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KANSAS GAS AND ELECTRIC COMPANY

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SLENN L KOESTER

January 14, 1985

Mr. R.P. Denise, Director Wolf Creek Task Force U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76011

KMLNRC 85-031

Re: Docket No. STN 50-482

Subj: Response to Inspection Report 50-482/84-51

Dear Mr. Denise:

This letter provides the Kansas Gas and Electric Company's (KG&E) response to your letter of January 3, 1985, which transmitted Inspection Report STN 50-482/84-51. As requested, the violation identified in the Inspection Report is being addressed in three parts:

- a) Corrective steps which have been taken and the results achieved;
- b) Corrective steps which will be taken to avoid further violation; and
- c) The date when full compliance will be achieved.

VIOLATION 482/84-51: VIOLATION OF 10CFR50, APP. B, CRITERION III

Finding:

10 CFR Part 50, Appendix B, Criterion III, requires that applicable regulatory requirements and the design basis, as defined in 10 CFR 50.2 and as specified in the license application, are correctly translated into specifications, drawings, procedures, and instructions.

10 CFR 50.2 defines "design bases" as that information which identifies the specific functions to be performed by a structure, system, or component of a facility, and the specific values or ranges of values chosen for controlling parameters as reference bounds for design.

Section 8.3.1.4.1.1 of the licensee application specifies that cables from different separation groups will, in accordance with IEEE Standard 384-177 (SIC) practice, be in steel conduit or enclosed raceway or separated by a fire barrier when the normal 5-foot and 3-foot horizontal separation cannot be maintained.

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Section 8.1.4.2 of the license application specifies that deviations from the IEEE Standard 384-1977 practice which reduce the minimum spatial separation between circuits be supported by analysis and, in accordance with the specified Regulatory Guide 1.75-1974, be considered part of the licensee's application.

Contrary to the above, a number of nonsafety conduits to safety cable trays and cables exiting the trays did not meet the spatial requirements for cables from different separation groups in accordance with your commitment to Regulatory Guide 1.75 and IEEE-384, nor was such deviation supported by an analysis, as specified in the license application.

RESPONSE:

a) Corrective steps which have been taken and results achieved:

Item 1. An analysis has been performed and the results are as follows:

The safety design basis is to protect the safety related cables from failure of the non-safety related circuits, and not vice-versa. In consideration of this limit, enclosing the non-safety circuits in conduit and maintaining at least 1 inch separation provides an acceptable level of protection. The conduit can contain only a limited quantity of combustible material (cable insulation & jacket). All SNUPPS cables, including those used for non-safety related circuits, are qualified to IEEE-383 and meet the flame-retardance requirements specified therein; the cables will not support combustion. Furthermore, there is insufficient oxygen inside the conduit to support combustion of more than a fraction of the available material.

Based on these considerations, it is established that 1-inch separation between a conduit containing non-safety related circuits and an open tray containing safety related circuits is sufficient to assure that any failure within the non-safety related circuits will not propagate into and compromise the integrity of the safety related circuits.

Item 2. In accordance with Regulatory Guide 1.75 this analysis will be incorporated into the Final Safety Analysis Report as follows:

Section 8.3.1.4.1.1(e): Isolation between separation groups is considered to be adequate where physical separation is less than that indicated in Items a, b, and c above, provided the circuits of different separation groups are run in enclosed raceways that qualify as barriers or other barriers are installed between the different separation groups. The minimum distance between these enclosed raceways and between barriers and raceways is 1 inch. The barriers are installed as described in a through d above.

In cases of open trays containing safety-related cables and totally enclosed conduits containing non-safety related cables, the safety design basis is to protect the safety related cables from failure of the non-safety related circuits, and not vice-versa. In consideration of this limit, enclosing the non-safety circuits in raceway and maintaining at least 1 inch separation provides an acceptable level of protection. The conduit can contain only a limited quantity of combustible material (cable insulation & jacket). All SNUPPS cables, including those used for non-safety related circuits, are qualified to IEEE-383 and meet the flame-retardance requirements specified therein; the cables will not support combustion. Furthermore, there is insufficient oxygen inside the conduit to support combustion of more than fraction of the available material.

Based on these considerations, it is established that I inch separation between a conduit containing non-safety related circuits is sufficient to assure that any failure within the non-safety related circuits will not propogate into and compromise the integrity of the safety related circuits.

CABLE SPREADING AREAS - The cable spreading area does not contain high energy equipment such as switchgear, transformers, rotating equipment, or potential sources of missiles or pipe whip and is not used for storing flammable materials. (Circuits in the cable spreading area are limited to control and instrument functions and also those power supply circuits....

It should also be noted that in section 8.1.4.3 in the Final Safety Analysis Report that IEEE 384-1974 is committed to and not, according to Inspection Report 50-482/84-51, IEEE 384-1977.

b) Corrective steps which will be taken to avoid further violation:

Because of the corrective steps that have been taken in part a), KG&E will be in full compliance with licensing commitments; therefore, no further corrective steps are necessary.

c) Date when full compliance will be achieved:

The subject FSAR change will be submitted on or before 1/16/85.

Yours very truly,

Glenn & Koester

Glenn L. Koester

Vice President - Nuclear

GLK: dab

xc: PO'Connor HBundy WGuldemond RCDeYoung



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