



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

JAMES P. McGAUGHY, JR.
ASSISTANT VICE PRESIDENT

JUN 16 1982
June 14, 1982 9:21

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
Unit 1
Docket No. 50-416
File 0260/15525/15526
PRD-82/21, Interim Report #2,
SSW "A" Loop System Flow
AECM-82/278

Reference: AECM-82/214

On April 15, 1982, Mississippi Power & Light Company notified Mr. F. Cantrell, of your office, of a Potentially Reportable Deficiency (PRD) at the Grand Gulf Nuclear Station (GGNS) construction site. The deficiency concerns a low flow condition through the "A" Standby Service Water (SSW) Pump.

As stated in AECM-82/214, MP&L has determined that this deficiency is reportable under the provisions of both 10CFR50.55(e) and 10CFR21 for Unit 1. Notification as to the applicability of 10CFR21 was made by telephone to Mr. F. Cantrell, NRC Region II, on May 10, 1982. It is indeterminate at this time as to whether this deficiency is applicable to Unit 2.

This deficiency should not impact fuel load because the issuance of plant operating procedures, to ensure that minimum pump flow is provided when the SSW system is automatically started due to a RCIC initiation, has been completed.

Our Interim Report is included as Attachment A. A Final Report is expected to be submitted by September 20, 1982.

Yours truly,

J. P. McGaughy, Jr.

RDC:dr
ATTACHMENT

For

cc: See page 2

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Member Middle South Utilities System

Mr. J. P. O'Reilly
NRC

AECM-82/278
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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

INTERIM REPORT NO. 2 FOR PRD 82/21

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. J. P. O'Reilly, NRC,
Region II by letter AECM-82/214, May 17, 1982.

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

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

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

The design which did not provide for an automatic minimum flow path during system low flow conditions was provided by the Bechtel Power Corporation, in Gaithersburg, Maryland.

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

A. Description of the Deficiency

The "A" loop of the Standby Service Water (SSW) System is designed to automatically provide cooling water to the RCIC Room Cooler on an RCIC initiation signal. As soon as the steam supply valve to the RCIC system leaves the fully closed position, an initiation signal is provided to start the SSW loop "A" pump, open the pump discharge valve and the cooling tower return valve. This will provide a flow path for the RCIC Room Cooler.

The flow in the SSW system during this mode of operation is significantly less than that required to keep the SSW pump cool during operation. Approximately 95 gpm is used in the system during this mode of operation and the SSW pump requires approximately 2000 gpm to prevent heat buildup in the pump.

The design does not allow for a minimum flow path in the SSW loop "A" when the SSW System is automatically started due to an RCIC initiation signal. All other automatic starts of both the SSW loop "A" and SSW loop "B", initiated by an automatic start of another system, provide adequate flow in the SSW loops to prevent pump damage.

B. Analysis of Safety Implications

The loss of the SSW loop "A" pump could prevent the removal of heat from plant auxiliaries, such as the Standby Diesel Generator II and the LPCS Room Cooler, which require cooling during an emergency shutdown of the plant. It could also prevent the use of the SSW system as the ultimate heat sink used for removal of the decay heat generated by the reactor core.

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

Mississippi Power and Light received information of the deficiency on April 15, 1982. We reported the deficiency to Mr. F Cantrell, of your office, as a Potentially Reportable Deficiency on that date and to Mr. F. Cantrell, by telephone as reportable under 10CFR21 on May 10, 1982. The MP&L "Responsible Officer," Mr. J. P. McGaughy, Jr., has been notified.

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 deficient designs of this type 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

Plant procedures which will ensure that minimum pump flow is provided when the SSW system is automatically started due to a RCIC initiation have been issued.

MP&L is presently developing an interim design change which will ensure that minimum pump flow is established when the SSW pumps have been started by an automatic signal.

MP&L intends, at a later date, to develop a permanent plant design change which would automatically provide minimum pump flow anytime the SSW pumps are running. The permanent plant design change development is not appropriate at this time due to other possible modifications to the SSW system as discussed in the MP&L, letter to Mr. Harold Denton (NRC) (AECM-82/154, May 5, 1982).

MP&L has requested the Architect/Engineer to investigate and determine the cause of the design inadequacy and what actions will be taken to prevent recurrence in Unit 2.

B. Responsible Individual

C. K. McCoy

Plant Manager

Mississippi Power and Light Company

He is responsible for corrective actions on Unit 1.

C. Length of Time to Complete Actions

Mississippi Power and Light received information of the deficiency on April 15, 1982. At this time, we expect to submit a Final Report on July 23, 1982.

MP&L has issued the required procedures and the interim design change will be implemented prior to power ascension.

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.

bcc: Dr. D. C. Gibbs
Mr. J. P. McGaughy, Jr.
Mr. J. F. Hudson
Mr. R. S. Trickovic
Mr. J. W. Yelverton
Mr. L. F. Dale
Mr. C. K. McCoy
Mr. T. H. Cloninger
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