 0, "Station Performance Testing Program".
- EDA-108, Revision 0, "Control of Contract Testing Activities".

The applicant appeared to have a comprehensive set of written, detailed procedures and instructions for accomplishing specific testing through out the facility. The procedures and instructions covering testing appear to be consistent in content and format among

departments which would facilitate coordination of testing that might affect more than one department.

During the review of the testing program, one minor deficiency was noted. A formal method for handling requests or proposals for conducting plant tests or experiments was not apparent in station procedures. Engineering Department procedure EDA-105 appeared to cover most necessary regulatory and engineering requirements to address a proposal for conducting a test and would require little modification to allow it to accomplish this function.

j. Measuring and Test Equipment (M&TE)

The purpose of this portion of the inspection was to determine whether the applicant had developed and implemented a program to control M&TE that was in conformance with regulatory requirements and commitments, including Regulatory Guides and industry standards.

A written description of the applicant's Measurment and Test Equipment program was encompassed by the following station procedures:

- STA-608, Revision 5, "Control of Measurement and Test Equipment".
- APP-331, Revision 0, "MODS M&TE data input".
- MEI-006,. July 1984, "M&TE Scheduling Maintenance".
- STA-201, Revision 8, "Preparation, Responsibility and Content of Station Manuals".
- STA-202, Revision 9, "Preparation, Review, and Approval and Revision of Station Procedures".

During a review of the applicant's M&TE program the following deficiencies were noted:

(1) STA-608, Revision 5, "Control of Measuring and Test Equipment" was inadequate in that it did not address or reference the following elements of the M&TE program:

- The organization, departments, or sections responsible for station M&TE.
- Responsibility for promulgation and distribution of the supervisory schedules used for M&TE calibration.

- o Equipment check-out.
- o Cross department procedures for sharing or use of M&TE.
- o Procedures to ensure M&TE is used by only qualified personnel.
- o Procedures to ensure safety during use and transportation.

The absence of the above program elements in station procedures appeared to deviate from the requirements of the CPSES Operations Administrative Control and Quality Assurance Plan, Revision 3, section 6.5, paragraphs 1.0, 2.1, and 4.0 which required development and implementation of procedures and instructions to establish control and calibration for M&TE. This omission is a violation of 10 CFR 50, Appendix B, Criterion XII (445/8431-14).

(2) The Instrumentation and Control M&TE storage area appeared to be too small for the amount and type of equipment stored. About 360 line items were stored within the area. Precision voltmeters were stored on top of one another, and Heise gages were stored near shelf edges. The potential for equipment damage appeared high.

(3) The instrumentation and control calibration and repair shop was too small for the work being conducted. Dead weight tester weights were overhanging the ends of workbenches.

k. Document Control

The purpose of this portion of the inspection was to determine whether the applicant had developed and implemented document controls that conformed to regulatory requirements, commitments, industry guides and standards.

The NRC inspectors reviewed the applicant's written program for control of documents as described in:

- o FSAR, Chapter 17, Section 17.2.6, "Document Control"
- o CPSES Operations Administrative Control and Quality Assurance Plan (OAC/QAP), Section 3.8, "Document Control and Records Management".

- DCP-3, Revision 18, "CPSES Document Control Program" (Brown & Root, Inc.)
- TNE-AD-4, Revision 6, "Control of Engineering Documents [TUGCO Nuclear Engineering (TNE)]".
- TNE-AD-5, Revision 3, "Identification of Design Deficiencies and Errors".
- TNE-DC-7, Revision 5, "Preparation and Review of Design Drawings".
- TNE-DC-8, Revision 4, "Design Verification of Engineering Documents".
- STA-201, Revision 7, "Preparation Responsibility and Content of Station Manuals".
- STA-202, Revision 8, "Preparation, Review, Approval and Revision of Station Procedures".
- STA-203, Revision 9, "Control of Station Manuals"
- STA-206, Revision 6, "Control of Technical Manuals".
- STA-301, Revision 3, "Document and Correspondence Control".
- STA-306, Revision 5, "Drawing and Specification Control".
- STA-307, Revision 3, "Forms Control".

(1) Facility Drawings:

The NRC inspector verified administrative controls applicable to drawings by reviewing the manner in which drawings were handled, and then randomly selecting several drawings and checking the accuracy of record keeping. Until recently, Brown and Root, Inc. operated the main site Document Control Center (DCC). Management of this DCC was shifted to the applicant with Brown and Root personnel still staffing the operation. This center received material from several sources, such as TNE and Comanche Peak Project Engineering (CPPE), each operating under their own approved procedures for the origination of drawings. The DCC exercised control, receipt, reproduction, distribution, storage, and retrieval responsibilities for several users, including TUGCO Operations' Document Control Center.

TNE was managing the drawing update program for an inventory of approximately sixty to seventy thousand controlled drawings for Unit One and Common (common to both units) drawings. At the time of the inspection, about 4500 drawings were considered "lifetime" drawings of which most were in the inventory of drawings in the Control Room. Of the lifetime drawings, about 80% had no changes outstanding, about 2% had three or more changes outstanding, and about 18% had one or two changes not yet entered. To support plant operations, all outstanding design changes were targeted to be incorporated prior to Unit 1 fuel load for the following drawings:

- Mechanical Flow Diagrams (M1-200 and 300 series)
- Electrical One-Line Diagrams, three-line diagrams, electrical wiring and connection diagrams (E1-001 through E1-200 series)
- Instrument and Control Diagrams (M1-2200 and 2300 series)
- Instrument Equipment List (M1-2400 series)
- Instrument Location Drawings and Tabsheets (M1-2500 and M1-2600 series)
- Safety Related Vendor Drawings

Any drawings identified above with outstanding design changes remaining at fuel load were to be added to the Master Data Base record keeping system for update prior to commercial operation. The inspector was provided with a list of other drawings that would be updated, with completion not until after commercial operation, and drawings that would not be updated at all with the rationale for not updating.

An example of a class of drawings that were not to be updated were piping composite drawings (M1-400 through 800 series) that were duplicative of mechanical flow and isometric diagrams that had been updated. Another example included instrument rack drawing (M1-2800) that had been superceded by photographic, as-built representations (CPPA-244167). The NRC inspector's review of the applicant's update program for facility drawings indicated that the program, when fully implemented, should satisfactorily support fuel load and commercial operation.

Related to drawing updates was the maintenance of timely status of drawings affected by design changes, such as Design Change

Authorizations (DCA), Component Modification Cards (CMC), and Engineering Change Notices (ECN). In April 1984, a Corrective Action Request (CAR-001) was prepared by CPSES QA describing document status held by Operations Document Control Center (DCC) not being the same as TNE. Thus the correct status of design drawings and specifications distributed by Operations DCC was indeterminate. Safe and correct system maintenance on safety-related systems, including valve line-ups being done under direction of control room personnel, was dependent on having current drawing status. A permanent solution to the drawing status problem was implemented by June 1, 1984.

In partial answer to CAR-001, TNE developed for their purposes the TNE Design Change Tracking Group Computer ("George Three"), which was scheduled to be fully implemented by September 14, 1984. At the time of this inspection the system was already in operation, with an input terminal located in TNE spaces, and receiving terminals located in other strategic places including the control room and the Operations DCC.

The NRC inspector selected at random the following drawings to test the drawing control system and determine their current status:

- Flow Diagram, Containment Spray (2323-M1-0232, Revision CP-6 of July 30, 1984.)
- Safety Injection System (2323-M1-0262, Revision CP-5 of July 25, 1984.)
- Main Steam Reheat and Steam Pump System (2323-M1-2202-02, Revision CP-4 of August 3, 1984.)
- Component Cooling Water System (2323-M1-2229-06, Revision CP-2 of July 27, 1984.)
- Demineralized and Reactor Make-up Water System (2323-M1-2241-04, Revision CP-2 of August 15, 1984.)
- 6.9 KV Auxiliaries One Line Diagram - Safeguard Buses (2323-E1-0004, Revision CP-2 of July 14, 1984.)
- Containment and Diesel Generator Safeguard 480V MCC's One Line Diagram (2323-EI-009, Revision CP-1 of June 11, 1984.)

The inspector verified that the computer data base reflected the latest revision to the drawings, that there were no unposted design changes affecting the drawings, and that the drawings in

use in the Control Room were the latest revision. The following specific observations were made during this portion of the inspection:

- The process of up-dating the "George Three" terminal with the latest design changes could require as long as five working days, however all drawings reviewed by the inspector reflected the proper status in the "George Three" terminal.

- Drawing 2323-M1-2241-04 above (Demineralized and Reactor Make-up Water System) was on file in the Operations DCC as an aperture card, but not printed and not distributed to Operations Department users as of August 21, 1984. It had been revised on August 15, 1984. The card was received in the Operations DCC on August 20, 1984, and was to be printed and distributed on August 22, 1984. All other aperture cards were of the proper revision and were distributed.

- On August 15, 1984, all indices (design change logs) previously in use were removed from the Control Room, thus the operator in the Control Room was not able to establish the current revision to selected drawings without calling the Operations DCC. It was noted that the Operations DCC was staffed on the day and swing shift, but not on the grave yard shift. It was also noted that "George Three" terminal was installed in the Control Room and was the only index for design changes available. None of the operators had been formally trained in the use of "George Three", so they could not use it.

- Some safety related equipment drawings for vendor supplied, "skid mounted" equipment (for example, diesel generator auxiliaries drawing #2323-M1-0213, Revision CP-3) were not available in the Control Room. Also, drawings in the Control Room had an empty "box" on the drawing where valves were mounted on the equipment foundation as delivered by the vendor. In some cases, this situation was aggravated by absence of assigned valve numbers to such valves. Efforts were underway to correct this problem.

- All changes to the drawings underwent the same level of review as the original drawing as required by procedure.

- Obsolete or superceded drawings were conspicuously marked.

- o TNE-AD-5, Revision 3, "Identification of Design Deficiencies and Errors", addressed the process of identifying design deficiencies (or errors), documenting them on TNE Design Deficiency Reports (TDDRs), and the resolution process. Nonconformances, including discrepancies found between as-built drawings and as constructed facility, were handled as stringently as if they were design changes.

(2) Technical Manuals

STA-206, Revision 6, "Control of Technical Manuals", was the governing document for station technical manuals. To determine the adequacy of technical manual control, the NRC inspector reviewed the procedure, interviewed the supervisor of technical manuals, and randomly selected several technical manuals with numerous revisions. He verified that the status of revisions reflected by the master distribution log and revision records sheet was the same as the status of the copies in use in several of the satellite libraries.

The NRC inspector noted that a copy of a technical manual may be distributed to as many as thirty-five satellite libraries with checkout from most of these libraries on an "honor system". All technical manuals checked in the Control Room were able to be accounted for; however, when the same manuals were checked at the Maintenance (Control Number 005) library, the following conditions were noted:

- o Volume 3, Book 1, Diesel Generator Sets (CP-0034-001C) was not in the library and not properly checked out (later located).

- o Radioactive Waste Solidification System (CP-0162B-001) was misfiled but later located in the library.

- o Three revisions (DCC-00793, -00794, -00841) were filed in the book identified above, but were not reflected on the "Record Revision Sheet" available in the Master Manual Distribution Log.

- o Revision DCC-0943 was noted in the Control Room copy (Control Number 003) and the library restricted copy (001) of the manual identified above, but without the revision number stamped on the sheet as required by procedure.

A sixteen step checklist was in use in the technical manual update area of the operations DCC to ensure all activities

associated with receipt of a technical manual change were accomplished, including:

- o Determination of libraries affected
- o Distribution of a copy of the manual update to Station Procedures Supervisor for cross-reference check to determine procedural revision necessity
- o Transmittal of the change to "Brown & Root" DCC
- o Addition to Plant Information Management System (PIMS) update covered new equipment
- o Check of the update for new drawings and initiation of appropriate action

A similar checklist was in use for receipt of new manuals.

An aggressive program to periodically "police" satellite libraries and maintain the manuals and the area in order was in effect as evidenced by the orderliness of the Control Room library. An aggressive program for recovering materials checked out from the "check-out" library was also in operation. The tickler system allowed a checkout to run for about four months before verification occurred that the checkout was still necessary.

Overall efficiency and accuracy of the technical manual program was found to be effective.

4. Control Room Design Review Status

The Human Factors Control Room Design Review of CPSES, conducted by the Human Factor Engineering Branch of the NRC, identified many Human Engineering Discrepancies (HEDs). As of August 31, 1984, all but 23 pre-licensing HEDs had been closed by the Human Factors Engineering Branch. The remaining 23 HEDs have been or will be verified by the Resident Inspector(s) and documented in the monthly inspection reports. The following is a listing of open HEDs yet to be verified:

3. HED DESCRIPTION

Annunciator alarms are not visually prioritized.

ACTION

Confirmatory on completion of annunciator prioritization.

63. HED DESCRIPTION

No storage space has been allocated for essential material.

ACTION

Confirmatory after installation of portable storage unit and storage of equipment at the remote shutdown panel.

80. HED DESCRIPTION

Pointers on "J" handle/star/handle switches contrast poorly with handle color.

ACTION

Confirmatory on "J" handle/star/handle pointers being painted white.

88. HED DESCRIPTION

Trend recorder scale differs from chart paper scale.

ACTION

Confirmatory on recorders having paper matching recorder scales (all recorders should have paper).

93. HED DESCRIPTION

No control coding is currently being used for:

- o Mechanical Valves, pumps, breakers, motors, etc.
- o Throttle valves
- o Emergency or critical controls

ACTION

Confirmatory on installation of "T" handles on transfer switches at HSP (14 handles).

106. HED DESCRIPTION

Labels are missing.

ACTION

Confirmatory on labels on recorders on CV-04, incore panel, and for lights on CV-03.

120. HED DESCRIPTION

Sound powered jack communications are incomplete.

ACTION

Confirmatory on storage of sound powered headset at the remote hot shutdown panel (see no. 68 above).

122. HED DESCRIPTION

The remote shutdown panel is in the process of complete redesign.

ACTION

Confirmatory on completion of hierarchical labeling at remote shutdown panel and transfer panels, labeling of light box, proper paper in recorders, and sound powered headsets at remote shutdown panel (see no. 68 above) and transfer panel.

130. HED DESCRIPTION

Controls have unlabeled switch positions.

ACTION

Confirmatory on new escutcheon plates for 1-HS-2491 through 1-HS-2494 on CB-09.

181. HED DESCRIPTION

The nuclear instrumentation system recorder lacks a scale for differential power.

ACTION

Confirmatory on installation of a scale for differential power.

184. HED DESCRIPTION

Counters require calculations by operator when displayed values run past 60 minutes. Other counters require the operator to convert displayed values by multiplication factors other than a multiple of ten.

ACTION

Confirmatory on full scale counters replacing 0.5 scale counters on CPS-01.

214. HED DESCRIPTION

A rotary control with clockwise-counter clockwise movement is used to control a"lower" and "raise" function.

ACTION

Confirmatory on permanent escutcheon plates on CB-11 (90-1EG2 and 65-1EG2).

225. HED DESCRIPTION

The locking position or function of the vernier controllers is not clearly indicated.

ACTION

Confirmatory on "LOCK" position labels on Hagan controllers.

226. HED DESCRIPTION

Setpoint adjustment knob covers on process controllers can be easily removed.

ACTION

Confirmatory on more secure attachment of setpoint adjustment knob covers on controllers.

267. HED DESCRIPTION

Trend recorders used frosted glass.

ACTION

Confirmatory on replacement of frosted glass on recorders on CB-10.

321. HED DESCRIPTION

Annunciator character sizes are inconsistent.

ACTION

Confirmatory on re-engraving of annunciator tiles

1-ALB-2	3.7
1-ALB-3B	2.6
1-ALB-4A	4.4
1-ALB-4B	1.5, 2.6, 3.6
1-ALB-5B	2.1, 3,4
1-ALB-5C	3.1, 4.2
1-ALB-6C	1.2, 1.3, 2.1, 2.2, 2.7, 3.2, 3.3, 3.7, 4.2
1-ALB-6D	1.4, 1.10, 1.14, 2.4, 2.13, 2.14, 3.13, 3.14, 4.13
1-ALB-8	1.13, 2.13, 2.14, 3.14, 4.14
1-ALB-9	1.4, 1.8, 1.11, 5.12, 7.6

345. HED DESCRIPTION

Abbreviations in computer displays do not conform to those in the Comanche Peak Steam Electric Station "Directory of Acronyns and Abbreviations."

ACTION

Confirmatory on revision of point descriptions in P2500 to use CPSES abbreviations.

The following HEDs were visually inspected and the required action is hereby confirmed by the Operations Resident Inspector:

103. HED DESCRIPTION

Use of a temporary label on "sequence of events" recorder.

ACTION COMPLETED

Confirm permanent label attached.

137. HED DESCRIPTION

The SI pump test line valves lack a functional grouping pattern.

ACTION COMPLETED

Confirm relabeling (relabeling was required to avoid confusion).

201. HED DESCRIPTION

Negative values are not indicated as such on vertical and circular scales.

ACTION COMPLETED

Confirm that negative signs (-) are added to negative values on vertical and circular scales.

179. HED DESCRIPTION

Red numbers with black graduation marks and vice versa are used for color coding purposes, making scales difficult to read.

ACTION COMPLETED

Confirm scales have been changed to black numbers and black graduation marks.

269. HED DESCRIPTION

Trend recorder door in control room could swing down when unlatched and strike and obscure components located below them.

ACTION COMPLETED

Confirm installation of rubber bumpers to restrict amount of downward motion of trend recorder doors.

338. HED DESCRIPTION

Safety Train "A" and "B" indicating lights are not easily identifiable.

ACTION COMPLETED

Confirm addition of color coded strips under indicating lights.

No violations or deviations were identified.

5. Preoperational Test Witnessing

Prior to witnessing of the test, the NRC inspectors performed a review of the test procedure. The review was conducted to verify that:

- The procedure provided a clear statement which specified the function it was to perform.

- o The acceptance criteria were clearly stated and addressed the appropriate requirements.

- o The communications between all persons concerned with the test were addressed.

- o The procedure contained appropriate quality control hold points.

- o There were provisions for verifications of actions performed with appropriate sign-offs provided for assurance of procedure step performance.

- o The performance of the procedure would, when completed, assure that the acceptance criteria were met.

- o The procedure was clearly written, properly reviewed and approved in accordance with the licensee's administrative procedures.

The NRC inspectors then observed the applicant's performance of the test. After verifying that the correct revision of the test procedure was in use, the NRC inspector verified, during the test performance, that:

- o There were sufficient personnel to perform the test.

- o The test steps were performed in the proper sequence to yield valid results.

- o Unforeseen equipment and procedure problems were resolved and documented.

- o Test personnel observed procedural hold points.

In addition to the major points listed above, the performance of testing personnel was observed to assess:

- o The professional manner in which the test was performed.

- o The level of familiarity of testing personnel with the purpose of the test and steps of the test procedure, including any complicated areas requiring additional set up time.

- o The level of detail contained in the pretest briefings with test personnel and operations support personnel including special assignments and specific on-station time requirements.

The specific preoperational tests that were witnessed and the NRC inspector's observations were:

a. 1CP-PT-29-03, (Redo), "Diesel Generator Load Tests"; 1CP-PT-29-04, RT-1, "Diesel Generator Sequencing and Operational Stability Test"; and 1CP-PT-57-10, Load Group Assignment Test."

The tests identified above were performed in conjunction with one another, therefore they are discussed together. The objectives of the tests were: (1) 1CP-PT-29-04, to verify that the diesel generator would start on an emergency start signal (e.g. Safety Injection signal) and/or loss of offsite power signal and sequence the required loads within the required time without exceeding the diesel generator design limits; (2) 1CP-PT-57-10, to verify that after an emergency start (1CP-PT-29-04), the respective diesel generator supplied power only to the loads of their respective safety trains; (3) 1CP-PT-29-03, to verify that each diesel generator can handle short term and long term loads without impairing its operability.

The NRC inspector witnessed the safety train A and B blackout and black plus safety injection, and the verification of safety train independence and the short and long term load tests. At the completion of each diesel start, the NRC inspector reviewed the Visicorder strip charts to determine correct sequences of operation. Some minor equipment problems were encountered. These were identified on Test Deficiency Reports (TDRs) then were corrected and retested to close out the TDR's.

b. 1CP-PT-64-01, "RPS Time Response Measurement"

The purpose of this test was to demonstrate that the response time of the Reactor Protection System is within the time interval as specified in the Plant Technical Specifications. The NRC inspector noted that this test was properly performed and that the objectives of the test appeared to have been met.

c. 1CP-PT-64-10, "Safeguards Relay Actuation Test"

The purpose of this test was to demonstrate the proper operation of the Engineered Safety Features (ESF) final devices/components by manual manipulation of their respective initiating device (actuating relay). Specifically, this test will verify that a specific output/slave relay contact, in a given train of the Solid State Protection System (SSPS), will actuate its respective ESF device/component. During the performance of this test, the NRC inspector noted that the attributes listed at the beginning of this

section of the report were satisfied.

d. 1CP-PT-66-01, "Nuclear Instrumentation System"

The purpose of this test was to verify that the Nuclear Instrumentation System is functionally capable of providing indication of input signals, generating trip functions for use by the Reactor Protection System, and initiating status functions when trip functions are bypassed or blocked, or system circuits are other than normal. The test was conducted without any significant problems.

e. 1CP-PT-48-02, "Containment Spray System"

The purpose of this test was to demonstrate proper operation of the Containment Spray System. Pump breaker response to initiation of safety signals were demonstrated. Upon actuation of safeguards output relays, Train A and Train B fluid flow response times were determined. Valve interlocks and valve response to spray actuation signals were demonstrated. Chemical eductor flow performance was demonstrated to be acceptable. Additionally, flow rate testing was performed on the chemical additive tank isolation valves.

No violations or deviations were identified.

6. Inspection Items in Progress

The NRC inspectors have started reviews in the following areas:

a. Selected System Operating and Integrated Plant Operating Procedures.

b. Selected Emergency Operating Procedures.

c. Open Safety Evaluation Report (SER) items .

d. Open NUREG 0737 (Clarification of TMI Action Plan Requirements) items.

The reviews commenced near the end of this reporting period. No major problem areas were identified thus far. The continuation and completion of these reviews will be documented in subsequent inspection reports.

7. Plant Tours

During this reporting period, the SRRI and RRI conducted several inspection tours of Unit 1. In addition to the general housekeeping activities and general cleanliness of the facility, specific attention was

given to areas where safety-related equipment is installed and where activities were in progress involving safety-related equipment. These areas were inspected to ensure that:

- o Work in progress was being accomplished using approved procedures.
- o Special precautions for protection of equipment was implemented, where required, and additional cleanliness requirements were being adhered to, where required, for maintenance, flushing and welding activities.
- o Installed safety-related equipment and components were being protected and maintained to prevent damage and deterioration.

Also during these tours, the SRRI and RRI reviewed the control room and shift supervisors' log books. Key items in the log review were:

- o plant status
- o changes in plant status
- o tests in progress
- o documentation of problems which arise during operating shifts

No violations or deviations were identified.

8. Plant Status

The following is a status of TUEC (TUGCO) manning levels for operations and plant test activities as of August 1984.

a. Authorized personnel level (including maintenance, operations, administration, quality assurance, and engineering) - 560

b. Number presently onboard - 506

9. Unresolved Items

Unresolved items are matters above which more information is required in order to ascertain whether they are acceptable items, violations or deviations. Seven unresolved items disclosed during the inspection are discussed in paragraphs 2, 3.c, 3.d, 3.f, and 3.h.

10. Exit Interview

An exit interview was conducted on September 7, 1984, with applicant representatives (identified in paragraph 1). During this interview, the SRRI and RRI reviewed the scope and discussed the inspection findings. The applicant acknowledged the findings.

NRC FORM 766A

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

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (12 digits)	REPORT NO.	SEQ.	MODULE NUMBER	VIOLATION SEVERITY OR DEVIATION	SITE RELATED
05000445	8431	A			
		B			
		C		4 X	
		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.)

Contrary to Criterion V of Appendix B to 10 CFR 50, the licensee: (1) failed to make changes to ELM-302, Revision 0, "480v Circuit Breaker Inspection and Testing," Section 5.0 in accordance with STA-205, Revision 2, "Temporary Changes to Procedures:" (2) failed to properly perform a review of Attachment 2 to ELM-302; (3) failed to make the entries in the "Safety-Related OSD Log", as required by WHS-001, Revision 9, "Receiving and Inspection of Material, Parts and Components"; (4) failed to make changes to Section 8.2 in accordance with STA-205; (5) failed to tag items in the level A storage areas as required by WHS-002, Revision 5, "Handling and Storage"; (6) failed to include "Q" material handling equipment on the plant's periodic maintenance and inspection program as required by WHS-002 (8431-05 a, b, c, d, e & f).

NRC FORM 766 A
(7-81)
NRCM 0535

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

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO.	SEQ.	MODULE NUMBER
0 5 0 0 0 4 4 5 8 4 3 1		A	
		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.)

Contrary to Criterion VIII of Appendix B to 10 CFR 50 the licensee stored quality and nonquality material together in a "Q" material-hold area of the maintenance building. (8431-07)

~~Robert D. Martin~~ Bayard

Cat 40
APP. 2B

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.

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RRI	TL/TF	D/DRS&S	C/RPB2	D/DRS&P	NRR
SPhillips/lt	DHunnicutt	RBangart	DHunter	RDenise	Noonan
2/12/85	2/12/85	1/ /84	2/12/85	2/ /84	12/26/84

V/99

IE01

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 [redacted] gularly [redacted] the status and adequacy of [redacted] or 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 [redacted] and [redacted] of safety-related activities as required, as noted below:

~~8504220330~~ 2pp

[redacted]nual 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 15, 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.

[redacted]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.

[redacted]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.

[redacted]dits 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

Construction Permit: CPPR-126
CPPR-127

Dockets: 50-445
50-446

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 1/11/85
H. S. Phillips, Senior Resident Reactor Inspector Construction — 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 11/23/84
D. M. Hunnicutt, Team Leader Region IV Task Force — Date

Inspection Summary

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

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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:

Audits of Procedures	Total Procedures	Procedures Audited/Referenced	% Audited in 1983
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)	189	28	15
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 External Procedures	Total Procedures	Procedures Audited/Referenced	% Audited in 1983
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

[redacted]

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 changes, 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, [redacted]. Furthermore, the inspection revealed that the [redacted] 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 [redacted] pending clarification of the audit and surveillance program effort and further review during a subsequent inspection (445/[redacted]).

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.

NRC FORM 766 (11-81) IE MC 0535

U.S. NUCLEAR REGULATORY COMMISSION

INSPECTOR'S REPORT

Office of Inspection and Enforcement

2/12/85

PRINCIPAL INSPECTOR (Name, last, first, and middle initial): H. S. PHILLIPS

REVIEWER: D. M. HUNNICUTT

INSPECTORS: H. S. PHILLIPS

LICENSEE/VENDOR	TRANSACTION TYPE	DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO.	REPORT SEQ.	NEXT INSPEC. DATE MO.	NEXT INSPEC. DATE YR.
TEXAS UTILITIES ELECTRIC COMPANY	X I – INSERT	0500044 5	8432	A		
	M – MODIFY	0500044 6	8411	B		
	D – DELETE			C		
	R – REPLACE			D		

PERIOD OF INVESTIGATION/INSPECTION FROM MO.	FROM DAY	FROM YR.	TO MO.	TO DAY	TO YR.	INSPECTION PERFORMED BY	ORGANIZATION CODE OF REGION/HQ CONDUCTING ACTIVITY (See IEMC 0530 "Manpower Reporting—Weekly Manpower Reporting" for code.) REGION	DIVISION	BRANCH
08	20	84	09	20	84	1 – REGIONAL OFFICE STAFF; X 2 – RESIDENT INSPECTOR; 3 – PERFORMANCE APPRAISAL TEAM; OTHER	4	2	3

REGIONAL ACTION (Check one box only)
- 1 – NRC FORM 591
- X 2 – REGIONAL OFFICE LETTER

TYPE OF ACTIVITY CONDUCTED (Check one box only)

X 02 – SAFETY	06 – MGMT. VISIT	10 – PLANT SEC.	14 – INQUIRY
03 – INCIDENT	07 – SPECIAL	11 – INVENT. VER.	15 – INVESTIGATION
04 – ENFORCEMENT	08 – VENDOR	12 – SHIPMENT/EXPORT	
05 – MGMT. AUDIT	09 – MAT. ACCT.	13 – IMPORT	

INSPECTION/INVESTIGATION FINDINGS (Check one box only)

A	B	C	D	
				1 – CLEAR
X	X			2 – VIOLATION
				3 – DEVIATION
				4 – VIOLATION & DEVIATION

TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS A	B	C	D	ENFORCEMENT CONFERENCE HELD A	B	C	D	REPORT CONTAIN 2.790 INFORMATION A	B	C	D	LETTER OR REPORT TRANSMITTAL DATE: NRC FORM 591 OR REG. LETTER IS SUED MO.	DAY	YR.	REPORT SENT TO HQ. FOR ACTION MO.	DAY	YR.
0	3	0	3	1 – YES				1 – YES				FEB	20	85			

MODULE INFORMATION

REC. ORD. TYPE	MODULE NUMBER INSP. NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	SEQ.*	PRIORITY	DIRECT INSPECTION EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL
B	2	3	0	7	0 3	A		1 0						
						B		1 0						
						C								
						D								
B	2	3	5	0	2 0	A		1 2 0	1 0 0					
						B		6 0	1 0 0					
						C								
						D								
B	2	3	5	0	6 0	A		6 5 0	1 0 0					
						B		5 0 0	1 0 0					
						C								
						D								
B	2	3	5	0	6 0	A		6 5 0	1 0 0					
						B		5 0 0	1 0 0					
						C								
						D								

MODULE INFORMATION

REC. ORD. TYPE	MODULE NUMBER INSP. NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL	SEQ.*	PRIORITY	DIRECT INSPECTION EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED TO DATE	STATUS	MODULE REQ. FOLLOWUP PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL
						A								
						B								
						C								
						D								
						A								
						B								
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						C								
						D								

* CIRCLE SEQUENCE IF VIOLATION OR DEVIATION

NRC FORM 766 A (11-81) IE MC 0535

INSPECTOR'S REPORT (Continuation)

Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO.	SEQ.	MODULE NUMBER	VIOLATION SEVERITY OR DEVIATION	SITE RELATED
05000445	8432	A	23150601 II.D.	4 (X)	S A C
05000446	8411	B			S B D
		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.)

Contrary to the requirements of Criterion II of 10CFR Part 50, the applicant failed to review the status and adequacy of the QA program.

NRC FORM 766 A³
(11-81)
IE MC 0535

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

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO.	SEQ.	MODULE NUMBER	
0 5 0 0 0 4 4 5	8 4 3 2	A	2 3 5 0 6 0	II. D.
0 5 0 0 0 4 4 6	8 4 1 1	B	VIOLATION SEVERITY OR DEVIATION	SITE RELATED
		C	1 2 3 4 X 5 6	5 A C
		D	27	5 B D 28

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.*)

Contrary to the requirements of Criterion XVIII of 10CFR Part 50, the applicant failed to establish and implement a comprehensive system of planned and periodic audits.

U.S. NUCLEAR REGULATORY COMMISSION

NRC FORM 766 A
(11-83)
E MC 0535

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

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

Contrary to the requirements of Criterion V of 10CFR Part 50 the applicant failed to certify one of six vendor compliance inspectors as required by TUGCO procedure DQP-VC-4 Revision 6, January 5, 1984.

In Reply Refer To:
Docket: 50-445/84-16

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:

Thank you for your letters of November 1, 1984, November 28, 1984, and January 14, 1985, in response to our letter and Notice of Violation dated October 4, 1984. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation. We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

Sincerely,

"Original Signed by:
D. M. HUNNICUTT"

D. R. Hunter, Chief
Reactor Project Branch 2

cc:
See next page

RPB2/B	RPB2/	D/DRSS	RPB2	DRSP	NRR
DMHunnicutt:jc	LEMartin	RLBangart	DRHunter	RPDenise	VNoonan
2/12/85	2/12/85	2/13/85	2/12/85	2/14/85	2/ /85

8502220367 2pp.

f Shao,
info. any actions?
R. C. Tang for Noonan 2/25

cc:
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, Licensing
Skyway Tower
400 North Olive Street
Lock Box 81
Dallas, Texas 75201

bcc to DMB (IE01)

bcc distrib. by RIV:
RPB1
RSTS Operator
RRI-OPS
RRI-CONST
J. Gagliardo, Task Force
D. Hunnicutt, Task Force
R. Bangart, D/DRSS
V. Noonan, NRR
S. Treby, ELD
RIV File

MIS System
EP&RPB
R. Denise, D/DRSP

Juanita Ellis, Pres.- CASE
Renea Hicks, A/Atty General, EP Div.-TX
Texas State Department of Health

Corrective Action
1/2+ yr later

✓

ll5

3-71909

Per telecon with J. Calvo on 4/24/5, QA/QC will include 84-16 findings and action in our Appendix P.
Reason: it is under TRT purview as he has to follow-up on all RIV findings on Elect Area. HL

BILLY R. CLE
VICE PRESIDENT NUCLE

1985

RECEIVED
JAN 16 1985

Mr. Rich
Region I
U.S. Nuc
Office o
611 Ryan
Arlington, TX 7601

50-445

COMANCHE PEAK STEAM ELECTRIC STATION
ADDITIONAL RESPONSE TO
NRC NOTICE OF VIOLATION
INSPECTION REPORT NO. 84-16
FILE NO.: 10130

Dear Mr. Bangart:

In our initial response to this Notice of Violation (B.R. Clements to R.L. Bangart, November 1, 1984, TXX-4346), we stated that we had commenced an evaluation to address the generic implications, if any, of this Item of Noncompliance on Unit 1 Cable Tray Hangers (CTH's) and that we anticipated completing this evaluation by November 30, 1984.

On November 28, 1984, we provided an additional response on this issue (B.R. Clements to R.L. Bangart, TXX-4369) in which we indicated our actions to perform field walkdowns of CTH's in Unit 1 and evaluate the results of these inspections had been initiated with anticipated completion of this activity by January 15, 1985.

To resolve this issue, we have established a CTH Unit 1 Special Analysis Group consisting of TUGCO, Gibbs & Hill, and Ebasco personnel with personnel from [redacted] providing an independent inspection activity. The procedures/instructions under which this analysis group will operate have been issued and personnel have been certified to perform the required inspections. Drawings generated for use during the inspection process are virtually complete. Currently, we are finalizing the remaining details of our overall plan. The completed action plan will be available for your review by January 21, 1985.

~~8502200372~~ 2pp.

It is expected that all inspections of these CTH's will be completed by early February, 1985, and final analysis results will be available by mid-February, 1985.

Very truly yours,

Billy R Clements

BRC:tlg

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

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

Mr. V.S. Noonan

TEXAS UTILITIES GENERATING COMPANY
SKYWAY TOWER • 400 NORTH OLIVE STREET, L.B. 81 • DALLAS, TEXAS 75201

BILLY R. CLEMENTS
VICE PRESIDENT, NUCLEAR OPERATIONS

November 28, 1984
TXX-4369

Mr. Richard L. Bangart, Director
Region IV Comanche Peak Task Force
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

Docket No.: 50-445

COMANCHE PEAK STEAM ELECTRIC STATION
ADDITIONAL RESPONSE TO NOTICE OF VIOLATION
INSPECTION REPORT NO. 84-16
FAILURE TO PROPERLY INSPECT CABLE TRAY HANGERS (CTH)

Dear Mr. Bangart:

In our initial response to this Notice of Violation (B.R. Clements to R.G. Bangart, November 1, 1984, TXX-4346) we stated that we had commenced an evaluation to address the generic implications, if any, of this Item of Noncompliance on Unit 1 Cable Tray Hangers and that we anticipated completing this evaluation by November 30, 1984. Although several actions have been taken to perform field walkdowns of CTH's in Unit 1, including subsequent engineering evaluations of the findings of these walkdowns, this effort has not been completed to date.

Based on the current progress in this area we expect to complete this activity by January 15, 1985 at which time we will provide you with an evaluation of our findings and corrective actions taken or planned.

Very truly yours,

Billy R Clements

BRC:tlg

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

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

Mr. V.S. Noonan

8502200378

TEXAS UTILITIES GENERATING COMPANY

SKYWAY TOWER • 400 NORTH OLIVE STREET, L.B. 81 • DALLAS, TEXAS 75201

BILLY R. CLEMENTS
VICE PRESIDENT, NUCLEAR OPERATIONS

November 1, 1984
TXX #4346

Docket No.: 50-445

Mr. Richard L. Bangart, Director
Region IV Comanche Peak Task Force
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

Dear Mr. Bangart:

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION
RESPONSE TO NRC NOTICE OF VIOLATION
INSPECTION REPORT NO. 84-16

We have reviewed your letter dated October 4, 1984 on the inspection conducted by Mr. L. E. Martin and other members of your staff of activities authorized by NRC Construction Permit CPPR-126 for Comanche Peak, Unit 1. We are hereby responding to the Notice of Violation listed in Appendix A of that letter.

To aid in the understanding of our response, we have repeated the Notice of Violation followed by our response. We feel the enclosed information to be responsive to the Inspectors' findings. If you have any questions, please advise.

Yours truly,

Billy R Clements

BRC:kh

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

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

Mr. V. S. Noonan

~~8501220385~~ 4pp.

APPENDIX A

NOTICE OF VIOLATION

Texas Utilities Electric Company
Comanche Peak Steam Electric Station

Docket: 50-445/84-16
Construction Permit: CPPR-126

Based on the results of an NRC inspection conducted during the period of May 14 through June 20, 1984, and in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C), 47 FR 8583, dated March 9, 1984, the following violations were identified:

A. Failure to Properly Inspect Cable Tray Hangers (CTHs)

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, Rev. 27, "Cable Tray Hanger Inspection," specifies the inspection attributes for inspecting assembly, configuration, base plate grouting, welding, etc., for conformance with design drawings and documents.

Contrary to the above:

1. The NRC inspectors identified two cases where three supports shared common clip angle attachments to the concrete wall. CTHs 6503, 6504, and 6505 shared a common clip angle that was not called for on Drawing 2323-S-903, Detail D for Case SP4 or on Component Modification Card (CMC) 11097. CTHs 6576, 6577, and 6578 shared common clip angles that were not called for on Drawing 2323-S-903, Detail D for SP4.

2. The NRC inspectors identified two hangers where the dimensions did not agree with the drawings. CTHs 6632 and 6638 both have installed dimensions that are more than the ±1/4 inch allowed tolerance from those specified in the appropriate design documents. The dimensional errors are specifically documented on Nonconformance Report M84-01834. The dimensional errors of the members varied from 7/8 of an inch to 1 1/8 of an inch shorter than those shown on the FSE-00159 drawing.

3. The NRC inspectors identified two cable tray hangers that did not have the weld configuration specified on the design drawings.

CTH 6642 and CTH 6645 both had horizontal welds at the clip angle to support connection and the design drawings specified vertical welds.

4. The NRC inspectors identified f[redacted] that had wall/floor connections that [redacted] CTH 6657 had a [redacted] so that it actually decreased the bearing surface between the nut and the clip angle. C[redacted], Detail 6. CTHs 5491, 5498 and 5499 had [redacted] tes and [redacted]its for the wall or beam attachment [redacted]il.

The above are examples identified by the NRC inspectors where cable tray hangers were instal[redacted] document these conditions.

Corrective Action

This item identifies instances where [redacted] in [redacted] The following actions have been taken to address this item of non-compliance:

1. The specific problems with the cable tray hangers (CTH) have been resolved by the issuance and completion of corrective actions for NCR's M 84-01834, M 84-01835 and M 84-01836.

2. The details associated with this item of non-compliance indicate that [redacted]ents being provided on [redacted]. Of the 15 CTHs identified in this item, 12 were dispositioned use-as-is and 3 hangers were reworked.

3. To determine if other CTHs had problems similar to those identified in this item of non-compliance, all CTHs in the Unit 1 Reactor Building having a design where a combination of welding to embed plates and Hilti bolts was used for attachments were re-inspected. This attachment design was selected for inspection since a common element existed with CTHs 5491, 5498 and 5499, identified in the inspection report. The results of this walkdown inspection indicated that all CTHs were installed in accordance with specific engineering approval and met drawing requirements.

Since the balance of problems identified in this item of non-compliance are diverse, an evaluation to address generic implications, if any, on Unit 1 CTHs is in progress. It is anticipated that this evaluation will be completed by November 30, 1984, at which time an additional response, including preventive actions regarding this item of non-compliance will be provided.

B. Failure to Provide Controlled Issuance of Design Documents and Changes Thereto

10 CFR Part 50, Appendix B, Criterion VI, "Document Control," requires that documents, such as instructions, procedures and drawings, including changes thereto, be controlled and properly distributed to the location where activities affecting quality are conducted. ANSI N45.2.11, Section 7 requires that documented procedures be used to control the issuance of design documents and changes thereto and that these procedures shall assure that documents are properly distributed.

Contrary to the above, it was determined that [redacted] Control Center (DCC). Specifically, [redacted] CMCs and design change authorizations identified by Operations DCC to be applicable did not agree with the Construction DCC list. In addition, the effective revision of Drawings 2323-M1-0301 (CP-5), M1-0261 (CP-4) and M1-0262 (CP-4) were not found in the control room file.

Corrective Action

The following corrective action has been taken. The manual method of maintaining the list of applicable CMCs and design change authorizations has been replaced with a computerized system. Computer terminals were installed in the Control Room May 18, 1984 and became operational June 27, 1984. Terminals are also in operation in the Operations DCC and other plant locations. As the list of CMCs and design change authorizations is updated, this information is immediately available to Operations personnel. The list is updated on the computer by TUGCO Nuclear Engineering and is utilized by both Construction DCC and Operations DCC. This change enables Operations DCC to effectively and accurately determine the status of changes to design drawings.

The control and distribution of drawings by Operations DCC has been improved by several changes. Reproduction equipment has been replaced by more efficient equipment to enable Operations DCC to keep up with the number of drawings they need to produce and control in the field. A log system has been implemented for drawings received from Construction DCC to monitor the length of time it takes to get new drawing revisions issued to the control room and other field locations. These changes will ensure that revisions of controlled drawings are issued to the field in a timely manner.

Preventive Action

The above corrective measures will prevent any further document control violations of this nature.

Date of Corrective Action Implementation

Action was taken on June 18, 1984 to ensure revisions of controlled drawings are issued to the field in a timely manner. Computer terminals are now installed and in operation to status design changes. A weekly status printout will be available at each terminal by November 1, 1984 to provide additional preventive measure.