

SAFETY EVALUATION REPORT
COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NOS. 1 & 2
DOCKET NOS. 50-445/446
CONFORMANCE TO REGULATORY GUIDE 1.97

INTRODUCTION AND SUMMARY

Texas Utilities Generating Company (TUGC) was requested by Generic Letter 82-33 to provide a report to the NRC describing how the post-accident monitoring instrumentation meets the guidance of Regulatory Guide 1.97 as applied to emergency response facilities. The applicant responded to the generic letter by letter dated April 15, 1983, which referred to the Final Safety Analysis Report for a review of the instrumentation provided for Regulatory Guide 1.97. Additional information was provided by letters dated October 24, 1983 and January 28, 1985, and in FSAR Amendments 47 and 50.

A detailed review and technical evaluation of the applicant's submittals was performed by EG&G Idaho, Inc., under contract to the NRC, with general supervision by the NRC staff. This work is reported by EG&G in their Technical Evaluation Report (TER), "Conformance to Regulatory Guide 1.97, Comanche Peak Steam Electric Station, Unit Nos. 1 & 2," dated March 1985 (attached). We have reviewed this report and concur with the conclusion that the applicant either conforms to, or is justified in deviating from, the guidance of Regulatory Guide 1.97 for each post-accident monitoring variable except for neutron flux. For this variable, TUGC has not identified the appropriate environmental qualification.

EVALUATION CRITERIA

Subsequent to the issuance of the generic letter, the NRC held regional meetings in February and March 1983, to answer licensee and applicant questions and concerns regarding the NRC policy on Regulatory Guide 1.97. At these meetings, it was noted that the NRC review would only address exceptions taken to the guidance of Regulatory Guide 1.97. Further, where licensees or applicants explicitly state that instrument systems conform to the provisions of the guide, it was noted that no further staff review would be necessary. Therefore, the review performed and reported by EG&G only addresses exceptions to the guidance of Regulatory Guide 1.97. This Safety Evaluation addresses the applicant's submittals based on the review policy described in the NRC regional meetings and the conclusions of the review as reported by EG&G.

EVALUATION

We have reviewed the evaluation performed by our consultant contained in the enclosed TER and concur with its bases and findings. The applicant either conforms to, or has provided an acceptable justification for deviations from the guidance of Regulatory Guide 1.97 for each post-accident monitoring variable except for the environmental qualification of the variable identified in Section 4 (conclusions) of the TER.

10 CFR 50.49 requires that all Regulatory Guide 1.97, Category 1 and 2 instruments located in a harsh environment be included in the environmental qualification program unless adequate justification is provided. The justification provided by the applicant supporting the lack of environmental qualification for the neutron flux instrumentation is that the same information can be obtained by monitoring the reactor coolant system (RCS) hot leg and cold leg water temperatures, and as backup, the control rod position and RCS soluble boron concentration.

The staff has reviewed this justification and finds it not acceptable. The alternate instrumentation cited by the applicant does not provide the necessary information required for post-accident monitoring in accordance with Regulatory Guide 1.97.

CONCLUSION

Based on the staff's review of the enclosed Technical Evaluation Report, and the licensee's submittals, we find that the Comanche Peak Steam Electric Station, Unit Nos. 1 and 2 design, with the exception of the neutron flux instrumentation, is acceptable with respect to conformance to the guidelines of Regulatory Guide 1.97, Rev. 2.

The applicant must provide Category 1 neutron flux instrumentation prior to fuel loading.