JAH 2 9 1985

FOLA-95-59 VIA

Note to: Herbert Livermore Group Leader QA/QC

From: R.C. Tang Relay

Subject: Comments by TRT Consultant Ted Workinger on Draft QA/QC SSERs, Category 5

The following comments are submitted for consideration with respect to preparing the final SSERs for QA/QC. These comments address the content and statements in the SSERs, rather than editorial corrections. Note that these comments pertain to draft copies of QA/QC SSERs that were sent to me in mid-December.

5A. Repair, Rework and Maintenance

All of the draft SSERs in Category 5A were reviewed and we have only two minor comments as follow:

AQ-43, 47 and 51 (Rev. 2 - 10/24/84)

The last sentence of Section 5, on page 5, makes a cross reference to Mechanical and Piping, Category 4. A more specific reference should be added in the final SSER. (?) V. Watza

AQ-52 (Draft 2 - 10/12/84)

It is suggested that the last item in Section 5, on page 5, be changed as indicated in the marked-up copy of the SSER. OK

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5B. Onsite Fabrication

We have no comments relevant to AQ-77 and AQ-79.

AQ-138 (Jim

It is suggested that the last paragraph of Section 6, on page 18, be deleted. The treble hook on a thirty-foot stainless steel chain is not related to the emergency low-fuel-limit switch nor the diesel fuel storage system. It is speculated that someone had the iron fab shop make this item, possibly, for their personal use.

5C. Housekeeping AQ-54 and 65

No comments

5D. Nonconformance Reports, AQ-30, et al (Draft 7 - 10/8/84)

- This is a long SSER. To assist the reader, it is suggested that the format consist of sub-sections, i.e., 4.1 <u>AQ-30 and AQ-31</u>, ° ° ° 4.15 <u>AQ-120</u>.
- 2. The last chanse, at the top of page 17, states, "° ° ° however, the issuance of that many NRCs would seem to warrant the preparation of a corrective action request, but none was <u>available</u>." The author meant none was prepared.

- 3. On page 23, Section 6, <u>Actions Required</u>. Rather than allude to items noted in AQ-34 and AQ-36, statement "a". should say specifically what actions are required. This comment also applies to statement "b.(3)" in the next paragraph.
- 4. On page 24, Section 7, <u>Potential Violations</u>. Item b. appears to be related to the incident regarding ANIS not reviewing CSTPs, MRSs, and WDCs between February 1980 and March 1981, which is addressed in QA/QC Category 2, AQ-134. Since corrective action had been taken, AQ-134 did not find any actions required or note any potential violations. What are we alluding to here?

5E. Materials

We have no comments relevant to AQ-12, 13, 14, and 115, AQ-41 and AQ-53

AQ-5 (Rev. 1 - 10/11/84)

- Section 4, page 2, discusses the corrective actions that were taken in response to ASME surveys in October 1981 and January 1982. It is not clear what explicit, additional, actions TUEC must take to respond to Section 6, <u>Actions Required</u>. addled 50.55 e U. Wattom
- 2. On page 4, Section 7, Potential Violations. The date at the end of the statement, " - as identified by ASME survey of October <u>1984</u>.", is wrong. It should be <u>1981</u>. (your one right).

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AQ-40 (Rev. 1 - 10/9/84)

Regarding the fourth sentence, of the second paragraph, of Section 4, on page 1, "Over the years . . . paints of different colors . . . where depleted.", it is not clear whether TUEC ran out of paint or colors. We believe the author meant colors. <u>Colorr</u> - if you ran out of paint you would simply by more . V. Watam

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Some of the above comments are reflected in the attached marked-up copies of the relevant SSERs from QA/QC Category 5.

 S-47: Work performed on system without inspection item removal notice (IRN).

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- 3. S-50: Rework of items completed prior to disposition approval.
- 5. <u>Conclusion and Staff Positions</u>: Based on their review of applicable documentation, the TRT concludes that all aspects of the allegations can be substantiated. However, identified unauthorized rework and welding_ are documented with NCRs. The TRT did not identify any significant breakdown in the quality control program, although isolated problems did occur. The safety significance of the allegations relating to undocumented repair welds is addressed in Mechanical and Piping Category 4.

In a meeting with the alleger on December 10, 1984, the TRT presented the results of the assessment of allegation AQ-43 and the TRT's conclusion. A brief discussion ensued. There were no major items of disagreement, and no new concerns or allegations were identified. The alleger associated rule AQ-51 could not be located thus no suit actions Required: None. conducted, no specific alleger was actions Required: None.

8. Attachments: None.

6.

9. Reference Documents:

- 1. 676 NCRs dated between March 1976 and August 1984.
- 2. Permanent Equipment Transfer Forms(PETs) No. 4 through No. 1665.
- 3. CP-SAP-6, Revision 9.
- 4. CP-CPM-12.2.
- 5. AQ-43: GAP 2.206 Petition, dated March 19, 1984 and A-1 statement.
- 6. AQ-47: GAP Petition, dated March 19, 1984.
- AQ-51: A-14 Testimony pp. 1, 4, 5, 10, 14, 16, 26-28 and 0-4-84-001.
- 8. Components CP1-CCEXCC-07

S/N 290950 thru S/N 290959 S/N 12120 CP1 - SWAPSW-01 & 02 CP2 - SWAPSW-01 & 02

9. A-1 meeting December 10, 1984, P.88

AQ-52 CP9 10-12-84⁻⁻ Draft 2 sser format/CP2

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SSER

1. Allegation Group: QA/QC 5A, Repair, Rework, Maintenance

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- 2. Allegation Number: AQ-52
- 3. <u>Characterization</u>: It is alleged that site personnel interchanged parts of unidentified diaphragm valves during site disassembly/ reassembly operations. It is believed that part traceability to the v .ves was lost and the valves operability is questionable.
- 4. <u>As sement of Safety Significance</u>: The implied safety significance of this allegation is that installed valves may have interchanged parts not designed to withstand the service pressure and temperature of the system in which they are installed and, therefore, may fail to function during system operation.

The TRT reviewed four procedures which were in effect prior to June 8, 1983, governing the assembly/disassembly of ASME valves. The TRT found no specific procedural requirements to assure valves parts were not lost/interchanged following disassembly. Some mechanical equipment valve (MEV) travellers did contain specific steps to package and tag components following disassembly to insure that traceability were documented in nonconformance reports, recent problems associated with maintaining control of quality certified valve components indicates the problem still exists in spite of many corrective action steps taken over the past years.

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5. <u>Conclusion and Staff Positions</u>: Based on the information obtained during field inspections, document review, and interviews with Quality Control, engineering and craft personnel, the TRT concludes that the valve assembly/disassembly process has resulted in components being lost/misplaced or interchanged. It is the staff position that failure of the corrective action system to adequately address this recurring problem has safety significance in the follow agarea relating to valves:-

Potential gauling or even valve failure if valve bonnets from similar valve of different pressure ratings are mixed.

- Actions Required: TUEC shall accomplish the following actions prior to fuel load:
 - Identify those similar diaphram valves v h differing pressure ratings that had potential for bonnet interchange, in the following systems:

Revision 1 - 10/11/84 AQ-5/SSER/ CP2A

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SSER

- 1. Allegation Group: QA/QC Category No. 5E
- 2. Allegation Number: AQ-5

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- 3. <u>Characterization</u>: It is alleged that lack of material traceability for safety-related materials and components has occurred.
- 4. Assessment of Safety Significance: The implied safety significance of this allegation is that if Texas Utilities Electric Company (TUEC) failed to maintain material traceability for safety-related materials and hardware components, defective material may be installed that will not perform its intended safety function.

The NRC Technical Review Team (TRT) reviewed the Brown & Root (B&R) Quality Assurance Manual, Section 8.0, dated May 17, 1978. Paragraph 8.2 of the manual requires that if material with material traceability identification is cut into more than one piece, the identification (or heat numbers) shall be transferred, before cutting, to the other pieces. A QC inspector shall then verify that heat numbers have been transferred. Section 8.0 of the B&R manual, dated August 14, 1981, continued to require verification of heat numbers by a QC inspector prior to subdividing material. Quality Instruction QI-QAP-11.1.28, Revision 25, required QC verification of material heat numbers prior to subdividing and also required that this heat number remain distinguishable until the fabrication and installation of component supports were accepted by QC.

During an ASME Boiler and Pressure Vessel Code survey at Comanche Peak Steam Electric Station (CPSES) or October 12 - 14, 1981, the ASME survey team determined that B&R did not verify the transfer of material identification. The ASME survey team also determined that control of material salvaged from vendor-supplied components was inadequate. As a result, significant changes to the QA program were made prior to a resurvey by the Based on review of records and interviews with craft, inspection, and engineering personnel, the TRT determined that since the identification and correction of the deficiencies reported by the ASME survey team, clarification of the QA program for material control has been maintained and has been handled in accordance with TUEC's accepted QA procedure CP-QAP-8.5, "Reclassification of Code Material," Rev. 4.

5. <u>Conclusion and Staff Positions</u>: Based on its review, the TRT concludes that the allegation that TUEC failed to maintain material traceability for safety-related material and numerous hardware components was substantiated. TUEC did have procedures for material traceability, as required by 10 CFR 50, Appendix B, Criterion VIII; however, TUEC had not followed these procedures.

A partial breakdown in the QA program did occur, as documented in NCRs M-3033 and M-3258; and although corrective actions were taken and were documented in accordance with TUEC QA procedure CP-QAP-8.5, TUEC failed to report the breakdown to the NRC per 10 CFR 50.55(e) requirements. The TRT notes is that the allegation itself has neither safety significance nor generic implications, in that the condition has since been corrected.

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 <u>Actions Required</u>: Prior to fuel load, TUEC shall review their/reporting system to assure that the causes for failing to report construction deficiencies has been corrected.



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- 8. Attachments: None.
- 9. Reference Documents:
 - 1. Procedure CP-QAP-8.5.
 - 2. B&R Manual, Section 8.0
 - Item 5 of A-2 letter to U. S. Department of Labor, dated March 7, 1984.
 - 4. Pages 26 through 34 of A-2 interview.
 - 5. Special Inspection Services (SIS) reports 367A, and 367.
 - Interoffice Memorandum (IM) 26, 407, SIS367-B; IM 26, 589 SIS 369, SIS 369-B, IM 26, 729.

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SSER

1. Allegation Group: QA/QC Category No. 5E

- 2. Allegation Number: AQ-40
- <u>Characterization</u>: It is alleged that heat numbers were obtained inappropriately in the field for materials used in safety-related applications.
- Assessment of Safety Significance: The implied safety significance of this allegation is that the acceptability of work performed with unknown heat numbers would be questionable and the quality of the installed materials would be indeterminate.

In assessing this allegation, the Technical Review Team (TRT) reviewed the Brown & Root (B&R) quality assurance manual and procedures addressing material traceability and interviewed inspection personnel. The TRT could find no evidence that material heat numbers were being assigned in the field, with the exception of color-coded material. Texas Utilities Electric Company (TUEC) used a color coding system to maintain heat number traceability for tubing material. Over the years of the plant construction, paints of different colors compatible with nuclear stainless steel tubing were depleted. TUEC then assessed the feasibility of using the same colors for different material requiring traceability. The engineering personnel made the decision to use green to identify tubing for heat number M7632, even though green had previously been used to denote tubing heat number 402095. The Comanche Peak Steam Electric Station (CPSES) quality assurance (QA) manager had extensive material testing conducted on M7632 to assure its conformance to specification and its intended use. This testing would have prevented the use of any defective material.

CPSES Engineering acknowledged the fact that if either heat number 402095 or M7632 was identified later as defective, both heats of material would