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C. Lance Terry  
Group Vice President, Nuclear

November 29, 1995

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  
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION ON  
LICENSE AMENDMENT REQUEST 94-022,  
SPENT FUEL STORAGE CAPACITY INCREASE

RE: 1) TU Electric letter logged TXX-94325, from C. L. Terry to  
the NRC, dated December 30, 1994

Gentlemen:

TU Electric transmitted License Amendment Request 94-022 (Reference 1) which revises the specification for fuel storage to authorize usage of the high density fuel storage racks, to increase the spent fuel storage capacity, and to adopt the wording, content, and format of the Improved Standard Technical Specifications. During recent conversations with the NRC several requests for additional information were discussed. Attachment 1 provides the requests for additional information and TU Electric's responses.

The information provided in Attachment 1 does not affect the proposed Technical Specification changes, the safety analysis of those changes, or the determination that the proposed changes do not involve a significant hazard consideration (provided by Attachments 2 and 3 of Reference 1).

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Should you have any questions, please contact Carl B. Corbin at (214) 812-8859 or David A. Bersi at (817) 897-8134.

Sincerely,

*C. L. Terry*

C. L. Terry

By: *Roger D. Walker*  
Roger D. Walker  
Regulatory Affairs Manager

CBC/cbc

Attachment: Response to Request for Additional Information Regarding  
Spent Fuel Pool Storage Increase

c - Mr. L. J. Callan, Region IV  
Mr. T. J. Polich, NRR  
Mr. W. D. Johnson, Region IV  
Resident Inspector, CPSES  
  
Mr. D. K. Lacker  
Bureau of Radiation Control  
Texas Department of Public Health  
1100 West 49th Street  
Austin, Texas 78704

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING  
SPENT FUEL POOL STORAGE INCREASE

NRC RAI # 1:

What are the total number of computer runs for single and multi-rack analyses, respectively?

TU Electric Response to RAI # 1:

The single rack and multi-rack analyses were each analyzed for four different cases which comprise the range of seismic loading and friction coefficient. The four cases are:

1. OBE with 0.2 friction coefficient
2. OBE with 0.8 friction coefficient
3. SSE with 0.2 friction coefficient
4. SSE with 0.8 friction coefficient

Thus, a total of eight different cases were evaluated. Of course, each individual case requires several separate computer runs, and several computer runs were used to generate stiffness and mass properties for the finite element models.

NRC RAI # 2:

What loading conditions were considered for each analysis (i.e. full, half-full, almost empty)?

TU Electric Response to RAI # 2:

The eight cases identified in Response # 1 considered fully loaded racks, both in the single rack and the multi-rack analyses. The fully loaded configuration has been determined to produce the limiting conditions for the racks in terms of displacements (both sliding and rocking), loads, and stresses. Calculations have been performed for partially loaded (i.e., one row full, two rows full, .... all rows full) racks to demonstrate acceptable margin against overturn.

NRC RAI # 3:

What are the dimensions of racks considered in each analysis (e.g. 12 x 14 x what height)?

TU Electric Response to RAI # 3:

The CPSES spent fuel pool contains two different rack sizes: 11 x 14 (99.88 inches x 126.88 inches) and 12 x 14 (108.88 inches x 126.88 inches). All racks have a height of 168.25 inches. The single rack analysis modeled the 11 x 14 size rack since it has the largest height to width aspect ratio and thus has more propensity to rock and lift a support pad off the pool floor. The multi-rack analysis modeled all the racks within the pool and therefore considered both 11 x 14 and 12 x 14 rack sizes.

NRC RAI # 4:

What Coefficients of Friction were considered in each analysis?

TU Electric Response to RAI # 4:

As mentioned in Response # 1, two bounding friction coefficients were considered in each analysis; 0.2 and 0.8. These extreme values capture the maxima of the racks' seismic response in terms of sliding displacements, rocking displacements, and internal loads and stresses.

NRC RAI # 5:

What dimensions of the spent fuel pool (length, width, and height) were used in the ANSYS analysis?

TU Electric Response to RAI # 5:

The inside dimensions of the spent fuel pool used in the ANSYS analysis were 40'-3" (length), 30'-0" (width), and 41'-6" (height).