

GULF STATES UTILITIES COMPANY

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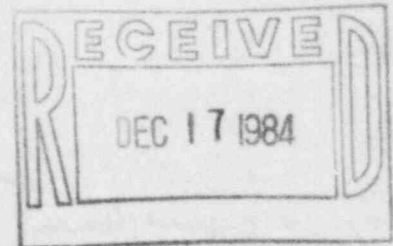


December 10, 1984
RBG- 19692
File Nos. G9.5, G9.25.1.1

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
Final Report/DR-262



On November 8, 1984, GSU notified Region IV by telephone of DR-262 concerning the starting and field flashing circuitry of the standby diesel generators supplied by Transamerica Delaval, Incorporated; GSU had determined this condition was reportable under 10CFR50.55(e). However, based on the information contained in the attachment to this letter, GSU has determined that this condition is not reportable under 10CFR50.55(e).

Sincerely,

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

PJD
JEB/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

December 10, 1984
RBG- 19692

DR-262/Starting and Field Flashing Circuitry of the Standby Diesel Generators

Background and Description of the Problem

This deficiency concerns the starting and field flashing circuitry of the standby diesel generators supplied by Transamerica Delaval, Incorporated. The deficiency as originally described stated that the design of the standby diesel generator starting and field flashing circuitry is such that in the event that the engine fails to start and an emergency start signal is present, the signal and the field flashing contactor is sealed in until manually reset. In this condition, the (field flashing) current limiting resistor will generate approximately 7500 watts inside the exciter cabinet. The cabinet is not designed to continuously dissipate a 7500 watt heat load, and solid state electronic components located a few inches from the resistor would be damaged. The components in question are safety-related and must operate to regulate generator voltage.

A thorough review of the circuitry involved has determined that the control system operates in the following manner. A latched-in emergency start signal will open the starting air valve, deactivate the shutdowns, and, after one second, flash the field through a time delay relay (TD1). The control system will stay in this configuration until the engine starts or until the starting air pressure falls below 150 psi; at which time, the air start valve will close, and the time delay relay (TD1) will drop out, thereby, opening the field flashing contactor and deenergizing the 7500 watt resistor.

Safety Implication

During the time that the field is flashed, 7500 watts are generated in the exciter cabinet, but under these continuous cranking conditions, it takes only 60 seconds to bleed down the starting air pressure below 150 psi. Therefore, even though the emergency start signal itself may be sealed in, the field will only be energized for approximately 60 seconds, and the field flashing resistor will produce less than 450 BTU of heat. This amount of heat is not considered detrimental to any components; therefore, the safe operations of the plant would not be affected by this condition.

Corrective Action

No corrective action is required.