TU ELECTRIC

Log # TXX-97216
File # 10010
909.5
Ref. # 10CFR50.48

November 6, 1997

**C. Lance Terry**
*Group Vice President*

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) - UNIT 1
DOCKET NO. 50-445
RESPONSE TO SAFETY EVALUATION OPEN ITEMS ON CPSES UNIT 1 REGARDING THERMO-LAG CABLE FUNCTIONALITY ISSUES (TAC NO. M85536)

REF: 1) NRC letter from Mr. Timothy J. Polich to Mr. C. Lance Terry dated October 1, 1997

2) Transcripts of meeting between NRC and TU Electric held on December 5, 1996 at the NRC Region IV Office in Arlington, Texas

3. TU Electric letter logged TXX-97047, from Mr. C. Lance Terry, to NRC dated February 28, 1997

During the telephone conference on September 16, 1997, and as stated in Reference 1 the NRC Staff has closed open items 2, 5, 6, and 7. The responses to open items 1, 3 and 4 are being provided in this letter as requested.

**Open Item 1:**

Raceway at CPSES Unit 1 where the total enclosed thermal mass is less than the total enclosed thermal mass of the tested configurations.

**Response:**

As stated via Reference 3, and discussed in the December 5, 1996 meeting with your Staff, TU Electric has provided the requested cable loading information of installed Unit 1 raceway barriers with respect to the matrix similar to what was in the Engineering Report ER-ME-067 for Unit 2. TU Electric believes that this is consistent with it's commitments made during the December 5, 1996 meeting with your Staff (please refer to page 20, line item 3 and page 104, line item 23 of reference 2). Additionally, after the development of the aforementioned matrix, TU Electric evaluated the plant installed configurations which had less fill than

the as tested configurations. The results of this evaluation are that the decrease in the thermal mass enclosed in the fire barrier will not adversely affect the ability of these barriers to perform their design function. TU Electric believes that it followed the guidance which was provided in reference 2 (see page 21 line item 15 through 18). Please note that TU Electric does not believe that this is a "cable functionality evaluation" as described in the October 29, 1992 criteria, but is instead structured similar to the evaluations allowed by the guidance provided in Generic Letter 86-10. TU Electric will provide further information regarding this evaluation during the scheduled November 12, 1997, meeting with the Staff in Rockville, MD.

**Open Item 3:**

Thermo-Lag fire stops installed in cable trays at CPSES Unit 1.

**Response:**

TU Electric has performed an evaluation of the three different type of materials used to construct fire stops within 1-hour rated fire barrier envelopes installed on Unit 1 cable trays at CPSES. This evaluation is provided in Attachment 2 to Appendix F of Engineering Report ER-ME-067. The evaluation concluded that; based on the results of the fire endurance tests listed in Section 3 of Attachment 2 of Appendix F, as augmented by the technical evaluations presented in Section 4 of Attachment 2 of Appendix F, fire stops installed at CPSES constructed of Thermo-Lag 330-1 and BISCO SF-60 silicone elastomer materials are acceptable designs to seal terminations of Thermo-Lag protective envelopes on cable trays. Firestops constructed using Silicone Foam material will be removed or augmented with acceptable firestop material via Design Modification 97-014. Please refer to the enclosed Engineering Report ER-ME-067 Rev 5 Attachment 2 to Appendix F.

**Open Item 4:**

Silicone foam fire stops installed in cable trays at CPSES Unit 1, where the qualification is based on fire tests that used silicone elastomer.

**Response:**

With respect to silicone foam, after December 5, 1996, TU Electric performed an extensive review of construction work packages (including design documents) and performed field walkdowns. These walkdowns concluded that of some silicone foam fire stops are installed in CPSES Unit 1. TU Electric will rework these silicone foam fire stops to bring them into compliance with tested configurations, i.e., silicone elastomer via Design Modification No. 97-014. Additionally please refer to response to open item 3 above.

Additionally, TU Electric has revised the Engineering Report ER-ME-067, Revision 5 of the Engineering Report eliminates detailed information not directly required to respond to the question asked by the Staff and is enclosed as enclosure 1 to this response. As requested during the September 16, 1997, conference call, BISCO Test Report 748-105 is being provided as enclosure 2. Should you have any questions or need additional information, please contact Obaid Bhatty at (254) 897-5839 to coordinate this effort.

Sincerely,

C. L. Terry

C. L. Terry

By: Roger D. Walker

Roger D. Walker
Regulatory Affairs Manager

OB:ob
Enclosures

cc: Mr. E. W. Merschoff, Region IV (w/o enclosures)
Mr. J. I. Tapia, Region IV (w/o enclosures)
Mr. T. J. Polich, NRR
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Resident Inspectors, CPSES (w/o enclosures)

**ENCLOSURE 1 TO TXX-97216**

**ER-ME-067 Rev.5**

# EVALUATION OF THERMO-LAG FIRE BARRIER SYSTEMS