



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

JAMES P. McGAUGHY, JR.
VICE PRESIDENT

April 18, 1983

83 APR 21 AID: 12
NRC REGIONAL OFFICE

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-83/01, Final Report, GE
HEA Relays
AECM-83/0244

Reference: AECM-83/0195, 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 GE HEA 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

8304260312 830418
PDR ADOCK 05000416
S PDR

CONFIDENTIAL COPY
TE 27

Mr. J. P. O'Reilly
NRC

AECM-83/0244
Page 2

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-83/01I. Description of the Deficiency

On August 31, 1981, Mississippi Power & Light Company received GE Service Advice (SA) 721-PSM-165.1 concerning a potential problem with GE HEA Relays which may fail to operate when the trip solenoid is energized. The Service Advice concluded that the affected relays were manufactured with malformed torsion springs during the period from May 1979 through December 1980.

This deficiency is not applicable to the NSSS scope of supply for either Unit 1 or Unit 2 in that none of the safety-related HEA Relays which GE supplied to Grand Gulf, were manufactured during the spring problem period.

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 GE HEA Relays which had been installed in safety-related applications. 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 HEA relays, noted by the Service Advice, were used in safety-related equipment. Two (2) relays were identified in safety-related applications. They are:

- (1) 25AA-Cubicle #1 - Device 186B-2-Relay Type 12HEA61C238
- (2) 26AB-Cubicle #1 - Device 186B-2-Relay Type 12HEA61C238

The G. E. Service Advice indicates those relays manufactured with malformed torsion springs will perform satisfactorily within the limits of applied control voltage, 80% to 112.5% of nominal. Our Architect/Engineer has determined that since the control voltage for these relays will be within this voltage range, these relays will perform as designed.

For the Unit 2 Balance of Plant (BOP) - PGCC there are no relays with this deficiency.

II. Analysis of Safety Implications

The function of relay 186B-2 is to trip and lockout the incoming 4.16KV breaker. Should this relay fail to operate, the overcurrent relaying and/or the time/overcurrent neutral relaying for the connected ESF transformer will trip the transformer breaker and the associated diesel generator will start and feed the bus loads. After the diesel generators have picked up the bus loads the operator can verify the availability of an alternate source of power and manually synchronize the bus to an alternate source of power from the available ESF transformers.

The design function of this relay is to trip the ESF bus during the fault condition which would have to occur to challenge the relay. Only one (1) ESF Division would be affected at a time.

Therefore, our Architect/Engineer and MP&L Project Engineering have determined that there would be no impact on plant safety 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 their corrective action will be to (1) test the relays per S. A. 721-PSM-165.1 and replace if necessary or (2) simply replace the relays.

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