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TUELECTRIC

February 16, 1988

William G. Council
Executive 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
AMSAC SER EVALUATION REPORT
RESPONSE CLARIFICATION

REF: W.G. Council letter TXX-6769 to NRC dated
October 9, 1987

Gentlemen:

On December 7, 1987, the NRC staff requested additional information about TU Electric's response to the AMSAC safety evaluation report, via a telephone conference call. CPE I&C provides the following information or clarification pertaining to these issues.

- 1) NRC Question: Provide the model number for Struthers-Dunn relays that are used within AMSAC.

TU Electric Response: The model number of the Struthers-Dunn relays used within AMSAC system is 219XDX181NE.

- 2) NRC Question: Provide additional details about non-1E power supply to the AMSAC cabinet. Where does the non-1E power supply tie together with 1E power in the voltage ladder? Is this power independent from the Reactor Protection System (RPS) power supply? Furnish reference drawings.

TU Electric Response: The AMSAC cabinet is provided with an uninterruptible non-Class 1E power supply from distribution panel 1C5. Upstream, this panel is connected to non-Class 1E 6.9kV Switchgears 1A1 and 1A2 which are powered from the X and Y Secondary windings of Unit Auxiliary Transformer, 1UT. The RPS power supply is provided from Class 1E 125V DC buses 1ED1 and 1ED2, which are fed from Class 1E Motor Control Centers (MCC's) 1EB1-1, 1EB2-1, 1EB3-1 and 1EB4-1. These MCC's are connected through Class 1E load centers to the 6.9kV switchgear 1EA1 and 1EA2. Thus AMSAC and RPS power supplies do not have a common point in the voltage ladder up to the 6.9kV voltage level (see reference drawings 2323-E1-0018, Sheet 3, 2323-E1-001, ECE-E1-0001, Sheet A).

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- 3) NRC Question: Do existing plant procedures meet and/or exceed the QA requirements of G.L. 85-06?

TU Electric Response: No. Some of the required procedures have not been written yet. In addition, existing procedures are under review to assure they meet the QA requirements of Generic Letter 85-06. The quality assurance program for design, procurement, installation, testing and maintenance will meet the requirements of Generic Letter 85-06.

- 4) NRC Question: In the section "Safety-Related Interface" of the SER response, what is implied by the words "all applicable" in the following sentence:

"These isolation devices ensure that the existing protection system continues to meet all applicable safety criteria by providing isolation as demonstrated in Appendix A of this submittal".

TU Electric Response: The words "all applicable" were used in context with separation of non-safety related AMSAC equipment from the existing safety-related Reactor Protection System at points of interface. Separation will be accomplished using isolation devices to ensure that AMSAC will not cause degradation of the existing Reactor Protection System. Applicable criteria for separation are IEEE standards 279, 384 and NRC Regulatory Guide 1.75. Compliance with these documents is discussed in the CPSES FSAR.

- 5) NRC Question: Time delay of C-20 has been increased by Rev. 1 of WCAP-10858P-A. Does TU Electric intend to implement this extension? Discuss implementation of Rev. 1 in general.

TU Electric Response: At present, the CPSES design is based on WCAP-10858P-A, Rev. 0. In the AMSAC Generic Design Package WCAP 10858P-A, Rev. 1, Westinghouse increased the range of C-20 arming-off-delay timer to 420 seconds and proposed an arming-off-delay time of 360 seconds. Westinghouse advised that the range of this time is increased to 420 seconds whereas the CPSES AMSAC System default arming-off-delay time is 260 seconds. Westinghouse will revise the C-20 arming-off-delay time in the future, if required. This change can then be incorporated by using AMSAC software.

Revision 1 of WCAP 10858P-A, was submitted to the NRC on August 3, 1987. Upon approval of the subject WCAP by the NRC and subsequent SER revision, if required; TU Electric would consider incorporation of any appropriate change as recommended by Westinghouse.

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- 6) NRC Question: Testability at power - what is the test frequency while at power? Frequency while shutdown?

TU Electric Response: At power, AMSAC will be tested quarterly. This quarterly test will consist of a self calibration of the processor and a semiautomatic test of the entire actuation logic system for AMSAC, as recommended by Westinghouse. During shutdown these quarterly tests will not be performed except as described in response to item #7.

- 7) NRC Question: Will an end-to-end test be performed during each refueling outage?

TU Electric Response: End-to-end testing of the AMSAC system will be performed during each refueling outage. However, credit will be taken for overlapping tests, such as input sensor calibration.

- 8) NRC Question: What control document will be used for testing?

TU Electric Response: Post installation testing will be conducted utilizing a pre-operational test. Periodic testing will be performed per Operations Instrumentation and Control Maintenance procedures (calibration procedures for quality related equipment).

Very truly yours,

W. G. Council

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