SEP 1 4 1981

Docket Nos.: STN 50-482, STN 50-48 and STN 50-486 /

Mr. John K. Bryan Vice President Union Electric Company 1901 Gratiot Street Post Office Box 149 St. Louis, Missouri 63166

Dear Gentlemen:

Subject: SNUPPS FSAR - Request for Additional Information:

Structural Engineering

As a result of our review of your application for operating licenses we find that we need additional information regarding the SNUPPS FSAR. The specific information required is as a result of the Structural Engineering Branch review and is listed in the Enclosure.

To maintain our licensing review schedule for the SNUPPS FSAR, we will need a response to the enclosed request by September 24, 1981. If you cannot meet this date, please inform us within seven days after receipt of this letter of the date you plan to submit your responses so that we may review our schedule for any necessary changes.

Please contact, Dr. G. E. Edison, SNUPPS Licensing Project Manager, if you desire any discussion or clarification of the enclosed request.

Sincerely,

Original signed by: B. J. Youngblood

B. J. Youngblood, Chief Licensing Branch No. 1 Division of Licensing

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Mr. Glenn L. Koester Vice President - Nuclear

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Docket Files (4) WPike

bcc:

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USGPO: 1981-335-960

TIC

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Kansas Gas and Electric Company

OELD

OIE (3)

Enclosure: Request for Additional Information

cc: See next page

8110020027 810914 PDR ADDCK 05000482 GEEdison/1q PDR Mr. J. K. Bryan Vice President - Nuclear Union Electric Company P. O. Box 149 St. Louis, Missouri 63166

cc: Gerald Charnoff, Esq. Shaw, Pittan, Potts, Trowbridge & Madden 1800 M Street, N. W. Washington, D. C. 20036

> Kansas City Power & Light Company ATTN: Mr. D. T. McPhee Vice President - Production 1330 Baltimore Avenue Kansas City, Missouri 64141

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Ms. Wanda Christy 515 N. 1st Street Burlington, Kansas 66839

ENCLOSURE

SNUPPS

Request for Additional Information Structural Engineering

220.0 STRUCTURAL ENGINEERING

- The staff has determined that Section 3.7(b).4.1 of the SNUPPS

 FSAR does not comply with the intent of R. G. 1.12, Rev. 1,

 as it claims. Nevertheless, it does comply, to a greater

 extent although not fully, with the positions of R. G. 1.12,

 Proposed Rev. 2, than that of R. G. 1.12, Rev. 1. The staff

 would accept that section of the FSAR if it is revised to comply

 with the positions of R. G. 1.12, Proposed Rev. 2, July, 1981.
- 220.2 Provide a discussion on how major cable tray test results were used in arriving at the 20% modal damping. The discussion should assure consistency of observed data and calculations used.
- Why was cable tray test input loading applied at a 45 degree angle instead of simultaneous horizont; and vertical load input? What are the implications of this testing method upon the validity of the recommended 20% damping (e.g., with respect to statistical independency requirements of different directional inputs)?
- 220.4 Will sprayed-on fireproofing affect cable friction and thus the damping ratios?

- 220.5 The cable tray test conditions do not reflect the actual physical site situation. Provide the rationale for extending the test results to the actual design which is different from the test configuration.
- 220.6 Specify different conditions under which different modal damping ratios up to 20% are used. (Cable tray)
- 220.7 It appears that the scope of the cable tray test and the number of tests may not support direct extension to SNUPPS cable tray design. Justify that the scope of test conducted is adequate for direct design application.
- 220.8 Justify the use of 7% critical damping for conduit supports for all seismic input level.