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**TU**ELECTRIC

April 1, 1993

William J. Cahill, Jr.  
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  
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION  
CONCERNING INCREASING RWST AND ACCUMULATOR BORON  
CONCENTRATION

- REF: 1) NRC letter from Mr. T. A. Bergman to  
Mr. W. J. Cahill, Jr., dated March 5, 1993
- 2) TU Electric letter logged TXX-92469, from  
Mr. W. J. Cahill, Jr. to the NRC, dated October 19, 1992
- 3) NRC letter from Mr. L. Raynard Wharton to Licensees,  
Docket No. 50-483, dated February 8, 1993

Gentlemen:

TU Electric provides the following in response to Reference 1. The information contained herein summarizes information previously provided in License Amendment Request 92-06 (Reference 2), or in the on-going discussions with the NRC staff to resolve the Boron Dilution Mitigation Systems (BDMS) technical specification limitations.

NRC QUESTION 1:

What effect does the proposed increase in reactor coolant system (RCS) minimum boron concentration have on the moderator temperature coefficient and how has this been accommodated in the safety analyses?

RESPONSE 1:

The proposed increases in the minimum required boron concentrations in the RWST and ECCS accumulators are based on post-LOCA criticality requirements for extended fuel cycle lengths. The increased reactor coolant system (RCS) boron concentrations required to support extended length fuel cycles will result in a more positive (less negative) moderator temperature coefficient.

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In support of the License Amendment Request 92-06, preliminary evaluations of the effects of the proposed changes on the accident analyses were performed. Nonetheless, prior to operation with a revised core configuration, all of the accident analyses are evaluated for continued applicability as part of the Reload Safety Evaluation (RSE) process. The effects on the accident analyses of the higher boron concentrations in the RWST, ECCS accumulators, and RCS are explicitly considered during the RSE process.

NRC QUESTION 2:

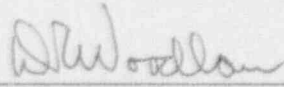
The staff will require an analysis of the inadvertent boron dilution event from shutdown conditions before a final evaluation of the proposed boron concentration increase can be made. This analysis should incorporate appropriate alternatives if the boron dilution mitigation system is determined to be inoperable for Cycle 4 operation. The analysis must be submitted in sufficient time to allow for staff review prior to the start of Cycle 4 operation.

RESPONSE 2:

The accident analyses upon which the Unit 1 Cycle 4 RSE will be based, will include a revised analysis methodology for the Inadvertent Boron Dilution event. Consistent with the requirements of the current CPSES Technical Specifications and Reference 3, TU Electric expects to submit this revised methodology for the analysis of the Inadvertent Boron Dilution event in late April 1993. Although the April submittal will be supported by an analysis specific to Unit 1 Cycle 3, the revised methodology will have been evaluated to assure applicability to the range of boron concentrations expected for extended cycle operation, including the Unit 1 Cycle 4 core configuration. The submittal and approval of the revised methodology for the Inadvertent Boron Dilution event is required to support operation of CPSES, but is considered to be independent of the proposed changes to the minimum RWST and ECCS accumulator boron concentrations.

Sincerely,

William J. Cahill, Jr.

By:   
D. R. Woodlan  
Docket Licensing Manager

BSD/grp

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