

May 27, 1994

Docket No. 50-445

Mr. William J. Cahill, Jr.  
Group Vice President, Nuclear  
TU Electric Company  
400 North Olive Street, L.B. 81  
Dallas, Texas 75201

Dear Mr. Cahill:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION ON COMANCHE PEAK STEAM ELECTRIC  
STATION UNIT 1 REGARDING THERMO-LAG BARRIER QUALIFICATION (TAC NO.  
M85536)

During the review of TU Electric's letter dated March 24, 1994, concerning the  
qualification of the Thermo-Lag fire barriers at Comanche Peak Steam Electric  
Station Unit 1, the NRC staff has determined the need for additional  
information. Enclosed is a list of questions.

The reporting requirements contained in this letter affect fewer than ten  
respondents; therefore, OMB clearance is not required under Public Law 96-511.

You are requested to provide your response to the enclosed questions within 30  
days of receipt of this letter.

Sincerely,

Original Signed By

Thomas A. Bergman, Project Manager  
Project Directorate IV-2  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Enclosure:  
Request for Additional  
Information

cc w/enclosure  
See next page

DISTRIBUTION

Docket File OGC  
NRC PDR ACRS (10)  
Local PDR SWest  
PDIV-2 R/F CMcCracken  
JRoe EConnell  
EAdensam LYandell, Region IV  
TBergman

OFFICE	PDIV-2/LA	PDIV-2/PM	PDIV-2/(A)D		
NAME	EPeyton	TBergman	JLyons		
DATE	5/27/94	5/27/94	5/27/94	/ /	/ /
COPY	YES/NO	<del>YES/NO</del>	<del>YES/NO</del>	YES/NO	YES/NO

OFFICIAL RECORD COPY

FILENAME: G:\WPDOCS\CPEAK\RAI85536.001

310107

9406010261 940527  
PDR ADOCK 05000445  
P PDR

NRC FILE CENTER COPY

DFD1

Mr. William J. Cahill, Jr.

- 2 -

May 27, 1994

cc w/enclosure:

Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
P. O. Box 1029  
Granbury, Texas 76048

Chief, Texas Bureau of Radiation  
Control  
Texas Department of Health  
1100 West 49th Street  
Austin, Texas 78756

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011

Honorable Dale McPherson  
County Judge  
P. O. Box 851  
Glen Rose, Texas 76043

Mrs. Juanita Ellis, President  
Citizens Association for Sound Energy  
1426 South Polk  
Dallas, Texas 75224

Mr. Roger D. Walker, Manager  
Regulatory Affairs for Nuclear  
Engineering Organization  
Texas Utilities Electric Company  
400 North Olive Street, L.B. 81  
Dallas, Texas 75201

Texas Utilities Electric Company  
c/o Bethesda Licensing  
3 Metro Center, Suite 610  
Bethesda, Maryland 20814

William A. Burchette, Esq.  
Counsel for Tex-La Electric  
Cooperative of Texas  
Jordan, Schulte, & Burchette  
1025 Thomas Jefferson Street, N.W.  
Washington, D.C. 20007

GDS Associates, Inc.  
Suite 720  
1850 Parkway Place  
Marietta, Georgia 30067-8237

Jack R. Newman, Esq.  
Newman & Holtzinger  
1615 L Street, N.W.  
Suite 1000  
Washington, D.C. 20036

REQUEST FOR ADDITIONAL INFORMATION

THERMO-LAG FIRE BARRIER SYSTEMS

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT 1

DOCKET NO. 50-445

1. With regard to the fire tested assemblies that included power, instrument or control cables, provide documentation that concludes that the thermal mass in the plant installed configurations is equal to or greater than the thermal mass in the tested assemblies.
2. With regard to the cables protected with "Flexi-Blanket" such as the 2-inch diameter air drop in Test Scheme 11-2, and the individually protected power cables in Test Scheme 15-2, provide a technical basis for accepting 2 layers of Thermo-Lag "Flexi-Blanket" as a 1-hour rated assembly in consideration of the decision by TU Electric to upgrade the 2 layer "Flexi-Blanket" configurations tested in Scheme 15-2 to a 3 layer configuration. Also, provide a technical basis for concluding that 3 layers of Thermo-Lag "Flexi-Blanket" will provide a 1-hour fire rated assembly when only a 2 layer assembly has been tested. Test Scheme 15-2 is listed in Appendix E (Plan for Certifying CPSES Unit 1 Thermo-Lag) of Engineering Report ER-ME-067, as being used for CPSES Unit 1, but is not included in Appendix C (Thermo-Lag Installation Review Matrix) for Unit 1. Please clarify the intended application for this scheme.
3. With regard to the Thermo-Lag "Box Assembly" tested in Scheme 11-4, provide a technical basis for accepting this configuration considering the performance of this assembly during the hose stream test, when barrier material was dislodged exposing the bottom of the cable tray and considering the decision by TU Electric to reinforce the attachments for the CPSES Unit 2 assembly tested in Scheme 12-2 based upon its performance during the hose stream test. This scheme is listed in Appendix E (Plan for Certifying CPSES Unit 1 Thermo-Lag) of Engineering Report ER-ME-067 as being used for CPSES Unit 1, but is not included in Appendix C (Thermo-Lag Installation Review Matrix) for Unit 1. Please clarify the intended application for this scheme.
4. With regard to Appendix C (page 157) of Engineering Report ER-ME-067, verify that the correct test scheme for the 18-inch by 4-inch power cable tray is Scheme 13-2 not Scheme 31-2, which is listed in the report.

5. Please provide the revised Engineering Report ER-ME-082, "Evaluation of Unit 2 Thermo-Lag Configurations" that reflects the Unit 1 configurations and serves as the basis for "acceptance of minor deviations from specified technical requirements" in accordance with the provisions of NRC Generic Letter 86-10.
6. Test Scheme 11-1 is listed in Appendix E (Plan for Certifying CPSES Unit 1 Thermo-Lag) of Engineering Report ER-ME-067, as being used for CPSES Unit 1, but is not included in Appendix C (Thermo-Lag Installation Review Matrix) for Unit 1. Please clarify the intended application for this scheme.
7. With regard to the manufacturing specifications of the Thermo-Lag material installed at Comanche Peak, verify that the material that was qualified for use in CPSES Unit 1, by the fire endurance tests referenced in Appendix E of the Engineering Report ER-ME-067, is representative of the material installed in CPSES Unit 1. This issue was addressed for CPSES Unit 2 in the letter of August 17, 1993, to Mr. William J. Cahill, Jr. from Ms. Suzanne C. Black.
8. With regard to the use of Thermo-Lag fire stops in cable trays at CPSES Unit 1, please provide additional information concerning the specific application of the fire stop configurations and the basis for qualifying the assemblies using IEEE-634. The staff is concerned that IEEE-634 may be inappropriate for the intended application.
9. With regard to the structural steel protected with Thermo-Lag at CPSES Unit 1, please provide additional information concerning the specific application of the structural steel fire proofing described in Appendix D of Engineering Report ER-ME-067, and the basis for the conclusion that the untested configuration is equivalent to the Underwriters Laboratory listed configuration. Include design or installation drawings and identify any differences from the listed configuration.