GULF STATES UTILITIES COMPANY
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AREA CODE 713 838-6631

November 16, 1981

RBG-11,613
File No. G9.5, G9.25.1.1

Mr. Karl V. Seyfrit, Director
U. S. Nuclear Regulatory Commission
Region IV, Office of Inspection & Enforcement
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

Dear Mr. Seyfrit:

River Bend Staiton Unit 1
Docket No. 50-458

On October 16, 1981, Gulf States Utilities Company (GSU) telephoned your office of a concern potentially reportable under 10CFR50.55(e). On November 9, 1981, Power Strut Division of Van Huffel Tube Corporation, Warren, Ohio (Power Strut) notified the Nuclear Regulatory Commission of a 10CFR Part 21 "Reporting of Defects and Noncompliances." GSU has determined this problem to be a reportable deficiency as defined in 10CFR50.55(e). Attached to this letter is our thirty day status report as required by 10CFR50.55(e)3 concerning the adequacy of spring nuts (PS-9227RS-1/2) supplied by Power Strut to withstand their designed load-carrying capacity. GSU will inform your office of our corrective actions by December 21, 1981.

Sincerely,

J E Booker

J. E. Booker
Manager-Technical Programs

JEB/kt

Attachment

cc: Director of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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ATTACHMENT
CONCERNING POWER STRUT
10CFR50.55(e)

1. Description of the Deficiency

GSU QAFR No. 81-4-16-D reported Power Strut spring nuts PS-9227RS-1/2 as having visually unacceptable threads. These nuts are used with Power Strut channels PS-280ST, which are embedded in concrete. The end connections of electrical cable tray support assemblies are attached to strut channels using these nuts, several of which have already been installed at the River Bend jobsite.

A test program was conducted to determine the nuts' capacity to resist shear loads. The test results indicated that the nuts do not exhibit the capability to resist allowable shear loads (as used in design). Slippage of the nuts occurred in several instances, and at a shear value significantly lower than the allowable shear capacity of these nuts. This slippage was attributed to the inadequate depth of serrations in the nuts.

2. Safety Implications

If the lower allowable shear-load capacity of the nuts had not been discovered, cable tray support systems at River Bend Station could have been designed using lower safety margins. We believe that this condition constitutes a significant deviation from performance specification. Had this deficiency remained uncorrected, it could have adversely affected the safe operation of the plant. Gulf States Utilities concluded this problem is a reportable deficiency as defined by 10CFR50.55(e).

3. Corrective Action

Lower allowable shear-load capacity of these nuts discovered through the testing program will result in revising the design criteria established for cable tray support structures. Cable tray supports already erected at River Bend will be reviewed and necessary repairs will be made of the approximately 8500 spring nuts installed to date. Future use of these nuts will be allowed only after an allowable load, based on the depth of the nuts' serrations, has been established, and the consistency of production is demonstrated by the supplier/producer.