

APPENDIX E

COMANCHE PEAK RESPONSE TEAM ACTIVITIES INSPECTION REPORT

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Reports: 50-445/85-13
50-446/85-09

Permit: CPPR-126:
CPPR-127

Dockets: 50-445
50-446

Category: A2

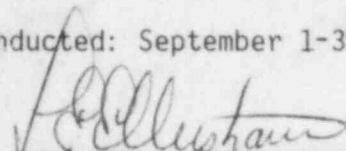
Applicant: Texas Utilities Electric Company (TUEC)
Skyway Tower
400 North Olive Street
Lock Box 81
Dallas, Texas 75201

Facility Name: Comanche Peak Steam Electric Station (CPSES), Units 1 and 2

Inspection At: Glen Rose, Texas

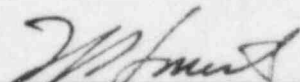
Inspection Conducted: September 1-30, 1985

Inspectors:



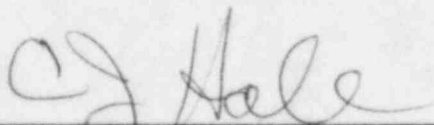
L. E. Ellershaw, Reactor Inspector, Region IV
CPSES Group
(paragraphs 1, 5.d, 5.g-5.i, 5.k-5.n, 5.t-5.v)

12/17/85
Date



W. F. Smith, Resident Reactor Inspector (RRI),
Region IV CPSES Group
(paragraphs 1, 5.j)

12/16/85
Date



C. J. Hale, Reactor Inspector, Region IV CPSES
Group
(paragraphs 1, 2.a-2.b, 3, 4, 5.e, 5.f, 5.o-5.s)

12/17/85
Date

B601030202 851224
PDR ADOCK 05000445
G PDR

T. F. Westerman for 12/27/85
 A. R. Johnson, Reactor Inspector, Region IV
 CPSES Group
 (paragraphs 1, 2.c-2.e, 5.a-5.c, 5.v)
 Date

Consultants: EG&G - R. Bonnenberg, L. Jones, A. Maughan, W. Richins,
 R. VanderBeek

Parameter - J. Birmingham, D. Brown, J. Gibson, K. Graham,
 D. Jew, T. Young

Reviewed By: J. Barnes 12/17/85
 I. Barnes, Group Leader, Region IV CPSES Group
 Date

Approved: T. F. Westerman 12/23/85
 T. F. Westerman, Chief, Region IV CPSES Group
 Date

Inspection Summary

Inspection Conducted: September 1-30, 1985 (Report 50-445/85-13; 50-446/85-09)

Areas Inspected: Nonroutine, unannounced inspection of applicant actions on previous inspection findings, Comanche Peak Response Team (CPRT) procedures and instructions, and CPRT issue - specific action plans (ISAPs). The inspection involved 2339 inspector-hours onsite by 6 NRC inspectors and 11 consultants.

Results: Within the three areas inspected, two violations (erroneous and missing conduit identification, paragraph 2.e; observation of an accepted flange joint in a broken condition, paragraph 5.v); and three deviations (issue of inspection verification packages with missing, incomplete and/or incorrect documents, paragraphs 5.u and 5.v; failure of ERC inspectors to note conditions which violated drawing requirements, paragraph 5.v; incorrect population development for ISAP V.d, paragraph 5.m) were identified.

DETAILS1. Persons Contacted

J. Arros, TERA Civil/Structural Issue Coordinator
 W. Bailey, ERC Supervisor, QA/QC Reinspection Engineering
 D. W. Braswell, TUGCO Engineering Superintendent
 C. I. Browne, Project Manager, R. L. Cloud & Associates, Inc.
 *R. E. Camp, Assistant Project General Manager, Unit 1 (Impell Corp.)
 *J. D. Christensen, ERC Deputy QA/QC Review Team Leader
 *J. Finneran, TUGCO Lead Pipe Support Engineer
 *S. M. Franks, Special Projects and Technical Support Lead (Impell Corp.)
 *J. B. George, TUGCO Vice President, Plant General Manager
 *P. E. Halstead, TUGCO Site QC Manager
 J. L. Hansel, ERC QA/QC Review Team Leader
 *C. R. Hooten, TUGCO Project Supervisor, Civil/Structural Engineering
 *J. C. Kuykendall, TUGCO Manager, Nuclear Operations
 H. A. Levin, CPRT Civil/Structural/Mechanical Review Team Leader
 *K. L. Luken, Lead Startup Engineer (Westinghouse)
 *D. M. McAfee, TUGCO QA Manager
 *J. T. Merritt, Jr., TUGCO Assistant Project General Manager
 *S. P. Melancon, CPRT Issue Coordinator
 *C. K. Moehlman, TUGCO Project Mechanical Engineer
 *C. E. Scott, TUGCO Startup Manager
 G. M. McGrath, TUGCO Licensing/Compliance Supervisor
 W. J. Nixon, TUGCO Results Engineering Supervisor
 M. Obert, TRT Issue Coordinator
 A. Patterson, ERC Engineering Supervisor
 C. Spinks, ERC Inspection Supervisor
 T. G. Tyler, CPRT Program Director (Energex)
 *W. I. Vogelsang, TUGCO Electrical Coordinator
 *C. H. Welch, TUGCO QC Services Supervisor
 *M. J. Wise, CPRT Testing Review Team Leader

*Denotes those persons who attended the exit interview.

The NRC inspectors also contacted other CPRT and applicant employees during this inspection period.

2. Applicant Actions on Previous Inspection Findings

- a. (Open) Unresolved Item (445/8511-U-01): Procedure CPP-001, "Preparation of Project Procedures and Quality Instructions," has been revised (Revision 1) to provide additional guidance/direction in the development of Quality Instructions (QIs). Unclear requirements noted in NRC review of QI-008 (i.e., paragraphs 2.a, 4.d, 8.a, 8.b,

8.c, 10, 11, 12.a.1, 12.9.2, 12.b.1, 12.b.2, 12.c.2, 12.d.2, 12.e.2.b) have been suitably resolved in Revision 2 of this document which was issued on September 9, 1985. Additional Region IV review with respect to QI-014 has been deferred until after completion of the NRR evaluation of statistical populations. This unresolved item will remain open pending resolution of QI-014 and completion of evaluation of QIs applicable to all engineering disciplines.

- b. (Open) Deviations (445/8511-D-01 and 445/8511-D-02): These items will remain open pending receipt and evaluation of the applicant's response.
- c. (Open) Open Item (445/8511-0-14): Additional inspection of this open item, pertaining to observation of a damaged fire wrap blanket on conduit C14B11217, has been performed. No other instances of fire wrap blanket damage were observed during this reporting period. TUGCO has initiated Nonconformance Report (NCR) E-85-101340S with respect to the conduit C14B11217 fire wrap damage.

This item will remain open pending further NRC inspection.

- d. (Closed) Open Item (445/8511-0-15): Further review of this open item, pertaining to observation of two sections of cable tray with covers removed, showed that the cover removal had been previously authorized by Item Removal Notice (IRN) E05257CB and NCR E85-100513.
- e. (Closed) Open Item (445/8511-0-33): Additional NRC inspection of this open item was performed in this reporting period. Procedure QI-QP-11.3-8, Revision 0, issue date July 7, 1978, "Identification and Color-Coding Inspections," requires that the presence of conduit identification be verified at both sides of all walls and slabs through which conduit passes. Procedure QI-QP-11.3-23.7, Revision 1, issue date January 5, 1980, "Verify Conduit Identification," requires also that conduit be identified as stated above and addresses the use of identification templates for embedded conduits which are flush with the surface of walls and floors. The NRC inspection showed several instances where required sleeve conduit identification was missing. One example was also noted of an incomplete identification marking. ERC inspections have also identified instances where conduit sleeves have not been included in the cable routing schedules.

The failure to accomplish required conduit identification to provide for control of cable routing is a violation (445/8513-V-01).

- f. (Closed) Open Item (445/8511-0-34): Further inspection of this open item, pertaining to absence of identification tags on the outboard side of electrical penetration assemblies, showed that tags were not

required by the applicable specifications; i.e., Specification Nos. 2323-ES-100 and 2323-ES-12/12A.

- g. (Closed) Open Item (445/8511-0-35): Further inspection of this open item, pertaining to the presence of 1-inch openings in the bottom of cable tray section T130ECG41 and T130CCP80, showed that the opening (i.e., potentially representing a separation deficiency) in tray T130ECG41 had been previously identified by the applicant and was being corrected by Construction Operation Traveler AM85-309D-9400. Additional examination of tray T130CCP80 showed that no other trays or conduit were below the opening in the tray and therefore a separation deficiency did not exist.

3. CPRT Program

Detailed NRC staff comments on the CPRT Program Plan, Revision 2, were forwarded to the applicant by NRC letter of September 30, 1985. ERC has controlled procedures addressing their activities and TERA is developing procedures for formal control of their activities (four are issued). Future Region IV inspection activities in these subject areas are dependent upon issue of the umbrella QA program and the results of NRC staff review.

4. CPRT Procedures and Instructions

a. Implementation of ERC Comanche Peak Procedures and Instructions

The NRC audits were conducted to determine if the ERC activities were consistent with the requirements identified in the Comanche Peak Procedures (CPPs).

- (1) Audit of CPP-001,-002 and-004: The NRC inspectors audited CPRT's implementation of CPP-001, Revision 0, "Preparation Review and Approval of Project Procedures and Instructions"; CPP-002, Revision 0, "Control of Correspondence and QA/QC Review Team Documents"; and CPP-004, Revision 0, "Project Working Files." No deviations from the commitments in CPP-002 and CPP-004 were noted. Several deviations from CPP-001, Revision 0, were identified concerning the control of procedure revisions to CPP distribution manual holders and the retention of procedure review comments. Two days after this NRC audit, CPP-001, Revision 1, was issued resolving these deviations.

- (2) Inspector Certification and Personnel Objectivity: This is a continuation of the NRC inspection of the implementation of CPP-003, "Indoctrination, Training and Certification of Personnel," that was initiated and documented in NRC Inspection Report 50-445/85-11; 50-446/85-06. Included in this inspection are the results of reviews of the objectivity statements of all CPRT personnel and the testing of ERC inspection personnel.

Personnel Objectivity: One of the founding principles of the CPRT program is that the program be conducted in such a manner that its objectivity and credibility will not be questioned. To this end, the CPRT developed an objectivity questionnaire that all personnel, except for clerical and certain administrative personnel, were required to complete and sign. The NRC has reviewed all currently completed questionnaires and compared them with the individual resumes.

Errors were found in many of the completed questionnaires due to individuals not being aware of contracts previous employers have had with TUEC. These errors were satisfactorily corrected. However, during this review two members of the Senior Review Team (SRT) and two key members of the CPRT were noted to have described previous contractual involvement with CPSES on their objectivity questionnaires. Additional NRC review of this matter will be made after receipt of the information requested by the transmittal letter for NRC Inspection Report 50-445/85-11; 50-446/85-06.

Inspector Testing: CPP-003 requires that all inspection, examination, and test personnel take a written examination in general QA principles and in their specific discipline, except for those individuals coming directly from the Braidwood site. The individuals were associated with ERC at that facility in a similar corrective action program to CPSES and were consequently permitted to transfer certifications obtained by examination at that location. CPP-003 further requires a minimum passing grade of 80%, failures may be retested only once and not in less than three days.

Written tests have been given to inspection personnel beginning in December 1984, with the largest majority being given during July and August 1985, when most of these personnel reported to the site. The test questions are carefully controlled with only limited and authorized access permitted. All test questions are maintained in a computer program. Each type of test (e.g. General QA, Mechanical Level II Specific, etc.) has a pool of questions that is at least twice as large as the number of questions that would appear on a given test.

NRC review of two pools of test questions (General QA and Mechanical Level II Specific) and a comparison of tests given at different times verified that the practices described above were being implemented.

Twenty-eight inspectors were required to be retested. Each of these inspector's files was reviewed for test and retest dates, and the questions on the tests and retests were compared for duplication. Six individuals were given retests in less than 3 days, five in December 1984, and one in January 1985. These departures from the 3-day requirement for retest occurred, however, before the issuance of CPP-003, Revision 0, dated July 2, 1985, and appear to be isolated occurrences when retesting first began.

No NRC deviations were identified.

- (3) Audit of CPPs-005,-006,-007 and-008: The following CPPs define requirements for preparation of documents critical to the reinspection process: (1) CPP-005, "Establishing Populations"; (2) CPP-006, "Sample Selection"; (3) CPP-007, "Preparation of Checklists and Data Base Reports"; and (4) CPP-008, "Preparation of Verification Packages."

The NRC audit of these four CPPs was based on the selection of nine completed verification packages from the ERC QA/QC Review Team Records Center.

The Records Center also had files for the master population list, population descriptions, population items list, and random sample identification lists. The master population list was checked to assure each of the selected verification packages was included. In all cases the proper population description and population items list were on file for each verification package audited. The applicable random sample identification lists existed but these lists were formally checked out to the engineers who were preparing verification packages. The engineers were contacted and the lists produced. The NRC inspector was informed that the lists would be returned to the Records Center after preparation of all verification packages and completion of the field reinspections.

The random sample identification list includes provisions for documenting whether an accessibility check was made. Justification is required if the accessibility check is not made. The verification packages, according to CPP-007, should contain inspection checklists and data base reports. All packages in the sample contained both.

A verification package index, required by CPP-008, was included in each verification package. Supplementary inspection instructions, optional according to CPP-008, were included in two of the nine verification packages. The adequacy of the documents referenced in each verification package is a subject considered in NRC audits of each ISAP No. VII.c population.

No NRC deviations were identified in the audit of these CPPs.

- (4) Audit of CPPs-009 and-010: The method chosen to audit the implementation of these CPPs was to review the nine verification packages referred to above to determine if CPP-009, "Performance of Reinspections and Documentation Reviews," and CPP-010, "Preparation of Deviation Reports," had been implemented.

The inspection checklist in all nine verification packages was completed, reviewed, and approved as required by CPP-009.

Of the verification packages reviewed, three included Deviation Reports (DRs). These were reviewed and approved by first and second reviewers, in accordance with CPP-010.

No NRC deviations were identified.

b. Review and Implementation of TERA Onsite Procedures

TERA is in the process of developing and implementing 20 Design Adequacy Procedures (DAPs) for use in controlling their Design Adequacy Program onsite and offsite. At present, four DAPs have been released and five have been released for interim use only. The remaining 11 are in the final review process. In addition, five civil structural and mechanical (CSM) procedures have been used as interim procedures until the DAPs are developed.

An NRC inspection was conducted to determine if the onsite TERA effort in conducting the assigned ISAP tasks complied with the CPRT Policies and Guidelines and, as applicable, DAPs or CSM procedures.

This inspection included four areas defined by the CPRT Policies and Guidelines: (1) "Policy on Testing and Inspection Personnel used in Third Party Verification Activities", (2) "Developing Sampling Plans and Random Samples for TRT Issues," (3) "Guide on Central and Working Files," and (4) "Guide for Safety Significance Evaluations." The inspection also addressed, in part, the previously identified open item (445/8511-0-37) which remains open until the site applicable DAPs are issued, implemented, and inspected.

- (1) Training Records: This activity will be covered by DAP-15, "Training and Qualification," which has not been released. This audit was conducted using the TERA work instruction CSM-1.

A review of the TERA files showed that there was a Training and Qualification file on each onsite TERA employee, at present 12 individuals. Each file included a resume, an objectivity statement, a training record, and a record of required reading. The file for one individual was reviewed in detail and established to contain all of the required information and approval.

No NRC deviations were identified.

- (2) Sampling Methods: No TERA DAP will be issued to cover sampling. Therefore, the TERA effort was inspected for compliance with the CP&F Policies and Guidelines.

ISAP No. II.a, "Reinforcing Steel in the Reactor Cavity," was chosen and the Issue Coordinator's file was inspected. The ISAP included tasks requiring sampling, review of pour cards, and study of embeds.

The file concerning pour cards contained a population list, a random number ordering of the population, a tabulation of the results of the inspection, and a summary report on the pour cards. The file concerning embeds showed that the number of embeds was small, so 100% were reviewed.

ISAP V.a, "Inspection for Certain Types of Skewed Welds in NF Supports," was inspected for sampling methods. A computer based list of hangers was used by TERA which identified all hangers that contained skewed welds. This list defined a population of 359 hangers with skewed welds from which a statistical random sample of 60 had been taken.

No NRC deviations were identified.

- (3) Discrepancy Responding: Documentation and tracking of issues and discrepancies is covered by DAP-2, which has been issued, and by CPRT Policies and Guidelines on reportability of deficiencies.

The file on Discrepancy/Issues Resolution reports (DIRs) was audited and contained copies of three TERA originated DIRs dated August 27, September 17, and September 25, 1985. These had been sent to the Generic Implication Coordinator for processing. One of the three was considered by TERA to be potentially reportable under 10 CFR 50.55(e) and the form, "Reportability Evaluations

Check List," had been completed and attached to the DIR. Disposition of the potentially reportable finding is and open item (445/8513-0-01).

No NRC deviations were identified.

- (4) Documentation System: TERA has developed a procedure, DAP-11, "Document Control," to control the documentation system. To date, the procedure has not been released, so the audit compared the TERA document control system to the CPRT Policies and Guidelines.

The TERA onsite documentation system utilizes file numbers, file indices, and file content logs and is being maintained in accordance with the CPRT Policies and Guidelines. The impact of the procedure on work performed prior to its issue is currently an open item; i.e., (445/8511-0-37).

No NRC deviations were identified.

5. CPRT ISAPs

- a. NCRs on Vendor Installed AMP Terminal Lugs (ISAP No. I.a.5)

Status of CPRT Activity

In conjunction with the review of the AMP Incorporated Engineering Evaluation Report EER-136, CPRT-Electrical is reviewing military specification MIL-T-7928G which was utilized by AMP in the testing of their terminal lugs. The CPRT-Electrical is currently assessing the completeness of the central records files and finalizing actions on this ISAP. The results report has not yet been issued for this activity.

Status of NRC Inspection Activity

The NRC inspector reviewed the process for the redistribution of NCRs E-84-01066 through E-84-01081 and the referenced NCR E-84-00972. The NRC inspector identified that replacement of terminal lugs was performed under Startup Work Authorization (SWA) No. 19116 which was verified to have been completed on May 3, 1984. This SWA was worked in conjunction with SWA No. 19249.

The NRC inspector examined 9 of the 16 6.9KV cubicles in which the terminal lugs of concern are located. The nine cubicles examined contain approximately 80% of the terminal lugs of concern. The NRC inspector observed no terminal lugs bent in excess of 90° or twists in excess of 45°. No flaking, cracks, or other physical characteristics were observed which could result in a loss of mechanical strength. As a result of these observations, the NRC inspector found

no reason to disagree with the conclusion of the disposition that the terminals can be used "as is" and do not pose a service problem.

The NRC inspector is reviewing MIL-T-7928G concurrently with the review of the AMP Engineering Evaluation Report EER-136. The NRC inspector has also made an initial review of the ERC central file for ISAP No. I.a.5.

No NRC violations or deviations were identified.

b. Flexible Conduit to Flexible Conduit Separation (ISAP No. I.b.1)

Status of CPRT Activity

The control board internal wiring analysis, (Revision 1) required by the ISAP, was submitted by Gibbs & Hill (G&H) to TUGCO on July 24, 1985, to demonstrate that existing circuits in main control panels are protected, exclusive of existing SERVICAIR flexible conduit; and to preclude the need for additional separation barriers. G&H is currently modifying this analysis to address NRC comments.

The physical tests (short circuit and heat transfer) conducted on the SERVICAIR flexible conduit to evaluate its adequacy as a barrier under design bases conditions, have been partially completed. Testing to establish worst case current condition in the heat transfer test is in process as a result of further analysis by G&H.

Status of NRC Inspection Activity

The NRC inspector has reviewed ISAP No. I.b.1, Revision 3, and the implementing CPRT QI; i.e., QI-004, Revision 4.

The NRC inspector is currently in the process of reviewing the G&H control board internal wiring analysis, Revision 1.

No NRC violations or deviations were identified.

c. Barrier Removal (ISAP No. I.b.4)

Status of CPRT Activity

NCRs were issued by TUGCO as a result of TRT activities to assure replacement of removed barrier material and rework of field cabling which was in violation of the separation criteria. Upon completion of the dispositioning of the NCRs, CPRT-Electrical requested ERC to inspect the rework. As a result of the inspection, another cable separation violation was noted. CPRT-Electrical requested TUGCO to issue a Design/Construction Significant Deficiency Analysis Report for potential reportability

under the provisions of 10 CFR 50.55(e). The deficiency analysis report was issued and addressed by TUGCO. It was determined that the noted deficiency was not reportable. A revision was made to CPSES Operations Maintenance Procedure INC-101 to address concerns of barrier material removal during maintenance.

Further activities on this issue will depend on the results of the control board and vertical panel internal wiring separation analysis associated with ISAP No. I.b.1.

The CPRT-Electrical is currently in the process of determining which other separation issues will be addressed in the ISAP.

Status of the NRC Inspection Activity

The NRC inspector has reviewed ISAP No. I.b.4, "Barrier Removal," Revision 3, dated June 26, 1985. No CPRT quality instruction governs this activity, other than the Senior Review Team (SRT) Draft Policies and Guidelines which were approved for use by the SRT on February 28, 1985. Assessment of the adequacy of this approach is an open item (445/8513-0-02).

No NRC violations or deviations were identified.

d. Electrical Conduit Supports (ISAP No. I.c)

Status of CPRT Activity

A third party review is to be performed by TERA as part of ISAP No. II.d, which deals with seismic design of control room ceiling elements and will focus on the Unit 1 Damage Study Program for greater than 2-inch conduit. TERA is conducting a review of as-built drawings for the selected 1 1/2-inch and 2-inch nonsafety-related conduit runs which are being analyzed by G&H for seismic effects.

Some supports in seven conduit runs have been found to have stresses greater than the specified allowables, when subjected to the G&H seismic loads.

Two approaches are underway in an attempt to resolve the problem. One approach deals with establishing a test program in an attempt to obtain plastic deformation versus load data that will justify increasing the allowable stress of certain support components. In conjunction, guidelines are being established for a walk-down evaluation of predicted interactions with safety-related items resulting from support failure and/or sway.

Status of NRC Inspection Activity

The ISAP and related procedures have been reviewed for consistency with FSAR requirements and NRC Technical Review Team (TRT) concerns pertaining to nonsafety-related conduit interactions with safety-related items. Procedures for selection of random samples were reviewed for compliance with Appendix D of the CPRT Program Plan. The engineering sample selection procedure is being reviewed.

Review of the Damage Study for greater than 2-inch nonsafety-related conduit as well as verification of the total population of 1 1/2-inch and 2-inch conduit has not been completed. As-built drawings, which will comprise a part of the final seismic analysis package, will be reviewed along with the analysis.

No NRC violations or deviations were identified.

e. QC Inspector Qualification (ISAP No. I.d.1)

In response to the TRT reporting of a lack of supporting documentation in inspector qualification files, ISAP No. I.d.1 was developed to review and evaluate all current inspector qualifications and also historical electrical inspector qualifications. The ISAP is structured to be performed in three phases. Phase One is a screening of inspector files by the ERC Certification Administrator (ERC-CA) for ASME inspectors, and by TUGCO Audit Group (TAG) for non-ASME inspectors. Phase Two is an evaluation of the qualifications by a Special Evaluation Team (SET). Phase Three is sampling reinspection of hardware originally inspected by any inspector deemed to have insufficient paper qualifications.

Status of CPRT Activity

Phase One is complete. TAG and the ERC-CA have completed screening of inspector files and transmitted the results to the SET. This screening documented discrepancies/deficiencies of various importance from clerical errors to lack of a high school diploma. Evaluation of the effect of these discrepancies/deficiencies is the role of the SET in Phase Two.

SET has completed Phase Two review of all current non-ASME inspector and historical electrical inspectors. Review of ASME related inspectors is approximately two thirds complete. In performing its review, the SET obtained additional clarification or backup documentation from TUGCO. Phase Two status of current non-ASME and historical

electrical inspectors had not been issued as of the end of this inspection period. To date, six inspectors have been identified for Phase Three. The sample reinspections for these individuals have been completed and results reports for each are in preparation.

Status of NRC Inspection Activity

For Phase One, the NRC inspector compared 12 screening reports with the certification files. This comparison found the reports to be accurate and complete with the exception that non-ASME certifications held by ASME inspectors had not been reviewed. This exception has been discussed with the issue coordinator and is an open item (445/8513-0-03).

For Phase Two, the NRC inspector reviewed five inspector qualification files and compared them to evaluations by the SET. In general, the comparisons agreed with the SET evaluations. One exception was noted with respect to an inspector's education level being insufficient as documented; i.e., record of passing General Equivalency Diploma test scores without copy of actual diploma. This is an open item (445/8513-0-04).

For Phase Three, the NRC inspector witnessed 24 of approximately 240 Phase Three reinspections. These inspections are controlled by QI-005, "Procedure for Evaluation of Inspector Performance." This procedure was reviewed by the NRC inspector. Comments on the procedure were directed to the Issue Coordinator and were resolved by ERC memo QA/QC-RT-483 or included in a subsequent revision.

The 24 witnessed ERC reinspections showed ERC noting deficiencies and documenting them on the inspection record. The deficiencies were also documented by an NCR for resolution. No additional deviations were noted by the NRC inspector during these inspections. Independent reinspections of the ERC activity is planned to be performed during a subsequent inspection.

The NRC inspector noted that deficiencies attributable to the original inspector could potentially be missed in items that had been changed by NCR rework. This is an open item (445/8513-0-05).

No NRC violations or deviations were identified.

f. Guidelines for Administration of QC Inspector Tests (ISAP No. I.d.2)

Status of CPRT Activity

Review and comment on Procedures CP-QP-2.1, "Training of Inspection Personnel," and CP-QP-2.3, "Documentation with QA/QC Personnel Qualification File," performed by the SET is complete. The applicant has issued CP-QP-2.1, Revision 19, which addresses the comments of SET. Review by SET of Revision 19 is not complete.

Status of NRC Inspection Activity

The NRC inspectors have reviewed Procedure CP-QP-2.1 for incorporation of the TRT comments. This review found all TRT comments addressed except for the lack of a defined vehicle for familiarization of QC inspectors with changes in inspection procedures. This is an open item (445/8513-0-06).

No NRC violations or deviations were identified.

g. Reinforcing Steel in the Reactor Cavity (ISAP No. II.a)

Status of CPRT Activity

TERA personnel informed the NRC inspector that the actions committed to by ISAP No. II.a are complete with the exception of a final verification of the completeness of the pour card population. The final results report has been prepared and is currently being reviewed internally by TERA.

Status of NRC Inspection Activity

Review of G&H analysis of the as-built condition of the Unit 1 reactor cavity is complete. An evaluation of other plan items is underway pending the issuance of the final results report.

No NRC violations or deviations were identified.

h. Seismic Design of Control Room Ceiling Elements (ISAP II.d)

Status of CPRT Activity

The TRT review of the seismic design of the ceiling elements installed in the control room was conducted to verify design in accordance with Regulatory Guide 1.29, "Seismic Design Classification," and FSAR Section 3.7B.2.8. These documents require that seismic Category II

and nonseismic items be designed in such a way that their failure will not adversely affect the function of safety-related components or cause injury to operators.

For the nonseismic items (other than the sloping suspended drywall ceiling), and for nonsafety-related conduits whose diameter is 2 inches or less, the TRT could find no evidence that the possible effects of a failure of these items had been considered. In addition, the TRT determined that calculations for seismic Category II components (e.g., lighting fixtures) and the calculations for the sloping suspended drywall ceiling did not adequately reflect the rotational interaction with the nonseismic items, nor were the fundamental frequencies of the supported masses determined to assess the influence that seismic response spectrum at the control room ceiling elevation would have on the seismic response of the ceiling elements.

The applicant has evaluated the potential interactions and determined that the installation of seismic restraints to resist horizontal motion would be required. It was also decided to remove the sloping suspended drywall along with its supports and replace it with a seismically qualified sloped ceiling.

Status of NRC Inspection Activity

During this inspection, ongoing measurements being taken of control room ceiling anchorages to concrete were observed. A review of drawings showing the proposed modifications was also conducted.

This item will be further reviewed during subsequent inspections.

No NRC violations or deviations were identified.

i. Rebar in the Fuel Handling Building (ISAP No. II.e)

Status of CPRT Activity

TERA personnel informed the NRC inspector that the actions committed to by ISAP II.e are complete. The final results report has been prepared and is currently being reviewed internally by TERA.

Status of NRC Inspection Activity

Review of G&H calculations is complete. An evaluation of additional plan items is being performed including: (1) a review of the adequacy of procedural controls governing rebar cutting, (2) a review of all

cases for Units 1 and 2 where rebar cutting was requested for installation of Hilti bolts, (3) a review of the determination of the possibility of additional unauthorized rebar cutting, and (4) a review of Hilti bolt installation work as performed by the construction crew that installed the subject Hilti bolts.

No NRC violations or deviations were identified.

j. Hot Functional Testing (HFT) Data Packages (ISAP No. III.a.1)

In order to maintain a correlation between areas inspected and the applicable sections of the ISAP, this inspection report will address each area using the ISAP paragraph number assigned by the applicant. During the previous inspection period of August 1-31, 1985, (See Appendix E of Inspection Report 50-445/85-11), paragraphs 4.1.1 through 4.1.6 were followup inspected, and paragraph 4.1.7 was started but not completed as indicated below:

- 4.1.7 There were seven HFT preoperational test data packages that were not previously reviewed by the TRT. In this section of the ISAP, the applicant committed to reevaluate these packages in accordance with the guidelines established in Attachment 1 of the ISAP. The NRC followup inspector reviewed the documentation associated with the reevaluation of each data package to determine that:
- ° The applicant's reevaluation appeared to follow the guidelines established by Attachment 1 of the Plan,
 - ° The documented questions raised by the reevaluation were properly dispositioned and approved by the Joint Test Group (JTG), and
 - ° The disposition approved by the JTG was not contrary to regulatory requirements.

The following test data package reevaluations were followup inspected:

- (a) ICP-PT-49-02, ICP-PT-49-05, and ICP-PT-55-10 were inspected during the last reporting period. The results are reported in NRC Inspection Report 50-445/85-11, Appendix E.
- (b) ICP-PT-57-09, "Check Valves and Hot Functional Safety Injection." The reevaluation was documented on Test Deficiency Report (TDR) 3987. There were no comments made by the applicant's reviewers, however, the NRC followup inspector noted that several check valves did not pass the

acceptance criteria for leakage, and as such were documented on six TDRs. The TDRs were closed on the basis that after repair the retesting would be deferred to the post fueling startup test program. This deferral was necessary at the time, because the plant conditions (normal operating temperature and pressure) required for testing were not scheduled to be achievable until then. The NRC inspector followed up to ensure all of the deferred valve retests were clearly identified, so that documentation would show that all of the objectives of ICP-PT-57-09 would be met prior to initial criticality. The NRC inspector found that all of the check valves except ISI-8815 were retested satisfactorily during December 1984, when the plant was heated up to normal operating pressure and temperature for thermal expansion retesting. ISI-8815 was deleted from the list of deferred valves on the basis that it was not a reactor coolant system boundary as defined in Technical Specification (TS) Table 3.4-1. After this decision was questioned by the NRC inspector, the applicant's representatives produced a draft change to the Deferred Preoperational Test Report showing the valve would be retested when required plant conditions became available, but prior to initial criticality (Mode 2). The NRC inspector was told by the applicant's representative that this change would have been made whether or not the original decision to delete the valve was questioned by the NRC inspector, because on April 9, 1985, TUEC had informed the NRC in a letter (TXX-4431) that ISI-8815 and four others would be incorporated into TS Table 3.4-1. During earlier reviews of the TS, the NRC had requested TUEC to incorporate ISI-8815 and 1-8900A, B, C and D into Table 3.4-1 because they should be considered reactor coolant system boundary valves whose operability should be verified through surveillance testing. 1-8900A, B, C and D were already tested during the preoperational test program in accordance with ICP-PT-57-09. For tracking and followup purposes, the satisfactory retesting of ISI-8815 is an open item (445/8513-0-07).

During preoperational testing, TDR 1337 identified excessive leakage during the seat leak test of 1-8900A, B, C and D. Section 2.1 of ICP-PT-57-09 specified a maximum leak rate of 45 milliliters per hour (ml/hr) for each valve. The four valves were tested in parallel, which yielded a combined leak rate of 84 ml/hr. The TDR was dispositioned "acceptable" with a justification stating that the combined leak rate could be as high as 180 ml/hr; i.e., 4 times 45. When the NRC inspector questioned this rationale, the

applicant's representative indicated that the TDR justification was incomplete, and would be revised to explain why 84 ml/hr is an acceptable leak rate. The surveillance leak test acceptance criteria for these valves is 1 gallon per minute. The preoperational test acceptance criteria are designed to precipitate a technical evaluation if any of the valves have significant leakage. The JTG considered a leak rate of 84 ml/hr from all four valves acceptable and not indicative of a valve seating problem requiring repair. Clarification of the test data package by revising the justification accordingly is Open Item (445/8513-0-08).

- (c) ICP-PT-58-02, "Residual Heat Removal at Hot Functional." The reevaluation was documented in TDR 3990. The NRC inspectors found no violations or deviations.
- (d) ICP-PT-74-02, "Incore TC and RTD Cross Calibration." The reevaluation was documented in TDR 3876. The NRC inspectors found no violations or deviations.
- (e) ICP-PT-91-01, "Loose Parts Monitoring System." The reevaluation was documented in TDR 3988. The NRC inspector found no violations or deviations.

4.1.8 The applicant committed to reevaluate 20 completed test data packages not associated with HFT. Of the 20 packages sampled, 13 had been reviewed previously by the NRC operations resident inspectors. The results of those reviews are documented in various routine inspection reports.

The NRC followup inspector verified that the following tests, which have been previously reviewed by the NRC operations resident inspectors, have been reevaluated in accordance with Attachment 1 of the ISAP:

- (a) ICP-PT-04-01, "Station Service Water," documented in TDR 3918 as satisfactorily reevaluated.
- (b) ICP-PT-29-02, RT1, "Diesel Generator Control Circuit Functional and Start Test, Retest 1," documented in TDR 3902 as satisfactorily reevaluated.
- (c) ICP-PT-29-04, "Diesel Generator Sequencing and Operational Stability Test," documented in TDR 4066 as satisfactorily reevaluated.

- (d) ICP-PT-37-01, RT1, "Auxiliary Feedwater System (Motor Driven Pumps), Retest 1," documented in TDR 3929 as satisfactorily reevaluated.
- (e) ICP-PT-48-01, "Containment Spray System," documented in TDR 3930 as satisfactorily reevaluated.
- (f) ICP-PT-57-01, RT2, "Safety Injection Pump Performance, Retest 2," documented in TDR 3920 as satisfactorily reevaluated.
- (g) ICP-PT-57-02, "Centrifugal Charging Pump Test," documented in TDR 3921 as satisfactorily reevaluated.
- (h) ICP-PT-57-05, "Safety Injection Accumulators Test," documented in TDR 3938 as satisfactorily reevaluated.
- (i) ICP-PT-57-06, "RHR ECCS Performance," documented in TDR 3939 as satisfactorily reevaluated.
- (j) ICP-PT-57-08, "Integrated SI-Emergency Power," documented in TDR 3940 as satisfactorily reevaluated.
- (k) ICP-PT-64-02, RT2, "Reactor Protection Systems, Retest 1," documented in TDR 3931 as satisfactorily reevaluated.
- (l) ICP-PT-64-07, "Solid State Safeguards Sequence System," documented in TDR 3906 as satisfactorily reevaluated.
- (m) ICP-PT-64-10, "Safeguards Actuation Relay Test," documented in TDR 3941 as satisfactorily reevaluated. The NRC followup inspector noted that there was an unresolved inspection report item that was identified during the prior review conducted by the NRC resident inspector in February 1985. The item (8502-10) was generated by NRC Inspection Report 50-445/85-02 dated September 11, 1985. The issue was the apparent incomplete incorporation of a complex change to the procedure using Test Procedure Deviation (TPD) No. 1. One of the changes was omitted from the TPD, but the justification was left in. Without the change being fully implemented, the NRC resident inspector was unable to determine if the test was satisfactorily completed. In an effort to determine why this problem did not appear in the reevaluation summary report, the NRC followup inspector interviewed three of the applicant's reevaluators and found

that this problem had been previously identified during the reevaluation and was resolved. The applicant's representative indicated that a documented resolution to Item 8502-10 was forthcoming to the resident inspector. Since this problem is already being tracked, it is not necessary to identify it further.

The remaining seven completed preoperational test data packages reevaluated in accordance with Attachment 1 of the ISAP were not previously reviewed by the NRC resident inspectors. Therefore, the followup inspection was conducted on the following data packages using the same inspection attributes listed in 4.1.7 above:

- (a) 1CP-PT-01-03, "125 Volt DC System," documented in TDR 3927 as satisfactory reevaluated.
- (b) 1CP-PT-02-01, "118 Volt AC Class 1E Inverters," documented in TDR 3917 as satisfactorily reevaluated.
- (c) 1CP-PT-02-10, RT1, "480 Volt Class 1E Switchgear and Motor Control Centers," documented in TDR 3928 as satisfactorily reevaluated.
- (d) 1CP-PT-02-17, "6.9 KV and 480 Switchgear Undervoltage Functional Test," documented in TDR 3937 as satisfactorily reevaluated.
- (e) XCP-PT-07-01, "Control Room Heating and Ventilation System," documented in TDR 3919 as satisfactorily reevaluated.
- (f) 1CP-PT-58-01, "Residual Heat Removal System," documented in TDR 3904 as satisfactorily reevaluated.
- (g) 1CP-PT-49-01, "Letdown, Charging and Sealwater System", documented in TDR 3905 as satisfactorily reevaluated.

No NRC violations or deviations were identified.

k. Inspection for Certain Types of Skewed Welds in NF Supports
(ISAP No. V.a)

Status of CPRT Activity

The reinspection of 60 field fabricated NF supports containing 99 type 2 skewed welds has been completed. The inspection attribute which was the technical focus of this issue dealt with geometric and dimensional configurations in locations where a typical fillet weld

gage measurement was not possible. The welds were reinspected by ERC inspectors using QI-006. The reinspection identified 14 type 2 skewed welds which deviated from drawing requirements; i.e., an undersize condition existed. Subsequent evaluation showed that one of the conditions was valid, however, the applicable drawing also showed that the weld was not required for structural integrity. Another condition was identified as being a vendor fabricated weldment, thus falling outside of the scope of this ISAP. However, the condition is valid and a NCR was initiated and evaluated separately. That particular evaluation was conducted by identifying all supports with type 2 skewed welds supplied by that vendor. A total of 32 supports were identified and a random sample of 7 was selected for reinspection. The random sample of 7 supports contained 13 type 2 skewed welds, 12 of which were accessible. No further undersized welds were identified. The remaining 12 conditions were evaluated as being valid and NCRs were initiated.

Status of NRC Inspection Activity

The NRC inspector verified that Brown & Root weld inspection Procedure Nos. CP-QAP-12.1, QI-QAP-11.1-26, QI-QAP-11.1-28 had been revised to properly address type 2 skewed welds, including their inspection and subsequent documentation. The NRC inspector witnessed, in the previous reporting period, reinspections of seven NF supports; each containing one type 2 skewed weld. ERC inspectors identified one undersize weld, which was documented in a NCR. The results of independent NRC reinspections of type 2 skewed welds are documented in Appendix F of this inspection report.

No NRC violations or deviations were identified.

1. Design Consideration for Piping Systems Between Seismic Category I and Non-seismic Category I Buildings (ISAP No. V.c)

Status of CPRT Activity

A list identifying all Units 1, 2 and common piping with a seismic/nonseismic interface has been completed by Comanche Peak Project Engineering. The results report has been prepared and is in the review stage.

Status of NRC Inspection Activity

The review of the list identifying all Units 1, 2, and common piping with seismic/nonseismic interface has been completed in order to verify the validity of the list and to assure that no pipe lines have

been omitted. The NRC review of the information relative to the auxiliary steam line and the recommendations to project Piping and Supports Program and/or Design Adequacy Program will not begin until issuance of the final results report.

No NRC violations or deviations were identified.

m. Plugwelds (ISAP No. V.d.)

Status of CPRT Activity

Reinspection has been completed of (1) component supports and baseplates, and (2) cable tray hangers, for presence of unauthorized or undocumented plug welds. Generic design change authorization (DCA) DCA 5347 permits plug welds in cable tray supports. ISAP No. V.d commits to third party review of the adequacy of this DCA. The implementation of this review will be inspected by Region IV in a subsequent report period. Plug welds in ASME, Section III component supports are not permitted except by specific engineering authorization.

The reinspection was performed on the following four random samples:

- (1) Random sample No. 1 consisted of 64 component supports and baseplates representing Unit 1 and common.
- (2) Random sample No. 2 consisted of 61 component supports and baseplates representing Unit 2.
- (3) Random sample No. 3 consisted of 60 cable tray hangers representing Unit 1.
- (4) Random sample No. 4 consisted of 61 cable tray hangers representing Unit 2.

The reinspection resulted in the identification of 23 plug welds in 14 cable tray hangers and no plug welds in component supports and baseplates.

Documentation for all cable tray hangers containing plug welds was reviewed. The results of this review showed that the plug welds in 13 of the cable tray hangers were authorized and documented, while the documentation for cable tray FSE-00159-4182 was found to be incomplete. These documentation packages are now undergoing a third party review by TERA.

Status of NRC Inspection Activity

The NRC inspector witnessed approximately 15% of the 246 reinspections conducted by ERC; i.e., 15 pipe supports and baseplates and 23 cable tray hangers. Five plug welds in cable tray hangers were identified

during the NRC witnessed reinspections. A review of the respective documentation packages revealed that these welds were properly authorized and documented.

In addition, the NRC inspector independently inspected three component supports and baseplates, and three cable tray hangers, none of which were within the CPRT random samples. Four plug welds were found and verified on two baseplates which were part of a common component support. The documentation package was reviewed and it revealed that the plug welds were authorized and documented.

During review of ISAP No. V.d, the NRC inspector established that the two random samples of component supports and baseplates were required to be exclusively ASME Code, Section III supports and baseplates. However, subsequent to the completion of the CPRT reinspection effort, a review of the two random samples revealed that just 39 out of 64 and 35 out of 61, respectively, were actually ASME Code, Section III supports and baseplates.

The failure to meet the commitments of ISAP No. V.d is a deviation (445/8513-D-01).

n. Installation of Main Steam Pipes (ISAP No. V.e)

Status of CPRT Activity

The specific engineering investigation of the main steam line installation is 100% complete and is undergoing review. The report describing the analytical evaluation of stresses and support load changes has been issued by R. L. Cloud & Associates (RLCA), and has been reviewed by TERA. Review and revision of procedures for pipe erection and placement of temporary and permanent supports as well as engineering significance of these procedures is also complete. The TERA draft results report is currently being reviewed.

Status of NRC Inspection Activity

About 75% of the RLCA stress report has been reviewed for adequacy with respect to the methods of analysis. The adequacy of the remainder of the report cannot be assessed until the supporting computer output, calculations, and piping models, received onsite September 26, 1985, are reviewed. The assessment of NCRs and Piping Deviation Request Forms that RLCA identified as being similar to the main steam line installation problem has been completed. All other items will be reviewed when the final results report is issued.

No NRC violations or deviations were identified.

o. Document Control (ISAP No. VII.a.3)

Problems in the document control area have been identified both by the applicant and NRC Region IV. This ISAP requires verification that latest design information has been physically incorporated and/or considered for other activities, as appropriate.

Status of CPRT Activity

Verification of the above is being accomplished by ISAP Nos. III.d, "Pre-Operational Testing," and VII.c, "Self-Initiated Reinspection/Documentation Review Program." The issue coordinator is awaiting input from these.

Status of NRC Inspection Activity

ISAP Nos. III.d. and VII.c. activities are currently being inspected by NRC personnel. NRC inspection of this ISAP will be initiated when it achieves an active status.

p. Audit Program and Auditor Qualification (ISAP No. VII.a.4.)

Status of CPRT Activity

The ERC issue coordinator reviewed the development of the TUEC Audit Program dating back to 1978. Support verification activities for this time frame were also reviewed. The results report is in preparation.

Status of NRC Inspection Activity

NRC inspection of this activity will commence upon issue of the results report.

q. Management Assessment (ISAP No. VII.a.5)

Status of CPRT Activity

ERC action has been deferred until results of an INPO audit made in July and August 1985 can be utilized by ERC to assess what improvements should be made to the management assessment program.

Status of NRC Inspection Activity

NRC inspection will be initiated when this ISAP achieves an active status.

r. Fuel Pool Liner Documentation (ISAP No. VII.a.8)Status of CPRT Activity

ERC has developed a check list for the review of fuel pool liner documentation. Sixty traveler packages have received an initial review which identified a need to revise the check list to provide a more indepth check of backup information on welders/welding. A total of 300 traveler packages will be selected from the sample population for ERC review.

Status of NRC Inspection Activity

NRC inspection of this ISAP will be initiated during a subsequent reporting period.

s. Onsite Fabrication (ISAP No. VII.b.1)Status of CPRT Activity

ERC has revised CPP-019, "Cluster Sampling for Issue Specific Action Plan VII.b.1," to change the sampling method. The ISAP is with the SRT for review of the proposed revision. Review of records or inspections are being delayed until the SRT review is complete. The issue coordinator expects further activity in October.

Status of NRC Inspection Activity

NRC inspection will be initiated when CPRT inspection and review activities achieve an active status.

t. Valve Disassembly (ISAP No. VII.b.2)Status of CPRT Activity

Reinspection of 92 valves from the combined random and engineering sample of 101 has been completed. Four DRs were initiated with respect to installed bonnets having identification numbers which are different from the identification numbers on their respective QA/QC documents. Two of the deviations were dispositioned as being nonsafety significant by the Safety Significance Evaluation Group (SSEG) based on a review of the applicable quality records, which revealed that while the identification numbers differed the bonnets were of the same type specified for these valves.

An SSEG effort to find quality records for the remaining two incorrectly identified bonnets was not successful. The bonnets have, however, been identified by the SSEG as being of nuclear quality as indicated by the NP marking observed on them. ITT Grinnell, the valve manufacturer, has stated that any nuclear grade valves shipped to the CPSES site have a pressure rating of at least 255 psig. Maximum line operating and design pressures listed in the line designation tables for one of the two valves in question are less than the 255 psig pressure rating and the deviation has been dispositioned as nonsafety significant. However, the design pressure for the chemical volume control line associated with the remaining valve is listed as 300 psig. The safety significance of this deviation is being evaluated.

Status of NRC Inspection Activity

The associated QI-018 has been reviewed for compliance with the CPRT Program Plan and referenced documents. The ERC sample selection plan has been reviewed for compliance with the CPRT program plan and has been verified as having been implemented accordingly. Seven reinspections have been witnessed and checklists for the 92 reinspected valves have been reviewed for proper disposition of discrepancies or deviations. All DRs have been reviewed for concurrence and processing in accordance with the CPRT program plan and ERC written procedures. Safety Significant Evaluation Nos I-M-VALV-44-001 and I-M-VALV-56-001 have been reviewed for concurrence and procedure compliance. The remaining two safety significance evaluations are currently under review.

No NRC violations or deviations were identified.

u. Pipe Support Inspections (ISAP No. VII.b.3)

Status of CPRT Activity

The reinspections being performed under ISAP No. VII.b.3 deal with pipe supports located in Room 77N and the 42 pipe supports previously inspected by the TRT. All other pipe support populations and their samples are being reinspected under ISAP No. VII.c, "Construction Reinspection/Documentation Review Plan."

One hundred and seventy-eight pipe supports in Room 77N have been reinspected, resulting in the identification of 229 deviations; 36 of which have been established as valid while the remainder are currently being evaluated for validity and safety significance by ERC engineering.

ERC has not yet issued a QI with respect to reinspection of the TRT 42 pipe supports.

Status of NRC Inspection Activity

The NRC inspector has reviewed QI-037 and witnessed the following seven reinspections to assure compliance with inspection procedure requirements:

<u>Verification Package No.</u>	<u>Unit No</u>
I-S-PS7N-015	1
I-S-PS7N-027	1
I-S-PS7N-028	1
I-S-PS7N-064	1
I-S-PS7N-144	1
I-S-PS7N-170	1
I-S-PS7N-187	1

During the above reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-S-PS7N-015: Broken cotter pin.

I-S-PS7N-027: (a) pipe clamp parallelism was out of tolerance, (b) spherical bearing gap discrepancy, and (c) clamp bolts did not have locking devices.

I-S-PS7N-028: (a) Pipe clamp parallelism was out of tolerance, and (b) locking devices for bolting missing.

I-S-PS7N-064: Clamp bolts did not have locking devices.

I-S-PS7N-144: (a) Pipe clamp parallelism was out of tolerance, (b) excessive spherical bearing gap, and (c) clamp bolts did not have locking devices.

I-S-PS7N-170: (a) Clamp bolts did not have locking devices, and (b) cotter pin was undersize.

Dispositions of the above findings are open items (445/8513-0-09 through 445/8513-0-14).

During review of inspection checklists, the NRC inspectors identified a deviation from commitment (445/8513-D-02). CPP-007, Revision 1, requires the QA/QC Lead Discipline engineer to review the inspection checklist package for accuracy, completeness, and conformance with

procedure. Package No. I-S-PS7N-187, which had been approved by the QA/QC Lead Discipline Engineer, did not contain the required number of inspection forms for snubber brackets and also contained a form for pipe clamp inspections although a pipe clamp did not exist.

v. Construction Reinspection/Documentation Review Plan (ISAP No. VII.c)

(1) Large Bore Piping Configuration

Status of CPRT Activity

Reinspection of the 60 random sample large bore piping runs has been completed and has resulted in the issuance of 16 DRs. The deviations generally involve out-of-tolerance linear measurement and location variations, insufficient pipe clearance between sleeves and adjacent equipment, and valve identification and flow direction not being verifiable. Evaluation of four DRs has been completed, with the resultant conclusion that they were nonsafety-related. Reinspection of an additional 39 items, required to complete the engineering sample, is being initiated.

Status of NRC Inspection Activity

Inspection of this activity included review of QI-025, Revision 1, dated August 16, 1985, and examination of the sampling process used for selection of large bore piping runs for reinspection. Three ERC reinspections were witnessed by the NRC inspector; i.e., Verification Package Nos. I-M-LBCO-050, I-M-LBCO-067, and I-M-LBCO-074.

During the above reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-M-LBCO-050: Expansion joint number not documented and a flange at end of the pipe run was not installed. Note: Subsequent to the reinspection, the verification package was removed from the sample due to construction being incomplete.

I-M-LBCO-067: Flanged section approximately 4 feet long was not installed. A decision had not been made on this verification package as of the end of the inspection period with respect to retention in the sample.

Disposition of this finding is an open item (446/8509-0-01).

It was ascertained, as a result of these inspection findings, that accessibility walkdowns conducted on large bore piping runs prior to reinspection do not address a check for completion of construction. This is an open item (446/8509-0-02).

No NRC violations or deviations were identified.

(2) Small Bore Piping Configuration

Status of CPRT Activity

Reinspection of the 60 random sample small bore piping runs has been completed and has resulted in the issuance of 3 DRs. The identified deviations are related to out-of-tolerance linear piping dimensions and inadequate clearance between the pipe and adjacent piping. The evaluations to assess safety significance have not yet been performed. Reinspection of an additional 35 items required to complete the random engineering sample of small bore piping runs has not been initiated.

Status of NRC Inspection Activity

Inspection of this activity included review of QI-126, Revision 0, dated August 16, 1985, and examination of the sampling process used for selection of small bore piping runs for reinspection. Three ERC reinspections were witnessed by the NRC inspector; i.e., Verification Package Nos. I-M-SBCO-010, I-M-SBCO-052, and I-M-SBCO-062.

During the above reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-M-SBCO-052: Flow direction was not indicated on a valve.

I-M-SBCO-062: A linear pipe dimension and a valve stem angle were not in accordance with the applicable isometric drawing.

Dispositions of the above findings are open items (446/8509-0-03 and 446/8509-0-04).

No NRC violations or deviations were identified.

(3) HVAC Plenums and Ducts

Status of CPRT Activity

Reinspections have been performed on 37 of the 60 items in the random sample associated with the HVAC plenums and ducts. The reinspections have identified conditions which necessitated the issuance of 31 DRs, none of which have been validated at this time.

Status of NRC Inspection Activity

Inspection of this activity included review of QI-039, Revision 0, dated August 29, 1985, and examination of the sampling process used for selection of HVAC plenums and ducts for reinspection. Four ERC reinspections were witnessed by the NRC inspectors; i.e., Verification Package Nos. I-M-DUPL-015, I-M-DUPL-017, I-M-DUPL-019, and I-M-DUPL-040.

During the above reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-M-DUPL-015: Pittsburgh seam construction (level 2) found rather than required welded seam (level 3).

I-M-DUPL-017: (a) Inadequate companion angle weld length and excessive companion angle stitch weld spacing, and (b) groove in weld from use of a grinder.

I-M-DUPL-019: (a) Companion angle thickness found to be 3/16-inch rather than specified 1/4-inch; (b) companion angle mating groove weld had 3/8-inch long underfill, and (c) inadequate weld length on access door flange corner tabs.

I-M-DUPL-040: (a) Vent lock caps not tight, (b) gasket was not in full contact in two places, (c) short companion flange weld lengths in two locations, and (d) excessive gap between companion angle and duct.

Dispositions of the above findings are open items (445/8513-0-15 through 445/8513-0-18).

ERC also noted the following deficiencies outside of the defined inspection scope:

I-M-DUPL-015: Bent companion flange screws.

I-M-DUPL-040: Close proximity of an instrument tubing support and bent companion flange screw.

Dispositions of the above findings are open items (445/8513-0-19 and 445/8513-0-20).

No NRC violations or deviations were identified.

(4) HVAC Equipment Installation

Status of CPRT Activity

Reinspections have been performed on 34 of the 60 items in the random sample associated with HVAC equipment installation. The reinspections have identified conditions which necessitated the issuance of 55 DRs, none of which have been validated at this time.

Status of NRC Inspection Activity

Inspection of this activity included review of QI-023, Revision 0, dated August 29, 1985, and examination of the sampling process used for selection of equipment items for reinspection. No ERC reinspections were witnessed by the NRC inspector.

No NRC violations or deviations were identified.

(5) Piping System Bolted Joints/Materials

Status of CPRT Activity

ERC completed 66 reinspections of piping system bolted joints/materials as of September 24, 1985. This is from the combined random and engineering sample total of 74.

Status of NRC Inspection Activity

The following eight ERC reinspections of piping system bolted joints/materials were witnessed by the NRC inspector:

<u>Verification Pkg. No.</u>	<u>Drawing No.</u>	<u>Flange No.</u>
I-M-PBOM-31	BRP-CS-1-AB-001	1
I-M-PBOM-42	BRP-SI-1-SB-012	1
I-M-PBOM-41	BRP-CC-1-FB-001	6
I-M-PBOM-48	BRP-SW-1-SB-003	1
I-M-PBOM-53	BRP-WP-X-AB-210	1
I-M-PBOM-59	BRP-VA-X-AB-025	2
I-M-PBOM-62	BRP-CH-1-EC-004B	3
I-M-PBOM-63	BRP-CC-2-AB-022	1

During the above witnessed reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-M-PBOM-48: Flange No. 1 (Drawing BRP-SW-1-SB-003) had a loose nut.

I-M-PBOM-62: Flange No. 3 (Drawing BRP-CH-1-EC-004B) had two studs without the required one thread past the outer face of the nut.

Dispositions of the above findings are open items (445/8513-0-21 and 445/8513-0-22).

No NRC violations or deviations were identified with respect to the witnessed activities.

During a NRC independent reinspection of Verification Package No. I-M-PBOM-23 (i.e., flange No. 4 on Drawing BRP-SW-2-SB-018), it was noted that flange No. 6, about 1 foot away from flange No. 4 on the same line, had 4 out of 12 studs with loose nuts. Flange No. 6 was not part of the ERC population sample. Further investigation revealed that flange No. 6 had Construction Operation Traveler No. MP-82-4117-0400 signed off by construction and accepted by QC. Paragraph 3.5.2.1 in Revision 7 of Brown and Root Procedure CPM-6.9E requires an IRN when breaking an inspected flange. No IRN had been issued to document the observed condition. The failure to comply with procedural requirements for accomplishing this activity is a violation. (446/8509-V-04).

(6) Electrical Cables

Status of CPRT Activity

ERC completed 49 reinspections of sampled electrical cables as of September 23, 1985.

Status of NRC Inspection Activity

The following three ERC reinspections of sampled electrical cables were witnessed by the NRC inspectors:

<u>Verification Pkg. No.</u>	<u>Cable No.</u>
I-E-CABL-007	EG104636
I-E-CABL-004	EG123625Z
I-E-CABL-030	ESBI-34

During the above reinspections, ERC did not identify any conditions to the NRC inspectors as subject to evaluation as potential deviations.

No NRC violations or deviations were identified.

(7) Electrical Conduit

Status of CPRT Activity

ERC completed 59 reinspections of electrical conduit as of September 23, 1985.

Status of NRC Inspection Activity

The following six ERC reinspections of sampled electrical conduit were witnessed by the NRC:

<u>Verification Pkg. No.</u>	<u>Conduit No.</u>
I-E-CDUT-027	ESB6-5
I-E-CDUT-035	C12G03270
I-E-CDUT-044	ECB3-29
I-E-CDUT-076	C12Ø08750
I-E-CDUT-077	C13G05532
I-E-CDUT-086	C13Ø30044

During the above reinspections, ERC identified the following conditions to the NRC inspectors as subject to evaluation as potential deviations:

I-E-CDUT-027: (a) Three piece connection fitting on run not handtight, (b) less than the required 1-inch separation between conduits ESB6-5 and C14Ø13763, (c) less than the required 1-inch separation between conduit ESB6-5 and tray T13KECH, and (d) conduit is 1-inch rather than the required 3/4-inch size.

I-E-CDUT-044: (a) Locknut on conduit CB3-24-29 not tight, and (b) locknut and bushing on conduit CB3-29 were not tight. ERC has subsequently validated deviations for these items.

I-E-CDUT-086: (a) Three piece coupling on conduit as it penetrates ceiling was loose, (b) inside coupling loose but locknut tight, and (c) less than 1-inch separation between conduit C13Ø30044 and CIPACR22.

Dispositions of the above findings are open items 445/8513-0-23 through 445/8513-0-25).

ERC also noted the following deficiencies outside of the defined inspection scope:

I-E-CDUT-027: (a) 3-inch stub on outlet box was not plugged per requirements, and (b) an outlet box had two stripped cover retaining bolts/screws.

I-E-CDUT-077: Cable from conduit C13G05532 to cable tray was thermal lagged within 2-inches of conduit. This removed the 2-inch slack requirement specified in Section 5.4 of Procedure QI-014, Revision 0. A notification was made by three part memo SER101 to TUGCO on September 16, 1985. NCR E85-101226SX has been initiated for this out of scope item.

Dispositions of the above findings are open items (445/8513-0-26 and 445/8513-0-27).

No NRC violations or deviations were identified.

(8) Cable Trays

Status of CPRT Activity

ERC completed 55 reinspections of sampled cable trays as of September 23, 1985.

Status of NRC Inspection Activity

The following ERC reinspection of sampled electrical cable tray was witnessed by the NRC inspector:

<u>Verification Pkg. No.</u>	<u>Cable Tray No.</u>
I-E-CATY-129	T12ØRBK17

During the above reinspection, ERC identified the following condition to the NRC inspector as subject to evaluation as a potential deviation: The tray node identification was not located per the drawing.

Disposition of the above finding is an open item (445/8513-0-28).

The NRC inspector also noted that an adjacent cable tray, T13ØRCJ36 had a tray cover which was misaligned and improperly secured. TUGCO, when notified of this condition, generated NCR No. E-85-101361S to initiate corrective action. The NRC inspectors examined other trays in the general area of this occurrence and determined that this was an isolated case.

No NRC violations or deviations were identified.

(9) Electrical Equipment Installation

Status of CPRT Activity

ERC completed 21 reinspections of electrical equipment installations as of September 20, 1985.

Status of NRC Inspection Activity

The following nine ERC reinspections of sampled electrical equipment installations were witnessed by the NRC inspectors:

<u>Verification Pkg. No.</u>	<u>Equipment No.</u>
I-E-EEIN-45	IE15
I-E-EEIN-01	ECSA-1-8890B-1,2 & 3
I-E-EEIN-03	ECSA-1-HV-4725-1, 2 & 3
I-E-EEIN-012	ECSA-1-HV-4172-1, 2 & 3
I-E-EEIN-039	ESCA-1-HV-5561
I-E-EEIN-052	ECSA-1-HV-4169-1, 2 & 3
I-E-EEIN-024	I-E-066
I-E-EEIN-029	ECSA-1-8512B
I-E-EEIN-042	ECSA-1-8511B

During the above reinspections, ERC identified the following conditions to the NRC inspectors as subject to evaluation as potential deviations.

I-E-EEIN-45: (a) Tag on the inspected penetration flange was 2E15 instead of the required IE15; (b) design change tag number DCA6881 was attached to the flange, whereas the inspection package had not identified the design change; and (c) the flange bolt at location 9 o'clock was not fastened flush with the top of nut as specified in the supplemental inspection instructions to QI-010, Revision 0. DRs I-E-EEIN-45-01 and I-E-EEIN-45-02 have been issued with respect to these findings and NCR E85-101272SX has been initiated by TUGCO to address the items.

I-E-EEIN-052: The electrical conductor seal assemblies (ECSAs) were longer than the 20 plus or minus 1-inch requirement.

I-E-EEIN-039: (a) Assembly ECSA-1-HV-5561 had a bend radius under the required 5-inch minimum, and (b) length of ECSA-1-HV-5561 was longer than the 20 plus or minus 1-inch requirement.

I-E-EEIN-03: (a) Assembly ECSA-1-HV-4725-3 had a fitting that was not handtight, and (b) all three (ECSA-1-HV-4725-1, 2 and 3) assemblies were longer than the 20 plus or minus 1-inch requirement.

I-E-EEIN-01: (a) Two assemblies were missing their identification tags, and (b) flex conduits C138890B-2 and 3 had bend radii under the required 5-inch minimum.

I-E-EEIN-012: (a) A three piece coupling on ECSA-1-HV-4172-2 was not handtight, (b) all three (ECSA-1-HV-4172-1, 2 & 3) assemblies were longer than the 20 plus or minus 1-inch requirement, and (c) assemblies ECSA-1-HV-4172-2 and 3 had bend radii that were under the required 5-inch minimum.

Dispositions of the above findings are open items (445/8513-0-29 through 445/8513-0-34).

During witnessing of I-E-EEIN-029 and I-E-EEIN-042, the NRC inspector noted that the verification packages indicated three required cable seal assemblies per valve, but only one was installed per valve (on the closed limit switch assembly). This anomaly was resolved through another document search. Two generic change documents, DCA 19076 and FCN 10589, had been issued, but not specifically identified against the package drawings. These change documents revised the number of cable seal assemblies required per valve to one.

The failure by ERC Engineering to reference DCA 19076 and FCN 10589 in the verification package is a deviation (445/8513-D-02).

ERC also noted the following deficiencies outside of the defined inspection scope:

I-E-EEIN-01: (a) Conduit identification on runs from JBIC-152G to ECSA-1-8890B-1, 2 and 3 were illegible; and (b) the solenoid valve's flex conduit had a missing digit on its identification tab.

I-E-EEIN-03: Rigid conduit identifications for runs from JBIC-2450 to ECSA-1-HV-4725-1 and 3 were illegible.

I-E-EEIN-024: (a) Conduits entering the top of the penetration box enclosure were not properly terminated; (b) conduit C12Ø18896 contained a nylon pull rope; and (c) at elevation 832 feet, in the reactor building near the personnel hatch, the electrical attachment to the sensing transmitter associated with the accumulator No. 1 nitrogen insulation valve no. 1-8875A, safety injection system was loose and appeared to be damaged.

Dispositions of the above findings are open items (445/8513-0-35 through 445/8513-0-37).

No NRC violations or additional deviations to 445/8513-D-02 were identified.

(10) Instrumentation Equipment Installation

Status of CPRT Activity

ERC completed 57 reinspections at sampled instrumentation equipment installations as of September 23, 1985.

ERC has attempted on three occasions to implement instrumentation equipment installation documentation reviews. These efforts were unsuccessful due to the need for additional instructions in the QIs for performing material traceability reviews (tubing).

Status of NRC Inspection Activity

The following three ERC reinspections of sampled instrumentation equipment installation were witnessed by the NRC inspector:

<u>Verification Pkg. No.</u>	<u>Instrument No.</u>
I-E-ININ-005	1-LS-4795
I-E-ININ-016	1-LS-3378
I-E-ININ-060	1-LS-3376

During the above reinspections, ERC identified the following condition to the NRC inspector as subject to evaluation as a potential deviation:

I-E-ININ-005: The anti-torque indicators on the flexible hose connections were misaligned by approximately 45°, indicating possible excessive twist.

Disposition of the above finding is an open item (445/8513-0-38).

The tubing size also could not be initially verified by ERC on performing this inspection due to the absence of three required documents in the verification package. The ERC inspectors subsequently obtained the three documents and verified that the tubing was the correct size.

The failure of ERC Engineering to include necessary documents in the verification package is a deviation (445/8513-D-02).

ERC also noted the following deficiency outside of the defined inspection scope:

I-E-ININ-016: Train B (green) channel lighting conduit, at the entrance to Room 99C, had a loose switch box. The lights worked intermittently when the box was moved.

Disposition of the above finding is an open item (445/8513-0-39).

No NRC violations or additional deviations to 445/8513-D-02 were identified.

(11) Reinspection of Concrete Placement

Status of CPRT Activity

A random sample of 60 concrete pours was selected from a total population of 7617 individual pours. Those pours ranged in size from 0.07 cubic yards (for 1 foot x 1 foot x 2 feet blockouts) to several hundred cubic yards (walls, slabs, etc.). Brown and Root pour cards identify from 1 to 10 or more individual pours. In some cases a pour cards lists, for example, concrete pours for a floor slab and several small concrete blockouts. Sample selection was based on a population of individual pours rather than pour card thus greatly increasing the number of small (less than 1-cubic yard) concrete placements that are inspected. Nineteen of the 60 concrete placement inspection packages are blockouts with less than 1-cubic yard of concrete. A second random sample of safe shutdown system related concrete pours has not yet been identified.

Reinspection of the first random sample of 60 concrete pours was initiated using QI-043, Revision 0, and is approximately 20% complete. Two deviations have been identified relating to

unfilled holes, voids, and debris in the concrete surface. These deviations are currently being reviewed for validity and safety significance by ERC Engineering. Documentation review procedures have not yet been issued.

Status of NRC Inspection Activity

The NRC inspectors reviewed QI-043, Revision 0, and witnessed 6 reinspections representing 10% of the first random sample of 60 concrete placements. ERC DR dispositions are being evaluated by the NRC inspectors. The following 6 ERC reinspections were witnessed by the NRC inspectors:

<u>Verification Pkg. No.</u>	<u>Concrete Placement No.</u>	<u>Unit</u>
I-S-CONC-06	CPC-003-4832-003	C
I-S-CONC-08	CPC-105-M81D-191	1
I-S-CONC-12	CPC-002-I842-068	C
I-S-CONC-41	CPC-101-7853-001	1
I-S-CONC-47	CPC-201-9808-008	2
I-S-CONC-52	CPC-105-5844-001	1

During the above reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-S-CONC-52: (a) Unfilled holes were identified in two locations, and (b) insulation was identified in one construction joint.

Disposition of the above findings is an open item (445/8513-0-40).

No NRC violations or deviations were identified.

(12) Small Bore Pipe Supports

Status of CPRT Activity

A random sample of 60 small bore pipe supports (2-inch and smaller) was selected from a total population of 7947 derived from the Hanger Installation Tracking System (HITS) as used by construction site personnel. The random sample consists of approximately 68% box frame supports; 20% U-bolt type supports; and 12% combined snubbers, sway struts and spring can/constant supports. Reinspection is now approximately 95% complete. Forty-five DRs relating primarily to Hilti bolt embedment, hole spacing and edge distance in base plates, and pipe clearances, have been initiated. Reports are currently being reviewed for validity and safety significance by ERC Engineering.

A second random sample of 60 small bore pipe supports associated with safe shutdown systems is being selected. Forty-two supports from the first random sample have been identified as being related to safe shutdown systems; thus, are included in the second sample's population. Therefore, an additional 18 supports will be selected for reinspection pending issuance of the associated verification packages.

Documentation review of small bore pipe supports was initiated using QI-020, Revision 0, issued September 16, 1985, and is approximately 20% complete.

Seven DRs pertaining to documentation have been issued and are currently being reviewed for validity by ERC Engineering.

Status of NRC Inspection Activity

NRC personnel have reviewed QI-019, Revision 1, (physical inspection) and QI-020, Revision 0, (documentation review). Six reinspections have been witnessed representing 10% of the first random sample. Approximately 10% of the remaining ERC reinspections are planned to be witnessed by NRC inspectors. Independent NRC inspections have been initiated.

The following six reinspections were witnessed by the NRC:

<u>Verification Pkg. No</u>	<u>Pipe Support No.</u>	<u>Unit</u>
I-S-SBPS-009	CH-1-AB-033-002-3	1
I-S-SBPS-019	CC-1-RB-004-007-3	1
I-S-SBPS-028	WP-X-AB-018-012-3	C
I-S-SBPS-035	CH-2-AB-015-008-3	2
I-S-SBPS-038	WP-X-AB-018-013-3	C
I-S-SBPS-049	CC-1-SB-043-009-3	1

During the above reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-S-SBPS-028: (a) Incorrect bolt hole spacing, and (b) excessive gap between the pipe and shim.

I-S-SBPS-035: Insufficient Hilti bolt embedment.

I-S-SBPS-038: Incorrect bolt hole spacing.

Dispositions of the above findings are open items (445/8513-0-41 through 445/8513-0-43).

No NRC violations or deviations were identified.

(13) Large Bore Pipe Supports - Non-Rigid

Status of CPRT Activity

The selected random samples consist of 60 safety-related pipe supports from the general population and 22 safety-related pipe supports from safe shutdown systems. Reinspection by ERC is in process and is approximately 60% complete. A total of 126 deviations have been identified of which 31 have been determined to be valid. The remainder are currently being evaluated for validity and safety significance by ERC Engineering.

Status of NRC Inspection Activity

The NRC inspector has reviewed QI-029 and witnessed the following three reinspections to assure compliance with inspection procedure requirements:

<u>Verification Pkg. No.</u>	<u>Unit No.</u>
I-S-LBSN-023	1
I-S-LBSN-031	1
I-S-LBSN-037	1

During the above reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-S-LBSN-023: (a) Material identification missing from one item; (b) bill of material quantities for two items differed from actual installed quantities; (c) bolt hole location, attachments to base plate, and a component member location were out of tolerance; (d) U-bolts had zero clearance; (e) base plate violated perimeter contact requirements; (f) locking devices on nine 2-inch diameter bolts were missing; (g) item 13 Hilti bolts violated embedment requirements; (h) snubber extension piece thread engagement could not be determined; (i) paint on spherical bearings; (j) no welder identification on integral Attachment No. 4; and (k) seven undersize welds were identified.

I-S-LBSN-037: (a) Clamp bolts did not have locking devices, and (b) paint was identified on spherical bearings.

Dispositions of the above findings are open items (445/8513-0-44 and 445/8513-0-45).

No NRC violations or deviations were identified.

(14) Large Bore Pipe Supports - Rigid

Status of CPRT Activity

The selected random samples consist of 61 safety-related pipe supports from the general population and 28 safety-related pipe supports from safe shutdown systems. Reinspection by ERC is in process and is approximately 57% complete. A total of 90 deviations have been identified of which 25 have been determined to be valid. The remainder are currently being reviewed for validity and safety significance by ERC Engineering.

Status of NRC Inspection Activity

The NRC inspectors has reviewed QI-027 and witnessed the following four reinspections to assure compliance with inspection procedure requirements:

<u>Verification Pkg. No.</u>	<u>Unit</u>
I-S-LBSR-047	1
I-S-LBSR-029	1
I-S-LBSR-048	1
I-S-LBSR-053	1

During the above reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-S-LBSR-047: (a) Inadequate thread engagement for Richmond insert; (b) undersize fillet weld; and (c) cotter pin not installed properly.

I-S-LBSR-029: Missing locking devices and dimensional discrepancies.

I-S-LBSR-048: Shim not located properly and minimum clearance discrepancies.

I-S-LBSR-053: Installation tolerances were discrepant.

Dispositions of the above findings are open items (445/8513-0-46 through 445/8513-0-49).

During the reinspection of I-S-LBSR-047, the NRC inspector identified two deviations from commitment in the areas of verification package preparation adequacy and reinspection/verification. The responsible QA/QC discipline engineer indicated that Richmond inserts were not applicable for inspection on the checklist, when both the bill of material and the design drawing listed Richmond inserts as being present (445/8413-D-02).

Paragraph 5.0 of QI-027, Revision 0, identifies note 30 as an applicable inspection note which requires the inspector to document any item that appears out of the ordinary as related to construction of the inspected item. The ERC inspectors failed to document the existence of four 9/16" diameter drilled holes in item 2 of ASME pipe support Mk. No. CT-1-053-436-C52R that were not shown on the design drawing (445-8513-D-03). It was additionally noted that ASME N-5 Data Report activity was complete for this support.

(15) Containment Liner and Tank Stainless Steel Liner

Status of CPRT Activity

A minimum number of 60 liner packages will be inspected using QI-031, Revision 0. Ninety-one packages have been issued and inspection is approximately 80% complete based on the minimum sample of 60. Forty-seven deviations have been identified, primarily due to excessive weld reinforcement. These deviations are currently being reviewed for validity and safety significance by ERC Engineering.

Status of NRC Inspection Activity

The NRC inspectors has reviewed QI-031, Revision 0, and witnessed four reinspections. ERC DR dispositions are being evaluated by the NRC inspector. The four ERC reinspections witnessed by the NRC were as follows:

<u>Verification Pkg. No.</u>	<u>Joint No.</u>	<u>Unit</u>
I-S-LINR-03	P-290	1
I-S-LINR-30	P-356	1
I-S-LINR-50	P-366	1
I-S-LINR-60	P-387	1
I-S-LIRN-06	17E	1
I-S-LINR-13	P-57	1
I-S-LINR-21	10E	1
I-S-LINR-51	15E	1
I-S-LINR-55	15-16(B2)	1

During the above reinspections, ERC identified the following conditions to the NRC inspector as subject to evaluation as potential deviations:

I-S-LINR-03: Excessive weld reinforcement.

I-S-LINR-30: Excessive weld reinforcement.

I-S-LINR-60: (a) Excessive weld reinforcement, (b) weld undercut, and (c) unacceptable weld seam surface.

I-S-LINR-06: Excessive weld reinforcement.

I-S-LINR-13: Excessive weld reinforcement.

I-S-LINR-51: Unacceptable weld seam surface.

I-S-LINR-55: Weld undercut.

Dispositions of the above findings are open items 445/8513-0-50 through 445/8513-0-56).

During the reinspection of verification package Nos. I-S-LINR-06 and I-S-LINR-51, the ERC inspector noted that the responsible QA/QC discipline engineer wrote "NA" for not applicable on the checklists for two base material local contour attributes. The attributes were found during the physical inspection by the ERC inspector to be, in fact, inspectable. New checklists were requested by the ERC inspector. The failure of the discipline engineer to issue correct verification packages is a deviation (445/85-13-0-02).

6. Exit Interview

An exit interview was conducted on October 4, 1985, with the applicant representatives denoted in paragraph 1 of this appendix. During this interview, the NRC inspectors summarized the scope and findings of the inspection. The applicant acknowledged the findings.