



**GULF STATES UTILITIES COMPANY**

POST OFFICE BOX 2951 • BEAUMONT, TEXAS 77704

AREA CODE 713 838-6631

July 9, 1984

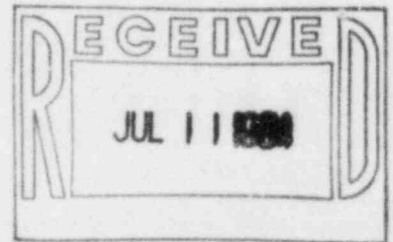
RBG-18171

File Nos. G9.5, G9.25.1.1

Mr. John T. Collins, 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. Collins:

River Bend Station Unit 1  
Docket No. 50-458  
Final Report/DR-152



On June 7, 1984, GSU notified Region IV by telephone it had determined DR-152 concerning wire terminations in 480 volt standby motor control centers supplied by Gould Brown-Boveri to be reportable under 10CFR 50.55(e). The attachment to this letter is GSU's final 30-day written report pursuant to 10CFR 50.55(e) with regard to this deficiency.

Sincerely,

*J E Booker*

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

*M*  
JEB/VJD/lp

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

NRC Resident Inspector-Site

INPO

8407200013 840709  
PDR ADOCK 05000458  
S PDR

11  
1127

## ATTACHMENT

July 9, 1984

RBG-18171

Page 1

### DR-152/Wire Termination in 480 Volt Standby Motor Control Centers Supplied by Gould Brown-Boveri

#### Background and Description of the Problem

This deficiency concerns nonconforming control wire terminations on the 480-V standby motor control centers (MCCs) supplied by Gould Brown-Boveri. These conditions were identified during inspections for field modifications and equipment release to the Preliminary Test Organization by Field Quality Control (FQC). FQC identified several cases of vendor-supplied control wire terminations that did not conform to the Gould acceptance criteria.

Gould was informed of the conditions identified and was requested to investigate the probable cause of the nonconformance, evaluate the adequacy of the acceptance criteria, and recommend corrective action. Gould's Quality Assurance (QA) engineer authorized the Site Engineering Group to remove samples of the nonconforming terminations for further evaluation by Gould plant personnel.

It was determined that the most probable cause for the nonconforming conditions was a combination of operator error and inspection error. The operators did not properly crimp the terminal lugs with the correct size crimping tool, and the resultant inconsistencies were not identified during Gould's visual inspection.

#### Safety Implications

The mechanical integrity of the control wire terminal lug nonconformance is suspect because the MCCs were seismically qualified with properly applied terminal lugs. There is no evidence to suggest that improperly applied terminal lugs could survive or function after a design basis seismic event.

Among the improperly terminated wire lugs identified in Nonconformance and Disposition Report (N&D) No 4609 were those which are part of the circuitry for LCPM\*MOV2B, the drywell hydrogen mixing inlet outboard isolation valve. The control power transformer installed in the MCC for the circuit was found to have a deficient connection, which were it to have failed, would have prevented the proper functioning of the valve. This could have reduced the effectiveness of the hydrogen mixing system and jeopardized the safe operation of the hydrogen recombiners.

Corrective Action

Gould provided Stone & Webster Engineering Corporation (SWEC) with the results of its evaluation and recommendations for any changes necessary. A portion of the recommendations included field inspection criteria for wire terminal crimping and termination. Subsequently, SWEC initiated N&D No. 4609 for all Class 1E MCCs purchased by the applicable specification (e.g., Specification No. 242.562) to identify and correct all nonconforming terminations. Rework has been completed on all Class 1E MCCs for the identified condition, and N&D No. 4609 was closed January 24, 1984.

Gould has indicated to SWEC that its quality control (QC) personnel will be trained to be aware of this problem and that Gould has removed the suspect crimping tool from service to prevent recurrence of the nonconforming terminations.