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

JAMES P. McGAUGHY, JR.
ASSISTANT VICE PRESIDENT

January 13, 1983

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 No. 50-416/417
License No. NPF-13
File 0260/15525/15526
PRD-82/37, Final Report,
Delaval: Failure of Qualified
Cables to Pass IEEE Flame
Test
AECM-83/020

On December 14, 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 qualified cable on the Transamerica Delaval Division I and II diesel generators and panels which failed the IEEE 383 flame test.

MP&L has evaluated this deficiency and determined that it is reportable under the provisions of 10CFR21 for Unit 1 and 10CFR50.55(e) for Unit 2. All details are provided in our attached Final Report.

Yours truly,

For J. P. McGaughy, Jr.

ACP:dr
ATTACHMENT

cc: See page 2

IE 27

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-82/37

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

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

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

   NOTE: 10CFR21 is not applicable for Unit 2 as the diesel generators have not been turned over to MP&L.

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

   The Diesel Generators were manufactured by Transamerica Delaval, Inc., Oakland, California and 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

   On November 8, 1982, Mississippi Power & Light Company received a letter from Transamerica Delaval, Inc., notifying us of a potential problem concerning the Division I and II diesel generators supplied to Grand Gulf.

   The deficiency involves commercial grade cable that was used for 1E cable in certain circuits on the Division I and II diesel generators supplied by Transamerica Delaval, Inc. Transamerica Delaval has recommended replacement of the cable due to the cable recently failing the IEEE 383 flame test. The affected cable is the shielded cable from the terminal block to the Airpax tachometer relay in the engine control panel, the shielded cable from the Airpax magnetic pickups to the junction boxes on the side of the engine and the multiconductor cable from the engine side mounted junction box to the Woodward governor actuator.

B. Analysis of Safety Implications

Loss of the shielded cables associated with either the Airpax tachometer relay or the Airpax magnetic pickups would result in the loss of the 425 RPM "Ready-to-Load" signal to the diesel generator output breaker preventing the automatic closure of the breaker and loading of the generator. The design function of the system would not be accomplished and in the unlikely event of a loss of coolant accident concurrent with a design basis fire could create a substantial safety hazard.

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

Mississippi Power and Light received information of the potential problem from Transamerica Delaval, Inc. on November 8, 1982. We reported the potential deficiency to Mr. Butcher, of your office, on December 14, 1982. An evaluation for Part 21 applicability has been completed for Unit 1.

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 other diesel generators besides the four located at Grand Gulf. (Two for each Unit).

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

MP&L has initiated a design change, DCP-82/3196, for the Unit 1 Division I and II diesels to implement the manufacturer's recommended corrective action. This will involve replacing the currently installed commercial grade shielded cable with qualified cable.

The corrective actions for the Unit 1, Division I and II diesels are expected to be completed prior to the next criticality.

Our Architect/Engineer has been notified to initiate the appropriate corrective actions for the Unit 2, Division I and II diesel generators.

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

Corrective actions for Unit 1 will be completed prior to the next criticality.

Corrective actions for Unit 2 will be completed prior to turnover to MP&L.

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.