415/397-5600

August 21, 1984 84056.023

Mr. J. B. George Project General Manager Texas Utilities Generating Company Comanche Peak Steam Electric Station Highway FM 201 Glen Rose, Texas 76043

Subject: Mechanical Systems Review - Follow-up Questions

Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4

Job No. 84056

References: (1) N. H. Williams (Cygna) letter to J. B. George (TUGCO),
"Mechanical and Electrical/I & C Review Questions," 84056.010,
dated July 30, 1984

(2) L. M. Popplewell (TUGCO) letter to N. H. Williams (Cygna), "Cygna Review Questions," dated August 11, 1984

Dear Mr. George:

Cygna submitted a set of mechanical systems review questions in Attachment A to Reference (1). TUGCO responded to these questions, except number 4, in Reference (2). We have reviewed the responses and found that in some cases further information and/or clarification is necessary. Attachment A to this letter contains these additional requests by reference to the original question number.

If you have any questions or require additional information, do not hesitate to call.

Very truly yours,

N. H. Williams Project Manager

cc: Mr. D. Wade (TUGCO)

Ms. J. Van Amerongen (EBASCO/TUGCO)

Mr. R. Ballard (G&H)
Mr. S. Treby (US NRC)
Mr. S. Burwell (US NRC)

Ms. J. Ellis (CASE) 8409050195 840821 PDR ADDCK 05000445

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MECHANICAL QUESTIONS FOLLOW-UP

- Cygna Question 1 notes that the CCW System may reach 135°F during recirculation mode (per G&H calculation 233-16) but the TUGCO response only addresses the acceptability of 130°F CCW. Please provide documentation of the acceptability of 135°F component cooling water during post accident recirculation mode.
- 2. Cygna Question 3 requested documentation that the CCW System could withstand the failure of non-seismic portions of the system. The TUGCO response addressed the failure of the non-seismic chillers (CPX-CHICE-OI to O4) but did not address the failure of the non-seismic Class 5 piping between valve 1-FV-4650A and the return valve 2-FV-4650A. Cygna contends that failure of this 10" piping could also cause the CCW pumps to become airbound. In addition, adjusting the chiller to limit flow to 2,000 GPM during normal operation will not limit it to 2,000 GPM under break conditions since the resistance of the chillers and return piping will no longer help to restrict flow. Please provide justification and documentation of the acceptability of this design.
- 3. Cygna Question 7 requested justification for the CCW not meeting the Westinghouse flow requirements to the reactor coolant pump thermal barrier. The TUGCO response addresses maximum flow but not minimum flow. Cygna agrees that a maximum flow of 1.5 times normal is acceptable per Westinghouse. However, the "PIPEFLOW" analysis indicates that the minimum flow of 35 GPM is not met for all modes of operation. Please provide documentation of the acceptability of flows as low as approximately 29 GPM or methods to be used to meet the Westinghouse stated minimum flow of 35 GPM.
- 4. Cygna Question 8 requested justification for the lack of ASME identification tags on many CCW System valves. The TUGCO response referenced ASME Code Section III, Subsection NCA-8230 (summer 1981 addenda) and included Subsection NCA-8320 and 8330 as an attachment to the letter. The response does not address why the tags were removed from _me but not all valves and what permanent markings exist on the valves to provide the required traceability. Please provide documentation of the reason for ASME code tag removal and method of permanently marking and traceability of valves.
- 5. Cygna Question 9 Cygna agrees that the metal tag indicating that the surge tank relief valve is ASME Class 2 is incorrect. Please provide documentation that this error has or will be corrected.
- 6. Cygna Question 11 questioned the lack of U.L. 3 hour fire rating I.D. plates on the double doors betwen Rooms 115A and 115B. The TUGCO response stated that this had been previously noted by Comanche Peak Project Engineering and that the door frame was correctly rated. On August 17, 1984, Cygna reinspected this door and found the following:

MECHANICAL QUESTIONS FOLLOW-UP

- The double doors now contain a U.L. 1-1/2 hour fire rating I.D. tag
- The door frame for the double doors does not have any U.L. I.D. tag attached to it.
- The single personnel door between Rooms 115A and B has a U.L. 3 hour fire rating I.D. tag.
- The single door frame has a U.L. tag but no rating is listed.

Please provide the documentation that found and corrected the lack of U.L. rating on the double doors. Also provide documentation and justification for the 1-1/2 hour rating on the double doors versus the 3 hour rating on the single personnel door and the lack of a U.L. I.D. tag on the frame of the double doors.