



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

19 84: 18

March 14, 1984

JAMES P. McGAUGHY, JR.
VICE PRESIDENT

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:

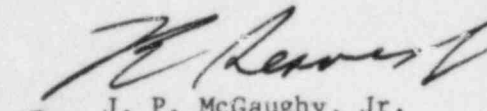
SUBJECT: Grand Gulf Nuclear Station
Units 1 and 2
Docket No. 50-416/417
License No. NPF-13
File 0260/15525/15526/16694.4
PRD-84/02, Final Report,
Anti-Rotational Setscrews in
Anchor Darling Glove Valves
AECM-84/0159

On February 13, 1984, Mississippi Power & Light Company notified Mr. R. Carroll, of your office, of a Reportable Deficiency at the Grand Gulf Nuclear Station (GCNS) Unit 2 Construction Site. The deficiency concerns the loosening of the anti-rotational setscrew in Anchor Darling glove valves.

MP&L has evaluated this deficiency and has determined that it is reportable under the provisions of 10CFR21 for Unit 1 and 10CFR50.55(e) for Unit 2.

Details are included in our attached Final Report.

Yours truly,


For J. P. McGaughy, Jr.

KDS
KDS:dr
ATTACHMENT

cc: See page 2

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Mr. J. P. O'Reilly
NRC

AECM-84/0159
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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 FCR PRD-84/02

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

J. P. McGaughy, Jr.
Vice-President, Nuclear
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

This deficiency is reportable under 10CFR50.55(e) for Unit 2. It is not reportable under 10CFR21 for Unit 2 since the affected equipment has not been received by MP&L.

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

General Electric Company
Nuclear Energy Business Operation
San Jose, California

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

A. Description of the Deficiency

The three affected valves identified are as follows:

HPCS test return to Condensate Storage Tank (CST); Valves
E22-F010, -F011

HPCS test return to Suppression Pool; Valve E22-F023

The valves in both Unit 1 and Unit 2 are affected.

The valve stem rotation is prevented by a key held in place by a stem collar. The setscrew holding the anti-rotational stem collar in position could loosen because of normal system vibration, causing the stem collar to slide and the key to fall from its keyway. Without the key in place, the stem may rotate with the motor operator without vertical movement. This rotation renders the valve inoperable.

B. Analysis of Safety Implications

These valves are opened during testing of the High Pressure Core Spray (HPCS) System to bypass the reactor. They are normally closed during plant operation. Because of the subject deficiency, these valves could remain open after the completion of a test, without the awareness of the Control Room operators.

If both F010 and F011, or F023 alone are open during an accident, HPCS flow would be diverted to the Condensate Storage Tank (CST) or Suppression Pool, thus bypassing the reactor. Also, the water from the Suppression Pool could be diverted to the CST which is located outside the containment and vented to the atmosphere. This condition may result in exceeding radiation dose limits specified in 10CFR100.

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

Mississippi Power and Light first received information of the generic deficiency in IE Information Notice 83-70 on October 31, 1983. This notice was being investigated for applicability to GGNS. On December 15, 1983, MP&L received notice from General Electric that the deficiency applied to GGNS. We reported the deficiency to Mr. R. Carroll, of your office, as being reportable under the provisions of 10CFR50.55(e) for Unit 2. We reported the deficiency to Mr. D. Verrelli as being reportable under 10CFR21 for Unit 1 on February 22, 1984. On that date Mr. Verrelli agreed that the date for the submittal of the 10CFR50.55(e) report would be acceptable for the submittal of the 10CFR21 report. 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.

Locations of other components were given by General Electric in their letter of December 14, 1983, to the NRC, Washington, D. C.

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

On Unit 1 the setscrew was tightened and the stem collar threads were staked using a center punch. Corrective actions for Unit 2 will be either the same as for Unit 1 or a nuclear grade thread locking compound will be applied to the set screw threads.

B. Responsible Individual

Unit 1
J. E. Cross
Plant Manager
Mississippi Power & Light Co.

Unit 2
T. H. Cloninger
Unit 2 Project Manager
Mississippi Power & Light Co.

C. Length of Time to Complete Actions

The corrective actions on Unit 1 were completed by November 21, 1983. Corrective actions on 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.