



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640, JACKSON, MISSISSIPPI 39205

April 20, 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-81/44, Interim Report No. 4,
Valves And Actuators Not
Manufactured Under A QA Program
AECM-82/177

References: 1) AECM-82/97, 3/15/82
2) AECM-82/45, 1/29/82
3) AECM-81/470, 11/30/81

On October 29, 1981, Mississippi Power & Light Company notified Mr. P. A. Taylor, of your office, of a Potentially Reportable Deficiency (PRD) at the Grand Gulf Nuclear Station (GGNS) construction site. The deficiency concerned unqualified Bettis Air Actuators on Henry Pratt Valves.

We have completed our investigation for Henry Pratt valves with Bettis actuators and have determined that this deficiency is not reportable under the provisions of 10CFR50.55(e). However, we are investigating the possibility that other type valves and actuators may have similar deficiencies. Details are included in our attached Interim Report. We expect to submit a Final Report by June 15, 1982.

Yours truly,

J. P. McGaughy, Jr.

KDS:dr
ATTACHMENT

cc: See page 2

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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 NO. 4 FOR PRD-81/44I. Description of the Deficiency

Bettis Air Actuators furnished with certain Henry Pratt butterfly valves under specifications M-257.0 and M-258.0 are not typical of the units utilized for original Qualification Testing.

Investigative data indicates that the delivered valve actuators do not match the units originally qualified. In some cases, there has been a design difference between the actuators that were delivered and the units qualified. In all cases, the materials of construction have been different. Therefore, a direct correlation to verify functional operability cannot be made at this time.

The defective actuators are located in both Unit 1 and Unit 2.

The deficiency is known to affect the Containment Cooling System (M41), the Auxiliary Building Ventilation System (T41), the Fuel Handling Area Ventilation System (T42) and the Control Room HVAC System (Z51).

A T420-SR1 actuator was seismically tested and successfully passed seismic qualification tests. The actuator components were inspected to determine size and configuration. In most cases, the measured dimensions agreed with the dimensions on the vendor drawings or in the stress reports. Minor discrepancies existed in the air and spring cylinder dimensions. However, these are considered acceptable since they have little or no effect on the center of gravity of the cylinder, the analysis, or the actuator operation. The most critical dimensions and sizes for design stress considerations were consistent between design documents and jobsite measurements. Based on the conformance of the critical dimensions and the design safety-factors, our Architect/Engineer has determined that the actuator dimensions and components comply with the design documents. Therefore, this deficiency is not significant in final design, would not affect the safety of operations of the nuclear power plant, and is not reportable under the provisions of 10CFR50.55(e) for the Bettis actuators on the Henry Pratt valves.

Failure of the actuators due to degradation of the internals would not affect safety. The actuators are spring return models and would fail in the safe position.

II. Approach to Resolution of the Problem

The specific cause of the deficiency is that the actuators were not manufactured under a QA program by the G. H. Bettis Company.

We are currently investigating similar deficiencies that may exist pertaining to valves and actuators that were not manufactured under a QA program by other vendors including those supplied by our NSSS vendor.

III. Status of Proposed Resolution

Although it has been determined that failure of the actuators due to degradation of the internals would not affect safety, MP&L has elected to upgrade the seals, lubricants, and coating on the pins and rollers prior to commercial operation. This will minimize future plant outage time in the case of a harsh environment condition which could degrade these materials.

IV. Reason Why A Final Report Will Be Delayed

Mississippi Power and Light is investigating the acceptability as to seismic qualifications of other type actuators that were not manufactured under a QA program.

V. Date When Final Report Will Be Submitted

A Final Report will be submitted by June 15, 1982.