



**GULF STATES UTILITIES COMPANY**

POST OFFICE BOX 2951 • BEAUMONT, TEXAS 77704

AREA CODE 713 838-6631

November 12, 1984

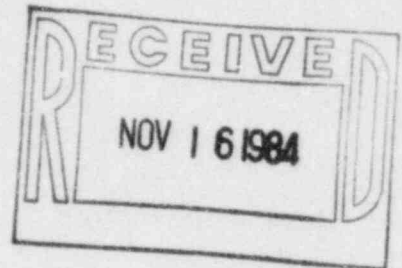
RBG-19406

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-205



On October 11, 1984, GSU notified Region IV by telephone that it had determined DR-205 to be reportable under 10CFR50.55(e). This deficiency concerns the lugs on motor leads of motor-operated valves supplied by Limitorque. The attachment to this letter is GSU's final 30-day written report pursuant to 10CFR50.55(e) with regard to this deficiency.

Sincerely,

*J. A. England*

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

JEB/PJD/lp

Attachment

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

NRC Resident Inspector-Site  
INPO

8411280572 841112  
PDR ADDCK 05000458  
S FDR

IE-2711

ATTACHMENT

November 12, 1984  
RBG-19406

DR-205 Lugs on Motor Leads of Motor-operated  
Valves Supplied by Limitorque

Background and Description of the Problem

During the replacement of terminal blocks broken during operator installation checkout on motor-operated valves 1SWP\*MOV74A and 1SWP\*MOV74B, it was discovered that the lugs on motor leads T1, T2, and T3 had been improperly installed by the motor operator supplier. This deficiency was documented on Nonconformance and Disposition Report (N&D) No. 5866. The following two conditions were identified on the N&D:

1. The lug crimp was not sufficiently tight, allowing the lug to be pulled off by hand with little effort.
2. The wire strands did not extend through the ring tongue end as required.

Motor leads T1, T2, and T3 are the power supply to the motor as shown on Limitorque Drawing No. 15-477-4071-3 and SWEC Drawing File No. 0228.212-047-095C. In addition to the referenced N&D, RQAP No. RB1-E-082 had been issued to further document this nonconformance.

In addition to the condition described above, the following is a listing of other N&Ds and valve mark numbers which have experienced loose terminal lugs.

<u>N&amp;D</u>	<u>Valve No.</u>
6579	1HVK*MOV-20A
*7446	1HVK*MOV-20A
6596	1CNS*MOV-106
*Superseded N&D No. 6579	1CNS*MOV-106

### Safety Implication

It has been determined that vibration during normal plant operation or a seismic event could cause a loose lug to separate from the motor lead. This would cause a loss of power to one phase with increased current in the remaining two phases. The overcurrent condition would cause a motor overload condition followed by a deenergization of the motor. Valves 1SWP\*MOV74A and 1SWP\*MOV74B are normally open valves which remain open on initiation of standby service water to maintain a flow of cooling water to auxiliary building unit cooler 1HVR\*UCS. This unit cooler receives flow from each branch of the service water system, providing cooling to the high-pressure core spray pumproom. However, one division of the standby service water system would provide adequate cooling. Should any problem develop in either division of the standby service water system following standby service water system initiation, these valves must remain operable so that the malfunctioning division of the standby service water system can be taken out of service. If a pipe break should occur in combination with a loss of either valve, a resultant loss of water from the standby service water cooling tower basin would occur. This would potentially cause a loss of cooling to the residual heat removal heat exchanger, among other safety-related equipment, causing a loss of cooling capacity to the reactor core.

### Corrective Action

Limitorque Corporation (Limitorque) was notified of the problem by telex on July 10, 1984. This notification included a request to provide information relative to the action being taken by Limitorque to prevent recurrence of the problem. Limitorque's response dated August 15, 1984, basically stated that a wiring standard was now being used which ensured conformance with Limitorque wiring requirements. Limitorque's response further stated that the operator in question was probably furnished prior to this standard. Based on the Limitorque response, a call was made to determine when the Limitorque standard was placed into use. Limitorque stated that it became effective around mid-1981, after most River Bend Station - Unit 1 operators had been furnished. This problem was corrected by replacing the terminal lugs furnished by the Limitorque with new lugs. Directions to complete this replacement were given in N&D No. 5866. In order to prevent recurrence of this type of problem, a comprehensive checklist for Limitorque motor operators was issued by SWEC as a response to E&DCR No. P-12,941A. A check will be made of the actuators using SWEC Procedure QAD 7.11 as a basis for the inspection.