



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

USNRC REGION I  
ATLANTA OFFICE  
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JAMES P. McGAUGHY, JR.  
VICE PRESIDENT

April 18, 1983

Office of Inspection & Enforcement  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, N.W.  
Suite 2900  
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 No. 50-416/417  
License No. NPF-13  
File 0260/15525/15526/16694.4  
PRD-83/02, Final Report,  
Liberty Control Telephone  
Relays  
AECM-83/0245

Reference: AECM-83/0196, 3/18/83

On February 17, 1983, 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 Liberty Control Telephone Relays.

As previously reported, MP&L has evaluated this deficiency and determined that it is not reportable for Unit 1. Also, a Final Report was to be delayed until MP&L Project Engineering had determined whether or not the rationale supplied by our Architect/Engineer substantiates that there would be no impact on safety for Unit 2. MP&L has determined that this deficiency is not reportable for Unit 2.

Details are provided in our attached Final Report.

Yours truly,

ACP:dr  
ATTACHMENT  
cc: See page 2

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Mr. J. P. O'Reilly  
NRC

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cc: Mr. J. B. Richard  
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

FINAL REPORT FOR PRD-83/02I. Description of the Deficiency

On May 5, 1982, Mississippi Power & Light Company received GE Service Advice (SA) 721-PSM-167.1 concerning a possible defect with Liberty Control Company telephone relays that are used in General Electric Protective Relays. The Service Advice states that the defect involves a contact button separated from the contact arm of the relay on relays manufactured between July 1980 and February 1982.

This deficiency is not applicable to the NSSS scope of supply for either Unit 1 or Unit 2 in that none of the relays which GE supplied to Grand Gulf had any problems as described in the Service Advice letter.

This deficiency is not applicable to the Bechtel scope of supply for Unit 1 in that a field inspection, by MP&L Plant Staff, revealed no relays which fell within the specified time frame of the Service Advice. Therefore, the determination has been made that this deficiency is not reportable, for Unit 1, under the provisions of 10CFR50.55(e) or 10CFR21.

For the Unit 2 Bechtel scope of supply, an investigation/inspection was performed to determine if any of the relays, noted by the Service Advice, were used in safety-related equipment. Seven (7) relays were identified in safety-related applications. They are:

- (1) 25BA3 - Device 27/62 - Relay Type 12SAM11A22A
- (2) 25BA6 - Device 27/B - Relay Type 12NGV12B15A
- (3) 2H22 - P113 - Device 151GD - Relay Type 12SFC151A1A
- (4) 2H22 - P113 - Device 127DA - Relay Type 12NGV13B21A
- (5) 2H22 - P115 - Device 159 - Relay Type 12NGV23A2A
- (6) 2H22 - P115 - Device 151GD - Relay Type 12SFC151A1A
- (7) 21DA - Device 27B - Relay Type 12NGV18A2A

Our Architect/Engineer responded to each of the above relays with the following rationale.

For relays (1) and (2):

Relay 27/62 for bus 25BA3 has a Normally Open (N/O) contact which accuates auxiliary relay 27X during load center bus 25BA3 undervoltage. Relay 27X is used to trip bus loads during bus 25BA3 undervoltage. Therefore, failure of relay 27/62 will affect only load center 25BA3 of Division I power. Division II power is unaffected.

The same rationale applies to relay 27/B.

Since the design function of this relay is to trip on bus undervoltage, which would have to occur to initiate a challenge to the relay, the bus loads would not be available in any case.

For relays (3) and (6):

Relay 151GD is used as a diesel generator ground fault detection relay. Designed operation of this relay, even during LOCA, is to trip the generator. Irrespective of the operation of the 151GD relay the diesel generator would be considered to be unavailable due to the ground fault condition. A relay failure would affect only one power division and would not decrease the designed availability of the diesel generator.

For relay (4):

This relay is installed but not used.

For relay (5):

This overvoltage relay only provides an alarm of an overvoltage condition at the diesel generator and does not have any control function.

And for relay (7):

The relay provides only an alarm of the undervoltage condition of 125V DC bus 21DA and has no control function.

For the Unit 2 Balance of Plant (BOP) - PGCC six (6) relays were identified. They are:

- (1) 2H13-P801 Device N41-M746 (460/G22) Relay Type 12CFVB11B1A
- (2) 2H13-P801 Device N41-M754 (459/481-1/G2) Relay Type 12STV11A1A
- (3) 2H13-P812 Device 2R12-M781 (563X-1/T21B) Relay Type 12NGA15U2
- (4) 2H13-P812 Device 2R12-M782 (563X-2/T21B) Relay Type 12NGA15U2
- (5) 2H13-P812 Device 2R11-M781 (563X-1/T21A) Relay Type 12NGA15U2
- (6) 2H13-P812 Device 2R11-M782 (563X-2/T21A) Relay Type 12NGA15U2

These six relays are non-class 1E and have no impact on plant safety.

## II. Analysis of Safety Implications

Our Architect/Engineer and MP&L Project Engineering have determined that any singular failure would not adversely affect the safe operation of the plant and that this deficiency is not reportable under the provisions of 10CFR50.55(e) for Unit 2.

III. Corrective Actions Taken

Our Constructor has determined that the corrective action will be to replace the nonconforming relays.

All corrective action will be completed by October 15, 1983.