

# MISSISSIPPI POWER & LIGHT COMPANY Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

June 15, 1982

JAMES P. McGAUGHY, JR. ASSISTANT VICE PRESIDENT

Office of Inspection & Enforcement U. S. Nuclear Regulatory Commission Region II 101 Marietta Street, N.W. Suite 3100 Atlanta, Georgia 30303

Attention: Mr. J. P. O'Reilly, Regional Administrator

Dear Mr. O'Reilly:

SUBJECT: Grand Gulf Nuclear Station

Units 1 and 2

Docket Nos. 50-416/417 File 0260/15525/15526

PRD-82/15, Interim Report No. 2, Relay Failure Division I

Diesel Generator AECM-82/268

Reference: AECM-82/189, 4/26/82

On March 26, 1982, Mississippi Power & Light Company notified Mr. R. Butcher, of your office, of a Potentially Reportable Deficiency (PRD) at the Grand Gulf Nuclear Station (GGNS) construction site. The deficiency concerns the failure of a switching relay in the Unit 1 Division I Standby Diesel Generator.

This deficiency has been evaluated and has been determined to be reportable under the provisions of 10CFR50.55(e) and 10CFR21.

This deficiency is not expected to impact fuel load for the following reasons:

- The failed relay has been replaced satisfactorily. One additional spare relay is available in the event of another failure. The relays presently in service are expected to perform satisfactorily until well past Fuel Load, even with their increased operating stress.
- The voltage regulator selector switch is required to be in the "Automatic" position during normal operation. Even if one of the relays did fail, there would be no effect on the circuitry or operation of the diesel with the switch in "Automatic".
- 3. A design change, which will provide permanent correction of the problem, has been developed and is being routed through the approval circuit.

206210586 820615 DR ADOCK 05000416 PDR

IE27

ACP:dr ATTACHMENT

cc: Mr. N. L. Stampley Mr. R. B. McGehee Mr. T. B. Conner

> Mr. Richard C. DeYoung, Director Office of Inspection & Enforcement U. S. Nuclear Regulatory Commission Washington, D.C. 20555

Mr. G. B. Taylor South Miss. Electric Power Association P. O. Box 1589 Hattiesburg, MS 39401

# INTERIM REPORT NO. 2 FOR PRD-82/15

1. Name and address of the individual ... informing the commission:

J. P. McGaughy, Jr.
Assistant Vice-President, Nuclear Production
P.O. Box 1640
Jackson, Mississippi 39205

Notification of Part 21 applicability made to Mr. J. P. O'Reilly, NRC, Region II by letter AECM-82/268, June 15, 1982.

2. Identification of the facility ... which ... contains a deficiency:

Grand Gulf Nuclear Station (GGNS) Units 1 and 2 Port Gibson, Mississippi 39150

3. Identification of the firm ... supplying the basic component which ... contains a deficiency:

The Standby Diesel Generators supplied to Grand Gulf by Bechtel Power Corporation were purchased from Transamerica Delaval, Inc., Oakland, California.

4. Nature of the deficiency ... and the safety hazard which ... could be created by such a deficiency ...:

# A. Description of the Deficiency

During testing, the Unit 1 Division I Standby Diesel Generator started in response to the simulated LOCA signal and reached rated speed but failed to reach rated voltage. It was found that the relay which transfers voltage control from the manual voltage regulator to the automatic voltage regulator was inoperative. As a result, the voltage output of the generator did not come up to rated voltage after the diesel had started and come up to rated speed.

#### B. Analysis of Safety Implications

In the event that testing had not detected this failure, and the Division I diesel had remained in manual control and been required to start and carry all of its normal loads, the voltage could have been so low that the diesel output breaker would not have closed due to a low output voltage interlock. This would result in the loss of two ECCS pumps. The RHR "A" pump and the LPCS pump, in the case of the Division I diesel.

5. The date on which the information of such deficiency ... was obtained.

Mississippi Power and Light received information of the deficiency on March 25, 1982. We reported the deficiency to Mr. Ross Butcher, of your office, as a Potentially Reportable Deficiency on March 26, 1982. Since that date MP&L has tiled one (1) Interim Report to inform the Commission of the progress and status of this deficiency. An evaluation for Part 21 has been completed and the MP&L "Responsible Officer," Mr. J. P. McGaughy, Jr., will be notified when he returns to his office.

6. In the case of the basic component ... the number and location of all such components.

We do not have knowledge of the location of defective equipment located other than at GGNS.

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

### A. Corrective Actions Taken

The failed relay on the Unit 1 Division I diesel was replaced with another relay of the same design, and tested satisfactorily. The circuitry of the relays for both the Unit 1 and Unit 2 diesels will be modified, per DCP-82/3538, to remove voltage from the relays once the relays are latched in either an open or closed position.

Our Architect/Engineer and their vendor are still investigating the cause of the design error.

## B. Responsible Individual

C. K. McCoy Nuclear Plant Manager Mississippi Power & Light Co. Responsible for Unit 1 T. H. Cloninger Unit 2 Project Manager Mississippi Power & Light Co. Responsible for Unit 2

# C. Length of Time to Complete Actions

The circuitry modifications for the Unit 1 diesels will be completed by July 1, 1982, and the corrective actions for Unit 2 will be completed prior to Fuel Load for that unit. Our Architect/Engineer is to respond by June 28, 1982, on the cause of the apparent improper design.

8. Any advice related to the deficiency ... that has been, is being, or will be given to purchasers or licensees:

As the deficiency did not originate with MP&L, we have no advice to offer.