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6/9/86

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	}{	
	}{	Docket No. 50-445-CPA
TEXAS UTILITIES ELECTRIC	}{	
COMPANY, et al.	}{	(Application for a
(Comanche Peak Steam Electric	}{	Construction Permit)
Station, Units 1 and 2)	}{	

JOINT INTERVENORS' 2ND SET OF INTERROGATORIES
AND REQUEST FOR DOCUMENTS

Pursuant to the Rules of Practice, Joint Intervenors CASE (Citizens Association for Sound Energy) and Meddie Gregory request responses to the questions below and production of the sought-after documents /1/.

We expect responses to these interrogatories and/or requests for document production not later than 30 days after receipt of this request.

Instructions

1. Each interrogatory or document request should include all pertinent information known to Applicants, their officers, directors, or employees, their agents, advisors, or counsel. "Employees" is to be construed in the broad sense of the word, including specifically Brown &

/1/ In Intervenors' 5/15/86 Proposed Discovery Plan (page 3), to which our initial set of Interrogatories and Request for Documents was attached, Joint Intervenors voluntarily committed to filing a second set of interrogatories and request for documents by June 2, 1986. However, we were unable to complete our filing by that time and on 6/2/86 left word for the Board Chairman (who was not available) that we would like to file our second set on or before 6/9/86 and requested that he advise if this was not satisfactory. We were unable to contact counsel for Applicants or NRC Staff on 6/2/86, but on 6/3/86 both indicated that they had no objections.

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Root, Gibbs & Hill, Ebasco, Cygna, Stone and Webster, Evaluation Research Corporation, TERA, any consultants, subcontractors, and anyone else performing work or services on behalf of the Applicants or their agents or subcontractors.

2. Each answer should indicate whether it is based on the personal knowledge of the person attesting to the answer and, if not, on whose personal knowledge it is based.

3. The term "documents" shall be construed in the broad sense of the word and shall include any writings, drawings, graphs, charts, photographs, reports, studies, audits, slides, internal memoranda, informal notes, handwritten notes, tape recordings, procedures, specifications, calculations, analyses, and any other data compilations from which information can be obtained.

4. As to each document provided, Applicants shall consider that providing the document constitutes an admission of its authenticity or, pursuant to 10 CFR paragraph 2.742(b), the basis for refusing to so admit.

5. Answer each interrogatory in the order in which it is asked, numbered to correspond to the number of the interrogatory. Do not combine answers.

6. These interrogatories and requests for documents shall be continuing in nature, pursuant to 10 CFR 2.740(e) and the past directives of the Licensing Board. Supplementation shall be made at least every two months to avoid resubmittal of these interrogatories.

7. For each item supplied in response to a request for documents, identify it by the specific question number to which it is a response. If the item is excerpted from a document, identify it also by the name of the document.

Interrogatories

2-1. Identify all listings, reviews, diagnoses, evaluations, consultant reports, in-house audits, handwritten notes, or other documents which list, itemize, and/or summarize what have come to be commonly known as the Walsh/Doyle Allegations. Also identify the document which Applicants consider to be the document which identifies all of the Walsh/Doyle allegations and the document which best summarizes them (if these are not the same document, please so state and identify both specifically).

2-2. What was the source of each item listed in response to question 2-1 above, and who was the author of each (give name, title, company organization, and date at the time each was authored or revised)?

2-3. For each item listed in your response to question 2-1, to what organization and/or individuals (identify name, title, organization) involved in the reinspection effort was each item given? Include specifically in your answer: (a) whether or not each was given to Stone & Webster, Gibbs & Hill, TERA/TENERA, ERC, and/or other organizations working within or with the CPRT; and (b) what was the extent of the information with which each organization or individual was provided (were they given only the summary document itself; were they given the underlying transcripts of hearings, documents, pleadings, Board Orders; etc.; if they were given more than just the summary document itself, what other documents were they given).

2-4. How was the scope of each organization's and/or individual's review determined, and who (name, title, organization) made the determination in each case?

2-5. When did Applicants first receive notice of each of the issues covered by the Walsh/Doyle allegations? In what format was such notification made (a specific document, verbal communication between specific individuals, etc.); identify specifically for each Walsh/Doyle issue.

2-6. What generic problems have been identified regarding pipe supports during the period of the Stone & Webster reinspection (by Stone & Webster or by others) which Applicants consider might be associated with the Walsh/Doyle allegations?

2-7. What other generic problems regarding pipe supports have been identified during the period of the Stone & Webster reinspection (by Stone & Webster or others) which Applicants consider to be unassociated with the Walsh/Doyle allegations?

2-8. In view of Applicants' current position, what issues contained in the Walsh/Doyle testimony or allegations would now be considered by Applicants to be (or to have been) reportable potentially reportable under 50.55(e)? Of those items listed in your response, which of them did Applicants consider to be actually reportable under 50.55(e) and (if different) which of them did Applicants actually report under 50.55(e).

2-9. Have any new procedures been introduced for consideration in the analysis of integral attachments to pipe runs (as used in anchors, for example)? Provide complete and specific details.

2-10. Have any of the reanlyses of pipe runs introduced support loads which, although less than the previous loads, still would require redesign of the supports? Why? Provide complete and specific details.

2-11. What, if any, new methodology and/or procedures are being used by Stone & Webster for the Richmond anchor/tube assembly analysis that were not used originally? Has there been an introduction of new bolt material for any of the Richmond threaded rods (or is all of the material still A307 or A36 steel)? What is the justification for this? Provide complete and specific details.

2-12. What, if any, generic type(s) of supports have Applicants requested be redesigned without further attempts at qualification (for example, have Applicants told Stone & Webster on cinched-up U-bolts, replace them all; or on unstable box frames, replace them all; i.e., don't try to go through and analyze them or anything, just replace them)? In each such instance, what was the reason or justification for this? Provide complete and specific details.

2-13. Please refer to the attached 5/19/86 DALLAS MORNING NEWS article and answer the following questions:

(a) Is it correct that in the first 3-1/2 months of 1986, Applicants reported 31 potentially serious safety problems, compared with 54 reported for all of 1985? If this statement is incorrect, please correct and clarify it. Were these all potentially reportable items under 10 CFR 50.55(e)? If not, please explain.

(b) Is it correct that Applicants filed 5,207 nonconformance reports (NCR's) in the first three months of 1986, compared to a total of 7,669 for the entire twelve month period of 1985? If this is not correct, please correct and clarify it. Please explain the reason for the relatively large number of NCR's so far in 1986.

2-13 (continued):

(c) Please estimate the percentage of NCR's filed during 1985 and during 1986 which resulted from problems identified by the CPRT and/or Stone & Webster reinspection efforts, as opposed to the percentage which resulted from efforts by others.

(d) (i) What is the number of pipe supports on which NCR's were written in 1985? in 1986?

(ii) If this information is not available in this form, how many NCR's were written on pipe supports in 1985? in 1986?

(iii) How many of such NCR's were written due to potential or actual problems in design?

(e) (i) What is the number of pipe supports which had potential 50.55(e) reports written against them? What is the number of such potential 50.55(e)'s which Applicants finally determined were actually reportable?

(ii) If this information is not available in this form, how many potential 50.55(e) reports were written on pipe supports in 1985? in 1986? What is the number of such potential 50.55(e)'s which Applicants finally determined were actually reportable?

(iii) How many of such 50.55(e) reports were written due to potential or actual problems in design of pipe supports? Identify the specific report numbers and provide a general description of the problem.

(iv) Which of the 50.55(e) reports in (iii) above were determined to actually be reportable?

2-14. What is the percentage complete of Unit 1 of Comanche Peak? What is the percentage complete of Unit 2? Please explain exactly what you mean by the percentage complete.

2-15. How many individuals (including workers, inspectors, consultants, etc.) are currently working onsite at Comanche Peak? How many individuals (including workers, inspectors, consultants, etc.) are currently working offsite (such at at Gibbs & Hill's offices in New York, etc.) on Comanche Peak?

2-16. What is the total estimated cost per day for Comanche Peak at this time (including labor, interest on money borrowed, insurance, etc.)?

2-17. How many large bore (4" and over) pipe supports are in Unit 1 of Comanche Peak? Of this total, how many are (a) Class 1, (b) Class 2, (c) Class 3, (d) Class 5?

2-18. How many small bore (under 4") pipe supports are in Unit 1 of Comanche Peak? Of this total, how many are (a) Class 1, (b) Class 2, (c) Class 3, (d) Class 5?

2-19. How many large bore (4" and over) pipe supports are in Unit 2 of Comanche Peak? Of this total, how many are (a) Class 1, (b) Class 2, (c) Class 3, (d) Class 5?

2-20. How many small bore (under 4") pipe supports are in Unit 2 of Comanche Peak? Of this total, how many are (a) Class 1, (b) Class 2, (c) Class 3, (d) Class 5?

2-21. The attached 5/19/86 DMN article states that:

> "The latest estimate released by the utility [of pipe supports in Unit 1 which would have to be removed or modified at Comanche Peak] indicates 3,700 supports -- more than 40 percent -- will be affected. Utility officials said 1,000 supports need minor work, 1,700 pipe supports must be re-designed and modified, and another 1,000 supports must be torn down."

Are these statements correct? If not, please correct and clarify the statements. What quantity and what percentage are in Unit 1, and what

quantity and what percentage are in Unit 2? What is the breakdown of the 4,700 (or whatever the correct number is) pipe supports as to class (for example, Class 1: so many minor, so many redesigned, and so many rip out; Class 2, the same; Class 3, the same; Class 5, the same). In your response, also identify which are large bore and which are small bore.

2-22. Is Stone & Webster performing a 100% reinspection of all large bore pipe supports? Of all small bore pipe supports? Please provide complete details.

2-23. In Stone & Webster's reinspection and/or reanalyses, have they discovered any generic or potentially generic problems in addition to those covered by the Walsh/Doyle allegations? If so, provide specific and complete details.

2-24. In Stone & Webster's reinspection and/or reanalyses, have they discovered information and/or documentation which confirms any of the Walsh/Doyle allegations? If so, provide specific and complete details.

2-25. Is Stone & Webster specifically addressing each of the Walsh/Doyle allegations? If not, what is the justification for not doing so? If so, specifically how is Stone & Webster addressing each of the Walsh/Doyle allegations? Exactly what is Stone & Webster's mandate: Does it include addressing only the Walsh/Doyle allegations specifically? Are they supposed to just tear out whatever is questionable and put up what is already known and acceptable in the industry, but without ever addressing specifically whether or not the Walsh/Doyle allegations were correct or the root causes and generic implications of same? Please provide specific details.

2-26. Have Applicants or any of their consultants come across anything that is going to necessitate a change in their FSAR commitments? Have Applicants deviated, or requested or received permission to deviate, from current industry codes and NRC regulations. If so, specifically in what way (what have they asked for, do they know of any that they're going to have to ask for)? Provide specific details.

2-27. Please provide a brief history of what Applicants' conclusions were as to the adequacy of the pipe supports at Comanche Peak and the validity of the Walsh/Doyle allegations. Specifically include in your answer:

(a) What were Applicants' conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the allegations of Mark Walsh as of August 1982 (following the testimony of CASE Witness Mark Walsh in July 1982)?

(b) What were Applicants' conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the Walsh/Doyle allegations as of October 1982 (following the deposition/testimony of CASE Witness Jack Doyle in September 1982)?

(c) What were Applicants' conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the Walsh/Doyle allegations as of June 1983 (following hearings in May 1983)?

(c) What were Applicants' conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the Walsh/Doyle allegations as of September 1983 (following the filing of Proposed Findings of Fact by the parties)?

2-27 (continued):

(d) What were Applicants' conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the allegations of Walsh/Doyle after receipt of the Licensing Board's 12/28/83 Memorandum and Order (Quality Assurance for Design)?

(e) What were Applicants' conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the allegations of Walsh/Doyle after receipt of the Licensing Board's 2/8/84 Memorandum and Order (Reconsideration Concerning Quality Assurance for Design)?

(f) What were Applicants' conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the allegations of Walsh/Doyle following the April 1984 hearings on pipe support issues?

(g) What were Applicants' conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the allegations of Walsh/Doyle following receipt of CASE's responses to Applicants' Motions for Summary Disposition which were filed in mid-1984?

(h) What were Applicants' conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the allegations of Walsh/Doyle following receipt of Cygna's 2/19/85 letter in which it changed its position on stability of pipe supports?

(i) What are Applicants' <u>current</u> conclusions as to the adequacy of Comanche Peak pipe supports and the validity of the allegations of Walsh/Doyle (not the conclusions which Applicants expect to arrive at in the future, but your <u>current</u> conclusions)?

2-27 (continued):

(j) Have Applicants finally realized that they have problems with the adequacy of the pipe supports at Comanche Peak? If so, when and how did Applicants finally realize they actually did have such problems?

(k) Who (name, title, organization) made the determinations discussed in your responses to (a) through (j) preceding?

2-28. What methodology and procedures are being used by Stone & Webster for analysis of multiple struts and snubbers at pipe support points? Provide specific details.

2-29. What methodology and procedures are being employed by Stone & Webster to address variations of actual vs. generic stiffness for pipe supports? Provide specific details.

2-30. Is there any portion of the NRC Staff's SIT Report with which Applicants had previously agreed but no longer believe is accurate or correct? If so, please identify each such portion and give specific details.

2-31. How many individuals with Stone & Webster are working on the pipe support effort: (a) in total; (b) onsite; (c) offsite?

2-32. (a) How many individuals who are currently or were employed by Stone & Webster during the period August 1985 through June 1986 were former employees of NPS Industries, ITT Grinnell, Texas Utilities Electric Company or one of its affiliated companies, Gibbs & Hill, or any other of Applicants or their agents, and worked at any time previously on the Comanche Peak project (either onsite or offsite)?

2-32 (continued):

(b) Provide a listing of all such individuals, along with details regarding the dates they originally worked for the companies in question, the dates they were hired by Stone & Webster for their assignment to the reinspection/reanalysis effort at Comanche Peak, their current job title and status, and if they are no longer employed at Comanche Peak, their last known address and telephone number.

2-33. (a) What engineering changes have Applicants made to assure that the same individuals who were responsible for design errors are not still at Comanche Peak and are not still making design errors? Give complete and specific details.

(b) How many engineering management personnel who were working in any engineering management positions during 1982 through 1985 have been replaced and no longer work at Comanche Peak in any capacity? Provide the names of all such engineering management personnel, and their last known address and telephone number.

(c) How many engineering personnel who were employed at Comanche Peak during 1982 through 1985 have been switched from one engineering position to another (such as from working on pipe supports to working on cable tray supports)? Provide complete and specific details, including each individual's name, past job position and duties, and present job position and duties.

(d) Provide the name of each of the individuals identified in your response to (c) above who have been, or are currently, working on the reinspection effort; also state (if not already stated in (c) above) the specific nature of each individual's duties regarding the reinspection.

2-34. (a) Which organization and/or individuals in the reinspection effort are addressing Walsh/Doyle allegations other than pipe supports (such as the design of the upper lateral support)?

(b) What have been the results of their efforts to date? Provide complete and specific details.

2-35. Provide answers to each interrogatory and document request contained in the following pleadings in the Comanche Peak operating license proceedings (Docket 50-445 and 50-446): CASE's 1/17/85 First Set of Interrogatories Re: Credibility; CASE's 2/4/85 Second Set of Interrogatories Re: Credibility; CASE's 2/25/85 Third Set of Interrogatories Re: Credibility; CASE's 2/25/85 Fourth Set of Interrogatories Re: Credibility; and CASE's 3/4/85 Fifth Set of Interrogatories Re: Credibility. (See clarifying statement under Request for Documents which follows.)

2-36. How and by whom was the decision made to utilize the Motions for Summary Disposition which were filed by Applicants in mid-1984? Was this an engineering decision, a management decision, or what? Specifically how, when, and by whom was the decision made to withdraw the Motions for Summary Disposition? Was this an engineering decision, a management decision, or what? Was there any discussion (verbally, taped, or in writing) regarding whether or not it was cheaper to litigate the problems than it would be to go out there and actually redesign and reconstruct the problem areas of the plant? Were there any time estimates, schedules, etc.? Provide complete and specific details.

2-37. Have Applicants changed their FSAR commitments regarding pipe support design during the time 1983 through the current time? Have Applicants, during the time 1983 through the current time, deviated, or

requested or received persmission to deviate, from then-current industry codes and then-current NRC regulations? If so, specifically in what way (what did they request, what were they given permission to do, etc.). Provide specific details.

2-38. When did Applicants first receive notice that there were problems with the design of the cable tray supports at Comanche Peak? In what format was such notification made (a specific document, verbal communication between specific individuals, etc.)? Was such notification received prior to the testimony of, and cross-examination by, CASE Witness Mark Walsh in the May 1984 operating license hearings? Provide complete and specific details.

2-39. What generic problems have been identified regarding cable tray supports between May 1984 and the current time which Applicants consider could have first been pointed out by CASE Witness Mark Walsh?

2-40. What generic problems have been identified regarding cable tray supports between May 1984 and the current time which Applicants consider to be unassociated with problems pointed out by CASE Witness Mark Walsh?

2-41. In view of Applicants' current position, what issues contained in the May 1984 testimony of, or cross-examination by, CASE Witness Mark Walsh would now be considered by Applicants to be (or to have been) reportable or potentially reportable under 10 CFR 50.55(e)? Of those items listed in your response, which of them did Applicants consider to be actually reportable under 50.55(e) and (if different) which of them did Applicants actually report under 50.55(e)?

2-42. Please refer to the attached 5/19/86 DALLAS MORNING NEWS article and answer the following questions:

2-42 (continued):

(a) Is it correct that all cable tray supports in Unit 1 are being examined for design problems? What is the status of cable tray supports in Unit 2; are they all being examined for design problems? If the answer to either is no, please explain and clarify. If the answer to either is yes, what have been the results of such examination?

(b) How many cable tray supports are there in Unit 1? How many in Unit 2? Are all of them considered to be safety-related; if not, how many are considered to be safety-related, and how many are considered to be in some other category (please specify)?

(c) How many of the cable tray supports have been checked against design drawings to date? How many have received a preliminary design review? Are final reports complete on any to date? Give complete and specific details.

(d) Please state whether or not the following statements in the attached DMN article is correct:

> "Utility officials have said the supports, instead of being individually designed, were built according to 'cookbook' designs borrowed from technical manuals that underestimated stress on the supports. Because many cables already have been installed, the utility may face the complicated task of rebuilding or tearing out supports without damaging the cables."

If the statements are not correct, please discuss and elaborate on how they are incorrect and give correct complete and specific details.

(e) Is it correct that all conduit supports in Unit 1 are being examined for design problems? What is the status of conduit supports in Unit 2; are they all being examined for design problems? If the answer to either is no, please explain and clarify. If the answer to either is yes, what have been the results of such examination?

2-42 (continued):

(f) How many conduit supports are there in Unit 1? How many in Unit 2? Are all of them considered to be safety-related; if not, how many are considered to be safety-related, and how many are considered to be in some other category (please specify)?

(g) How many of the conduit supports have been checked against design drawings to date? How many have received a preliminary design review? Are final reports complete on any to date? Give complete and specific details.

(h) Please state whether or not the following statement in the attached DMN article is correct and applies also to conduit supports:

> "Utility officials have said the supports, instead of being individually designed, were built according to 'cookbook' designs borrowed from technical manuals that underestimated stress on the supports."

If the statement is not correct, please discuss and elaborate on how it is incorrect and give correct complete and specific details.

2-43. What, if any, generic type(s) of cable tray supports have Applicants requested or ordered be redesigned without further attempts at qualification? In each such instance, what was the reason or justification for this? Provide complete and specific details.

2-44. What, if any, generic type(s) of conduit supports have Applicants requested or ordered be redesigned without further attempts at qualification? In each such instance, what was the reason or justification for this? Provide complete and specific details.

2-45. (a) What is the number of cable tray supports on which NCR's were written in 1985? in 1986?

2-45 (continued):

(b) If this information is not available in this form, how many NCR's were written on cable tray supports in 1985? in 1986?

(c) How many of such NCR's were written due to potential or actual problems in design?

2-46. (a) What is the number of conduit supports on which NCR's were written in 1985? in 1986?

(b) If this information is not available in this form, how many NCR's were written on conduit supports in 1985? in 1986?

(c) How many of such NCR's were written due to potential or actual problems in design?

2-47. (a) What is the number of cable tray supports which had potential 10 CFR 50.55(e) reports written against them? What is the number of such potential 50.55(e)'s which Applicants finally determined were actually reportable?

(b) If this information is not available in this form, how many potential 50.55(e) reports were written on cable tray supports in 1985? in 1986? What is the number of such potential 50.55(e)'s which Applicants finally determined were actually reportable?

(c) How many of such 50.55(e) reports were written due to potential or actual problems in design of cable tray supports? Identify the specific report numbers and provide a general description of the problem.

(d) Which of the 50.55(e) reports in (c) above were determined to actually be reportable?

2-48. (a) What is the number of conduit supports which had potential 10 CFR 50.55(e) reports written against them? What is the number of such potential 50.55(e)'s which Applicants finally determined were actually reportable?

(b) If this information is not available in this form, how many potential 50.55(e) reports were written on conduit supports in 1985? in 1986? What is the number of such potential 50.55(e)'s which Applicants finally determined were actually reportable?

(c) How many of such 50.55(e) reports were written due to potential or actual problems in design of conduit supports? Identify the specific report numbers and provide a general description of the problem.

(d) Which of the 50.55(e) reports in (c) above were determined to actually be reportable?

2-49. Answer question 2-26 with regard to cable tray supports (if you had originally answered it only with regard to pipe supports).

2-50. When did Applicants first receive notice that there were problems with the design of the supports for heating, ventilation, and air conditioning (HVAC) at Comanche Peak? In what format was such notification made (a specific document, verbal communication between specific individuals, etc.)? Provide complete and specific details.

2-51. What generic problems have been identified regarding HVAC supports (either design or construction) between May 1984 and the current time.

2-52. Please refer to the attached 5/19/86 DALLAS MORNING NEWS article and answer the following questions:

2-52 (continued):

(a) Is it correct that supports for HVAC "also face design problems, but that analysis and hardward inspection still is preliminary"? What is the status of HVAC supports in Unit 1 and in Unit 2; are they all being examined for design problems? If the answer to either is no, please explain and clarify. If the answer to either is yes, what have been the results to date of such examination?

(b) How many HVAC supports are there in Unit 1? How many in Unit 2? Are all of them considered to be safety-related; if not, how many are considered to be safety-related, and how many are considered to be in some other category (please specify)?

(c) How many of the HVAC supports have been checked against design drawings to date? How many have received a preliminary design review? Are final reports complete on any to date? Give complete and specific details.

2-53. Please state whether or not the following statement in the attached DMN article is correct and applies also to HVAC supports:

> "Utility officials have said the supports, instead of being individually designed, were built according to 'cookbook' designs borrowed from technical manuals that underestimated stress on the supports."

If the statement is not correct, please discuss and elaborate on how it is incorrect and give correct complete and specific details.

2-54. Answer question 2-26 with regard to conduit supports (if you had originally answered it only with regard to pipe supports).

2-55. When did Applicants first receive notice that there were problems with the design of the control room ceiling at Comanche Peak? In what format was such notification made (a specific document, verbal

communication between specific individuals, etc.)? Do Applicants now consider that the allegation regarding the design of the control room ceiling had merit? Provide complete and specific details.

2-56. What generic problems have been identified regarding the design of the control room ceiling between May 1984 and the current time.

2-57. What is the status of the redesign and reconstruction of the control room ceiling? Are final reports complete to date? Give complete and specific details.

2-58. Answer question 2-26 with regard to the design of the control room ceiling (if you had originally answered it only with regard to pipe supports).

2-59. Are the statements in the attached DMN article correct:

> "Overall, reinspection of existing construction is about 60 percent complete. But because procedures to check the design adequacy of the plant were not completed until January, inspection of design work is only 20 percent to 25 percent complete, utility officials said."

If they are not correct, specify in what regard they are incorrect, and correct and clarify them. If they are totally or partially correct, what justification exists for proceeding with reinspection of construction prior to reinspection of design of each item? And what methodology, procedures, and checklists have been developed and are in use to assure that construction which has already been reinspected will be reinspected should it be necessary because of redesign?

2-60. In the right-hand column of the attached DMN article, there is a discussion regarding supervisors imposing unrealistic production quotas, etc. Provide the names, titles, and organizations of the individuals

involved, state whether or not each is still employed (and in what capacity) at Comanche Peak. What efforts have been made to assure that the work performed under the conditions in question have been reinspected and/or redesigned? Have there been any other similar incidents of harassment, intimidation, or imposition of unrealistic production quotas identified, either in the reinspection effort or as part of the Applicants' in-house efforts? Provide complete and specific details.

Request for Documents

Joint Intervenors request that Applicants produce the original or copies of all documents in Applicants' (or their agents) custody, possession, or control that refer or relate in any way to documents identified in or used for answering the interrogatories in this entire 2nd Set as set forth in the preceding. And, more specifically:

(1) In regard to the preceding questions relating to items reportable or potentially reportable under 10 CFR 50.55(e), please be sure to provide all documents that refer or relate in any way to your response, including but not limited to all logs of 50.55(e) items, notes of initial verbal notifications to NRC Region IV, initial written notifications to NRC Region IV, all follow-up notifications to NRC Region IV, all documents relating to the 50.55(e) item (including, if Applicants decided the item was not in fact reportable, all documents relating to and/or supporting that decision).

(2) Provide copies of all NCR logs which CASE has not already received. Provide for inspection and copying all NCR's written since the beginning of the CPRT effort and Stone & Webster effort. (Please check with

CASE's Mrs. Ellis for further details regarding which logs and NCR's we have already received; we will work with you on this.)

If a document has already been supplied by Applicants to CASE in another proceeding, Applicants can identify with particularity the location of the document or answer by including the name of the document, page and line number, in which docket the document was produced, and the date it was produced. This does not apply if the answer previously provided was an objection or if the interrogatory has not yet been answered. In that case, Applicants must reassert the objection as applicable to this proceeding or answer the interrogatory.

Respectfully submitted,

Juanita Ellis

(Mrs.) Juanita Ellis, President
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Co-Counsel for CASE

Dated: June 9, 1986

Metropolitan

Problem

Regulators a

By David Real
Staff Writer of the News

Only a few months ago, U.S. Regulatory Commission officia upbeat about the Comanche Peak plant.

Texas Utilities and the federa tary agency had hammered out t points of a comprehensive plan work in more than 5 percent of t and reinspection was moving alo

But in mid-December, the afoul. Inspectors were overlooki lems, according to utility and re commission officials.

The next month, after correct

The Dallas Morning News

Monday, May 19, 1986

ity-assurance programs. The fine was issued for repeated violations of requirements for design, construction and inspection of nuclear power plants, and for "significant weaknesses" in the plant's quality programs.

In turn, that damaging news led to a downgrading of Texas Utilities stock by the New York bond-rating house of Standard & Poor's Corp.

The project suffered another setback when the U.S. Atomic Safety and Licensing Board granted Comanche Peak opponents a hearing on whether Comanche Peak should be granted an extension of its construction permit. The utility and the regulatory commission staff appealed the decision last week.

And the Soviet reactor accident at Chernobyl, reawakening public concern about the safety of nuclear power, provided a catalyst for Dallas County Commissioner John Wiley Price to join the plant's opponents in a call for a complete reinspection of the Glen Rose facility — something that utility officials said could doom the plant.

Meanwhile, the utility's consultants continue to churn out evidence of problems at Comanche Peak.

The design quality of the plant — first challenged by Comanche Peak opponents in mid-1982 — still appears to be its most severe problem:

■ In October, utility officials estimated 120 pipe supports of the 9,000 supports in Unit 1 would have to be removed or modified at Comanche Peak. The latest estimate released by the utility indicates 3,700 supports — more than 40 percent — will be affected. Utility officials said 1,000 supports need minor work, 1,700 pipe supports must be re-designed and modified, and another 1,000 supports must be torn down.

■ All 4,500 cable tray and conduit supports in Unit 1 are being ex-

reinspection. The response team must faithfully follow its 12-pound, 4-inch-thick program plan to the letter if the plant is ever to start operation.

"If the CPRT (program plan) doesn't fly, then the plant won't fly," Noonan said.

There is evidence that the response team already has hit some serious problems in implementing the plan.

Disturbing flaws appeared in the utility's reinspection program as early as mid-August, according to regulatory commission inspection reports released in the past few months.

Monthly inspection results for September, October and November — released publicly in December, March and April — indicated consultants had made numerous mistakes reinspecting construction work and sometimes worked from instructions that could be misinterpreted.

Inspections representing more than 8,200 inspector-hours of work indicated that:

■ A small but troubling percentage of inspection errors had been committed by outside consultants.

Noonan said inspectors became concerned in November when the number of faulty inspections by utility consultants began to exceed an acceptable 1 percent error rate and climbed to the 2 percent to 3 percent range.

"We started getting concerned because it was getting to be what we call 'on the ragged edge,' and we didn't want it to go any farther," Noonan said. "This program is going to be long enough, and we don't need to find that it's starting to get out of hand on us."

After the regulatory commission notified utility executives, steps were taken to "re-tune" the reinspection effort, he said.

One of the steps required higher-

more than a year in the making, the five reports released in mid-April have been questioned by the chairman of the U.S. Atomic Safety and Licensing Board, the regulatory commission staff and Comanche Peak opponents alike for not being as thorough as anticipated.

The utility pledged to answer numerous questions raised by Atomic Safety and Licensing Board chairman Peter Bloch.

Noonan agreed that the reports are "sparse" and that the information they contain are the "bare minimum" that would be acceptable to the Nuclear Regulatory Commission. He also admitted that the commission staff was "not overly happy" with some of the reports, although supporting documentation contained in voluminous files maintained by the utility is expected to satisfy most questions.

But Comanche Peak opponent Billie Garde, who represents Dallas-based Citizens Association for Sound Energy, said the accompanying files do not contain the crucial information needed to determine the quality of the plant.

"This is our first look at what the utility has been doing for the last year and a half, and it's pretty appalling," she said. "The documentation in the central files has just got huge gaping holes in it. The paper trail is not there."

Utility spokesman Dave Fiorelli said Ms. Garde's assessment "mischaracterized" the condition of the results reports.

"We feel they are a lot more complete than her comments would indicate," Fiorelli said. "We feel that the files do support the results reports thoroughly and in sufficient detail."

Said Ms. Garde: "The conclusions by the reinspection program are based on the same kind of missing paper and missing supporting documentation that the plant itself is based on.

ems beset Comanche Peak

re optimistic that reinspection will make plant safe

sures were taken, the plan hit another snag. Inspectors were buried in an avalanche of problems.

Although both situations are serious, weary regulatory commission officials remain optimistic that the utility's reinspection plan is digging out any problems that could make the plant unsafe to operate.

"Sure, there are problems out there, but we said we wanted the utility to find them, and that's happening," said Vince Noonan, the regulatory commission project director for Comanche Peak. "I guess I have to say that the system is working as we intended it to work."

The success of the system, however, has battered the utility with an unforeseen number and severity of problems.

In the first 3½ months of 1986, the regulatory commission said the utility reported 31 potentially serious safety problems — compared with 54 reported for all of 1985.

In another category, the utility filed 5,207 "non-conformance" reports in only the first three months of 1986. The 12-month total for 1985 was 7,669.

These and other problems have forced the utility to expand its review of the quality of the plant far beyond its original expectations.

"There's been a lot of lows at Comanche," Noonan said. "And it's taking a long time. It's taking probably a lot longer than anybody would ever have thought."

The utility conceded last month that it no longer expects to begin operation of Comanche Peak in mid-1987, as announced in November, or meet its target cost of $5.46 billion. In fact, utility officials say they no longer can estimate when the plant will open or how much it will cost.

Noonan said he was forced to scrap plans for the Nuclear Regulatory Commission to finish its work at Comanche Peak

Please see PROBLEMS on Page 15A.

Problems plague Comanche Peak reinspection plan

Continued from Page 13A.

in August. He is now planning a supplemental budget request to extend the effort "at least through the end of the year."

That indicates the plant probably cannot begin operation before 1988. Meanwhile, Unit 1 of the plant has been 99 percent complete for more than a year, and the second reactor unit is 81 percent complete. More than 8,200 laborers, inspectors and consultants continue to work on the project both on- and off-site. Interest on money borrowed by the utility for the project, insurance and other costs are more than $1 million a day. That does not include labor costs.

And reinspection is by no means the project's only problem.

The latest blow came early this month when the regulatory commission slapped the utility with $370,000 in proposed fines. That total included a $120,000 fine issued for three incidents that intimidated quality-control inspectors and could have prevented them from finding safety problems at the plant. Notification came just days after the utility had agreed to pay its first fine for a similar offense in 1983.

The lion's share of the $370,000 in fines — $250,000 — was levied against the plant for "multiple failures" of its construction and quality-control programs.

Inspectors were ordered to check the plant, but well. Noonan said ran problems regulatory

level inspectors to observe corrective work at the plant, Noonan said. Top-level management also met with inspectors to stress the importance of following instructions precisely.

Noonan said utility actions appear to have been effective, and the quality of the inspections is improving.

■ A major incident occurred late last year when two supervisors imposed unrealistic production quotas on reinspection teams, forcing numerous mistakes that invalidated at least three months of work on the plant's cable tray inspection program. The problems went undetected because no audits or quality-control checks were ordered for the work. After the regulatory commission discovered the problems, Texas Utilities management suspended all reinspection work for two weeks, doubled the quality-control inspectors from six to 12, and replaced both supervisors.

That incident contributed to a $50,000 fine against the utility.

■ The first five of an estimated 52 "results reports" — the final product of the reinspection effort and a key to Comanche Peak obtaining a license — already have created controversy.

amined for design problems. To date, half the supports have been checked against design drawings. Only 800 have received a preliminary design review, and final reports are not available. The trays contain control and instrumentation cables essential to safe operation of the plant. Utility officials have said the supports, instead of being individually designed, were built according to "cookbook" designs borrowed from technical manuals that underestimated stress on the supports. Because many cables already have been installed, the utility may face the complicated task of rebuilding or tearing out supports without damaging the cables.

■ Supports for heating, ventilation and air-conditioning also face design problems, but that analysis and hardware inspection still is preliminary.

Overall, reinspection of existing construction is about 60 percent complete. But because procedures to check the design adequacy of the plant were not completed until January, inspection of design work is only 20 percent to 25 percent complete, utility officials said.

■

Whether the plant receives a license is closely tied to how convincing a job the utility's Comanche Peak Response Team does on the

COMANCHE PEAK'S TROUBLED SPRING

April 17: Texas Utilities pays $40,000 fine for 1983 intimidation incident

April 18: Texas Utilities abandons $4.56 billion cost estimate and mid-1987 operation date for Comanche Peak

April 29: Moodys downgrades Texas Utilities credit rating because of Comanche Peak problems

May 2: $370,000 in fines proposed by NRC

May 5: Hearing granted to challenge construction permit extension

The Dallas Morning News

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	}{	
	}{	Docket No. 50-445-CPA
TEXAS UTILITIES ELECTRIC	}{	
COMPANY, et al.	}{	(Application for
(Comanche Peak Steam Electric	}{	a Construction Permit)
Station, Units 1 and 2)	}{	

CERTIFICATE OF SERVICE

By my signature below, I hereby certify that true and correct copies of JOINT INTERVENORS' 2ND SET OF INTERROGATORIES AND REQUESTS FOR DOCUMENTS

have been sent to the names listed below this 9th day of June, 1986, by: Express Mail where indicated by * and First Class Mail elsewhere.

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