DIST:
LB#1 Rdg
Docket File
NRC PDR
PRC System
NSIC
MRushbrook
SBurwell
ACRS (16)
EJordan
NGrace

Docket No.: 50-445

OCT 5 1984

Mr. M. D. Spence
President
Texas Utilities Generating Company
400 N. Olive Street
Lock Box 81
Dallas, Texas 75201

Dear Mr. Spence:

Subject: Comanche Peak Unit 1 Technical Specifications

As a result of its review of the Comanche Peak Unit 1 Technical Specification, the staff has identified several areas where additional information is required. Five of the areas we identified potentially entail substantial effort for resolution.

These include (1) the absence of tech spec requirements for the atmospheric dump valves' operability, (2) the absence of an automatic safety injection signal during mode 4, (3) the absence of the capability (per tech specs) to close the steam line isolation valves in mode 4, (4) the inconsistency between the control rod withdrawal accident analysis which assumes two reactor coolant pumps circulating water for cooldown, and the tech specs which allow only one RHR pump operating for cooldown during modes 4 and 5, and (5) the relationship between the process variables values as limited by the tech specs, as measured, and as assumed in the safety analysis. For these five concerns the staff requested that the applicant provide a plan for resolution and a justification for interim operation until such resolution is approved and implemented. The staff discussed these and other technical specifications issues with the applicant during a meeting in Bethesda on Friday, September 21, 1984.

The enclosure identifies the unresolved items which require resolution. Should you have questions concerning the enclosure please contact S. B. Burwell or J. J. Stefano.

Sincerely,

B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing

Enclosure:
As stated

cc: See next page

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10/01/84	10/2/84	10/4/84	10/5/84

T. Marsh 10/2/84

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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COMANCHE PEAK

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ENCLOSURE

Evaluation of the Comanche Peak Technical Specifications

1. Table 3.2-1, DNB Parameters

The staff notes the following apparent discrepancies

I. a. The temperature is limited to $T_{ave} \leq 592.7°F$

b. However, FSAR page 15.0-10 states the temperature error to be ±5.5°F. It follows that the high value of T_{ave} for analysis purpose should be:

$$T_{ave} \geq 592.7 + 5.5 = 598.2°F$$

c. In a TUGCO letter dated August 31, 1983, it is stated that Westinghouse calculates a T_{ave} minimum error allowance of 4.6°F. Therefore, in accordance with this allowance the T_{ave} value used for analysis should be:

$$T_{ave} \geq 592.7 + 4.6 = 597.3°F$$

d. FSAR page 15.2-29, also, states that the feed water line break is analyzed at the nominal T_{ave} plus 5.5°F, i.e. 589.2 + 5.5 = 594.7°F

e. The technical Specification basis page B3/4 2-6 states that the analysis value of T_{ave} is 595°F

Please address the above and explain the differences.

II. The pressure limit is $\geq$ 2230 psig.

Page 15.0.10 of the FSAR states the pressure error allowance to be ±30 psi. Also, FSAR table 15.0.3 states the nominal value of the pressure to be 2235 psig. Accordingly, the low value used for analysis should be

$$2235 - 30 = 2205 \text{ psig}$$

This value is properly reflected in the basis page B 3/4 2-6. However, the tech spec limit of 2230 psig minus the error allowance of 30 psi equals 2200 psig.

Please explain the difference.

2. Table 3.3-2, Reactor Trip System Instrumentation Response Times

The overtemperature N-16 and overpower N-16 reactor trips have response times of $\leq$ 7 sec each. However, FSAR table 15.0.4 shows a delay time of 2 sec each. Please explain the difference.

3. a. In the absence of a Technical Specification section that specifies the operability requirements for the plant's atmospheric relief valves (ADVs) discuss the mitigation features for a postulated SGTR event at CPSES (with the assumption that the ADVs are inoperable).

   b. Table 3.3-3 page 3/4 3-16, item 1, Safety Injection

   Prove that an automatic SI signal on containment high pressure in mode 4 is not necessary to mitigate a LOCA or a SLB in the absence of the cold leg accumulators and MSIVs operable.

   c. Table 3.3-3 page 3/4 3-39, item 4, Steam Line Isolation

   Prove that manual capability of MSIV isolation in mode 4 to mitigate a SGTR is not necessary.

   Please provide a plan for resolving the above concerns and justification for interim operation until the resolution has been implemented.

4. The staff notes the lack of tech specs preventing control rod withdrawal accidents in modes 4 5 when only one RHR train may be providing the cooling. The FSAR analysis of rod withdrawal events assumes 2 RCPs circulating primary water for heat removal. Please address this issue.

   Please provide a plan for resolution and justification for interim operation until such resolution is implemented.

5. Several Technical Specification Sections

   The different sections in the Technical Specifications state limits on minimum and/or maximum values of process variables, e.g., temperature, pressure, flow rates, levels, and volumes.

   The staff is concerned that these process variable limits are not, in all cases, reflected in the safety analyses.

   The staff requires that the applicant: (1) provide justification for not assuming in the safety analyses steady state conditions that are consistent with the limits specified in the tech specs after adding a conservative uncertainty margin, and (2) provide a discussion in the basis for choosing the uncertainty margin. The applicant should make a distinction between the value of the parameter as measured, as limited by the tech specs, and as assumed in the safety analyses.

   Please provide a plan for resolution and justification for interim operation until such resolution is implemented.

6. Surveillance Requirement 4.1.2.2.d, Reactivity Control Systems

   Provide the basis for the 30gpm minimum boron injection flow rate to the RCS.

7. Table 3.4.1, RCS Pressure Isolation Valves

State why the high pressure SI flow line check valves are not included in the list of reactor coolant pressure isolation check valves requiring periodic leak checks.

8. Surveillance Requirement 4.5.2.f, ECCS

Explain the differences as listed below for the minimum developed pump differential pressures between the tech spec values and the values assumed in the safety analysis as shown in FSAR figures 6.3-3, -4, and -5:

	T. S. Value	FSAR Value
Centrifugal Charging Pump	2350 psid	2390 psid
Safety Injection Pump	1435 psid	1485 psid
RHR Pump	170 psid	186 psid

9. Surveillance Requirement 4.5.2.h, ECCS (Flow Balance Test)

a. Demonstrate that the minimum SI flow rates specified in sections 1. a., 2. a. and 3. a. for each ECCS pump satisfy the minimum SI flow rates for all discharge pressures as shown in FSAR Figure 15.6-47.

b. Explain why the maximum flow rates specified in sections 1. b., 2. b. and 3. b. for the ECCS pumps are to be obtained with two pumps rather than a single pump, especially since the flow balance tests discussed in (a) above are performed with one pump. The Westinghouse Standard Technical Specifications specify that this check is to be performed with one pump.

10. Section 3.5.3, ECCS - T_{ave} < 350°F

This section specifies that a maximum of one centrifugal charging pump (CCP) and one SI pump be operable at or below 308.7°F. The FSAR indicates that the CPSES LTOPS is designed for the flow from two CCPs. Demonstrate that the LTOP can handle the combined flow from one CCP and one SI pump with a system T_{ave} at the lowest cold leg temperature permissible by the tech specs prior to removal of the reactor pressure vessel head.