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OFFICE OF SECRETARY
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
before the
ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
TEXAS UTILITIES ELECTRIC)
COMPANY et al.)
)
(Comanche Peak Steam Electric)
Station, Units 1 and 2)
_____)

Docket Nos. 50-445-OL
50-446-OL

(Application for an
Operating License)

APPLICANTS' FOURTH PROGRESS REPORT

Pursuant to the Board's "Memorandum and Order
(Progress Report and Notice of Available Documents)"
entered June 6, 1986, the Applicants submit herewith
their fourth "Progress Report."

1. CPRT Milestones - Accomplished

The Senior Review Team ("SRT") has approved and
issued 28 Results Reports (representing 27 Action
Plans), as set forth in Attachment 1. The notice to

8702190089 870210
PDR ADOCK 05000445
G PDR

DS03

CASE of the availability of the Working Files for all of these action plans has been issued and the responses to the Board's 14 Questions have been provided for all but 12 of them (as indicated on that exhibit). It is expected that responses to the Board's 14 Questions for the balance of the issued Results Reports will be filed shortly.

As noted on the attachment, two Action Plans have been deleted. Thus there are a total of 53 action plans (ISAPs and DSAPs), of which 30 have been deleted or completed.

2. CPRT Milestones - To Be Accomplished

As set forth in the "First Progress Report," completion of the CPRT Program Plan is considered to consist of the following milestones:

1. Completion of the Action Plan VII.c hardware re-inspections;
2. Issuance of the Results Report for Action Plan VII.c;
3. Issuance of the Collective Evaluation Report for the Testing Program;
4. Issuance of Results Reports for the Issue Specific Action Plans (I.a.1 through VII.b.5);
5. Issuance of the Collective Evaluation Report for the QA/QC and Quality of Construction Program (CPRT Program Plan Appendix B);

6. Issuance of the Results Reports for the Discipline Specific Action Plans;
7. Issuance of the Collective Evaluation Report for the Design Adequacy Program (CPRT Program Plan Appendix A); and
8. Issuance of the overall Collective Significance Report for the CPRT Program.

As noted in prior Progress Reports, the CPRT does not work to a project schedule in the normal sense in which the term is used. Nonetheless, the following information may be helpful to the Board:

The milestones set forth above are expected to be accomplished essentially in the order listed except that it is expected that issuance of the Results Reports for the hardware-inspection TRT-based action plans and the Results Report for Action Plan VII.c will be issued more or less simultaneously. The presently expected date for issuance of the Results Report for Action Plan VII.c is April 30, 1987.

Any remaining Action Plans other than the DSAPs are expected to be completed, and the Collective Evaluation Reports for the Quality of Construction, Construction QA/QC, and Testing Programs are expected to be issued, during the second quarter of 1987.

With respect to design, please see the letter of the Chairman of the SRT to Mr. Council, dated February 4, 1987, copy attached. It is expected that the completed CPRT Results Reports on design topics will be completed in the third quarter of 1987.

In each case, "completed" with respect to an action plan refers to the approval of a Results Report by the SRT.

As noted in prior Progress Reports, the foregoing information is provided with certain caveats. These schedules are not the sort of firm schedule the Board may have had in mind when it issued its memorandum; such schedules do not exist and will not be created for the CPRT Program. Some of these dates may slip for a number of reasons including some conscious decisions.

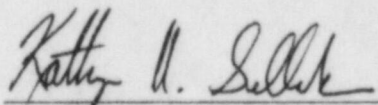
The next Progress Report will be issued March 31, 1987.

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By 
Kathryn A. Selleck

RF No.	Name	Rev	Date	P.F. Leader	PRStat	SRT App*	CASE Not	Board J-1
IV	Surveillance Pro. for Leakings		Deleted		Deleted			
VII.b.5	Elec. Raceway Support Inspect*		Deleted		Deleted			
II.b	Concrete Compressive Strength	3	01/24/86	H. Levin	SPT Approved	02/28/86	04/04/86	10/10/86
I.a.4	Bugs/Terminations	4	01/24/86	J. Mallanda	SPT Approved	03/13/86	04/04/86	06/05/86
III.d	Preop Testing	4	02/27/86	J. Pushtick	SPT Approved	03/13/86	04/04/86	08/14/86
VII.b.2	Valve Disassembly	1	01/24/86	J. Hansel	SPT Approved	03/19/86	04/04/86	08/14/86
I.b.3	Conduit/Cable Tray Separation	4	01/24/86	J. Mallanda	SPT Approved	03/26/86	04/04/86	09/30/86
VII.a.4	Audit Pro. & Auditor Qual's	1	01/24/86	J. Hansel	SPT Approved	04/18/86	06/04/86	08/14/86
I.a.3	Buff .splice Qualification	4	01/24/86	J. Mallanda	SPT Approved	04/30/86	06/04/86	08/14/86
I.a.4	Bug /Terminations - Revised	4	01/24/86	J. Mallanda	SPT Approved	06/25/86	08/14/86	00/00/00
I.a.5	MC's on OHF Terminal Lugs	4	01/24/86	J. Mallanda	SPT Approved	07/24/86	08/14/86	09/14/86
VII.a.5	Periodic Review of OH Program	1	01/24/86	J. Hansel	SPT Approved	07/28/86	08/14/86	10/10/86
III.a.4	Traceability of Test Inst's	4	02/27/86	J. Pushtick	SPT Approved	08/06/86	08/21/86	12/05/86
I.d.3	Craft Personnel Training	0	01/24/86	J. Hansel	SPT Approved	08/27/86	09/16/86	11/10/86
I.d.2	Admin. of Inspector Tests	2	01/24/86	J. Hansel	SPT Approved	09/17/86	10/14/86	12/18/86
III.a.2	JIF Approval of Test Data	3*	07/30/86	J. Pushtick	SPT Approved	16/15/86	11/20/86	
III.a.3	Tech Specs for Deferred Tests	3*	07/30/86	J. Pushtick	SPT Approved	10/15/86	11/20/86	
V.e	Install. of Main Steam Piping	2	01/24/86	H. Levin	SPT Approved	10/15/86	11/20/86	
V.a	Skewed Welds in MF Supports	2	01/24/86	H. Levin	SPT Approved	10/22/86	11/20/86	
V.c	Piping Between Buildings	2	01/24/86	H. Levin	SPT Approved	10/29/86	11/20/86	
VII.a.6	Exit Interviews	1	01/24/86	J. Hansel	SPT Approved	10/29/86	11/20/86	01/21/86
VII.a.8	Fuel Pool Liner	1	01/24/86	J. Hansel	SPT Approved	11/04/86	11/20/86	01/21/87
VII.a.7	Housekeeping and Sys. Clean.	1	01/24/86	J. Hansel	SPT Approved	11/21/86	01/05/87	01/21/87
I.b.1	Flex/Flex Separation	4	01/24/86	J. Mallanda	SPT Approved	12/09/86	01/05/87	
I.b.2	Flex/Cable Separation	4	01/24/86	J. Mallanda	SPT Approved	12/09/86	01/05/87	
I.b.4	Barrier Removal	4	01/24/86	J. Mallanda	SPT Approved	12/09/86	01/20/87	
II.c	Air Gap	5	01/24/86	H. Levin	SPT Approved	12/10/86	01/20/87	
V.d	Plug Welds	2	01/24/86	H. Levin	SPT Approved	12/10/86	01/20/87	
I.a.1	Heat Shrinkable Sleeves	4	01/24/86	J. Mallanda	SPT Approved	12/17/86	01/20/87	
VII.a.3	Document Control	1	01/24/86	J. Hansel	SPT Approved	12/17/86	01/20/87	



John W. Beck
Vice President

February 4, 1987

Mr. W.G. Council
Executive Vice President
TU Electric
Skyway Tower/400 N. Olive Street
Dallas, Texas 75201

Dear Mr. Council:

There have been some significant developments in the TU Electric Corrective Action Programs for CPSES that prompt the SRT to refocus CPRT activities related to CPSES design adequacy.

As you know, the CPRT's Design Adequacy Program (DAP) included a major element of self-initiated investigation of CPSES design adequacy. It was originally the SRT's intent that the results of this initial investigative phase would form the basis for CPRT recommendations related to the need for corrective actions and additional investigatory efforts related to design adequacy.

During the past few months, TU Electric has made a series of decisions regarding Corrective Action Programs for CPSES based on a number of considerations, including the preliminary results of the DAP investigative phase. It is the SRT's understanding that the resulting Corrective Action Programs defined by TU Electric will constitute a 100% design verification of the safety-related aspects of CPSES (other than NSSS design), and that these programs will be implemented by major architect/engineering firms that have had no previous design responsibility for those portions of the original design that they are now verifying.

This commitment by TU Electric provides an alternative means for achieving the design adequacy-related objectives of the CPRT Program Plan from that originally envisioned and obviates the need for completion of all of the specific elements contained in the DAP. For example, since the Corrective Action Programs cover all of the design activities that were addressed by the DAP on a sampling basis, there is no logical need to rely on trending or generic implications analyses to identify areas of potentially deficient design requiring further investigation.

Recognizing these developments, the SRT believes that a shift in the focus of CPRT activities related to CPSES design adequacy is appropriate at this time. It is the consensus of the SRT that the focus of future CPRT design-related activities should be on SRT-directed, specific overviews designed to assess the effectiveness of the implementation of the Corrective Action Programs defined by TU Electric with particular emphasis on achievement of CPRT Program objectives. Included in this set of directed activities will be specific evaluations of the effectiveness of the establishment and implementation of programmatic improvements to preclude recurrence of past CPSES design problems.

As currently envisioned by the SRT, CPRT overview activities will consist of the following elements:

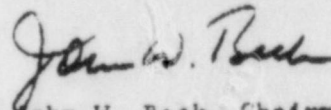
- 1) DAP overview efforts in the areas of large bore piping/pipe supports and cable tray/conduits will continue to be conducted in accordance with the Program Plan; results of this overview will be reported in DSAP Results Reports.
- 2) As directed by the SRT, review the TU Electric Corrective Action Programs for the purpose of determining whether such programs have captured all known, open technical issues and that there is a commitment to resolve them.
- 3) As directed by the SRT, reviews will be conducted to evaluate the adequacy and effectiveness of implementation of contractor (e.g. the SWEC Engineering Assurance Program) and TU Electric programs established to ensure the quality of the Design Basis Consolidation Program (DBCP) and other design-related corrective action programs.
- 4) As directed by the SRT, reviews will be conducted to assess the adequacy of selected end products of the DBCP and other design-related corrective action programs.
- 5) As directed by the SRT, reviews will be conducted of the adequacy of (including effectiveness of implementation) TU Electric programs and procedures to manage and control design-related activities, with particular emphasis on actions taken to preclude recurrence of past problems.

In order to do an adequate evaluation of TU Electric corrective action and management programs, as they relate to design, the SRT must identify causes of suspected design discrepancies. It is our current view that the following causes should bound all suspected design discrepancies at CPSES. Our scrutiny of the corrective action and management programs will emphasize these areas:

- o Design Commitment Control
- o Code Compliance Procedures

- o Organizational Interface Procedures (internal and external)
- o Design Change Control Procedures
- o Design Verification Procedures
- o Procedure Implementation
- o Technical Audits of Design Control
- o Technical Audit Corrective Actions
- o Training and Personnel Qualification

Exceptions to Revision 3 of the Program Plan will be noted in the Results Report or Collective Evaluations as they are published.



John W. Beck, Chairman
Senior Review Team, CPRT

JWB/lcd

ANNOTATED BIBLIOGRAPHIES

OF

AVAILABLE DOCUMENTS

Pursuant with the Board's Order of June 6, 1986, the Applicants submit the attached annotated bibliographies of available documents for the time period of November 26, 1986 - January 25, 1987. The principals that were utilized, the documents that are annotated and the document sources are consistent with the guidelines and procedures that were used by Applicants in previous annotated bibliographies.

10 CFR 50.55(e)

During the period of November 26, 1986 to January 25, 1987, Applicants issued 49 letters to the NRC concerning 44 items which had previously been identified as potentially reportable under the provisions of 10 CFR 50.55(e). The letters are categorized as follows:

- A. 30 letters - Interim Report - Evaluation to determine reportability is continuing.
- B. 13 letters - Interim Report - Item determined to be reportable, evaluation/corrective action continuing. (See listing below)

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
11/25/86	TXX-6117	CP-86-36	Large Bore Piping and Supports

This letter is a follow-up report on a reportable item under the provisions of 10 CFR 50.55(e). It notifies the NRC that continuing engineering evaluation has not identified any additional instances which are considered reportable, however, evaluation is continuing.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
11/25/86	TXX-6120	CP-86-72	Small Bore Piping and Supports

This letter is a follow-up report on a reportable item under provisions of 10 CFR 50.55(e) involving the scope of plant modification resulting from the project's pipe support reverification program. It notifies the NRC that continuing engineering evaluation has not identified any additional instances which are considered reportable, however, evaluation is continuing.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/05/86	TXX-6137	CP-86-11	Component Cooling Water Pump Impeller Linear Indications

This letter is a follow-up report on a reportable item under the provisions of 10 CFR 50.55(e). Inspections of the Unit 1, Train A, CCW pump impeller have revealed that rework is required. The

Train B impeller will be inspected following the availability of Train A service water. Upon completion of the inspection, the extent of the required work will be determined and the repair will be scheduled as required.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/05/86	TXX-6138	CP-85-31	Electrical Raceway Support System

On August 27, 1985, the NRC was notified of a deficiency involving the Unit 1 Electrical Raceway Support System. Specifically, due to additional weight imposed by the installation of Separation Barrier Material (SBM) and Radiant Energy Shield (RES) Material without a complete interdisciplinary review and design analysis, the structural integrity of the raceway is indeterminate. This letter informs the NRC that this issue is being reported under the provisions of 10 CFR 50.55(e) and required information as to description, safety implications and corrective action for the issue is provided.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/10/86	TXX-6146	CP-86-53	Seismic Design of Conduit

On October 21, 1986, the NRC was notified of a reportable deficiency involving the seismic design of conduit under the provisions of 10 CFR 50.55(e). This letter is an interim report submitted to status corrective action implemented to date.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/12/86	TXX-6153	CP-85-42	Thermolag on Conduit Supports

On October 26, 1986, the NRC was notified that the deficiency involving the possible adverse effect of the substitution of rectangular and oversized preformed sections of thermolag on conduit installations is reportable under the provisions of 10 CFR 50.55(e). This letter is an interim report submitted to status corrective action implemented to date.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/18/86	TXX-6168	CP-86-54	Original Design of Control Room Ceiling

On October 3, 1986, the NRC was notified of a reportable item involving the design and installation of the control room ceiling. This letter is an interim report submitted to status the

implementation of corrective action. Quality control verification of construction activities concerning the control room ceiling will be complete upon closure of outstanding inspection findings.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/18/86	TXX-6175	CP-86-18	Safety Chilled Water Chiller Units

On May 21, 1986, the NRC was notified of a reportable item involving difficulties in starting and operating the safety chilled water chiller units. This letter informs the NRC that detailed review is continuing of vendor specifications and updating of the list of components serviced by the component cooling water system. The supplier (YORK) is also continuing the evaluation of the installation of the chiller flow control valves with regard to a standby, non-operating safety chiller. Westinghouse is also continuing to evaluate the impact of the 40 degree Farenheit CCW temperature on NSSS components.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/19/86	TXX-6177	CP-86-62	Polar Crane Support Structure

On October 3, 1986, the NRC was notified of a deficiency involving the misinterpretation of the polar crane load cases which were deemed reportable under the provisions of 10 CFR 50.55(e). This letter is an interim report submitted to status corrective action implemented to date.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
01/06/87	TXX-6201	CP-86-82	Cable Tray Hangar Splice Welds

On December 8, 1986, the NRC was notified of a deficiency involving certain welds which are used to splice cable tray hangars channel sections end to end to form posts. This letter informs the NRC that this deficiency is reportable under the provisions of 10 CFR 50.55(e) and provides the required information concerning description, safety implication and corrective action for the deficiency.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
01/08/87	TXX-6206	CP-86-36	Large Bore Piping and Supports

On June 9, 1986, the NRC was notified of a reportable item involving the scope of plant modifications resulting from the project's pipe support reverification program. This letter

informs the NRC that engineering evaluation is continuing and has not identified any additional instances which are considered reportable.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
01/09/87	TXX-6207	CP-86-72	Small Bore Piping and Supports

On June 9, 1986, the NRC was notified of a reportable item involving the scope of plant modifications resulting from the project's pipe support reverification program. This letter informs the NRC that engineering evaluation is continuing and has not identified any additional instances which are considered reportable.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
01/21/87	TXX-6235	CP-86-19	Instrumentation Installations

On March 21, 1986, the NRC was notified of a reportable item involving the installation of steam service pressure transmitters. This letter was submitted to status the corrective actions for this reportable item under the provisions of 10 CFR 50.55(e).

C. 3 letters - Final Report - Deficiency not reportable
(See listing below)

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/03/86	TXX-6132	CP-85-26	Upper Lateral Restraint Embedment Design

This letter is a final report of a potentially reportable item under the provisions of 10 CFR 50.55(e). The deficiency involves the design/analysis of the steam generator upper lateral beam anchorage. Evaluations were performed for LOCA loading under a design bounding assumption where the steam generator compartment platforms are considered removed (resulting in higher pressures in the upper portion of the compartment). Based on the evaluations performed, this letter informs the NRC that it has been concluded that in the event this issue had remained undetected, no condition adverse to safety would exist, therefore, this issue is not reportable.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/05/86	TXX-6140	CP-86-80	Torque Values for J.C. White Tubing Restraints

On November 7, 1986, the NRC was notified of a deficiency involving the recommended torque values for J.C. White tubing restraints. The torque values for these restraints have not been reflected in the project specifications and procedures or implemented during the installation process. This letter is a final report and informs the NRC that an evaluation has concluded that the vendor's minimum torque requirements have been met when these bolts were installed per project specifications. The letter states that project specifications and procedures will be revised to specifically implement the manufacturer's requirements. This revision will replace the terms "snug tight" and "in a secure manner" which meet the intent of project requirements, but cannot be verified. The letter concludes that in the event this issue had remained undetected, no condition adverse to safety would exist, therefore, this issue is not reportable.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
12/23/86	TXX-6180	CP-86-17	Minimum Concrete Coverage

On March 21, 1986, the NRC was notified of a deficiency concerning the minimum concrete coverage required for reinforcing steel in the walls and floors necessary to maintain a three-hour fire rating. This letter is a final report and informs the NRC that our evaluation of the subject walls and floors indicated

that postulated temperatures would not adversely affect the structural capacity of the reinforced concrete elements. It has been concluded that CPSES design is in compliance with Uniform Building Code (UBC) and this issue is not reportable under the provisions of 10 CFR 50.55(e).

D. 3 letters - Final Report - Deficiency is Reportable and
Corrective Action Taken
(see listing below)

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
01/16/87	TXX-6220	CP-86-70	Elevated Temperature Effects on Instrument Supports & Tubing

This letter is a final report of a deficiency regarding elevated temperature effects on instrument supports and tubing. The required information as to description of the deficiency, safety implications and corrective action are provided.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
01/21/87	TXX-6228	CP-86-77	Instrument Tubing Minimum Wall Thickness

This letter is a final report of a deficiency involving specification of minimum wall thickness in instrument tubing which may not meet the stress allowables required by the ASME B&PV Code, Section III. The required information as to description of the deficiency, safety implications and corrective action is provided.

<u>Date</u>	<u>Letter No.</u>	<u>SDAR No.</u>	<u>Subject</u>
01/21/87	TXX-6230	CP-86-16	Fire Effects on Instrument Tubing

This letter is a final report of a deficiency involving the detrimental effects of low melting point metals on stainless steel instrument tubing during a fire. This letter provides the required information as to a description of the deficiency, safety implications and corrective action.

CPRT

The following correspondence was issued by TUGCO to the NRC concerning CPRT during the time period of November 26, 1986 - January 25, 1987:

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
12/02/86	TXX-6102	Response to CASE's Comments on Welding in CPRT Program Plan

This letter transmits the CPRT responses to the CASE comments on welding contained in their August 14, 1985 letter, "CASE's First Critique of Applicants' Comanche Peak Response Team (CPRT) Plan".

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
12/18/86	TXX-6159	Small Bore Piping and Pipe Supports Generic Issues Report

This letter transmitted copies of the "Small Bore Piping and Pipe Supports Generic Issues Report" prepared by Stone and Webster Engineering Corporation for TUGCO as part of the CPRT piping and pipe supports requalification effort.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
12/19/86	TXX-6184	CPRT Results Reports

This letter transmitted the following Results Reports:

- VII.a.7 Housekeeping & System Cleanliness
- I.b.1 Flexible Conduit to Flexible Conduit Separation
- I.b.2 Flexible Conduit to Cable Separation

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
12/23/86	TXX-6148	Documents for Evaluation and Resolution of Generic Technical Issues for HVAC Ducts & Duct Supports

This letter transmitted documents prepared by EBASCO Services Incorporated for TUGCO as part of the CPRT cable tray and conduit support program initiated by Texas Utilities.

Date
01/16/87

Letter No.
TXX-6223

Subject
CPR⁷ Results Reports

This letter transmitted the following Results Reports:

- I.a.1 Heat-Shrinkable Cable Insulation Sleeves
- I.b.4 Barrier Removal
- II.c Maintenance of Air Gap Between Concrete Structures
- VII.a.3 Document Control
- V.d Plug Welds

RESPONSES TO NRC INSPECTION REPORTS/
NOTICE OF VIOLATION/NOTICE OF DEVIATION

The following correspondence was issued by Applicants (TUGCO) to the NRC Region IV concerning inspection reports during the period of November 26, 1986 - January 25, 1987:

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
12/12/86	TXX-6134	Inspection Report Nos. 50-445/85-18 & 50-445/85-15

NOV Item A - OJT waivers for inspectors' certifications.

NOD Item C - Insufficient information regarding incorrect checklist entry and justification for the entry.

This letter transmitted a supplemental response. In part, the response stated:

NOV Item A - Applicants continue to disagree that this is a violation. In all cases, the conditions regarding OJT were met as evidenced by the L-III proficiency demonstration and Certifying Authority signatures. Procedures have been revised to eliminate the need for minimum OJT and OJT waiver to avoid further misunderstanding of their intent or use.

NOD Item C - The reason for the deviation is an inadvertent error or entry by the discipline engineer. The engineer did, however, provide the required justification for the entry. A reinspection found the flange locations, in question, to be within allowable tolerance.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
01/06/87	TXX-6200	Revised Corrective Action Date

This letter transmitted a revised date for completion of corrective action regarding NOV 446/8509-V-02.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
01/09/87	TXX-6173	Inspection Report Nos. 50-445/86-01 & 50-446/86-01

NOV Item A.1 - Insufficient information regarding failure to

implement procedure requirements for DRs for non-ASME components.

NOV Item A.4 - Insufficient information regarding tagging of nonconforming items on NCRs.

NOV Item A.6 - Insufficient information regarding restriction of initial response to CPRT activities only.

NOD Item B - Provide documented actions to prevent recurrence of initial stated examples.

NOD Item C - Provide information as to whether surveillance and/or audits have addressed activities of QA/QC engineer applicable to deviation, 445/8601-D-18.

This letter transmitted a supplemental response. In part, the response stated:

NOV Item A.1 - Applicants' initial response only addressed the failure to initiate NCRs for items falling under the ASME Section XI program since this was the only activity identified through Applicants' review of the QA/QC Coordinators' DR/NCR log initiated for all ERC DRs generated for non-ASME components.

NOV Item A.4 - The intent of the tagging criteria was not to identify items installed or functioning properly since the NCR provides adequate control of those items. Tagging criteria is now contained in work procedures to require "hold tags" on deficient items if:

- a) Item is not installed, or
- b) Correction of the deficiency without QC witness would preclude proper reinspection.

NOV Item A.6 - Applicants' initial response was restricted to CPRT related activities because of the limiting nature of controlling IPC procedure, IPC-P3. Quality engineering evaluation of the 53 out-of-scope three-part memos initiated by IPC determined that 30 documented nonconforming conditions should have been documented on individual NCRs. Those conditions have been documented on NCRs issued on or before 04/30/86.

NOD Item B - Documentation of action to prevent recurrence is contained in appropriate ERC files.

NOD Item C - ERC QA surveillance number II-85-20 specifically addressed the work activities of the QA/QC engineer applicable to this deviation.

Date
01/12/87

Letter No.
TXX-6089

Subject
Inspection Report Nos.
50-445/86-03 & 50-446/86-02

- NOV Item A - Improper field design changes.
- NOV Item B - Adherence to quality control procedures.
- NOV Item C - Adherence to quality control procedures.
- NOV Item D.1 - Adherence to quality control procedures.
- NOV Item D.2 - Adherence to quality control procedures.
- NOV Item E - Inadequate quality control program.
- NOV Item F - Inadequate quality control measures.
- NOV Item G.1 - Inadequate quality control program.
- NOV Item G.2 - Inadequate quality control program.
- NOV Item H - Inadequate quality control measures.
- NOV Item I - Adherence to quality control procedures.
- NOD Item A - Deviation from QA/QC procedures.
- NOD Item B - Deviation from QA/QC procedures
- NOD Item C - Deviation from QA/QC procedures.
- NOD Item D - Deviation from QA/QC procedures.
- NOD Item E.1 - Deviation from QA/QC procedures.
- NOD Item E.2 - Deviation from QA/QC procedures.
- NOD Item E.3 - Deviation from QA/QC procedures.

This letter transmitted a response to the above items. In part, the response stated:

NOV Item A - The DCA in question was revised to delete the specifics regarding wire size reduction. Procedure CP-CPM 6.3 will be revised to require that a review of the DCA be conducted prior to the traveler being issued to ensure that if the DCA does contain specifics they are incorporated into the traveler.

NOV Item B - Formal classroom training was initiated in February 1986 and completed in May 1986 to resolve inconsistent IR

completion by QC inspectors.

NOV Item C - NCRs were initiated for each of the nonconforming conditions identified in this violation. QC inspectors involved with acceptance of the discrepant installations identified have been made aware of their errors.

NOV Item D.1 - The isometric drawing in question has been revised to show the 3/8" HKB. With the dispositioning of NCR M-86-201023, recurrence of this violation will be prevented.

NOV Item D.2 - A revision will be made to QI-QP-11.21-1 as corrective action to prevent recurrence of this condition.

NOV Item E - For each specific discrepancy noted in the violation, a NCR or Deficiency and Disposition Report (DDR) has been issued for evaluation and disposition. Several other procedure revisions and retraining efforts were identified to the NRC to be taken to prevent recurrence.

NOV Item F - NCR M-80-00161 was revised in April 1986. A review of a random sample of NCRs has been conducted to determine the safety significance of actions resulting from completed dispositions of NCRs. This review has provided a high degree of assurance of the adequacy of the dispositions of NCRs at CPSES.

NOV Item G.1 - A series of nonconformance reports were listed as being issued as a result of the conditions noted in this violation. Revision 06 of Procedure QI-QP-11.10-2A was issued on 02/24/86 and QC personnel were trained to this procedure revision.

NOV Item G.2 - Nonconformance Reports were initiated to address the dimensional discrepancies. Each of the QC inspectors involved with acceptance of the discrepant installations identified have been made aware of their errors.

NOV Item H - This alleged violation is under evaluation. Applicants expect to send a report by February 20, 1987.

NOV Item I - This violation consists of three parts.

Part 1 - All TUGCO Operations NCRs have been reviewed and no significant adverse trends were identified. Trend analysis performed on 1985 NCRs was reported to the appropriate levels of management by the 1985 Quality Assurance Annual Report.

Part 2 - Recently issued NEO procedures now clearly define the site guidelines for deficiency and nonconformance reporting.

Part 3 - STA-404 was revised in June 1985 to document the review for nonconforming conditions by providing a "Yes/No NCR required" block on the DR form.

NOD Item A - Corrective action has been completed with the issuance of Rev. 3 to QI-019 and with the reinspection of all affected packages as of May 30, 1986.

NOD Item B - Applicants deny the alleged deviation. The ERC QA/QC discipline engineer did in fact review QI-QAP-11.1-28 Revision 3 for applicability in developing the QI-029 inspection checklist. The engineer concluded that inspection for excessive grinding of base metal through paint is not a recreatable characteristic of the welding attribute.

NOD Item C - Applicants deny the alleged deviation. The surface of the subject weld was inspected per packages I-S-PWRE-006 and I-S-NPBW-014. Weld surface irregularities were noted by the inspectors and the attribute rejected in each package.

NOD Item D - Applicants deny the alleged deviation. A subsequent review of this package by ERC has revealed that a deviation does not exist. The ERC engineer correctly N/A'd these attributes.

NOD Item E.1 - Corrective action has been taken in regard to this violation. Additionally, TUGCO has undertaken a complete HVAC support reverification program for Unit 1 and common. The DAP analysis is currently in process and is expected to be completed by June 1987.

NOD Item E.2 - ERC Deviation Report number I-S-HVDS-075-DR5 was prepared to document the undersized weld.

NOD Item E.3 - Deviation Report number I-M-LBCO-148-DR-3 was prepared on August 28, 1986, to document the existence where the minimum separation criteria was not met. A NCR was generated as a result of the DR to disposition the above conditions.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
01/16/87	TX-5186	Inspection Report Nos. 50-445/86-14 & 50-446/86-11

NOV Item A - Failure to segregate nonconforming items in warehouse.

NOV Item B.1 - Permanently installed equipment not protected from welding and grinding activities.

NOV Item B.2 - Failure to implement color coding/identification requirements.

NOV Item B.3 - Failure to implement color coding/identification requirements.

NOV Item B.4 - Loose conduit connectors.

NOV Item B.5 - Lack of end protection for unlanded conductors.

NOV Item B.6 - Failure to implement color coding requirements.

NOV Item C - Lack of procedures to address process control for drilling holes in solid bottom cable trays to facilitate installation of fittings and/or cable TY-RAPS.

This letter transmitted a response to the above items. In part, the response stated:

NOV Item A - A NCR was issued to identify the damage to the items specified. Items have been segregated by relocation to the QA hold area pending NCR disposition. Warehouse and QC receiving personnel will be retrained in the requirements of the applicable receiving and inspection procedures.

NOV Item B.1 - The permanently installed equipment in question will be inspected for damage and appropriately dispositioned. In a meeting on July 24-25, 1986, the use of disciplinary measures in the event of a similar violation was discussed. A project directive was issued concerning the protection of permanent plant equipment which defined disciplinary actions to be taken.

NOV Item B.2 - NCRs were written to identify and correct the discrepant conditions.

NOV Item B.3 - NCRs were written to identify and correct the discrepant conditions.

NOV Item B.4 - The cited violation of loose connectors (not hand tight) was found to exist for only one instance rather than two. A NCR was issued, dispositioned, work completed and the conduit in question was satisfactorily reinspected. A review of other completed 1E flexible conduit connectors was performed and no additional nonconformances were identified.

NOV Item B.5 - Applicants deny this alleged violation. The intent of this procedure is to provide protection to the cable end prior to, during and after construction pulling activities. It is not the intent to provide conductor end protection for unused conductors within a terminated cable.

NOV Item B.6 - NCRs were written to identify and disposition the discrepant conditions. Work has been completed on these NCRs and the cables satisfactorily reinspected.

NOV Item C - Revisions have been made to appropriate construction and inspection procedures to provide criteria for installation and verification of completed installation.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
01/19/87	TXX-6212	Inspection Report Nos. 50-445/85-14 & 50-446/85-11

NOV Item D - Failure to follow procedures concerning maintenance of duplicate copies of engineering documents.

This letter transmitted a response to the above item. In part, the response stated:

NOV Item D - Engineering Instruction TNE-AD-4-6 was created to specifically control the transmitted and duplicate retention of pipe support calculations and measures to assure accountability.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
01/22/87	TXX-6213	Inspection Report Nos. 50-445/86-06 & 50-445/86-04

NOV Item A(2) - Overflowing of electrical cable from cable trays.

This letter transmitted a response to the above item. In part, the response stated:

NOV Item A(2) - Corrective actions have been taken to prevent the improper cable installation identified in the NOV. Revisions to Inspection Instructions and Construction Procedures have been made to address the specific requirements of the electrical erection specification.

TUGCO INTERNAL AUDIT
OF
ENGINEERING AND CONSTRUCTION ACTIVITIES

The following internal audits were conducted. Reports were issued during the time period of November 26, 1986 - January 25, 1987:

Number: TCP-86-42

Title: Permanent Plant Records Vault

Scope: The scope of the audit consisted of the evaluation of the operation of the QA Permanent Plant Records Vault.

Number: TCP-86-43

Title: Piping Systems As-Built

Scope: The scope of the audit was to evaluate the adequacy and verify the implementation of the Piping As-Built Verification Program.

Number: TCP-86-44

Title: Cable Spread Room (U2) As-Built

Scope: The original scope of this audit was to evaluate the adequacy and implementation effectiveness of TUGCO Nuclear Engineering's Field Verification Method (FVM) TNE-FVM-CS-05, Rev. 0 for As-Building of the structural steel framework in Unit 2 Cable Spread Room.

During the pre-audit entrance meeting, the audit team was informed that no As-Building activities were on going based upon the reassignment of this task responsibility from Gibbs & Hill, Inc. to Stone & Webster Engineering Corp. (SWEC). As a result, the objectives of the scheduled audit could not be accomplished as originally intended. Consequently, the scope was altered to assess program status, for audit rescheduling purposes, and to assure that no As-Building activities were proceeding during the transition period and re-establishment of approved procedures for conducting the task.

Number: TCP-86-45

Title: Engineering/QC: HVAC

Scope: The scope of the audit was performed to verify that proper programs/procedures have been established by participating organizations to complete design, installation and as-built verification of Unit 1 and 2 HVAC systems.

Number: TIN-86-07

Title: Design Control

Scope: The scope of the audit was performed to verify that affected organizations had initiated/revised programs and procedures as necessary to implement the requirements of NEO-3.03, Revision 1 "Preparation, Review and Disposition of Plant Design Modifications", and verify that a program had been established by affected organizations to complete design modifications which were initiated prior to the issuance of NEO-3.03, Revision 0.

MISCELLANEOUS

The following additional correspondence was issued by TUGCO to the NRC during the time period of November 26, 1986 - January 25, 1987:

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
12/04/86	TXX-6143	TUGCO Commitments from CYGNA & SWEC Meeting

This letter transmitted copies of information requested during the meeting of November 13-14, 1986 between CYGNA and Stone and Webster Engineering Corporation.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
12/08/86	TXX-6126	NRC Request for Additional Information Concerning MSIV Bypass Valves

This letter (with attachments) provided additional information concerning the TUGCO request on May 17, 1985, to allow the use of manual operators on the main steam isolation valve (MSIV) bypass valves. The correspondence also provided comments on the proposed technical specification revision and on the related FSAR changes provided by Amendment 56.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
12/09/86	TXX-6156	Meeting Notice

This letter transmitted notice of a forthcoming meeting between CYGNA and SWEC to discuss Piping System and Pipe Support Corrective Action Program.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
12/16/86	TXX-6157	Supplemental Information on Containment Coatings Performance

This letter transmitted TUEC's response to the NRC Staff's request for supplemental information regarding the CPSES Coating Performance Program.

Date Letter No. Subject
12/19/86 TXX-6185 FSAR Amendment

This letter transmitted FSAR changes scheduled for a future FSAR Amendment resulting from testing and analysis performed to justify the separation between instrumentation and control cables and raceways at CPSES.

Date Letter No. Subject
12/19/86 TXX-6162 FSAR Amendment Description

This letter transmitted a description of Amendment 61 to the CPSES FSAR.

Date Letter No. Subject
12/22/86 TXX-6182 Transmittal of Documents

This letter transmitted copies and pertinent comments concerning the following documents:

- * CPSES Design Basis Consolidation Program Plan
- * Civil/Structural Generic Issues Report

Date Letter No. Subject
12/23/86 TXX-6191 Generic Issues Report

This letter transmitted copies of the Electrical Generic Issues Report prepared to resolve the specific design issues raised by design reviews including the third party review by TERA Corporation.

Date Letter No. Subject
12/31/86 TXX-6189 Follow-Up Report Regarding Allegations

This letter transmitted information that the allegation involving cans of trash in the containment wall (reference NRC letter 4-86-A-019 of May 30, 1986) is being investigated and evaluated.

Date Letter No. Subject
01/02/87 TXX-6147 Pipe Support Base Plate Designs Using Concrete Expansion Anchor Bolts

This letter transmitted information to revise TUGCO's submitted

responses to IE Bulletin 79-02 (Pipe Support Base Plate Designs Using Concrete Expansion Bolts) Revision 0 through 2.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
01/05/87	TXX-6174	Generic Technical Issues Report

This letter transmitted copies of "Generic Issues Technical Report - Evaluation and Resolution of TERA Equipment Qualification Issue Resolution Reports" prepared by Impell for TUGCO to resolve seismic and environmental concerns identified by TERA.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
01/16/87	TXX-6214	ACRS Presentation

This letter transmitted additional information regarding TU Electric's presentation to the Advisory Committee on Reactor Safeguards.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
01/16/87	TXX-6217	Generic Issues Report

This letter transmitted copies of the Instrumentation and Control Generic Issues Report which has been prepared to resolve the specific design issues raised by design reviews including the third party review by TERA Corporation.

<u>Date</u>	<u>Letter No.</u>	<u>Subject</u>
01/19/87	TXX-6229	Meeting Notice

This letter transmits notice of a forthcoming meeting between CYGNA and EBASCO to discuss cable tray support.

OTHER

On behalf of Texas Utilities, Robert A. Wooldridge has submitted various documents to the Board for their information. These documents include the following for the time period of November 26, 1986 - January 25, 1987:

12/09/86 Notice of meeting between CYGNA and SWEC.

12/09/86 Information from the November 13-14, 1986 meeting between CYGNA and SWEC.

12/19/86 Copies of Small Bore Piping and Pipe Supports Generic Issues Report.

12/22/86 Copies of CPSES Design Basis Consolidation Program Plan and Civil/Structural Generic Issues Report.

12/22/86 Approved Results Reports VII.a.7, I.b.1 and I.b.2.

12/23/86 Copies of Electrical Generic Issues Report.

12/23/86 Documents for Evaluation and Resolution of Generic Technical Issues for HVAC Ducts & Duct Supports.

01/05/87 Copies of Generic Technical Issues Report - Evaluation and Resolution of TERA Equipment Qualification Issue Resolution Reports.

01/16/87 Copies of Instrumentation and Control Generic Issues Report.

01/16/87 Approved Results Reports I.a.1, I.b.4, II.c, VII.a.3 and V.d.

The following reports were issued by the CPRT Overview Quality Team (OQT) during the time period of November 26, 1986 - January 25, 1987:

12/08/86 Internal memo from J.F.Streeter to J.W.Beck transmitting the CPRT OQT Progress and Status Report. This report includes a summary of the OQT meeting held October 13-17, 1986 and a progress and status report of OQT activities.

12/19/86 Internal memo from J.F.Streeter to J.W.Beck transmitting the CPRT OQT Progress and Status

Report. This report includes a summary of the OQT meeting held December 1-5, 1986 and a progress and status report of OQT activities.

The following consultant reports have been received by engineering for the time period of November 26, 1986 - January 25, 1987:

(SEE ATTACHMENT A)

ATTACHMENT A

<u>LETTER #</u>	<u>DATE</u>	<u>NAME OF REPORT</u>
SWTU-0182	11/20/86	Executive summary report for October 1986
IM-T-0210-052-181	11/28/86	Transmittal of Impell report 01-210-1521 Train C Conduit damping justification
IMT-0884	12/15/86	Final issue report of the equipment qualification generic issue report
CVT-0217	12/16/86	Stone & Webster corrective action program monthly report for November 1986
SWTU-0399	12/19/86	Electrical generic issues report
EB-T-1656	12/22/86	Transmittal of documentation for cable tray hangers design verification program
SWTU-0397	12/19/86	Civil/Structural generic issues report
IMT-0994	12/29/86	Generic technical issue report. Evaluation and resolution of TERA Equipment Qualification Issue Reports: DAP-E-EIC-503 (Environmental) and DAP-E-M-500 (Seismic)
CVT-0222	12/15/86	Impact of construction deviation on stress requalification
NE-2819	12/04/86	Vendor manual review study
EB-T-1533	01/12/87	System interaction Program Generic Technical Report
WPT-8683	01/06/87	Comanche Peak Inspection and Evaluation Report for Steam Generator Upper Support Beam Anchor Bolts
EB-T-1647	12/15/86	Evaluation and Resolution of Generic Technical Issues for HVAC Systems (Including ducts and duct supports)
	01/16/87	Instrumentation and Controls Generic Issue Report
	12/05/86	Small Bore Piping and Pipe Support Generic Issues Report
	12/15/86	Impact of Construction Deviations on Stress Requalification Program

DOCKETED
USNRC

CERTIFICATE OF SERVICE '87 FEB 17 P5:01

I, Kathryn A. Selleck, one of the attorneys for the Applicants herein, hereby certify that on February 10, 1987, I made service of the within Applicants' Fourth Progress Report and Annotated Bibliographies, by mailing copies thereof, postage prepaid, to:

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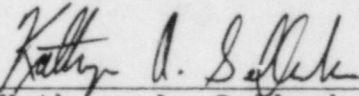
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