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

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April 9, 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-82/11, Interim Report No. 1
Henry Pratt Valves
without Proper Bracing
AECM-82/144

On March 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 Henry Pratt butterfly valves without proper angle bracing in the Standby Gas Treatment System.

We have evaluated this deficiency and have determined that it is a substantial safety hazard and is reportable under the provisions of 10CFR50.55(e) for Unit 1 and Unit 2 and 10CFR21 for Unit 1 for MP&L. Bechtel Power Corporation has also determined that the deficiency is reportable under 10CFR21. This was reported by telephone to Mr. R. Butcher on April 7, 1982.

We are still investigating applicability to the NSSS scope of supply and are working with our Architect/Engineer and the vendor to determine actions to prevent recurrence.

Our report is included as Attachment A. Bechtel's report is included as Attachment B.

MP&L expects to submit a Final Report by April 29, 1982.

Yours truly,

for J. P. McGaughy, Jr.

cc: See page 2

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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. 1 for PRD-82/11

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. R. Butcher, NRC, Region II by telephone, April 8, 1982 by MP&L and Bechtel.

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

The defective valves are located in both Unit 1 and Unit 2 at the Grand Gulf Nuclear Station
Port Gibson, Mississippi 39150

However, only those in Unit 1 have been turned over and accepted by MP&L and are reportable under 10CFR21.

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

Supplied to Grand Gulf by Bechtel Power Corporation, Gaithersburg, Maryland. Bechtel obtained the valves from Henry Pratt Company, Aurora, Illinois.

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

A. Description of the Deficiency

Three (3) Henry Pratt six (6) inch motor operated butterfly valves do not meet the seismic qualifications required in our Architect/ Engineer's specifications for valves in the Operability Assurance Program for ASME Section III, Class 1, 2, and 3 valves. This requires that the valves have a resonant frequency greater than 33 Hz. In order to meet these specifications, it is necessary that the valves are installed with 1" x 1" x 1/4" angle braces. Only one (1) of four (4) valves has the angle braces installed.

This deficiency was identified during a review of seismic qualification reports.

It occurred because the subject valves were shipped prior to completion of the operability testing. During operability testing it was discovered that the test assembly without bracing had a resonant frequency of only 26 Hz. The added bracing was necessary to raise the resonant frequency of the valves to 33 Hz.

Since the testing was performed after the Unit 1 valves had been shipped to the jobsite, they are currently installed without the additional bracing. One of the Unit 2 valves was used for the qualification testing, so the necessary bracing has been added to this valve. The other Unit 2 valve does not have the required bracing.

B. Analysis of Safety Implications

The qualification test valve assembly was statically tested with the angle braces installed. Without the required bracing, it cannot be assured that the valves would operate properly during a postulated design basis seismic event. If there was a simultaneous main steam line break outside containment and a malfunction of these valves, the Standby Gas Treatment System would be unable to remove the potentially radioactive air in the steam tunnel outside containment.

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

Mississippi Power and Light received information of the deficiency on March 10, 1982. We reported the deficiency to Mr. F. Cantrell of your office as a Potentially Reportable Deficiency on that date and to Mr. R. Butcher as reportable under 10CFR21 on April 8, 1982. The MP&L "Responsible Officer," Mr. J. P. McGaughy, Jr., will be notified of the evaluation when he returns to his office.

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

The deficiency as reportable under 10CFR21 is known to affect valves Q1-T48-F005 and Q1-T48-F006 in Unit 1. Valve Q2-T48-F006 is reportable under 10CFR50.55(e) in Unit 2. These are both in the BOP scope of supply.

We are presently investigating the applicability of this deficiency to any Henry Pratt valves in the NSSS scope of supply.

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 ... reponsible for the action; and the length of time that has been ... taken to complete the action.

A. Corrective Actions Taken

A Supplier Drawing Revision Notice (SDRN) has been issued to add the proper angle braces to the three (3) valves identified above. Construction Work Permit T48-P-2 has been issued to perform the modifications on the Unit 1 valves. These modifications are scheduled to be completed by April 16, 1982. The modification of the Unit 2 valve will be completed prior to Unit 2 fuel load. This will be tracked by Nonconformance Report 6361.

B. Responsible Individual

G. B. Rogers, Jr.
Site Manager
Mississippi Power and Light Company

C. Length of Time to Complete Actions

Mississippi Power and Light received notification of the deficiency on March 10, 1982. All corrective actions for the Unit 1 valves identified above will be completed by April 16, 1982.

Our Architect/Engineer is working with the vendor, Henry Pratt Company to formulate actions to prevent recurrence.

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.

ATTACHMENT "A" TO PRD 82/11 (MCAR-134)

HENRY PRATT VALVES WITH IMPROPER BRACING

PART 21 REPORT

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

P. S. Collins
Quality Assurance
Bechtel Power Corporation
Post Office Box 41
Port Gibson, Mississippi 39150

K. D. Shelton
Quality Assurance
Mississippi Power & Light Company
City Center North
210 South Lamar Street
Suite 320
Jackson, Mississippi 39201

Per telephone call on April 8, 1982 with Mr. R. Butcher, Region II, NRC, it was confirmed that the 10 CFR 50.55(e) time requirements for the written report could be applied and, as such, MP&L was requested to include this report with their 50.55(e) report.

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

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

3. Identification of the firm constructing the facility ... contains a defect:

Installed at the GGNS by:
Bechtel Power Corporation
15740 Shady Grove Road
Gaithersburg, Maryland 20877

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

Two valves have been installed and turned over to MP&L which had not received required retrofit modifications. The required modifications involved the installation of additional angle braces on the bonnet. The valves required modification in order to conform with the valve assembly utilized for the seismic qualification test. The deficient valves are designated "T48-F005 and T48-F006. (Unit I Valves)

Attachment A to PRD 81/22 (MCAR-134)
Part 21 Report
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During a seismic event, inability of the valve to operate to the open position could violate secondary containment isolation boundary and not maintain a negative pressure in the drywell. Therefore, a safety hazard could be created that could produce a condition that would exceed the allowable off-site radiation dosage.

5. The date on which the information of such a defect was obtained:

An evaluation of the applicability under the provisions of 10 CFR 21 was made on April 7, 1982 by Bechtel Power Corporation.

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

Components Located in GGNS Unit I

The condition reportable under 10 CFR 21 is considered applicable only to GGNS Unit I. The defect applies to Valves Q1-T48-F005 and Q1-T48-F006. Reference Specification 9645-M-258.0, Items 2.07a and 2.07b.

Number and Location of Other Affected Components

There is one (1) additional valve, for use on GGNS Unit II, that will require modification. The Unit II valve is designated Q2-T48-F006.

The equipment supplier, Henry Pratt Company has been notified that Bechtel has filed a 10 CFR 21 report for the cited defect.

Due to the nature of the defect which is set forth in this report, it has been concluded that this defect does not apply to other Bechtel projects.

7. The corrective action which has been taken ... the name of the organization responsible for the action, and the length of time that has been ... or will be taken to complete the action.

For Unit I, Bechtel engineering has coordinated with MP&L engineering. Reference letter MPB-82/0127. The implementation and scheduling of corrective action will be determined by MP&L.

For Unit II, Bechtel will add the required bracing to Valve Number T48-F006. Note: Valve Number T48-F005 was the valve used for the qualification tests and already has the required bracing.

Attachment A to PRD 82/11 (MCAR-134)
Part 21 Report
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Henry Pratt Company will send their representative to the Jobsite for a final inspection and certification of all work.

The Unit II action will be tracked by Bechtel Non-Conformance Report #6361. All action will be completed prior to fuel-load.

8. Any advice related to the defect that has been, is being, or will be given to purchasers or licensees.

None