

Log # TXX-92175
File # 10010
915.6
Ref. # 10CFR50.46

TU ELECTRIC

April 7, 1992

William J. Cahill, Jr.
Group Vice President

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NOS. 50-445 AND 50-446
PEAK CLADDING TEMPERATURE CHANGES GREATER THAN 50°F

- REF: 1) TU Electric Letter logged TXX-91220 from
William J. Cahill, Jr. to the NRC
dated July 31, 1991
- 2) TU Electric Letter logged TXX-91270 from
William J. Cahill, Jr. to the NRC
dated July 31, 1991

Gentlemen:

Westinghouse Electric Corporation notified TU Electric of errors in the CPSES Unit 1 small break LOCA calculation on March 9, 1992. The peak fuel cladding temperature (PCT) for CPSES Unit 1 small break LOCA analysis was calculated using the WFLASH model. The most recent notification of PCT penalty from Westinghouse was for removal of credit for the turbine driven auxiliary feedwater pump from the small break LOCA analysis with a value of 99.1°F. Each change/error is identified in an attachment to this letter along with the resultant change in peak cladding temperature. Utilizing the attached list of changes to the Unit 1 PCT conservatively, the maximum updated value for the Unit 1 PCT is 2133.65°F. This updated value remains below the 2200°F limiting value established by Part 50.46(b)(1). Therefore, the current analysis continues to demonstrate CPSES Unit 1 compliance with 10CFR50.46.

This report provides notice of changing the limiting transient for Unit 1 from the large break LOCA to the small break LOCA. The Unit 2 limiting transient remains as identified in Reference 2. Currently, all ECCS evaluation model changes/errors for Units 1 and 2 have been included in FSAR updates except for the most recent PCT penalty.

The absolute magnitude of these changes total greater than 50°F and in accordance with 10CFR50.46(a)(3)(i), have been classified as significant. This letter is TU Electric's 30 day report of changes or errors discovered in the ECCS calculations of PCT as required by 10CFR50.46(a)(3)(ii).

140061

4204150005 920407
PDR ADDCK 05000445
P PDR

400 N. Olive Street L.B. 81 Dallas, Texas 75201

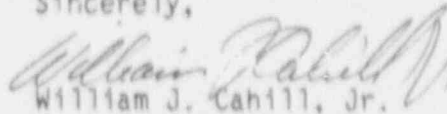
2029

TXX-92175
Page 2 of 2

TU Electric provided schedules for reanalysis of the large break LOCA analysis for Unit 1 and Unit 2 in Reference 1 and Reference 2, respectively. During a telephone conversation with the NRC staff, on November 21, 1991, TU Electric agreed to provide revised reanalysis schedules. The schedules for reanalysis are being revised to be consistent with the current schedule for use of Siemens fuel (Cycle 4 for Unit 1 and Cycle 3 for Unit 2). The schedule for completion and submittal of the reanalysis for the large break LOCA and small break LOCA for Unit 1 is May 31, 1993 (Cycle 4). The schedule for completion and submittal of the reanalysis of the large break LOCA for Unit 2 is May 31, 1995 (Cycle 3).

If you have any questions, please contact Mr. J. D. Seawright at (214) 812-4375.

Sincerely,


William J. Cahill, Jr.

JDS/gj

c - Mr. R. D. Martin, Region IV
Resident Inspectors, CPSES (2)
Mr. T. A. Bergman, NRR
Mr. B. E. Holian, NRR

CPSES Unit 1
Small Break LOCA Peak Cladding Temperature
Changes/Errors

<u>Item</u>	<u>Change in PCT (°F)</u>
4.4% shortfall in SI flow delivered over time period of interest.	88.0
Increased the signal processing delay time from 1 sec. to 2 sec.	9.0
Increased the AFW purge volume used to calculate the time to switchover to the lower enthalpy.	53.0
Comanche Peak Steam Electric Station Setpoint Study Information. Pressurizer Low Pressure SI at 1700 psig.	2.0
Automatic AFW Controller Safety Evaluation	75.5
Revised Charging Flow Evaluation.	84.0
Reevaluation of the effect on small break LOCA break LOCA for reductions in Charging SI and HHSI.	-126.0
Increased AFW purge volumes due to check valve back leakage.	19.2
Revised AFW purge volumes.	0.5
Increase in the Auxiliary Feedwater flow rate from 625 gpm to 1225.5 gpm, entire purge volume assumed to be at 440°F.	-25.0
Adjustment to the small break analysis results for the correction to the Zirc/Water error.	2.0
ECCS Flow changes to prevent runout of the Charging/SI and HHSI during post-LOCA recirculation.	64.85
Removal of the credit for TDAFW delivery from LOCA analysis.	99.10
<hr/>	
Total PCT penalty for 10CFR50.59 changes and permanent ECCS model changes.	346.15°F
Limiting Case PCT	1787.5°F
=====	=====
Total Limiting Case PCT	2133.65°F