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TUELECTRIC

December 2, 1992

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Group Vice President

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NOS. 50-445 AND 50-446
ADVANCE FSAR SUBMITTAL - REVISED ANALYSIS FOR RELEASES
THROUGH CONTAINMENT PRESSURE RELIEF LINE DURING LOCA

Gentlemen:

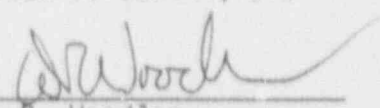
The attachment to this letter provides an advance CPSES FSAR submittal to facilitate the NRC Staff review of the subject area in support of licensing Unit 2. The attachment is organized as follows:

1. A description/justification of each change.
2. A copy of the revised FSAR pages (changes are indicated in the margin by the word "DRAFT").

The attached material will be incorporated in CPSES FSAR Amendment 87 which is currently scheduled for December, 1992. If you have any questions regarding this submittal, please contact Mr. Bob Dacko at (214) 812-8228.

Sincerely,

William J. Cahill, Jr.

By: 
D. R. Woodlan
Docket Licensing Manager

BSD
Attachment

c - Mr. J. L. Milhoan, Region IV
Resident Inspectors, CPSES (2)
Mr. T. A. Bergman, NRR
Mr. B. E. Holian, NRR

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CPSES - FINAL SAFETY ANALYSIS REPORT (FSAR)

DETAILED DESCRIPTION

Prefix Page
(as amended)

Group Description

15.6-46

- 2 Updates some of the assumptions and results of the environmental consequences of releases through the containment pressure relief line after a LOCA.
- Revision :
- In calculating the exclusion area boundary doses for the Unit 2 analysis, it was determined that the Unit 1 analysis was extremely conservative due primarily to a subsequent installation of a restricting orifice plate on the inlet to the 18" pressure relief system ductwork. In addition, as a result of performing analyses of breaks on a spectrum of line sizes, the 2" line resulted in the highest doses (the previous Unit 1 analysis found the 3" break to be limiting). These changes do not impact the acceptability of the doses with respect to 10CFR100 limits.
- Change Request Number : SA-92-768.
- Commitment Register Number :
- Related SER : 15.4 SSER :
- SER/SSER Impact : No

Q022.20

DRAFT

a. The maximum containment air/steam mass release to the environment was conservatively calculated assuming containment pressures for a large break LOCA, and critical flow via the 3-3/8 inch orifice plate at the inlet to the pressure relief system ductwork. No credit was taken for line losses in the ductwork or two butterfly valves.

DRAFT

b. Only reactor coolant activity is assumed to be released. A spectrum of line breaks from 1 inch to 6 inches were analyzed.

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c. A preaccident iodine spike was considered in determining the primary reactor coolant activity. The corresponding reactor coolant iodine concentrations are listed in Table 15.6-3. The noble gas activity concentrations are presented in Table 15.1-4.

Q312.21

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d. The containment pressure relief line isolation valve closure time including instrumentation delays will not exceed 5 seconds. The radioactive fission products are assumed to be released from the Containment through the pressure relief line for a period of time equal to the small break LOCA reactor trip signal time (see Table 15.6-1) plus 5 seconds).

DRAFT

e. No credit was taken for radioactive decay.

f. No credit was taken for an elevated release.

DRAFT

Based on the foregoing assumptions, the doses to the thyroid and whole body were both conservatively calculated to be less than 1 rem at the exclusion area boundary. The doses from this accident are well within the values set forth in 10CFR100.

15.6.6 A NUMBER OF BWR TRANSIENTS

This section is not applicable to the CPSES.