MISSISSIPPI POWER & LIGHT COMPANY
Helping Build Mississippi
P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

April 19, 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-82/07, Final Report for
Unit 1, Interim Report #2
for Unit 2, Unqualified NAMCO
Limit Switches
AECM-82/172

On February 25, 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 unqualified NAMCO limit switches.

Bechtel Power Corporation and MP&L have both determined that this deficiency is a substantial safety hazard and meets the reporting requirements of 10CFR21 for both Bechtel and MP&L. Mr. F. S. Cantrell was notified by phone of this determination on March 23, 1982.

Our original notification stated that Models EA740 and EA180 may not be qualified for their intended safety functions. However, only the model EA740 switches, none of the model EA180 switches, have been identified as being safety-related in Unit 1. Investigations are continuing by MP&L to determine applicability to Unit 2.

Details are included in our attached Report. We expect to submit our Final Report for Unit 2 after resumption of Unit 2 activities.

Yours truly,

J. P. McGaughy, Jr.

KDS:dr
ATTACHMENT

cc: See page 2

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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

FINAL REPORT FOR PRD-82/07 UNIT 1
INTERIM REPORT NO. 2 FOR PRD-82/07 UNIT 2

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. F. S. Cantrell, NRC, Region II by phone on March 23, 1982.

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

Grand Gulf Nuclear Station (GGNS) Unit 1
Port Gibson, Mississippi 39150

Investigations are underway to determine if this deficiency applies to Unit 2.

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

Supplied to Grand Gulf by Bechtel Power Corporation, Gaithersburg, Maryland.

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

A. Description of the Deficiency

According to NAMCO's test report "Qualification of NAMCO Control Limit Switches Model EA740", Revision 1, 2/22/79 Model EA740 and EA180 limit switches were qualified for nuclear containment service. However, it was later discovered that the applicability of the report depends upon the materials used in construction of the limit switches. The materials can be identified by certain manufacturing codes stamped on each limit switch. The absence of the proper code on any limit switch indicates that it is unqualified since the materials used in the construction of the switch cannot be identified.

Uncoded switches at GGNS on Unit 1 are known to be on valves in the following systems: Suppression Pool Cleanup (P60), Domestic Water (P66), Floor and Equipment Drains (P45), Residual Heat Removal (E12), Reactor Water Cleanup Filter/Demineralizer (G36), Containment Cooling (M41), Condensate/Refueling Water (P11), Standby Liquid Control (C41), and Fuel Pool Cooling and Cleanup (G41).

During the investigation of NUREG-0588 requirements, EA740 limit switches on Main Steam Isolation Valves in the Nuclear Boiler System (B12) were also determined to be unqualified because of the manufacturing date. These have previously been reported by MP&L under PRD-81/42.

Applicability of the deficiency to Unit 2 is currently under investigation.

B. Analysis of Safety Implications

The majority of the valves identified are used for containment and auxiliary building isolation. The limit switches are used to indicate the position (open/close) of safety-related valves. Failure of the limit switches during degraded plant conditions could cause erroneous indications of the status of the building isolation. This could further degrade plant conditions if inappropriate corrective actions were taken utilizing the erroneous indications. This is a substantial safety hazard and reportable under the provisions of 10CFR21.

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

Mississippi Power and Light received information of the deficiency on February 24, 1982. We reported the deficiency to Mr. R. Butcher, of your office, as a Potentially Reportable Deficiency under 10CFR50.55(e) on that date. We notified Mr. F. Cantrell of your office on March 23, 1982, that this deficiency was also reportable under the provisions of 10CFR21 for Bechtel Power Corporation and Mississippi Power & Light. The MP&L "Responsible Officer," Mr. J. P. McGaughy, Jr., has been notified of the Part 21 reporting requirement.

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

A total of ninety three (93) NAMCO type EA740 limit switches that perform a safety function have been identified on Unit 1 in nine (9) systems. Two (2) type EA180 limit switches have been identified on Unit 1 but these do not perform a safety function. Investigations are currently underway to locate any additional affected switches on Unit 2.

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

All unqualified switches that perform a safety related function will be replaced with correct switches that have the necessary qualifications for nuclear service.

B. Responsible Individual

G. B. Rogers, Jr.
Site Manager
Mississippi Power and Light Company

C. Length of Time to Complete Actions

The NAMCO limit switches that are unqualified will be replaced with replacement switches with all certifications. This will be completed prior to low power ascension testing for Unit 1.

Corrective actions for Unit 2 will be tracked by our Constructor's MCAR 132.

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.