



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

June 16, 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:

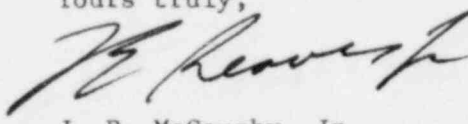
SUBJECT: Grand Gulf Nuclear Station
Units 1 and 2
Docket Nos. 50-416/417
File 0260/15525/15526
PRD-82/27, Interim Report,
Plant Flooding
AECM-82/281

On May 10, 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 the potential for plant flooding based on the Probable Maximum Precipitation (PMP) flood level.

Based on the results of our investigation, the determination has been made that this deficiency is reportable under the provisions of 10CFR50.55(e). This deficiency has been determined to not have an impact on fuel load in that MP&L Plant Staff committed to control possible internal flooding by using sandbags and procedural controls which will be available by fuel load.

Our Interim Report is attached. MP&L expects to submit a Final Report concerning this matter by September 10, 1982.

Yours truly,


for J. P. McGaughy, Jr.

ACP:dr
ATTACHMENT

cc: See page 2

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Member Middle South Utilities System

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Mr. J. P. O'Reilly
NRC

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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 FOR PRD-82/27

I. Description of the Deficiency

A review of Grand Gulf Units 1 and 2 site has revealed a number of existing obstructions that were not considered or evident at the time the original site drainage scheme was developed. The cumulative effect of these obstructions raises the calculated Probable Maximum Precipitation (PMP) flood level to an elevation that exposes the plant to some level of internal flooding.

This deficiency is applicable to the Bechtel Scope of Supply for both Unit 1 and Unit 2.

Multiple safety-related systems with components below grade elevation could be affected.

The unrestricted flow of water into Category I structures could adversely affect the operation and safe shutdown of the plant by rendering safety related components and systems inoperable. Therefore, this deficiency is reportable under the provisions of 10CFR50.55(e).

II. Approach to Resolution of the Problem

The cause of the deficiency was placement of structures and modifications to permanent structures in manners which were not included in the original site drainage analysis. These changes would restrict the flow of water during severe rainfall events resulting in water levels higher than 133' outside safety-related buildings. The modifications/changes which created the condition are:

1. Seashell berms beside the security fence.
2. Parking lot elevations as high as 132.9'.
3. The road west of the Diesel General Building was constructed to elevations as high as 133.0'.
4. Presence of a headwall at a drainage ditch outlet.
5. Presence of trailers with plywood skirts which will block storm flow under the trailers.

The extent of the deficiency is limited to site drainage for Units 1 and 2.

Appropriate measures are being taken to provide for a barricade around Unit 1 Buildings to preclude internal flooding based on a PMP event. The specific design has not been finalized since there are several options to consider.

Barricades will be constructed around Plant buildings to prevent water entry during severe rainfall events.

Plant flooding during Probable Maximum Precipitation (PMP) is included as License Condition 5 in the GGNS operating license. The wording is as follows:

- "A. MP&L shall provide sufficient sand bags at entrances to safety-related structures. During periods of significant precipitation, these entrances shall be monitored.

When the water level reaches an elevation of one inch below the entrance, sand bags shall be applied to protect the entrances to one foot above the entrance.

- B. Prior to exceeding 5% power, MP&L shall submit an analysis of PMP flooding and their plans for a permanent solution."

III. Status of Proposed Resolution

The deficiency has been determined to be applicable to the the Bechtel scope of supply and the cause of the deficiency has been identified. The extent is those components and systems which are located below elevation 133.0' in the plant. Our Architect/Engineer expects to complete an analysis of the PMP flooding by June 30, 1982. A design selection is expected to be complete by August 27, 1982.

IV. Reason Why a Final Report Will be Delayed

The Final Report will be developed after a design has been finalized and a schedule determined for installation of flood barriers.

V. Date When a Final Report Will be Submitted

MP&L expects to submit a Final Report on this matter on or before September 10, 1982.