



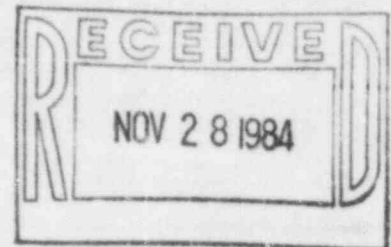
**GULF STATES UTILITIES COMPANY**

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November 19, 1984  
RBG-19480  
File Nos. G9.5, G9.25.1.1

Mr. Robert D. Martin, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region IV, Office of Inspection and Enforcement  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011



Dear Mr. Martin:

River Bend Station Unit 1  
Docket No. 50-458  
Interim Report/DR-255

On October 19, 1984, GSU notified Region IV by telephone that it had determined DR-255 to be reportable under 10CFR50.55(e). This deficiency concerns Topaz inverters supplied by General Electric Company. The attachment to this letter is GSU's interim 30-day written report pursuant to 10CFR50.55(e) with regard to this deficiency.

An interim or final status report will be provided by January 22, 1985.

Sincerely,

J. E. Booker  
Manager-Engineering,  
Nuclear Fuels & Licensing  
River Bend Nuclear Group

~~JEA~~ <sup>BEH</sup>  
PJD/lp

Attachment

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

NRC Resident Inspector-Site

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## ATTACHMENT

November 19, 1984  
RBG-19480

### DR-255 Topaz Inverters Supplied by General Electric Company

#### Background and Description of the Problem

The problems involves the adjustment of the low voltage shutoff and turnon for GE dedicated Class 1E inverters (GE Drawing 184C4723). This adjustment was set too high by the original manufacturer (Power Mark, a Division of Topaz). The GE dedication process was checking for an operable range of 105 to 140 volts DC, instead of 100 to 140 volts. Topaz had been routinely setting the low voltage cutoff at 105 volts DC. Typical DC bus voltage are GE specified to range from 108 to 132 volts with momentary voltage dips to 105 volts DC during the startup of large DC loads.

#### Safety Implication

The above deficiency could result in a condition where the inverter may not start or restart until the voltage is increased not just to 105 but to above 118 volts DC (13 volt fixed offset). Since the allowable momentary dip of the input bus voltage is equal to the factory preset inverter low voltage cutoff (105 VDC), this dip could result in an inverter trip and a failure to restart during a design basis accident.

The subject inverters are used to power 24 VDC instrument buses to RCIC and various Emergency Core Cooling Systems (ECCS) including HPCS, ADS, RHR, and LPCS. Other applications include the Remote Shutdown and Leak Detection Systems.

#### Corrective Action

Discussions with General Electric Company (GE) are underway to determine the appropriate corrective action.