

RELATED CORRESPONDENCE
May 13, 1981

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of

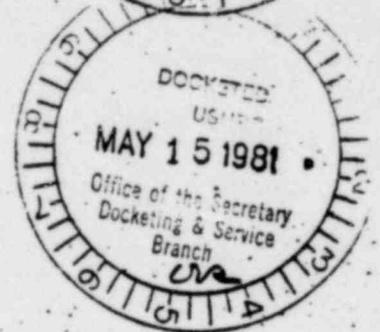
TEXAS UTILITIES GENERATING
COMPANY, et al

(Comar Peak Steam Electric
Station, Units 1 and 2)

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Docket Nos. 50-445

(Application for
Operating License)



CFUR'S FOURTH SET OF INTERROGATORIES
TO APPLICANT AND REQUESTS TO PRODUCE

Pursuant to 10 C.F.R. §§2.740b and 2.741, Citizens for Fair Utility Regulation ("CFUR"), hereby serves CFUR's Fourth Set of Interrogatories and Requests to Produce upon Texas Utilities Generating Company, et al ("Applicants"). Each interrogatory shall be answered fully in writing, under oath or affirmation, and include all pertinent information known to Applicant, its officers, directors or members as well as any pertinent information known to its employees, advisors or counsel. Each request to produce applies to pertinent documents which are in the possession, custody or control of Applicant, its officers, directors or members as well as its employees, advisors or counsel. In answering each interrogatory and in responding to each request, please recite the interrogatory or request preceding each answer or response.

These interrogatories and requests shall be continuing in nature. Thus, any time Applicant obtains information which renders any previous response incorrect or indicates that a response was incorrect when made, Applicant should supplement its previous response to the appropriate interrogatory or request to produce. Applicant should also supplement its responses as necessary with respect to identification of

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each person expected to be called at the hearing as an expert witness, the subject matter of his or her testimony, and the substance of that testimony. The term "documents" shall include any writings, drawings, graphs, charts, photographs, and other data compilations from which information can be obtained. We request that at a date or dates to be agreed upon, Applicant make available for inspection and copying all documents subject to the requests set forth below.

1. Can applicants state with a 100 percent confidence level that no human error (operator or otherwise) will occur during any type of accident at CPSES.
2. If your response to the preceding interrogatory is anything but "No", please describe in detail the bases and documentation for said 100 percent confidence level.
3. Have the applicants factored in or otherwise accounted for human error in the accident sequence analyses listed in Exhibit "A" attached to these Interrogatories. Please answer separately for each analysis listed in Exhibit "A".
4. For each of the Exhibit "A" analyses that you have responded anything but "No" in your responses to the preceding Interrogatory, please answer the following (please answer separately for each Exhibit "A" analysis involved):
 - a. Describe in detail what human errors were factored in or otherwise accounted for;
 - b. Describe in detail how each listed human error was factored in or otherwise accounted for;
 - c. Describe in detail how the factoring in or the accounting for each listed human error affected the results of the analyses;
 - d. What other credible human errors were not factored in or otherwise accounted for in the analysis.
 - e. For each human error listed in your response to the preceding subpart of this Interrogatory, state with particularity why it was not factored in or otherwise accounted for and when you intend to factor it in or otherwise account for it.

5. For each of the Exhibit "A" analyses that you have responded anything but "Yes" in your responses to Interrogatory 3, please answer the following (for each Exhibit "A" analysis involved):
 - a. Describe in detail how you intend to factor in or otherwise account for human errors in the future;
 - b. When do you intend to factor in or otherwise account for human errors;
 - c. List with particularity the human errors you intend to factor in or otherwise account for;
 - d. Describe with particularity the other credible human errors which are not listed in your response to the preceding subpart of this Interrogatory.
 - e. For each human error listed in your response to the preceding subpart of this Interrogatory, state with particularity why you do not intend to factor it in or otherwise account for it.
 - f. Following the TMI accident, what changes and additions in operator training and procedures have been incorporated at CPSES.

7. For each change and addition listed in your response to the preceding Interrogatory, describe with particularity how it changes the input, the result and/or the analysis itself of each analysis listed in Exhibit "A" hereto. (Please answer separately for each analysis listed in Exhibit "A").

8. Following the TMI accident, what changes and additions in maintenance training and procedures have been incorporated at CPSES.

9. For each change and addition listed in your response to the preceding Interrogatory, describe with particularity how it changes the input, the result and/or the analysis itself of each analysis listed in Exhibit "A" hereto. (Please answer separately for each analysis listed in Exhibit "A").
10. State the name, employer, business address, and business telephone number of every human factors expert who has been consulted on behalf of the applicants in connection with CPSES.
11. For each person listed in your response to the preceding Interrogatory, please answer the following:
 - a. Describe with particularity the results of his or her report whether it be written or oral;
 - b. If he or she has issued a written report, please describe it with particularity and attach a copy to your answers to these Interrogatories.
12. Describe with particularity each exception to NUREG-0737 which has been requested by the applicants.
13. For each exception listed in your response to the preceding Interrogatory, please answer the following:
 - a. Describe in detail why each such exception was requested;
 - b. If you have not already done so, describe in detail the justification for each such exception requested;
 - c. Describe in detail all documentation relating to each requested exception and the reason or justification therefor.
14. Describe with particularity each exception to NUREG-0737 which has been granted to the applicants.

15. For each exception listed in your response to the preceding Interrogatory, please answer the following:
 - a. Describe in detail why each such exception was requested;
 - b. If you have not already done so, describe in detail the justification for each such exception requested;
 - c. Describe in detail all documentation relating to each requested exception and the reason or justification therefor.
16. Describe with particularity each exception to NUREG-0660 which has been requested by the applicants.
17. For each exception listed in your response to the preceding Interrogatory, please answer the following:
 - a. Describe in detail why each such exception was requested;
 - b. If you have not already done so, describe in detail the justification for each such exception requested;
 - c. Describe in detail all documentation relating to each requested exception and the reason for justification therefor.
18. Describe with particularity each exception to MUREG-0660 which has been granted to the applicants.
19. For each exception listed in your response to the preceding Interrogatory, please answer the following:
 - a. Describe in detail why each such exception was requested;
 - b. If you have not already done so, describe in detail the justification for each such exception requested;
 - c. Describe in detail all documentation relating to each requested exception and the reason or justification therefor.

20. Describe in detail your justification for excluding human error and error due to following erroneous procedures in analyzing small break accidents.
21. Describe in detail your justification for excluding human error and error due to following erroneous procedures in analyzing accident sequences other than the analyses listed in Exhibit "A" hereto.
22. List with particularity the types of maintenance errors which have occurred in operational experiences at nuclear power plants.
23. For each type of error listed in your response to the preceding Interrogatory, state the frequency (per year) each has occurred and the duration of each such type of error.
24. List with particularity the types of operator errors which occurred in the operational experiences at nuclear power plants.
25. For each type of error listed in your response to the preceding Interrogatory, state the frequency (per year) each has occurred and the duration of each such type of error.
26. As used in the FSAR, how do the applicants define a "Condition II fault?"
27. Describe in detail the bases of and justification for the assertion in FSAR 15.0.1.2, "By definition these faults (or events) [Condition II faults] do not propagate to cause a more serious fault, i.e., Condition III or IV events."

28. Do the applicants contend that it is not credible that a common mode failure could cause any of the initiating events listed in FSAR 15.0.1.2 to propagate and cause a Condition III or IV fault?
29. If your response to the preceding Interrogatory is anything but "No", please describe in detail the legal and technical justification why each initiating event listed in FSAR 15.0.1.2 could not propagate to cause a Condition III or IV fault by a common mode failure? (Please answer separately for each initiating event listed in FSAR 15.0.1.2).
30. If your response to Interrogatory 28 is anything but "Yes" please answer the following (separately for each initiating event listed in FSAR 15.0.1.2):
 - a. List each initiating event from FSAR 15.0.1.2 which can be credibly propagated to cause a Condition III or IV fault by a common mode failure.
 - b. For each initiating event from FSAR 15.0.1.2 not listed in your response to the preceding subpart of this Interrogatory, describe in detail the legal and technical justification why each such initiating event could not propagate to cause a Condition III or IV fault by a common mode failure.
31. Do the applicants contend that a failure of the PORV to close is a Condition II fault? If your response is affirmative, describe in detail the legal and technical justification for your contention.
32. Describe in detail how the applicants plan to mitigate the consequences of an inadvertant opening of the PORV. Please provide the technical and legal justification for your response.

33. Describe in detail how the applicants plan to mitigate the consequences of a failure to close of the PORV. Please provide the technical and legal justification for your response.
34. Describe with particularity what affirmative actions have been taken to prevent reactor coolant pump cavitation.
35. Describe with particularity what affirmative actions have been taken to mitigate the consequences of a required continued operation of the reactor coolant pump when non-condensed gases are present in the primary cooling system.
36. Describe with particularity what affirmative actions have been taken to prevent damage to the emergency diesel generators which may result from their running unloaded for a significant period of time?
37. Describe with particularity what affirmative actions have been taken to insure that the emergency diesel generators will be available to provide power under the circumstances anticipated by the preceding Interrogatory.
38. Describe with particularity what affirmative actions have been taken to handle properly the amount of radioactive water such as that which escaped at the TMI accident.
39. For each accident sequence analysis listed in Exhibit "A" attached hereto, describe with particularity the methods or procedures by which you propose to handle or contain all radioactive water outside of the pressure boundary at CPSES during the entire time until the reactor is returned to safe and/or normal condition. (Please answer separately for each analysis listed in Exhibit "A").

40. For each accident sequence analysis listed in Exhibit "A" hereto, please answer the following separately for each listed analysis:
- a. State the estimated quantity of radioactive water that credibly may be required to be handled or contained outside the pressure boundary at CPSES.
 - b. Describe with particularity all documents and other sources of information upon which you base your response to the preceding subpart of this Interrogatory. Please attach copies of all such documents to your answers to these Interrogatories.
 - c. Should the quantity of radioactive water outside the pressure boundary at CPSES exceed the estimate listed in your response to subpart a. of this Interrogatory, how do the applicants propose to mitigate the consequences of such an excess quantity of radioactive water.
41. For each accident sequence analysis listed in Exhibit "A" hereto, please answer the following separately for each listed analysis:
- a. State the range (i.e., the greatest and least) of the quantity of radioactive water which has been handled or contained outside the pressure boundary at each Westinghouse nuclear reactor operated in the United States.
 - b. Describe with particularity all documents and other sources of information upon which you base your response to the preceding subpart of this Interrogatory. Please attach copies of all such documents to your answers to these Interrogatories.

42. Please state whether applicants consider or contend each of the following to have the effect of law, agency regulation, or other (if other please describe):
- a. Code of Federal Regulations;
 - b. NRC Regulatory Guides;
 - c. NRC Manual;
 - d. Office of Inspection & Enforcement Manual;
 - e. Standard Review Plan.
43. Please state whether applicants consider or contend that compliance with the following is necessary for applicants to obtain an operating license (Please answer separately for each):
- a. Code of Federal Regulations;
 - b. NRC Regulatory Guides;
 - c. NRC Manual;
 - d. Office of Inspection & Enforcement Manual;
 - e. Standard Review Plan.
44. Please state whether applicants consider or contend that compliance with the following is sufficient compliance and will insure the issuance of an operating license (Please answer separately for each):
- a. Code of Federal Regulations;
 - b. NRC Regulatory Guides;
 - c. NRC Manual;
 - d. Office of Inspection & Enforcement Manual;
 - e. Standard Review Plan.
45. Describe with particularity what affirmative actions have been taken to satisfy the "reanalysis of transients and accidents and inadequate core cooling" requirements of item I.C.I. of NUREG-0737.

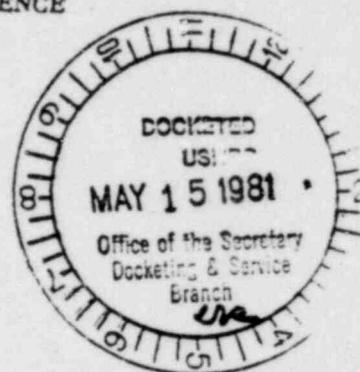
46. Describe with particularity the current operator actions or procedures which are necessary to satisfy the "reanalysis of transients and accidents and inadequate core cooling" requirements of item I.C.I. of NUREG-0737.
47. Please attach to your answers to these interrogatories copies of all analyses submitted to the NRC regarding the above referenced item I.C.I. of NUREG-0737.
48. Please attach to your answers to these interrogatories, copies of all operator procedures regarding the above referenced item I.C.I. of NUREG-0737.

Respectfully submitted,

Richard L Fouke

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EXHIBIT "A"



ACCIDENT SEQUENCE ANALYSIS LIST

- A. Feedwater system malfunctions that result in a decrease in feedwater temperature.
- B. Feedwater system malfunctions that result in an increase in feedwater flow.
- C. Steam pressure regulator malfunction or failure that results in increasing steam flow.
- D. Inadvertant opening of a steam generator relief or safety valve.
- E. Spectrum of steam system piping failures inside and outside of containment in a PWR.
- F. Loss of external electric load.
- G. Twibine trip (stop value closure).
- H. Inadvertant closure of main steam isolation valves.
- I. Loss of condenser vacuum.
- J. Coincident loss of onsite and external (offsite) a.c. power to the station.
- K. Loss of normal feedwater flow.
- L. Feedwater pipeline break.
- M. Single and multiple reactor coolant pump trips.
- N. Reactor coolant pump shaft seizure.
- O. Reactor coolant pump shaft break.

- P. Uncontrolled control rod assembly withdrawal from a sub-critical or low pump startup condition.
- Q. Uncontrolled control rod assembly withdrawal at the particular power level that yields the most severe results.
- R. Control rod maloperation.
- S. Startup of inactive reactor coolant loop at an incorrect temperature.
- T. Chemical and volume control system malfunction that results in decrease in the boron concentration in the reactor coolant.
- U. Inadvertant loading and operation of fuel assembly in an improper position.
- V. Spectrum of rod ejection accidents.
- W. Inadvertant operation of ECCS during power operation.
- X. Chemical and volume control system malfunction (or operator error) that increases reactor coolant inventory.
- Y. Inadvertant opening of a pressurizer safety or relief valve.
- Z. Break in instrument line or other lines from reactor coolant pressure boundary that penetrate containment.
- AA. Steam generator tube failure.
- AB. LOCA resulting from the spectrum of postulated piping breaks.
- AC. Radioactive gas waste system leak or failure.
- AD. Radioactive liquid waste system leak or failure.
- AE. Postulated radioactive releases due to liquid tank

failures.

- AF. Design basis fuel handling accidents in the containment and spent fuel storage building.
- AG. Spent fuel cask drop accidents.
- AH. Inadvertant control rod withdrawal.
- AI. Loss of feedwater.
- AJ. Loss of A.C. power.
- AK. Loss of electrical load.
- AL. Loss of condenser vacuum.
- AM. Twibine Trip.
- AN. All ECCS analyses.
- AO. All hydrogen analyses.
- AP. All seismic analyses.

CERTIFICATE OF SERVICE

I hereby certify that copies of "ANSWERS TO NRC STAFF'S FOURTH SET OF INTERROGATORIES TO AND REQUEST TO PRODUCE FROM CFUR" have been served of the following by deposit in the United States mail, first class, this

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