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RELATED CORRESPONDENCE

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

October 1, 1984

DOCKETED  
USNRC

'84 OCT -2 P3:31

Peter B. Bloch, Esq., Chairman  
Administrative Judge  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dr. Kenneth A. McCollom  
Administrative Judge  
Dean, Division of Engineering,  
Architecture and Technology  
Oklahoma State University  
Stillwater, OK 74078

Dr. Walter H. Jordan  
Administrative Judge  
881 W. Outer Drive  
Oak Ridge, TN 37830

In the Matter of  
Texas Utilities Electric Company, et al.  
(Comanche Peak Steam Electric Station, Units 1 and 2)  
Docket Nos. 50-445 and 50-446 01

Dear Administrative Judges:

The NRC Staff has recently issued Inspection Reports 84-15 (July 30, 1984) and 84-24 (August 28, 1984). Inspection Report 84-15 discusses, inter alia, the Staff's continuing inspection of the Applicants' inspection and testimony of Transamerica Delaval, Incorporated ("TDI") emergency diesel generators. Inspection Report 84-24 addresses preoperational testing, and two open items regarding the TDI diesel generator inspections. Copies of these inspection reports are enclosed for the information of the Board.

Sincerely,

Geary S. Mizuno  
Counsel for NRC Staff

Enclosures: As stated  
cc w/encls.: Herbert Grossman  
cc w/o encls.: Service List

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7-30-84

DOCKETED  
USNRC

'84 OCT -2 P3:32

In Reply Refer To:  
Docket: 50-445/84-15

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 and W. F. Smith of this office during the period March 1 through April 30, 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, J. C. Kuykendall and other members of your staff at the conclusion of the inspection.

Areas examined during the inspection included: (1) plant procedures inspection; (2) followup of Transamerica Delaval diesel generator inspection; (3) preoperational test witness; (4) followup on unresolved item 8407-01; (5) followup and closure of previous inspection findings; and (6) plant tours. 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 appeared to deviate from a commitment made to the NRC. This item and reference to the commitment are identified in the enclosed Notice of Deviation. You are requested to respond to this deviation in writing. Your response should be based on the specifics contained in the Notice of Deviation enclosed with this letter.

One unresolved item is identified in paragraph three of the enclosed inspection report.

We have also examined actions you have taken with regard to previously identified inspection findings. The status of these items is identified in paragraph 5 of the enclosed report.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosures will be placed in the NRC Public Document Room unless you notify this office, by telephone, within 10 days of the date of this letter, and submit written application to withhold information contained therein within 30 days of the date of this letter. Such application must be consistent with the requirements of 2.790(b)(1).

The response directed by this letter and the accompanying Notice is not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

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

Sincerely,

Original Signed By:

Richard L. Bangart

Richard L. Bangart, Director

Region IV Comanche Peak Task Force

Enclosures:

1. Appendix A - Notice of Deviation
2. Appendix B - NRC Inspection Report  
50-445/84-15

cc w/enclosures:

Texas Utilities Electric Company

ATTN: H. C. Schmidt, 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

APPENDIX A  
NOTICE OF DEVIATION

Texas Utilities Electric Company  
Comanche Peak, Unit 1

Docket: 50-445/84-15  
Construction Permit: CPPR-126

Based on the results of an NRC inspection conducted during the period of March 1 through April 30, 1984, and in accordance with NRC Enforcement Policy (10 CFR Part 2, Appendix C), 49 FR 8583, dated March 8, 1984, the following deviation was identified:

Deviation From a Commitment to NRC

The FSAR, page 1 A(B)-14, in response to question Q421.19 commits the licensee to Regulatory Guide 1.33, Revision 2, February 1978. The Regulatory Guide endorses ANSI N-18.7-1976, as an acceptable method of compliance with the program requirements of Appendix B to 10 CFR 50. The licensee's commitment took no exceptions nor proposed an acceptable alternative to this commitment for the area of safety-related maintenance instructions; thus, all provisions of the Regulatory Guide and ANSI Standard as they pertain to PWR's apply.

In deviation from the above, the licensee has developed a program and specific maintenance instructions that have not been reviewed and approved by the Station Operations Review Committee (445/8415-01).

Texas Utilities Electric Company is hereby requested to submit to this office, within 30 days of the date of this Notice of Deviation, 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 deviation from commitments made to the Commission; and (3) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

Dated: July 30, 1984

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION  
REGION IV

NRC Inspection Report: 50-445/84-15

Construction Permit: CPPR-126

Docket: 50-445

Category: A2

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: March 1 - April 30, 1984

Inspectors:

Dennis L. Kelley  
D. L. Kelley, Senior Resident Inspector (SRRI)  
(paragraphs 1, 4, 5, 7, 8, 9, and 10)

7/26/84  
Date

W. F. Smith  
W. F. Smith, Resident Reactor Inspector (RRI)  
(paragraphs 1, 2, 3, 6, and 10)

\_\_\_\_\_  
Date

Approved:

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

7/27/84  
Date

Inspection Summary

Inspection Conducted March 1 - April 30, 1984 (Report 50-445/84-15)

Areas Inspected: Routine, announced inspection of (1) plant procedures inspection; (2) Transamerica Delaval diesel generator inspection; (3) pre-operational test witness; (4) followup on unresolved item 8407-01; (5) licensee action on previous inspection; (6) plant tours; and (7) plant status. The inspection involved 290 inspector-hours onsite by two NRC inspectors.

Results: Within the seven areas inspected, no violations or deviations were identified in six areas. One deviation was identified in paragraph 4 as a result of followup on unresolved item 8407-01.

DETAILS1. Persons ContactedLicensee Personnel

- \*B. R. Clements, Vice President, Nuclear Operations
- \*J. C. Kuykendall, Manager, Nuclear Operations
- J. T. Merritt, Assistant Project General Manager
- \*J. H. Roberts, Construction Startup Turnover Surveillance Supervisor
- \*T. P. Miller, Lead Startup Engineer
- \*H. A. Lancaster, Startup Quality Assurance Specialist
- \*J. C. Smith, Quality Assurance
- \*T. L. Gosdin, Support Services Superintendent
- \*D. E. Deviney, Operations Quality Assurance Supervisor
- C. L. Turner, Director, Nuclear Training
- R. R. Wistrand, Administrative Superintendent
- J. Moorefield, Office Services Coordinator
- D. Reimer, Maintenance Engineer
- D. A. London, TDI Owner Group Coordinator - CPSES
- C. W. Smith, Mechanical Maintenance Supervisor
- D. Lystad, Maintenance Supervisor
- B. Snellgrove, Quality Control Inspector
- S. E. Harvey, Assistant Shift Supervisor
- R. L. Fortenberry, Shift Supervisor
- M. Smith, Shift Supervisor
- R. Beck, System Test Engineer
- M. Niemeyer, Training Supervisor

Others

- V. Lyndstrom, TDI Service Representative

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

\*Denotes those present during the exit interview.

2. Plant Procedures Inspection

The objective of this inspection was to confirm that the scope of the plant procedures system is adequate to control safety-related operations within applicable regulatory requirements and to determine the adequacy of management controls in implementing and maintaining a viable procedure system.

The procedures inspection is wide in scope and, therefore, is only about 15% completed through the end of this resident inspection reporting period. The inspection is projected to continue through July 1984. This segment included a review of station administrative procedures, which are listed as follows:

STA-202	"Preparation, Review, Approval, and Revision of Station Procedures" (Revision 8 of 3/23/84)
STA-203	"Control of Station Manuals" (Revision 7 of 10/26/83)
STA-209	"Preparation, Review, Approval and Review of Station Instructions" (Revision 1 of 1/26/84)
STA-307	"Forms Control" (Revision 2 of 3/23/84)
STA-401	"Station Operation Review Committee" (Revision 5 of 7/6/83)
STA-404	"Control of Deficiencies" (Revision 1 of 3/2/82)
STA-405	"Control of Non-conforming Materials" (Revision 5 of 1/7/83)

In general, the procedures listed above all were formatted satisfactorily in accordance with the established requirements of STA-202. Each procedure contained sufficient detailed information in order to accomplish the intended purpose.

The history files in the licensee's vault were reviewed in detail for each of the procedures inspected. All previous revisions and required documentation of approvals were in place. The shift supervisor's office in the control room, and the TUGCO maintenance library were audited to determine that the proper revision to each of the procedures inspected was in place. No deficiencies were identified.

Methods and logs used in the control of station manuals by the office services staff were reviewed with licensee personnel. It was apparent that a high level of discipline is present in the control of station manuals. Only a few minor concerns were found as detailed below:

a. STA-202

Section 4.4.3.4 of STA-202 requires parts of the procedure that have been revised to be flagged with a vertical line in the right margin adjacent to the change ("sidelining"). However, such is not required if extensive changes are made. The RRI suggested to the licensee that if a procedure is changed extensively and "sidelining" is impractical, a short phrase such as, "MAJOR REVISION - THEREFORE CHANGES ARE NOT INDICATED" should be printed on the coversheet. This would save the recipients the time it takes to search for sidelines only to find that they may not exist.

The licensee representative took the comment into consideration.

b. STA-203

Section 4.3.3 requires a notification memo to be sent to each onsite holder of controlled station manuals to alert recipients of a revision or new procedure. This is not being done for holders of the manual whose copies are not being maintained by the office services staff, and it may not be necessary, because recipients whose manuals are not being maintained by office services must sign a receipt anyway. STA-203 should be revised to clarify this.

STA-203 and ANSI N18.7-1976 require a review and update of procedures at least every 2 years. Section 4.5.1 of STA-203 states, "A revision to a procedure/instruction constitutes a review." STA-202, however, does not specifically require the persons generating or reviewing procedure revisions to conduct the 2-year update of the entire procedure each time a revision is made. A person could make a simple change such as adding a reference or changing a valve number and not perform a detailed review on the rest of the procedure with update in mind. The 2-year review as such could be conducted by definition of STA-203 rather than by the actions intended by ANSI N18.7-1976. The RRI raised this issue with the licensee, but the licensee contended that the requirement to do a complete review with each revision is well understood by the people involved in changes to procedures, and such is the intent of Section 4.5.1 of STA-203. The RRI pointed out that there is a potential for future problems in this area.

c. STA-209

STA-209 does not adequately define the limitations of using instructions which are not approved by the Station Operations Review Committee (SORC), when the work involved affects the quality of safety-related equipment. This is addressed in paragraph 5 of this inspection report.

d. STA-307

Section 4.2.5 of STA-307 permits minor revisions to forms without SORC approval; i.e., full procedure revision. However, distribution is not being controlled to ensure that manual holders receive and incorporate such revised forms. The revised forms are being sent out with an informal cover letter instructing recipients to ". . . delete old pages and incorporate these new ones." This practice is not providing adequate control. The licensee acknowledged this and has since undertaken the practice of issuing the changed forms with revision receipt acknowledgement forms. This is more consistent with Section 4.3 of STA-203, which requires the acknowledgement forms to be used when full procedure revisions are made.



Section 4.2.6 of STA-307 holds the office services staff responsible to change the forms control revision number and the date of issue of revised forms. The licensee has interpreted Section 4.2.6 to mean the date in the title block of the parent procedure attachment page must be changed to reflect the date the form is revised. As a result, station manuals contain pages of a given revision with conflicting issue dates. This practice does not appear to be consistent with the requirements of Section 4.4.3.2 of STA-202. The date of the form revision is optional per Section 4.2.3 and, if anywhere, should appear adjacent to the form revision number. The procedure page revision should remain the same as the rest of the procedure.

Section 4.2 of STA-307 requires newly developed forms to be transmitted to the office services staff for number and status under the forms control program. This is to prevent different organizations from using different forms for similar purposes. While inspecting emergency diesel generator inspection records, the NRC inspector noted that maintenance engineering had created a form called "Component Condition Report" which is intended for use on that project only, and there was no evidence of intent or action to transmit this form to the office services staff. STA-307 should be changed to provide for "one-time" forms to be created where standardization or association with a station procedure is not appropriate.

e. STA-401

Section 2.0 of STA-401 states, "If any conflict exists between this procedure and the Technical Specifications, the requirements put forth in the Technical Specifications shall govern." This paragraph seems to imply that if such conflict exists, then the reader is to comply with the Technical Specifications and not the procedure instead of changing the procedure so that the reader complies with both. The NRC inspector remarked that the phrase should be deleted, or followed by words that require revision of STA-401 if such conflicts are discovered.

The NRC inspector noted that Section 4.4 of STA-401 was written to implement the responsibilities of the SORC as delineated in Section 6.5.1.6 of the proposed Technical Specifications. Upon checking the two sections for agreement, the NRC inspector noted that STA-401 did not include Technical Specification Section 6.5.1.6.g, "Review of Unit Operations to Detect Potential Nuclear Safety Hazards." The licensee was informed of this apparent oversight.

Correction of the above minor problems related to station procedures has been taken under advisement by the licensee and shall be considered an open item (50-445/8415-02).

3. Monitoring of Transamerica Delaval, Inc. (TDI) Emergency Diesel Generator (EDG) Inspection

During this reporting period, the RRI monitored the disassembly, inspection, and records generation on EDG No. 76001 which is Unit 1, Train A emergency diesel generator manufactured by TDI. Reporting of this activity commenced with NRC Inspection Report 50-445/84-07, dated March 20, 1984, which covered the period February 1-29, 1984. The background of this EDG activity at CPSES is described in paragraph 2 of that report.

The RRI observed work in progress; checked for procedure compliance, material segregation and control; cleanliness control; and documentation of findings. Several personnel were interviewed as work progressed to ascertain that they were properly trained, briefed, and in possession of the required procedures and work authorizations.

At the beginning of this reporting period the maintenance department had been in the process of disassembling EDG No. 76001 for about 10 days. Over the period March 1 through April 30, 1984, the EDG was completely dismantled, as required by the Owner's Group inspection plans plus some TUGCO initiatives. By the end of this period, 39 of 60 inspection plans had been completed and reassembly was well underway with all cylinder liners installed and pistons/connecting rods in the process of being installed.

The licensee's maintenance department personnel continued to demonstrate responsible, professional demeanor as work progressed. On very few occasions, it was necessary for the RRI to point out oversights on foreign material exclusion or protection of components. Critical areas such as removal and reinstallation of liners, pistons, heads, and engine driven auxiliaries were witnessed by the RRI. Liquid penetrant, magnetic particle, radiographic, ultrasonic, and visual inspections were witnessed by the RRI at random with no deficiencies found.

Eighteen of the sixty inspection plan packages were signed off as complete without any defects found. The RRI reviewed all 18 packages in detail and found two minor deficiencies which were corrected by the licensee and one question. The question relates to Inspection Plan 17 which addresses an alloy separation examination on cylinder block studs. The technician was required by Long Island Lighting Co. (LILCO) Procedure QCI FS1-F11.1-080 to be qualified to the test equipment technical manual and LILCO Procedure QAD-2.5. Documentation in the inspection plan package shows the technician to be qualified to LILCO Procedure QAI-11.2.6. As of this report writing, the conflict has not been resolved. This is to be considered an unresolved item (50-445/8415-03).

A complete, chronological report on the activities inspected from the beginning of teardown on February 20, 1984, to completion of reassembly of EDG No. 76001 appears in NRC Inspection Report 50-445/84-17.

#### 4. Preoperational Test Witnessing

During this reporting period, the NRC inspectors witnessed the performance of preoperational test ICP-PT-64-02, RT-1, "Reactor Protection System." The objective of the test was to demonstrate that the logic, coincidence, redundancy, safe failure on loss of power, and testability of the reactor protection system functions meet design requirements.

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.

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

The communication between all persons concerned with the test were addressed.

The procedure contained appropriate quality control hold points.

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

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

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

The NRC inspectors found that all the above items were adequately addressed.

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

There were sufficient personnel to perform the test.

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

Unforeseen equipment and procedure problems were reviewed and documented.

Test personnel observed procedural hold points.

The NRC inspector observed the testing activities both during and after normal working hours and during the weekend.

No violations or deviations were identified.

5. Review of Response to Unresolved Item (8407-01)

During the inspection conducted in February 1984 (NRC Report 50-445/84-07), the NRC inspectors identified an unresolved item (8407-01). The unresolved item dealt with the licensee's use of non-SORC reviewed and approved instructions to perform work on the Unit 1, Train A emergency diesel generator.

The unresolved item stated:

- "1. Does the use of safety-related maintenance instructions meet the requirements of approved maintenance procedures as described in the following documents:
  - A. 10 CFR Part 50, Appendix B, Criteria V and VI
  - B. ANSI N18.7-1976, Sections 5.2.15, 5.3 and 5.3.5(4)
  - C. Regulatory Guide 1.33, Revision 2, February 1978
  - D. FSAR, Page A(B) - 14, Response to Question Q421.19
  - E. QAC/QAP, Rev. 5., 2/14/83, Section 13.1, Subsections 2.0 and 5.2
2. Explain how the same level of review and approval confidence is attained for maintenance instructions as compared to a maintenance procedure."

The NRC inspectors reviewed each of the above with the licensee.

The NRC inspectors concluded that the present practice of using instructions to perform work on safety-related equipment is in deviation to the licensee's commitment in the FSAR. The FSAR commitment is to Regulatory Guide 1.33, Revision 2, February 1978 with no exceptions or alternate programs presented or approved as acceptable alternatives. The Regulatory Guide and ANSI N18.7-1976 to which the Regulatory Guide refers require maintenance to

be performed using procedures/instructions receiving the same review and approval as operating instructions; i.e., review and approval by the SORC. Failure to provide such review and approval for maintenance instructions, in particular, and in general, a program for developing such instructions is in deviation to the FSAR commitment to Regulatory Guide 1.33, Revision 2, February 1978 (50-445/8415-01).

6. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (50-445/8309-01): Training Organization and Staff - During the week ending March 4, 1983, the NRC inspector noted that the figure at the end of Chapter 13.2 of the FSAR indicated that the licensee did not intend to license any training instructors. It was pointed out by the NRC inspector that this was not in accordance with paragraph 2.d of Enclosure (1) to H. R. Denton's letter dated March 28, 1980. Amendment 41 to the FSAR, dated July 11, 1983, now shows a requirement for at least four training instructors to be licensed as SROs and a background for SRO license desirable for other training instructors, the training supervisor, and the Director of Nuclear Training. At CPSES, four instructors are licensed SROs, and the supervisor is a licensed SRO. In addition, one more training instructor has taken an SRO examination (results pending) and the licensee plans to have three more sit for the SRO license examination in September 1984. The Director of Nuclear Training has been a licensed SRO at another site which satisfies his background requirements. This item is considered closed.

(Closed) Open Item (50-445/8309-02): General Employee Training (GET) - During the week ending March 4, 1983, the NRC inspector expressed concern to licensee management that Procedure TRA-101, "General Employee Training," was silent to procedure training, and as such it left the NRC inspector with the impression that new employees will be granted unescorted access to the site without benefit of training on station procedures that address such subjects as clearance tagouts, access controls, and housekeeping controls. The RRI reviewed TRA-101, Revision 1, dated April 22, 1983, and the lesson plans used for GET. The procedure addresses the objective of providing sufficient information through GET to ensure the individual has sufficient knowledge to have unescorted access into the protected areas. The lesson plans now cover the pertinent parts of 22 station procedures. The student is exposed to CPSES organization, procedure compliance, deviations and nonconformances, clearance and safety tagging, housekeeping controls, access controls, package controls, and radiological controls, all of which are discussed in detail in station procedures. The RRI suggested that GET students should also be acquainted with authority for equipment operation (STA-601), high voltage clearance tags (STA-617), and conduct in the control room (ODA-303 and 306). The licensee's training supervisor indicated that these suggestions would be added to the "lesson improvement file." This item is considered closed.

(Closed) Open Item (50-445/8309-03): General Employee Training (GET) - It was found by the NRC inspector during the above GET inspection that although TRA-101 specified 80 percent as passing for a GET examination, the actual practice was 70 percent. Although none of the standards (e.g., ANSI 18.1-1971 and ANSI 3.1-1978) listed in the CPSES FSAR specify passing grades for GET, 70 percent is an industry standard that is recommended for GET in INPO Guidelines 82-004 dated February 1982. The April 22, 1983, revision to TRA-101 changed the passing grade to 70 percent. The licensee is now in compliance with the procedure. This item is considered closed.

## 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:

- a. Work in progress was being accomplished using approved procedures.
- b. 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.
- c. 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:

- a. plant status
- b. changes in plant status
- c. tests in progress
- d. 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 testing activities as of April 30, 1984:

a. Operations Manning Status

Authorized Personnel Level (including maintenance, operations, administration, quality assurance, and engineering) - 541

Number Presently Onboard - 483

b. Plant Testing Status

The present status of the NRC preoperational testing phase inspection program is approximately 40 percent complete.

The licensee preoperational testing program is as follows:

Test Completion Status

Preoperational Tests - 90

Acceptance Tests - 43

No violations or deviations were identified.

9. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations, or deviations.

One such item, disclosed during the inspection, is discussed in paragraph 3 above.

10. Exit Interview

An exit interview was conducted May 3, 1984, with licensee representatives (identified in paragraph 1). During this interview, the SRR1 and RRI reviewed the scope and discussed the inspection findings.

In Reply Refer To:  
Docket: 50-445/84-24

8-28-84

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 D. M. Hunnicutt of this office and NRC contract personnel during the period July 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: (1) preoperational test witnessing, (2) test results evaluation, (3) licensee action on previous inspection findings, and (4) plant tours. 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.

Within the scope of the inspection, no violations or deviations were identified.

Two new unresolved items are identified in paragraph 3 of the enclosed inspection report.

We have also examined actions you have taken with regard to previously identified inspection findings. The status of these items is identified in paragraph 4 of the enclosed report.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room unless you notify this office, by telephone, within 10 days of the date of this letter, and submit written application to withhold information contained therein within 30 days of the date of this letter. Such application must be consistent with the requirements of 2.790(b)(1).



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

Sincerely,

Original Signed By:  
Richard L. Bangart

Richard L. Bangart, Director  
Region IV Comanche Peak Task Force

Enclosure:  
Appendix - NRC Inspection Report  
50-445/84-24

cc w/enclosure:

Texas Utilities Electric Company  
ATTN: H. C. Schmidt, 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

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

NRC Inspection Report: 50-445/84-2A

Construction Permit: CPPR-126

Docket: 50-445

Category: A2

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: July 1-31, 1984

Inspectors: *Dennis L. Kelley* 8/21/84  
D. L. Kelley, Senior Resident Reactor Inspector (SRRI) Date  
(paragraphs 2, 4, 5, and 6)

*W. F. Smith* 8/21/84  
W. F. Smith, Resident Reactor Inspector (RRI) Date  
(paragraphs 2, 3, and 4)

*D. M. Hunnicutt* 8/21/84  
D. M. Hunnicutt, Team Leader, Task Force Date  
(paragraph 2)

Approved: *D. M. Hunnicutt* 8/21/84  
D. M. Hunnicutt, Team Leader, Task Force Date

Inspection Summary

Inspection conducted: July 1-31, 1984 (Report: 50-445/84-24)

Areas inspected: Routine, announced inspection of (1) preoperational test witnessing, (2) test results evaluation, (3) licensee action on previous inspection findings, (4) plant tours, and (5) plant status. The inspection involved 165 inspector-hours by three NRC inspectors and NRC contract personnel.

Results: Within the areas inspected, no violations or deviations were identified. Two new unresolved items were identified in paragraph 3.

DETAILS

1. Persons Contacted

Licensee Personnel

- \*B. R. Clements, Vice President, Nuclear Operations
- \*J. C. Kuykendall, Manager, Nuclear Operations
- \*J. T. Merritt, Assistant Project General Manager
- \*J. H. Roberts, Construction Startup Turnover Surveillance Supervisor
- \*T. P. Miller, Lead Startup Engineer
- \*H. A. Lancaster, Startup Quality Assurance Specialist
- \*J. C. Smith, Quality Assurance
- \*T. L. Gosdin, Support Services Superintendent
- \*D. E. Deviney, Operations Quality Assurance Supervisor
  - C. L. Turner, Director Nuclear Training
  - R. R. Wistrand, Administrative Superintendent
  - J. Moorefield, Office Services Coordinator
- \*R. E. Camp, Startup Manager
- \*R. A. Jones, Manager, Plant Operations
- \*M. R. Blevins, Maintenance Superintendent
- \*R. B. Seidel, Operations Superintendent
  - S. M. Franks, Special Project and Technical Support Lead
  - K. B. Becker, System Test Engineer
  - G. B. Mullens, System Test Engineer
  - D. G. Hisey, System Test Engineer

\*Denotes those present at exit interview.

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

2. 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.
- The acceptance criteria were clearly stated and addressed the appropriate requirements.
- The communication between all persons concerned with the test was addressed.
- The procedure contained appropriate quality control hold points.

- There were provisions for verifications of actions performed with appropriate signoffs provided for assurance of procedure step performance.
- The performance of the procedure would, when completed, assure that the acceptance criteria were met.
- The procedure was clearly written, properly reviewed, and approved in accordance with the licensee's administrative procedures.

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

- There were sufficient personnel to perform the test.
- The test steps were performed in the proper sequence to yield valid results.
- Unforeseen equipment and procedure problems were resolved and documented.
- Test personnel observed procedural hold points.

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

- The professional manner in which the test was performed.
- The level of familiarity of the testing personnel with the purpose and steps of the test procedure including any complicated areas requiring additional set up time.
- 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 inspectors' observations were:

- a. 1CP-PT-29-01, RT-1, "Emergency Diesel Generator (EDG) Auxiliary Systems, Retest 1"

This test was to demonstrate the proper operation of the auxiliary systems components that receive safety injection signals, automatic lockout and blockout signals, or operator lockout signals. It also tests the fuel oil transfer pump control circuits. This is the first

in a series of retests and preoperational test repeats that are to be accomplished subsequent to the EDG Owner's Group teardown and inspection on Train B.

During July 9, 10, and 11, 1984, the test was performed on Train B EDG. The NRC inspector witnessed selected portions of this test, reviewed the official test book containing the procedure, applicable changes, and test logs, and monitored the performance of the equipment being tested. The system test engineer (STE) conducted the test properly and in a professional manner.

No deviations or violations were identified during the performance of this test.

b. 1CP-PT-29-02, RT-1, "Diesel Generator Control Circuit Functional and Start Test, Retest 1"

The purpose of this test was to functionally demonstrate electrical and pneumatic control circuit operability in the manual mode of operation for Train B. This test is the first preoperational test in the series which actually starts and operates the EDG. It verifies that the machine can start and be ready to load within 10 seconds.

During the period of July 14-16, 1984, the NRC inspector witnessed this test as it was performed on Train B EDG.

No violations or deviations were identified during the performance of this test.

c. 1CP-PT-29-05, "Diesel Generator Reliability Test"

This test is intended to demonstrate the reliability of the EDG by performing a series of 23 consecutive starts, each start followed by loading to greater than 50% and running for not less than 1 hour each time. All five of the starts were accomplished on one (of two) air receivers to prove the system can start reliably without assistance from the air compressors.

The RRI witnessed portions of this test to verify that the testing was conducted in accordance with the approved procedure, that the test results were acceptable, and to evaluate the performance of the STE and supporting personnel conducting the test. This test was conducted during the week of July 23-29, 1984. The RRI noted key parameters and observed that expected values were achieved. Both Trains A & B EDGs were tested concurrent, alternating between EDGs to minimize lost motion. The STE was obviously familiar with the requirements of the procedure (he was the author) and followed administrative requirements as he progressed through the test.

No violations or deviations were identified during the performance of this test.

d. ICP-PT-64-01, RT-2, "Reactor Protection System"

This test was performed to demonstrate that the logic, coincidence, redundancy, fail-safe capability on loss of power, and testability of the reactor protection system functions as designed.

The NRC inspector observed that the "special precautions" and "prerequisites" listed in the test procedure were met. On July 9, 10, and 11, 1984, the NRC inspector observed the test in progress, verified procedure compliance and that testing was performed in appropriate sequence to meet objectives stated in the test procedure, and that valid test results were obtained. Test personnel performing the test were knowledgeable of the test requirements, test objectives, and were professional while performing, reviewing, and documenting the test data. Instrument calibration, component performance, and component operations were within the accepted values stated within the procedure. The test was completed on July 11, 1984.

No violations or deviations were identified during the performance of this test.

e. ICP-PT-64-05, RT-1, "Safeguards Test Cabinets/Turbine Trip Test Cabinets Blocking Circuit Operational Test"

This test was to demonstrate that both the blocking scheme test circuits and the direct actuation (go-type test) circuit for slave relay, K741, of the safeguards test cabinets and the blocking scheme test circuits of the turbine trip test cabinets function as designed.

The NRC inspector observed that the "special precautions" and "prerequisites" listed in the test procedure were met. On July 13, 14, and 16, 1984, the NRC inspector observed the test in progress, verified procedure compliance and that testing was performed in appropriate sequence to meet objectives stated in the test, and assured valid test results. Test personnel and QA personnel observed procedure hold points. The test personnel performing the test were knowledgeable of the test requirements, test objectives, and were professional while performing, reviewing, and documenting the test data. The test was completed on July 16, 1984.

No violations or deviations were identified during the performance of this test.

f. ICP-PT-31-1, Rev. 0, "Safety Chilled Water System"

This test was to demonstrate that each of the two 100% chiller and recirculation pump units will provide the required emergency fan coil unit chiller water flow for specified safety feature equipment areas in either Train A or Train B for Unit 1. This test further demonstrated that operation and supervision of the chilled water system can be accomplished by using the local or remote controls. This test demonstrated that an "SIS" (safety injection signal) or a "BOS" (blackout signal) will automatically start the safety chilled water system and makeup flow to the surge tank will be automatically controlled.

This test was observed by the NRC inspector on July 10, 11, and 12, 1984, and was completed July 12, 1984.

The NRC inspector observed that the "special precautions" and "prerequisites" listed in the test procedure were met. The NRC inspector observed work in progress, verified procedure compliance and that testing was performed in appropriate sequence to meet objectives stated in the test procedure, and that valid test results were obtained. Test personnel performing the test were knowledgeable of the test requirements, test objectives, and were professional while performing, reviewing, and documenting the test data. Instrument calibration, component performance, and component operations were within the accepted values stated in the procedure.

No violations or deviations were identified during the performance of this test.

g. ICP-PT-02-02, "118 VAC RPS Inverters"

The purpose of this test was to verify the ability of the 118 VAC uninterruptible A-C power system to provide a continuous source of power to the reactor protection system.

The NRC inspector witnessed the performance of this test during the period of July 23-27, 1984. No problems were observed during the test performance. Several data points were observed including a review of recorder charts.

No violations or deviations were identified during the performance of this test.

In addition to the above tests that were completed during this reporting period, the below listed tests were started, but are still in progress:

- (1) ICP-PT-34-01, "Main Steam Isolation Valves"



- (2) ICP-PT-64-04, "Reactor Plant System Setpoint Verification"
- (3) ICP-PT-37-03, "Auxiliary Feedwater Turbine Driven Pump"
- (4) ICP-PT-48-02, "Containment Spray System Response Time Chemical Additive Flow Test"

No violations or deviations were identified during the witnessing of the performance of these tests.

3. 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: 1) adequacy of the evaluation of test results, 2) assurance that test data met acceptance criteria, and 3) assurance that deviations were properly identified and resolved. An evaluation was performed on the adequacy of the licensee's administrative practices with respect to test execution and data evaluation.

The following completed test data packages were inspected:

- ICP-PT-57-01, "Safety Injection Pump Performance"
- ICP-PT-57-01, RT-1, "Safety Injection Pump Performance, Retest 1"
- ICP-PT-57-01, RT-2, "Safety Injection Pump Performance, Retest 2"
- ICP-PT-57-02, "Centrifugal Charging Pump Test"
- ICP-PT-57-02, RT-1, "Centrifugal Charging Pump Test, Retest 1"
- ICP-PT-57-05, RT-1, "Safety Injection Accumulators Preoperational Test, Retest 1"
- ICP-PT-57-06, "RHR ECCS Performance"
- ICP-PT-57-07, "Integrated Safety Injection-Normal Power"
- ICP-PT-57-08, "Integrated Safety Injection-Emergency Power"
- ICP-PT-57-09, "Check Valves and Hot Functional Safety Injection"
- ICP-PT-64-07, "Solid State Safeguards Sequencer System"

The following specific comments were made by the inspector on the completed test packages:

1CP-PT-57-06:

On data sheets 9, 10, 11, 12, and 21 through 30, suction pressures recorded on Safety Injection Pumps 01 and 02 and Centrifugal Charging Pumps 01 and 02 were very high and on two occasions overranged the gage. The NRC inspector noted that the minimum acceptable pressure requirement was met, but was concerned that the gage would be unreliable for subsequent operations. The licensee stated that these gages provide qualitative indication of suction pressure for these pumps when operated locally, which is not the normal mode of operation. The NRC inspector did not consider that any instrument, whether local or remote, should be required to operate out of its range. As such this is (open) Unresolved Item 445/8424-01.

1CP-PT-57-01

Safety Injection Pump 01 performance curve in the completed test data package does not meet the minimum acceptable pump performance curve of Figure 6.3-5 of the CPSES Final Safety Evaluation Report (FSAR). At 650 gallons per minute the pump is under a total head of about 1550 pounds per square inch (psi) when 1650 psi is the minimum. The test procedure acceptance criteria have been met, but those criteria conflict with the FSAR. The licensee recognized this potential safety question, but did not indicate whether or not the FSAR was to be changed or complied with before licensing. The NRC inspector informed the licensee that this may require resolution before the license is granted. This issue is (open) Unresolved Item 445/8424-02.

The NRC inspector noted that with exception of the two unresolved issues above, the test data packages listed were properly reviewed by the JTG and satisfied the attributes of this inspection.

No violations or deviations were identified.

4. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (445/8415-03): Question on Qualification of NDT Technician - During the review of Transamerica Delaval Inc. (TDI) emergency diesel generator completed inspection records, the NRC inspector questioned the qualification of the technician who performed an alloy separation examination on cylinder block studs in accordance with Inspection Plan 17. The technician was required by Long Island Lighting Co. (LILCO) Procedure QCI-FS1-F11.1-080 to be qualified to LILCO Procedure QAD 2.5. Documentation in the inspection plan package showed the technician to be

qualified to LILCO Procedure QAI-11.2.6. The licensee has since produced documentation to show that QCI-FS1-F11.1-080 was revised to reflect QAI-11.2.6, and a Stone & Webster letter No. 84522/LJH/urs which indicates that training under QAI-11.2.6 is adequate preparation for operating the alloy separator. This item is closed.

(Closed) Unresolved Item (445/8418-03): Inadequate Inspection Documentation - During review of TDI emergency diesel generator completed inspection records, the NRC inspector noted that the inspection plan (IP) provided by the "Owner's Group" was revised by the TUEC maintenance engineer over the signature of the previous revision, lending confusion to what acceptance criterion was used in evaluating defects on cylinder block nuts. The "Owner's Group" consists of representatives from several utilities owning TDI diesels who have joined together for the purpose of combining and standardizing efforts to recertify TDI emergency diesel generators. The IP is not a TUEC document, and therefore the NRC inspector took exception to TUEC representatives making changes without evidence of Owner's Group concurrence. The inspection report contained in the IP package was closed out with a satisfactory reinspection that was facilitated by the IP revision, yet the related nondestructive examination (NDE) report still showed the original rejection. There was no evidence that a nonconformance report existed, which would flag the rejected NDE report and provide for follow up and corrective action. In short, the "paper trail" was inadequate for this IP package. The QC supervisor indicated that the above is a series of errors in the paperwork which can be corrected because the required data is available and the quality of the hardware had not been compromised. Since this was a unique and somewhat isolated problem as it relates to the 14 IPs reviewed, and since the Owner's Group had not provided definitive guidelines on the IP package content, the NRC inspector designated this as an unresolved item. If TUEC could produce a viable "paper trail" this item would be closed.

Since the above inspection, TUEC made the appropriate corrections.

Upon reinspecting the IP package, the NRC inspector observed that Owner's Group authorization for the IP revision was obtained. This provided a valid acceptance criterion for the NDE examiner, who was able to then annotate on the NDE report that the nuts inspected were within that acceptance criterion. This in turn validated the inspection report which already indicated a satisfactory reinspection. Thus the "paper trail" is now complete. This item is considered closed.

##### 5. 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:

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

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

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

No violations or deviations were identified.

6. Plant Status

The following is a status of TUEC (TUGCO) manning levels for operations and plant testing activities as of July 31, 1984:

Operations Manning:

Authorized personnel level (including maintenance, operations, administration, quality assurance, and engineering) - 553

Number presently onboard - 499

7. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations, or deviations.

Two such items, disclosed during the inspection, are discussed in paragraph 3 above.

8. Exit Interview

An exit interview was conducted July 31, 1984, with licensee representatives (identified in paragraph 1). During this interview, the SRI and RRI reviewed the scope and discussed the inspection findings. The licensee acknowledged the findings.