



GULF STATES UTILITIES COMPANY

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U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Gentlemen:

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

Enclosed is Gulf States Utilities Company's Special Report concerning two valid failures of the Division III diesel generator at River Bend Station. This report is submitted pursuant to River Bend Station Technical Specification 4.8.1.1.3 and 6.9.2.

Sincerely,

W. H. Odell
Manager-Oversight
River Bend Nuclear Group

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SPECIAL REPORT

At 0117 on 11/09/90 with the plant in Operational Condition 5 (Refueling), during the performance of surveillance test procedure STP-309-0603, "Division III 18 Month ECCS Test", the Division III high pressure core spray (HPCS) diesel generator (DG) failed to energize the emergency busses within 10 seconds following the DG start. This was due to the failure of the output breaker to close within the required 10 second time period.

Troubleshooting was performed and an acceptable time of 9.9 seconds was obtained during a maintenance retest start. However, during a subsequent portion of STP-309-0603 at approximately 1750 on 11/09/90, the DG once again failed to meet its requirement of output breaker closure within 10 seconds. Each of the failures constitutes a valid failure in accordance with Regulatory Guide 1.108 position C.2.e.2. This Special Report is submitted pursuant to River Bend Technical Specifications 4.8.1.1.3 and 6.9.2 to document both valid failures.

INVESTIGATION

At 0117 on 11/09/90, in accordance with the regularly scheduled "Division III 18 Month ECCS Test" (STP-309-0603), the Division III DG was given an emergency start signal. The DG did not satisfy Technical Specification 4.8.1.1.2.f.6.b because the output breaker failed to automatically close within the required 10 seconds. The measured closure time was 10.1 seconds.

The two permissives which the DG must satisfy to close the output breaker are speed (870 RPM) and 90% of rated voltage. The setpoints of the tachometer assembly, voltage sensing relay, field flash relay and starting motor jog delay relay were checked and found to be within tolerances. However, slight recalibration was performed to optimize the DG response to allow the permissives to be achieved sooner. A retest was performed during troubleshooting under a maintenance work order and a satisfactory time of 9.9 seconds was achieved.

At approximately 1750 on 11/09/90 under a subsequent section of STP-309-0603, an emergency start signal was again given to the DG. Again the DG output breaker did not close within 10 seconds, failing to satisfy Technical Specification 4.8.1.1.2.f.4.b. The measured closure time was 10.1 seconds.

CAUSE OF FAILURE AND CORRECTIVE ACTION

Review of the emergency response information system (ERIS) computer data, revealed that the speed permissive was being satisfied at approximately 9.5 seconds, but the voltage permissive was preventing breaker closure until 10.1 seconds. A modification request (MR 90-0142) was initiated and implemented to change the field flash time delay from 4.5 seconds to 4.0 seconds. This change allowed the generator voltage to reach its permissive sooner. A retest was performed and a satisfactory time of 9.62 seconds was achieved.

LENGTH OF TIME UNAVAILABLE

At the time of these valid failures, the Division III DG was inoperable for scheduled maintenance and testing and was not required to be operable.

CURRENT SURVEILLANCE INTERVAL

Division I: Monthly
Division II: Monthly
Division III: Weekly

TEST INTERVAL CONFORMS TO TECHNICAL SPECIFICATIONS:

Yes

FAILURES FOR DIVISION I

 1 Valid failures in the last 20 valid tests

 1 Valid failures in the last 100 valid tests

FAILURES FOR DIVISION II

 0 Valid failures to in the last 20 valid tests

 3 Valid failures in the last 100 valid tests

FAILURES FOR DIVISION III

 2 Valid failures in the last 20 valid tests

 4 Valid failures in the last 100 valid tests

Number of valid failures in previous 100 valid tests of all Diesel Generators
at River Bend Station: 4