



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

October 18, 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 No. 50-416
License No. NPF-13
File 0260/15525/15526
PRD-82/29, Final Report, Dikkers
SRV Actuator Corrosion
AECM-82/479

Reference: AECM-82/283, 6/21/82
AECM-82/359, 8/20/82

On May 21, 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 extensive internal corrosion of Dikkers safety relief valve actuators.

As previously reported, MP&L has determined that this deficiency is reportable under the provisions of 10CFR50.55(e). We have also determined that it is reportable under the provisions of 10CFR21.

Details of the resolution of this deficiency are provided in our attached Final Report. This report was originally due on October 15, 1982, but a one day extension was granted on that day by Mr. R. Butcher.

Yours truly,

KDS:dr
ATTACHMENT

cc: See page 2

82 OCT 21 9:55
USNRC REGION 2
ATLANTA, GEORGIA

8210260513 821018
PDR ADOCK 05000416
S PDR

OFFICIAL COPY

IE 27

Mr. J. P. O'Reilly
NRC

AECM-82/479
Page 2

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-82/29

1. Name and address of the individual informing the commission:

J. P. McGaughey, Jr.
Assistant Vice-President, Nuclear Production
P.O. Box 1640
Jackson, Mississippi 39205

Notification of Part 21 applicability made to Mr. R. Butcher, NRC Region II, by phone on October 13, 1982.

2. Identification of the facility which contains a deficiency:

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

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

Supplied to Grand Gulf by General Electric Company, San Jose, California. It is indeterminate if the actuators and valves were defective when they were supplied or if the corrosion occurred after receipt by MP&L.

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

A. Description of the Deficiency

Extensive internal corrosion was discovered upon disassembly of a Dickers main steam line safety relief valve (SRV) during routine maintenance. Six (6) of twenty (20) installed actuators were found to be internally corroded upon subsequent inspection. In addition, corrosion was found in both Unit 1 spare actuators (actuators only, not complete SRV assemblies), actuators on six (6) of eight (8) spare SRVs for Unit 1 and one (1) of eight (8) Unit 2 SRVs inspected. Corrosion was present on the springs, studs, piston plate, top and bottom cover plates, and the spring retainer cover. All of the corroded parts were galvanized steel.

B. Analysis of Safety Implications

The relief function of the SRV's is affected. The SRV's are a portion of the nuclear boiler system and eight (8) of them form a portion of the Automatic Depressurization System (ADS). The Low Pressure Core Spray (LPCS) and Low Pressure Coolant Injection (LPCI) Emergency Core Cooling Systems depend upon the ADS for depressurization prior to initiation. A failure of the SRV actuators could result in insufficient emergency cooling under severe transient conditions and affect core integrity.

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

Mississippi Power and Light received information of the deficiency on May 21, 1982. We reported the deficiency to Mr. R. Butcher, of your office, as a Potentially Reportable Deficiency on that date. Since then MP&L has filed two (2) Interim Reports to inform the Commission of the progress and status of the evaluation of this deficiency. An evaluation for Part 21 has been completed and the MP&L "Responsible Officer," Mr. J. P. McGaughy, Jr., will be notified when he returns to his office.

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

There are a total of fifty (50) actuators for the Dikkers safety relief valves on Unit 1 and Unit 2 at Grand Gulf. Thirty-eight (38) of these valves have been inspected to date. Of these, fifteen (15) have been found corroded. An additional twelve (12) Unit 2 SRV actuators have not been inspected. These will be inspected prior to being installed in 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

The six (6) installed Unit 1 actuators were replaced with Unit 1 and Unit 2 spare actuators.

The fifteen (15) actuators that were corroded have been cleaned, refurbished, tested, and returned to their original design condition.

The Unit 2 actuators that have not been inspected will be inspected prior to installation in Unit 2.

B. Responsible Individual

Unit 1	Unit 2
C. K. McCoy	T. H. Cloninger
Nuclear Plant Manager	Unit 2 Project Manager
Mississippi Power & Light Co.	Mississippi Power & Light Co.

C. Length of Time to Complete Actions

Mississippi Power & Light Company was first aware of the deficiency on May 21, 1982. All corrective actions for Unit 1 have been completed.

The remaining twelve (12) Unit 2 SRV actuators will be inspected prior to installation.

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.