



GULF STATES UTILITIES COMPANY

RIVER BEND STATION POST OFFICE BOX 220 ST FRANCISVILLE, LOUISIANA 70775
AREA CODE 504 636-8094 346-8661

October 20, 1989
RBG- 31655
File Nos. G9.5, G9.25.1.2

U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

Gentlemen:

River Bend Station - Unit 1
Docket No. 50-458

Pursuant to the requirements of 10CFR21.21(b)(2), Gulf States Utilities Company (GSU) is submitting this written report of a defect in a General Electric Type CR 2940 control switch at River Bend Station. The attached report provides the information required by 10CFR21.21.

Sincerely,

J. C. Deddens
Senior Vice President
River Bend Nuclear Group

Handwritten initials
JCD/JEB/LJE/ELD/DNL/CWL/ch

Attachment

cc: Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

NRC Resident Inspector
Post Office Box 1051
St. Francisville, LA 70775

Mr. John E. Dale
Nuclear Services Manager
General Electric Company
4324 South Sherwood Forest Boulevard
Baton Rouge, LA 70816

Handwritten initials
IE19
11

ATTACHMENT

Gulf States Utilities Company
River Bend Station - Unit 1
Report of a Defect Per 10CFR21
General Electric Type CR 2940 Control Switch

1. Name and address of individual(s) informing the NRC.

Written notification is provided by this report from Mr. J. C. Deddens, Senior Vice President, Gulf States Utilities Company.

Address: Gulf States Utilities
Post Office Box 220
St. Francisville, LA 70775

2. Identification of the facility, the activity, or the Basic Component supplied for the facility or activity which fails to comply or contains a Defect.

The defect was found in a control switch used in the "D" reactor protection system (RPS) trip channel at River Bend Station - Unit 1.

3. Identification of the firm constructing or supplying the Basic Component which fails to comply or contains a Defect.

The control switch (Type CR 2940 Part No. 145C3040P022) was supplied by General Electric Company.

4. Nature of the Defect or failure to comply and the safety hazard which is created by the Defect or failure to comply.

A General Electric Type CR2940 control switch, part No. 145C3040P022 was found with the key slot of the switch operator indicating normal (mid) position. When in the normal position, contacts 3 and 4 are designed to be maintained in the closed position. Contrary to this requirement, contacts 3 and 4 were found to be open. This condition was found in the "D" reactor protection system (RPS) trip channel. The condition of the switch contacts caused a reactor scram while testing the "C" RPS trip channel.

In addition to the original condition, twenty-three spare switches of the same type were tested. The test found that the switch is capable of failing such that the key may be removed prior to contacts 3 and 4 closing in the normal position. Eight failures of this type were identified from this test.

Control switches having part No. 145C3040P022 are installed in twenty-four safety related applications. The switches are installed in the reactor protection system (RPS) and the automatic depressurization

system (ADS). Failure of the switches in RPS would place the system in a conservative state. However, ADS utilizes contacts 3 and 4 in the control logic needed for actuation of the pressure relief and low-low set modes for the safety relief valves (SRVs). A failure of contacts 3 and 4 to close would prevent division II SRV pressure relief and low-low set logic from performing its safety related function.

5. The date on which the information of the Defect or failure to comply was obtained.

The initial condition was found on September 30, 1989. Evaluation of the condition per 10CFR21 determined the condition to be reportable on October 20, 1989.

6. In the case of a Basic Component which contains a defect or fails to comply, the number and location of all the components in use at, supplied for, or being supplied for one or more facilities or activities subject to the regulations of 10CFR21.

Control switches having part No. 145C3040P022 are installed in twenty-four safety related applications at River Bend Station. They are installed in the reactor protection system (RPS) and the automatic depressurization system (ADS).

7. The corrective action which has been, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

Contacts 3 and 4 for all of the subject switches installed in plant systems have been verified to be in the correct position for their intended application. A review was conducted of surveillance procedures that require operation of the subject control switches. With the exception of STP-051-0201, "RPS-Main Steam Line Isolation Valve Closure Monthly CHFUNCT" and STP-202-0602, "ADS Safety Relief Valve Operability Test", the applicable procedures contain sufficient controls for verifying proper positioning of the switch contacts. STP-051-0201 has been revised per TCN 89-1130 to include instructions for verifying proper switch contact position. STP-202-0602 will be revised prior to its next scheduled performance. In addition, two switches identified as being defective have been sent to General Electric for failure analysis. GSU is performing an independent failure analysis on the defective switches. GSU will also notify General Electric Company by copy of this letter.

8. Any advice related to the Defect or failure to comply about the facility, activity, or Basic Component that has been, is being, or will be given to purchasers or licensees.

Not applicable.