

April 20, 1982

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
TEXAS UTILITIES GENERATING)	Docket Nos. 50-445 and
COMPANY, <u>et al.</u>)	50-446
)	
(Comanche Peak Steam Electric)	(Application for
Station, Units 1 and 2))	Operating Licenses)

APPLICANTS' ANSWERS TO CASE'S
NINTH SET OF INTERROGATORIES



Pursuant to 10 C.F.R. § 2.740b(b), Texas Utilities Generating Co., et al. ("Applicants") hereby submit their answers to "CASE's Ninth Set of Interrogatories to Applicants," served April 5, 1982. Applicants are in the process of identifying and gathering documents requested in this Ninth Set. Pursuant to our ongoing discussions with CASE, Applicants will make these documents available for inspection and copying either at the Comanche Peak site or in Applicants' corporate offices in Dallas, as appropriate, in the near future.

ANSWERS TO CASE'S NINTH SET OF INTERROGATORIES

1. Yes.
2. Not applicable.
3. Not applicable.
4. Yes.

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5. Not applicable.
6. Not applicable.
7. The Component Modification Card (CMC) and Design Change Authorization (DCA) are the documents by which approved engineering changes are implemented. The CMC and DCA Logs have been made available to CASE previously for inspection and copying.
8. The following documents typically pertain to a given concrete placement:
 - A. Concrete Pour Card with pre-established pour number
 - B. Concrete/Mortar Batch Tickets
 - C. Laboratory Test Records
 - D. QC Inspection Reports/Checklists

As Applicants have previously stated, there is not a document entitled "concrete pour log." The Concrete Pour Card is the controlling document for the concrete pour. Batch tickets are prepared for all grout and concrete used in the pour. QC Inspections are documented on inspection reports or checklists. Laboratory tests are recorded on laboratory test records. These documents are submitted to the Permanent Plant Records Vault where they are accumulated as a "package." With respect to inclusion of relevant information in the computer, information from the concrete pour card is first transferred onto a data sheet. The data sheet is then used to input information into the computer. These data sheets are not retained. The computer printout furnished to CASE is an index of the pre-established concrete pour card numbers that have been captured in the record system.

9. "9." Four (4).
- "10." Four (4).
- "11." Regarding Question "9."
 - a. The Hartford Steam Boiler Inspection and Insurance Company audits were performed pursuant to ANSI N626.0.
 - b. The conclusions are as documented in the audit reports, which have been made available to CASE for inspection and copying.

- c. The Hartford Steam Boiler Inspection and Insurance Company.
- d. Copies are available in the Dallas office of Texas Utilities for inspection and copying by CASE.

Regarding Question "10".

Report No. 1

- a. The "Final Concrete Evaluation of Refueling Pool Structure at Comanche Peak, Unit No. 2, Glen Rose, Texas" was prepared by Richard A. Muenow, P.E.

It was performed for the purpose of detecting, locating, and delineating internal discontinuities in the concrete of the titled structure.

- b. The conclusions are as documented in the report, which has been made available to CASE for inspection and copying.
- c. The tests were authorized by Robert B. Williams, TUSA.
- d. A copy is available in the Dallas office of Texas Utilities for inspection and copying by CASE.

Report No. 2

- a. The "Final Report on the Concrete Evaluation in Dome Roof Section of Comanche Peak, Unit No. 1, Glen Rose, Texas" was prepared by Muenow and Associates. It was conducted to provide information relative to the concrete quality, in addition to detecting and defining internal discontinuities.
- b. The conclusions are as documented in the final report, which has been made available to CASE for inspection and copying.
- c. The evaluation was authorized by Robert B. Williams, TUSI.
- d. A copy is available in the Dallas office of Texas Utilities for inspection and copying by CASE.

Report No. 3

- a. The Final Report for the "Review of the Quality Assurance Program for the Design and Construction of the Comanche Peak Steam Electric Station" was prepared by Fred Lobbin to provide an independent assessment of the QA program and, in particular, to identify areas which could be improved and which should receive management attention.
- b. The conclusions are as documented in the final report, which has been made available to CASE for inspection and copying.
- c. This reveiw was instituted by Billy R. Clements.
- d. A copy is in the Dallas office of Texas Utilities for inspection and copying by CASE.

Report No. 4

- a. The "Report of Independent Review and Analysis of QA Records Management Systems for Texas Utilities Services Incorporated," by Ebasco Services Inc., was performed to review, evaluate, and report on the effectiveness of the TUGCO QA records management system.
 - b. The conclusions are as documented in the report, which has been made available to CASE for inspection and copying.
 - c. John T. Merritt instituted the review.
 - d. A copy is available in the Dallas office of Texas Utilities for inspection and copying by CASE.
10. No.
 11. Not applicable.
 12. Not applicable.
 13. No.
 14. Not applicable.
 15. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.

Applicants note that handwritten version of DPR logs were an interim step before the final DD logs were typed. Applicants generally did not retain the handwritten versions once they were typed, and therefore they are no longer available. CASE should recognize that logs are not "records" and are therefore not retained as such. Logs are used primarily for tracking purposes.

- 16-18. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.
19. As stated in our response to Interrogatory 8, data sheets are the interim document from which information is indexed onto the computer. These documents are not considered "records" and are, therefore, not retained.
20. Mr. Lobbin's evaluation was primarily a review of the audit and vendor compliance function within the TUGCO QA organization. To a much lesser extent, Mr. Lobbin reviewed the Surveillance and Inspection Programs of TUGCO.
21. See Attachment 1.
22. Another utility recommended Mr. Lobbin to Applicants. See response to Interrogatory 23.
23. Applicants decided last year to obtain an independent assessment of the TUGCO/TUSI QA program. In consulting with other utilities regarding possible approaches to this idea, one of the utilities recommended Mr. Lobbin, should it be decided to retain a consultant for this evaluation. Applicants determined that employing a consultant would be an effective means to accomplish the evaluation and selected Mr. Lobbin on the basis of the above-mentioned recommendation.
24. See response to Interrogatory 20.
25. Billy R. Clements, TUGCO Vice President, Nuclear.
26. While there is no requirement that such an audit be performed, Mr. Clements commissioned the review in order to obtain an independent assessment of the TUGCO/TUSI QA program.
27. No.
28. No.

29. TUGCO Executive Vice President and General Manager - Robert J. Gary.
TUGCO Vice President, Nuclear - Billy R. Clements
TUGCO Manager, Quality Assurance - David N. Chapman
TUGCO Supervisor, Quality Assurance Services - Antonio Vega
30. A program established to monitor, review, or observe selected activities. In this instance, the activities monitored, reviewed and observed were various construction and QA/QC activities at the Comanche Peak site.
31. December 14 - 18, 1981, and January 4 - 8, 1982. No holidays are included in these time frames.
32. No. However, the CPSES Quality Assurance Plan was available for his review.
33. The prime contractors for Comanche Peak are Westinghouse Electric Corporation, Gibbs & Hill, Inc. and Brown & Root, Inc. Mr. Lobbin did not reveal the identity of the prime contractor to which he referred, presumably because it was not within the scope of the report. As stated in the Lobbin Report, at p. 4, Mr. Lobbin made "no effort ... to evaluate directly the effectiveness and implementation of the Comanche Peak QA programs of TUGCO's prime contractors."
34. No. However, Chapter 17.1 of the Final Safety Analysis Report ("FSAR") defines TUGCO's responsibilities for audits and surveillances of the Quality Assurance program. These responsibilities include audits and surveillances of Brown & Root's ASME program. Also included in Chapter 17.1 of the FSAR are the applicable organizational interfaces.
35. Not applicable.
36. Not applicable.
37. Not applicable.
38. Corporate Quality Procedure CQP-CS-4, Revision 2, of the Corporate Quality Procedures/Instructions Manual establishes the procedures for this activity in effect at the time of Mr. Lobbin's evaluation. This procedure previously was made available to CASE for inspection and copying.

39. Corporate Quality Instruction CQI-CS-4.5, Revision 1 of the Corporate Quality Procedures/Instructions Manual establishes the procedures for this activity in effect at the time of Mr. Lobbin's evaluation. This procedure previously was made available to CASE for inspection and copying.
40. Yes.
41. Both of the procedures identified in the responses to Interrogatories 38 and 39 have been revised.
- 42.-43. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.
44. The TUGCO persons qualified to participate as auditors in the vendor QA audit program are:
- | | |
|--------------------|------------------|
| Debra L. Anderson | Cecil Manning |
| Bailey F. Cambell | Rick Hoelscher |
| Roland F. Cote' | Antonio Vega |
| Steve Davis | Tony Valdez |
| Al'An Kesler | Debara Paris |
| Larry Rillera | Albert Boren |
| Robert H. Shoemake | Wayne Parry |
| Susan L. Spencer | David Deviney |
| Lisa M. Bielfeldt | Richard Curtis |
| John Maxwell | Charles Killough |
| Jim Smith | John Echterhoff |
| Leonard A. Lamb | Alan Lancaster |
45. Mr. Lobbin has informed Applicants that the Comanche Peak vendor audit activity was compared to only one other nuclear project, Arizona Public Service's Palo Verde Plant.
46. See response to Interrogatory 45.
47. No. At the time this report was written the figures were correct. However, as our response briefly pointed out, any meaningful comparison of the number of activities performed is impossible without, at the same time, considering the breadth and depth of each of those activities.
48. Not applicable.
49. Mr. Lobbin has informed Applicants that the Comanche Peak design and construction audit activity was compared only to one other nuclear project, Arizona Public Service's Palo Verde Plant.

50. 1975 - 11
1976 - 24
1977 - 31
1978 - 32
1979 - 40
1980 - 46
1981 - 24
1982 (to date) - 8 (+ 1 in progress)

51. 1975 - 0
1976 - 0
1977 - 0
1978 - 54
1979 - 80
1980 - 16
1981 - 18
1982 (to date) - 4

52. Brown & Root, Hartford Steam Boiler Inspection and Insurance Company, and The National Board of Boiler and Pressure Vessel Inspectors.

53.	<u>Brown & Root</u>	<u>Hartford</u>	<u>National Board</u>
	1975 - 3	1979 - 2	1979 - 2
	1976 - 4	1980 - 1	
	1977 - 3	1981 - 1	
	1978 - 3		
	1979 - 2		
	1980 - 1		
	1981 - 1		
	1982 (to date) - 2		

54. For all activities which require audits, such audits are scheduled and performed without consideration of resources. See Procedure CQP-CS-4 of the Corporate Quality Procedures/Instructions Manual.

55. None. Manpower is allocated to specific audits as required and in no way is considered to be a potentially limiting factor.

56. The Applicants have not yet completed this evaluation and, therefore, have no results.

57. See response to Interrogatory 56.

58. All nine audits included work done under the Brown & Root ASME Certificates of Authorization. Any audit of Brown & Root would have been performed against their ASME QA Program, not specific ASME-related functions.
59. None.
60. At one time or another, all areas of the ASME program were reviewed.
61. Yes. These reports have already been made available to CASE for inspection and copying in response to CASE's Sixth Set of Interrogatories.
62. Not applicable.
63. As of January, 1982, the authorized TUGCO QA audit staff level was 13 persons.
64. As of January, 1982, the TUGCO QA audit staff consisted of 6 auditors, supplemented, on an as-needed basis, by QA engineers and technicians, all of whom are qualified auditors.
65. The TUGCO QA audit staff was formed in 1979. Prior to that time, there were no TUGCO employees dedicated solely to audits. The TUGCO audits were performed primarily by engineers in the QA department who were qualified as auditors. The TUGCO QA audit staff continues to rely on persons such as these to support the audit effort. The authorized TUGCO QA staff levels for 1979 and subsequent years are, as follows:
- | |
|----------|
| 1981 - 9 |
| 1980 - 2 |
| 1979 - 2 |
66. 1981 - 6
1980 - 2
1979 - 2
- Prior to 1979 - 0. See response to Interrogatory 65.
67. Applicants will supply this document for inspection and copying. Arrangements will be made for CASE to obtain a copy of this document in the near future.
68. Yes.

69. All audits include technical review of procedures by audit team members to assure, from a programmatic basis, that procedures establish adequate and effective controls on safety-related activities. In addition, Engineers at the site review procedures to assure they are concise and accurately reflect appropriate design parameters in their acceptance criteria.
70. As stated in the response to Interrogatory 69, evaluation of procedures for adequacy and effectiveness of controls is an integral part of every audit. There is no requirement to, and the Applicants do not record whether a technical review is initiated in the presence or absence of a particular problem.
71. Yes.
72. TCP-28 was the only audit performed specifically on Nonconformance Report administration. However, other audits may include a review of nonconformance records as they may apply to the activity being audited.
73. Yes.
74. The following audits included a review of prime contractors' audit functions performed pursuant to 10 C.F.R. Part 50, Appendix B, Criterion XVIII:
- TBR-1, 2, 5 through 8
TGH-1, 3, 7, 10, 11 and 17
TWH-1 through 14, 18, 20 and 21
75. As stated in the Lobbin Report (p. 15), determination of generic effect is made on every audit as a result of audit findings. Specifically, an auditor, upon finding a deficiency, must determine, by further review and investigation, whether the deficiency is an isolated incident or whether there are additional instances of the same type of problem. In addition, the auditor determines whether the problem is the result of a program or procedure deficiency, inadequate training, or attitude. Although there is no requirement to, and the applicant does not record this logic sequence, this evaluation is in fact performed on every audit performed by the Applicant.

76. Yes.
77. Together with the audit reports, all corrective and preventive action responses, if required, have been made available to CASE for inspection and copying with each audit report produced.
78. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.
79. Older audit reports do not contain such a description; however, the scope of the audit was contained in the audit notification letter. More recent audit reports contain a description of both the scope and impact of the audit.
80. Yes. Applicants perform these reviews during the course of audits which include review of activities conducted pursuant to 10 C.F.R. Part 50, Appendix B, Criterion XVIII.
81. This information may be obtained by reviewing the audits being provided in response to Interrogatories 113 and 114.
82. Applicants note that there is no regulatory requirement for "surveillance." Nevertheless, Applicants provide the following information:

Surveillance may be used as a management tool to identify areas that might need additional attention and/or to participate in problem resolution. Applicants believe Surveillance organization and visibility should be in the form and to the degree management deems appropriate given the specific role played by surveillance on a specific project, as determined on a case-by-case basis. Accordingly, the importance of the various concepts listed in parts (a) through (d) will vary for each surveillance.

83. Not applicable.
84. Not applicable.
85. No. Prior to this reorganization, two surveillance groups reported to the Supervisor, Quality Assurance Services. With this reorganization, responsibility for construction surveillance groups was assigned to the Site QA Supervisor.

86. Applicants believe they have employed and utilized personnel with the experience necessary to perform the surveillance activities. Any difficulties which are encountered in hiring such personnel arise because personnel with extensive design and construction experience are in great demand.
87. TUGCO has contacted personnel agencies specializing in technical personnel, and in particular, nuclear experience. In addition, recruiting ads have been placed in industry magazines and newspapers.
88. Yes.
89. Not applicable.
- 90.-91. Mr Lobbin did not identify the particular "project organization" to which he referred or those who consider the surveillance group "of little benefit." CASE should recognize that the surveillance program is an independent, voluntary activity that is conducted in addition to the TUGCO QA program mandated by and performed pursuant to 10 C.F.R. Part 50, Appendix B. Nonetheless, as indicated in Applicants' response to the Lobbin Report findings, see TUGCO QA Response at p. 27, Applicants are desirous of an effective surveillance program, and believe the program has functioned well and has performed a useful service for the Comanche Peak project.
92. The results of this audit are documented in our audit report TCP-36. Two deficiencies, one concern, and two comments were identified.
93. Applicants will supply this document for inspection and copying. Arrangements will be made for CASE to examine and request a copy of this document in the near future.
94. a. There were no previous audits of a similar nature performed by TUGCO.
- b. No. However, TCP-36 was an audit of Brown & Root and TUGCO inspection personnel.
- c. See responses to Interrogatories 94.a. and b.

95. The requirement for this training is contained in, and Applicants have previously provided, the following Procedures and Instructions:

Brown & Root CP-QAP-2.1, "Personnel Training and Certification, " Brown & Root QI-QAP-2.1-1, "NDE Personnel Certification," and Brown & Root QI-QAP-2.1-5, "Training and Certification of Inspection Personnel"; contained in the Brown & Root "ASME Quality Assurance Procedures Manual."

In addition, the "QA/QC Non-ASME Personnel Training Manual" contains additional procedures and instructions.

96. Applicants will supply the "QA/QC Non-ASME Personnel Training Manual" for inspection and copying. Arrangements will be made for CASE to examine and request a copy of this document in the near future.
97. There are approximately 250 QA and QC inspectors currently located at the Comanche Peak site. In that production of the requested information for each of those persons, and for all past employees, would be burdensome on both Applicants and CASE, Applicants will await further specification by CASE before responding, as agreed in Applicants conversation with CASE on April 12, 1982.
98. See Attachment 2.
99. There are programs in place at Comanche Peak which require that non-conformances be reviewed in an effort to preclude repetition of conditions adverse to quality.
100. Both Brown & Root and TUGCO quality assurance organizations implement a program as described in the response to Interrogatory 99.
101. Applicants will supply this document for inspection and copying. Arrangements will be made for CASE to examine and request a copy of this document in the near future.

102. Applicants have no present plans to call Mr. Lobbin to testify.
103. Billy R. Clements, TUGCO Vice President, Nuclear.
104. The TUGCO/TUSI QA Program.
105. It was Mr. Lobbin's opinion that the effectiveness of the evaluation would be enhanced by limiting the scope to the activities described in the response to Interrogatory 20. The duration, however, was expanded to two weeks rather than the originally scheduled one-week period.
106. As stated earlier, Mr. Lobbin was retained to evaluate the TUGCO/TUSI QA Program. In that TUGCO evaluates the Brown & Root program, Mr. Lobbin's efforts in this area would be redundant.
107. During his evaluation, Mr. Lobbin had unlimited access to all files maintained by TUGCO QA. Mr. Lobbin himself selected these documents.
108. See response to Interrogatory 107.
109. Mr. Lobbin has informed Applicants that he did not note which specific audits he reviewed.
110. See response to Interrogatory 109.
111. Mr. Lobbin has informed Applicants that he did not note which specific Westinghouse audits he reviewed.
112. See response to Interrogatory 111.
113. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.
114. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.

115. CASE has not previously requested these particular audits. Only in CASE's Seventh Set of Interrogatories, Question 8, did CASE pose an interrogatory which encompassed such vendor audits (audits by TUGCO of vendors at the vendors' facilities). However, CASE indicated in its February 19, 1982 conversation with Applicants that Applicants did not need to supply those audits at that time and that CASE would pursue this question at a later date.
116. Mr. Lobbin has informed Applicants that these documents were selected by him at random.
117. Mr. Lobbin has informed Applicants that he did not note which records were reviewed.
118. See response to Interrogatory 117.
119. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.
120. Listed below are the names and titles of all individuals identified as being interviewed by Mr. Lobbin. All individuals are employed by Texas Utilities Generating Company unless otherwise noted.
- David N. Chapman - Manager, Quality Assurance
Antonio Vega - Supervisor, Quality Assurance Services
Albert H. Boren - Supervisor, Vendor Compliance
Ronald G. Tolson - Site Quality Assurance Supervisor
Debra L. Anderson - Quality Assurance Auditor
Susan L. Spencer - Quality Assurance Auditor
Bob C. Scott - Ebasco-QA/QC Supervisor - General
Gerald W. Parry - Sr. Quality Assurance Technician
Cecil Manning - Sr. Quality Assurance Technician
Dennis Schmidt - Sr. Quality Assurance Technician
Michael Bever - Sr. Quality Assurance Technician
Robert G. Taylor - Nuclear Regulatory Commission -
Senior Resident Reactor Inspector
121. No. As stated in the response to Interrogatory 107, Mr. Lobbin had unlimited access to all files maintained by TUGCO QA.
122. See response to Interrogatory 121 above.

- 123. See response to Interrogatory 121 above.
- 124. No. Mr. Lobbin was aware of, and had access to, yet chose not to review Inspection and Enforcement Reports.
- 125. Not applicable.
- 126. Site Surveillance Reports ("SSR") 126 through 166.
- 127. SSR-1 through 36 (1979)
SSR-37 through 125 (1980)
SSR-001 through 010 (1982)

In addition, site surveillance reports were issued in prior years pursuant to surveillance activities performed by Brown & Root. Mr. Lobbin did not review those reports.

- 128. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.
- 129. Mr. Lobbin's review of the Quality Assurance program included past and present activities with increased emphasis on the more recent activities. Reviews of past activities included documents such as audit reports, surveillance reports, and vendor compliance records.
- 130. No.
- 131. Not applicable.
- 132. Not applicable.
- 133. No.
- 134. Not applicable.
- 135. Not applicable.
- 136. The vendor audit program has been in effect since September, 1973. The compliance program has been in effect since August, 1978.
- 137. No. All nonconformance reports are reviewed by Quality Assurance personnel at CPSES to determine whether or not the nonconformance is reportable under the requirements of 10 C.F.R. § 50.55(e).

- 138. Not applicable.
- 139. Not applicable.
- 140. See Attachment 3.
- 141. "Action Addressee" (TUGCO Log) and "Disposition Assignment" (Brown & Root Log) are virtually synonymous. The applicable Engineering or Construction management personnel identified as Action Addressee/Disposition Assignment are responsible for evaluating and dispositioning NCR's assigned to them.
- 142. Both terms have the same meaning. Each NCR is given a trend category number in order to associate it with the proper trend category. The categories are used as an objective method of ascertaining the need for corrective action.
- 143. See Attachment 4.
- 144. If a Corrective Action Request (CAR) is issued, a "Yes" is entered into this column. If a CAR is not issued, a "No" is entered into this column.
- 145. A CAR is issued when a problem becomes repetitive or it is significant enough to warrant escalated corrective action.
- 146. No. Quality Assurance management makes that determination.
- 147. The number that appears in the "CAR Rqd Yes/No" column is the number of the associated Corrective Action Request (CAR).
- 148. "Reportable Yes/No" refers to whether or not the nonconformance may be reportable under the requirements of 10 C.F.R. § 50.55(e). "TWR", Temporary Waiver Request, was a document by which Construction/Engineering requested authorization to continue the subject activity on a "risk removal" basis. There is no relation between the two terms.

The Reportable Yes/No column was deleted from the Brown & Root NCR Log because Brown & Root does not have responsibility for formally reporting conditions to the NRC that may be reportable under 10 C.F.R. § 50.55(e). Subsequently, the "TWR" heading was placed in the column from which "Reportable Yes/No" had been deleted.

149. In both cases, the number shown is the number of a Temporary Waiver Request, which was used as a tracking or status indicator.
150. If a "yes" appears in the "reportable yes/no" column, Brown & Root QA believed that the matter may fall under the criteria of 10 C.F.R. § 50.55(e), and has brought the matter to the Applicants' attention. If a "no" appears, Brown & Root QA did not believe that the matter met the reportability criteria of 10 C.F.R. § 50.55(e). Refer to the response to Interrogatory 149 for the explanation of the numbers which appear in those columns.

If a "no" or "--" appears in the "TWR" column, a Temporary Waiver was not requested. Refer to the response to Interrogatory 149 for the explanation of the numbers which appear in those columns. Also, see response to Interrogatory 155.

151. No. Quality Assurance management makes that determination.
152. "Psbl" is an abbreviation for the word Possible. As stated in response to Interrogatory 150, Brown & Root QA brought this matter to the Applicants' attention. If the matter met the criteria of 10 C.F.R. § 50.55(e), it was reported.

The following list indicates whether the NCR's identified as "Psbl" were reported:

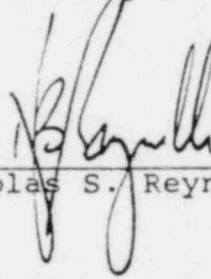
NCR 617 - Reported
NCR 669 - Not reported
NCR 694 - Reported
NCR 704 - Not reported
NCR 722 - Not reported
NCR 806 - Not reported
NCR 809 - Not reported
NCR 810 - Not reported
NCR 811 - Not reported
NCR 815 - Not reported
NCR 831 - Not reported
NCR 833 - Not reported
NCR 894 - Not reported
NCR 899 - Not reported
NCR 906 - Not reported
NCR 907 - Not reported

153. The criteria used in determining whether or not each item is actually reported are contained in 10 C.F.R. § 50.55(e).
154. This responsibility is defined in site quality procedure CP-QP-16.1 (TUGCO "Quality Procedures Manual") and procedure CQP-CS-6 (Corporate Quality Procedures/Instructions Manual), which have been made available to CASE for inspection and copying.
155. Prior to October, 1981, a dash in this column means a Temporary Waiver was not requested, i.e., a "No". If a Temporary Waiver was requested by Construction/Engineering, and Quality Assurance management concurred with the request, the Waiver was issued. If issued, a TWR number was recorded. There is no connection between TWR's and whether or not the item is reported under 10 C.F.R. §50.55(e). After October, 1981, TWR's were no longer used and the dash indicates that fact.
156. Procedure CP-QP-16.0, Paragraph 3.1.5.1 (TUGCO "Quality Procedures Manual") and procedure CP-QAP-16.1, Paragraph 3.2.1.3 (Corporate Quality Procedures/Instructions Manual) define the processes of voiding NCR's. These procedures have been made available to CASE for inspection and copying.
157. See response to Interrogatory 156.
158. As clarified in Applicants' telephone conversation with CASE on April 19, 1982, Applicants respond as follows:

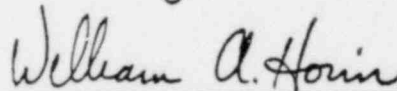
The only documents from TUGCO and Brown & Root that are of a similar nature to non-conformance report logs, and which Applicants have not previously provided to CASE, are Field Deficiency Report logs.
159. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.

- 160. July 10, 1980.
- 161. The NCR Log was initiated to track NCR's associated with the non-ASME QA program.
- 162. TUGCO NCR's are applicable to non-ASME activities, while Brown & Root NCR's are applicable to ASME activities. Items generally are not duplicated because of the different activities covered.
- 163. The letter designation preceding each NCR number identifies the discipline (i.e., C = Civil, M = Mechanical, E = Electrical, I = Instrumentation).
- 164. Applicants will supply these documents for inspection and copying. Arrangements will be made for CASE to examine and request copies of these documents in the near future.

Respectfully submitted,



Nicholas S. Reynolds



William A. Horin
DEBEVOISE & LIBERMAN
1200 17th Street, N.W.
Washington, D.C. 20036
(202) 857-9817

Counsel for Applicants

April 20, 1982

FREDERICK P. LOBBIN, P.E.
Consulting Engineer

Education

- 1964 - New York State Maritime College - Bachelor of Science, Nuclear Science
- 1967 - The Catholic University of America - Master of Science, Nuclear Engineering

Professional Experience

- 1981-Date - Private engineering and management consultant to electric utility industry. Involved primarily in areas related to the design and evaluation of management systems for power plant engineering, construction, testing and operations.
- 1977-1981 - Associate - Gasser Associates, Inc. Provided technical consulting services to the firm's nuclear utility clients and was responsible for new business development and strategic planning. The firm's clients were primarily utilities with nuclear plants nearing or in commercial operation.
- 1972-1977 - Director of Engineering - General Physics Corporation. Responsible for a significant portion of the firm's early growth in nuclear power consulting, in particular, in areas related to nuclear plant operations quality assurance and management systems design, engineering support for plant design modifications, and inservice inspection.
- 1971-1972 - Staff Engineer - Southern Nuclear Engineering, Inc. Assignments included preparation and review of licensing documents for the firm's nuclear utility clients, including preliminary and final safety analyses and environmental reports, and preparation of both preoperational and startup test procedures for a large PWR nuclear plant.
- 1967-1971 - Senior Engineer - Hittman Nuclear & Development Corporation. Project engineer for a number of engineering projects related to power systems design and safety analysis. Technical expertise was in steady state and transient thermal-hydraulic analysis of power plant systems.

1964-1967 - Graduate Assistant - The Catholic University of America. Assisted with Nuclear Engineering Department lab projects involving use of the AGN-201 research reactor and other lab equipment, including a small analog reactor simulator, a heat transfer loop, and various radiation measurement equipment. Obtained an AEC Reactor Operator License for the AGN-201.

Professional Affiliations

American Society of Mechanical Engineers
American Society for Quality Control
American Nuclear Society

CPSES QA/QC Organization Management

<u>Brown & Root</u>	<u>Title</u>	<u>Start</u>	<u>End</u>
P.L. Bussolini	B&R Project QA Manager	12/02/74	1/21/78
J.P. Clark	Project QA Manager	9/11/77	To present
J.V. Hawkins	Project QA Manager	8/24/79	10/30/81
Rose Klimist	Project QA Manager	1/13/80	8/02/80
Gordon Purdy	Project QA Manager	10/30/81	To present
Bob Scott	Project QA Manager	4/05/76	6/08/79

TUGCO

Prentice M. Milam	Site QA Supervisor	6/75	2/77
Ronald G. Tolson	Site QA Supervisor	2/77	To present

Although the following are not "QA/QC organizations at CPSES," they do perform QA functions within their own activities.

CBI */

Mike Jeffers	QA Supervisor	7/75	7/79
Dennis Williams	QA Supervisor	2/79	To present

Bahnson **/

Tilman O. Bryan	Site QA Manager	9/77	9/78
David McDonald	Site QA Manager	5/78	6/79
Richard Owens	Site QA Manager	2/79	To present

Grinnell ***/

Steve Danks	QA Manager	8/81	To present
Joseph T. Merreck	QA Manager	8/80	8/81
Leon Reese	QA Manager	7/79	8/80

*/ Chicago Bridge & Iron
 **/ Bahnson Service Company
 ***/ Grinnell Fire Protection Systems Co., Inc.

TUGCO NCR LOG
"Action Addressee"

<u>Name</u>	<u>Position</u>
Doug Frankum	B&R Project Manager
Larry Popplewell	Project Electrical Engineer
John T. Merritt	Engineering & Construction Manager
Jerry Allen	Project Civil/Structural Engineer
Dick Kissinger	Project Civil Engineer
John Finneran	Project Pipe Support Engineer
Ronald G. Tolson	Site QA Supervisor
Claude Moehlman	Field Mechanical Engineering Supervisor
Jim Keller	Field Mechanical Engineering Supervisor
Gayle Creamer	Project I & C Engineer
Bill Baker	Project Welding Engineer
Jay Ryan	Project Pipe Support Engineer (Lg. Bore)
Charlie Britt	Construction General Electrical Superintendent
Ned Baker	Project Mechanical Design Engineer
James V. Hawkins	B&R Project QA Manager
Mark Smith	Field Mechanical Systems Engineer
Ron Estes	Technical Support Lead Engineer

BROWN & ROOT NCR LOG
"Action Addressee"

<u>Name</u>	<u>Position</u>
Doug Frankum	B&R Project Manager
H.C. Dodd	B&R Project Manager
Charles Gatchell	Project Engineer TUSI
P.L. Bussolini	B&R Project QA Manager
U.D. Douglas	B&R Project Manager
J.P. Clark III	B&R QA Manager
John T. Merritt	Engineering and Construction Manager
Ronald V. Fleck	QA Engineer

Brown & Root NCR LOG
"Action Addressee"

<u>Name</u>	<u>Position</u>
Ronald G. Tolson	Site QA Supervisor
James V. Hawkins	B&R Project QA Manager
Tom Schreeder	QC Supervisor
Walt Lisiewski	Project Electrical Engineer
Rose Klimist	B&R Project QA Manager
Bill Baker	Project Welding Engineer
Gordon Purdy	B&R Project QA Manager
John Finneran	Project Pipe Support Engineer
Claude Moehlman	Field Mechanical Engineering Supervisor
Mark Smith	Field Mechanical Systems Engineer
Jim Keller	Field Mechanical Engineering Supervisor

TUGCO NCR TREND CATEGORIES

1) Item/Material Identification

- 0 Improper Identification
- 0 Traceability Lost
- 0 Tags Missing

2) Storage

- 0 Material Stored in Wrong Place
- 0 Material Stored with Wrong Environment
- 0 Maintenance During Storage Incorrect

3) Calibration

- 0 Tools out-of-Calibration or Not in Program
- 0 Calibration Stickers Missing
- 0 Tools not Calibrated on Schedule

4) Hold Points

- A Violation of QC Holdpoints
- B Unauthorized Use of Equipment in Hold
- C Violation of Procedure

5) Material

- A Improper Assembly, Installation, Etc.
- B Damage
- C Missing or Defective Equipment

6) Documentation

- 0 Documents Missing, Incomplete, Incorrect or Inconsistent

7) Welding

- 0 Any Non-ASME Welding-related Nonconformance.

8) Cleanliness

- 0 Housekeeping or Nonconformances that are a Direct Result of Poor Cleanliness

9) Testing

- 0 Failures on Testing Done after Installation
- 0 Incorrect Testing Procedures Used; E.g., Concrete which fails 28-day Strength Test; Hydro Test Failures

10) Separation

- 0 Violation of Separation Criteria

11) Drawings/Specifications

- 0 Design Documents Incorrect, Incomplete, Inconsistent, Missing, etc.

BROWN & ROOT NCR TREND CATEGORIES

I. General

Shipping Damage	G1
Incomplete Documentation	G2
Noncompliance with Specifications (including configuration during receiving/procedures)	G3
Handling/Storage	G4
Cleanliness	G5
Calibration	G6
Coatings/Painting	G7
Installation Construction Damage	G8
Improper Material	G9
Storage Maintenance	G10
Installed Maintenance	G11
Dwg/CMC Incorrect	G12

II. Mechanical (Piping and Equipment)

Equipment Installation	M1
Equipment Alignment	M2
Piping Fabrication	M3
Piping Installation	M4
Welding	M5
Nondestructive Examination Results	M6
Heat Treatment	M7
Hydrostatic Testing	M8
Equipment Malfunction	M9
Inspection/Surveillance	M10
Minimum Wall	M11
Violation of Holdpoints	M12
Material	M13

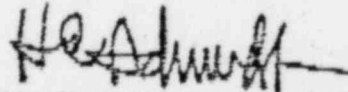
III. Mechanical (Component Supports)

Support Fabrication	M14
Support Installation	M15
WPS Violation	M16A
Unqual. Welder	M16B
RDE	M17
Heat Treatment	M18
Material	M19
Holdpoint Violation	M20
Dwg/CMC Incorrect	M21
Documentation Incomplete/Incorrect	M22
Specification Violation	M23

STATE OF TEXAS)
)
COUNTY OF DALLAS)


Homer C. Schmidt, being duly sworn, deposes and says:

That he is Manager, Nuclear Services, Texas Utilities Services Inc., and knows the contents of the foregoing Applicant's Answer to CASE's Ninth Set of Interrogatories; that the same is true of his own knowledge except as to matters therein stated on information and belief, and as to that, he believes them to be true.



Homer C. Schmidt

Subscribed and sworn to before me this 20TH day of April 1982.


Notary

This document is a telecopy. Applicants will furnish the original by separate cover.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD '82 APR 21 A9:38

In the Matter of)
)
TEXAS UTILITIES GENERATING) Docket Nos. 50-445
COMPANY, et al.) 50-446
)
(Comanche Peak Steam Electric) (Application for
Station, Units 1 and 2)) Operating License)

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing
"Applicants' Answers to CASE's Ninth Set of Interrogatories,"
in the above-captioned matter were served upon the following
persons by overnight delivery (*) or by deposit in the
United States mail, first class postage prepaid this 20th
day of April, 1982:

Marshall E. Miller, Esq.
Chairman, Atomic Safety and
Licensing Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Chairman, Atomic Safety and
Licensing Appeal Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

Dr. Kenneth A. McCollom
Dean, Division of Engineering
Architecture and Technology
Oklahoma State University
Stillwater, Oklahoma 74074

Marjorie Ulman Rothschild, Esq.
Office of the Executive
Legal Director
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

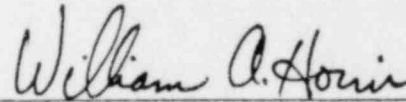
Dr. Richard Cole, Member
Atomic Safety and Licensing
Board
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

David J. Preister, Esq.
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Environmental Protection
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P.O. Box 12548
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Licensing Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20555

* Mrs. Juanita Ellis
President, CASE
1426 South Polk Street
Dallas, Texas 75224

Mr. Scott W. Stucky
Docketing & Service Branch
U.S. Nuclear Regulatory
Commission
Washington, D.C. 20005

A handwritten signature in cursive script, reading "William A. Horin". The signature is written in dark ink and is positioned above a horizontal line.

William A. Horin

cc: Homer C. Schmidt
Spencer C. Relyea, Esq.