



# MISSISSIPPI POWER & LIGHT COMPANY

*Helping Build Mississippi*

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

JAMES P. McGAUGHY, JR.  
ASSISTANT VICE PRESIDENT

February 19, 1982

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, Director

Dear Mr. O'Reilly:



SUBJECT: Grand Gulf Nuclear Station  
Units 1 and 2  
Docket Nos. 50-416/417  
File 0260/15525/15526  
PRD-81/39, Final Report,  
Remote Shutdown Panels  
AECM-82/66

References: AECM-81/418, 10/22/81  
AECM-82/07, 1/8/82

On September 22, 1981, Mississippi Power & Light Company notified Mr. P. A. Taylor, of your office, of a Potentially Reportable Deficiency (PRD) at the Grand Gulf Nuclear Station (GGNS) construction site. The deficiency concerns wiring terminations in the Remote Shutdown Panels supplied by the Reliance Electric Company.

We have completed our investigation and have determined that this deficiency is reportable under the provisions of 10CFR50.55(e) but not under 10CFR21 for Mississippi Power and Light. All details are included in our attached Final Report.

Yours truly,

J. P. McGaughy, Jr.

KDS:dr  
ATTACHMENT

See Page 2

8203080457 820219  
PDR ADOCK 05000416  
S PDR

OFFICIAL COPY

IE 27511

FINAL REPORT FOR PRD-81/39

I. Description of the Deficiency

An inspection of the wiring terminations in the Remote Shutdown Panels (1H22-P150 and 1H22-P151) detected numerous loose connections, improper wire crimps, and wire size to terminal lug size discrepancies.

The Remote Shutdown System provides controls for reactor systems needed to carry out the shutdown function from outside the Control Room and bring the reactor to a safe shutdown condition in an orderly manner. These reactor systems are the Reactor Core Isolation Cooling (RCIC), Residual Heat Removal (RHR) A & B, Standby Service Water (SSW) A & B, and the Nuclear Boiler (Safety-Relief Valves).

The deficiency is known to affect only Unit 1. Inspections will be performed to determine applicability to Unit 2. It does not apply to the NSSS vendor.

II. Analysis of Safety Implications

When the panels were originally inspected at the jobsite, it was noted that numerous discrepancies due to poor workmanship existed. The condition, at this time, was evaluated as not reportable.

However, due to the numerous inspections that were performed during the investigation, the condition of the terminations deteriorated. Some of the screws loosened further, wires were pulled loose from crimps, and some terminal points became broken.

When the poor workmanship was originally documented, steps were taken to rebuild the panels. This is presently being done. Therefore, MP&L has no way to determine what the "worst case" condition of the panels was, or to evaluate its reportability. Therefore, we have determined that this deficiency is reportable under 10CFR50.55(e)(iii), since an extensive evaluation would be required to establish the adequacy of the component to perform its intended safety function.

III. Corrective Actions Taken

All defective terminations will be remade according to our Constructor's field standards. Broken terminal blocks will be replaced and loose screws will be retightened. Work should be completed by March 15, 1982.

Since this is an isolated occurrence no actions to prevent recurrence are necessary. The Unit 2 remote shutdown panels will be inspected and reworked if necessary

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