



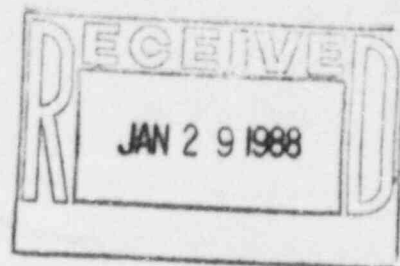
GULF STATES UTILITIES COMPANY

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE LOUISIANA 70775

AREA CODE 504 635-6094 346-8651

January 19, 1988
RBG- 27313
File Nos. G9.5, G9.25.1.2

Regional Administrator
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 safety-related Limitorque valve operators at River Bend Station. Initial notification of this defect was provided by telephone on January 14, 1988 to Mr. Glen Madsen of the NRC-Region IV from Mr. Rick J. King of GSU.

The attached report provides the information required by 10CFR21.21.

Sincerely,

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

JCD/JRB/ERG/RJK/JRH/DNL/ch

Attachment

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

NRC Resident Inspector
P.O. Box 1051
St. Francisville, LA 70775

Mr. Pat McQuillian
Limitorque Corporation
P.O. Box 11318
Lynchburg, VA 24506-1318

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ATTACHMENT

Gulf States Utilities Company River Bend Station - Unit 1

Report of a Defect Per 10CFR21.21

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.

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 within the United States which fails to comply or contains a defect.

The defect was found in five safety-related valve operators at River Bend Station - Unit 1. The valves which were found to contain the defect were three main steam shutoff valves (Mark Nos. 1B21*MOVFO98A, B,C) and two feedwater isolation valves (Mark Nos. 1B21*MOVFO65A and 1FWS*MOV7A).

3. Identification of the firm constructing or supplying the basic component which fails to comply or contains a defect.

The wire lugs were contained in valve operators supplied during initial construction of River Bend Station by Limitorque Corporation.

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

During functional testing of main steam shutoff valve, 1B21*MOVFO98B, the valve failed to fully close. The motor operator experienced a high current surge and tripped its motor overload heater. During investigation, two motor leads were found burned and separated from the wire lugs. The third lug was easily pulled from the wire lead after removing heat shrink insulation. The lugs were found to be oversized for the motor lead conductors. Also, while performing maintenance on feedwater isolation valve, 1FWS*MOV7A, a lug on one motor lead was found to be oversized for the conductor and not crimped.

The lugs were marked "T&B Navy 23-30 E-6" and were sized for use with a #5-6 AWG conductor. The motor leads were #10 stranded conductor. Further investigation found that both valves used Limitorque SMB-4 operators with terminal blocks that had one-quarter inch diameter terminal screws. The lugs were the correct size for the one-quarter

inch screw, but not the correct size for the conductor. This is the only size of Limitorque operator at RBS that uses a quarter-inch terminal screw.

All safety related SMB-4 operators were inspected to determine lug size. Of a total of ten operators in safety related service, five were found with oversized lugs and were deemed to be unreliable although they passed surveillance requirements. The lugs were repaired by replacing them with correctly sized lugs.

The lugs could potentially cause the valves to fail to operate when required, as was the case during the testing of 1B21*MOVFO98B, a main steam shutoff valve used in conjunction with main steam isolation valve - positive leakage control system (MSIV-PLCS) to limit leakage from the main steam lines to the environment following an accident. Failure of these valves to close would cause the outboard division of MSIV-PLCS to be inoperable. The feedwater isolation valves are used to isolate one feedwater inlet line to the reactor vessel. These valves, along with the penetration valve leakage control system (PVLCS), are used to limit leakage from the feedwater line following an accident. The potential failure of these valves to close would cause PVLCS to be inoperable for one feedwater line. If these events occurred following a loss of coolant accident, leakage control systems would not function properly, potentially leading to radioactive releases to the environment.

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

The initial condition was found on December 7, 1987 as reported in Condition Report CR 87-1640. Subsequent evaluation determined the condition to be reportable per 10CFR21 on January 14, 1988.

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.

A total of ten Limitorque SMB-4 operators are used in safety related applications at River Bend Station. The function of those valves containing the defect is given in Sections 2 and 4 above.

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.

GSU has replaced the defective lugs with correctly sized lugs. This work was performed by Maintenance Work Orders 118783, 113618, and 111336. This corrective action was completed on December 12, 1987. In addition, receipt inspection of Limitorque motor operators is being revised to include inspection of lug size on motor leads to prevent

reoccurrence of this condition. Revision of procedures controlling this activity will be completed by February 29, 1988.

GSU believes the condition is only applicable to SMB-4 operators. However, due to potential generic concerns with applicability of this condition to other size Limitorque motor operators, GSU will also inspect a sample of other operator sizes. This sampling program will be performed per MIL-STD-105D and will be completed prior to start up following the second refueling outage.

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.