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

May 19, 1981

NORRIS L. STAMPLEY

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, Director

Dear Mr. O'Reilly:

SUBJECT: Grand Gulf Nuclear Station Units I and II Docket Nos. 50-416/417 RII: AGW 50-416/81-04 IE Inspection Report of February 2 to March 12, 1981 AECM-81/178

In response to your letter dated April 24, 1981, which transmitted the subject inspection report, we submit our responses to the three NRC Viol tions identified in Appendix "A" of your letter. In response to Violation Item Number 416/81-04-08, "Housekeeping," our response is provided in Attachment "A". Our reply to Violation Number 416/81-04-09, "Failure to Provide Criteria for Determining When Openings are Required to be Covered," is given in Attachment "B". Our reply to Violation Number 416/81-04-11, "Debris in "B" Residual Heat Removal Pump," is provided in Attachment "C".

We find no proprietary data contained in the inspection report.

Yours truly, Stampley

JWY:rh Attachments: A) Violation 416/81-04-08 B) Violation 416/81-04-09 C) Violation 416/81-04-11

Mr. T. B. Conner

cc: Mr. J. P. McGaughy, Jr. Mr. Victor Stello, Director Mr. R. B. McGehee Div. of Insp. & Enforcement U.S. Nuclear Reg. Comm. Washington, D.C. 20555

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Member Middle South Utilities System

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Director of Office of Inspection & Enforcement

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cc: Mr. G. B. Taylor South Miss. Electric Power Association P. O. Box 1589 Hattiesburg, MS 39401

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Director of Office of Inspection & Enforcement

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STATE OF MISSISSIPPI COUNTY OF HINDS

Personnally appeared before me, the undersigned authority in and for the jurisdiction aforesaid, N. L. Stampley, who being by me first duly sworn, stated on oath that he signed the above and foregoing on the day and year therein mentioned, and that the information contained therein is true and correct to the best of his knowledge and belief.

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SWORN TO AND SUBSCRIBED before me, this the 19th day of May, 1981.

My Commission Expires:

My Commission Expires Feb. 13, 1985.

Attachment "A" AECM-81/178

RESPONSE TO VIOLATION NUMBER 416/81-04-08 "HOUSEKEEPING"

1. Admission or Denial of the Alleged Violations

MP&L concurs with the violation that specific discrepancies to WP/P-3 Zone IV cleanliness requirements occurred on March 5, 1981.

2. Reason for the Violation

During the construction phase it is virtually impossible to have the total plant clean one hundred percent of the time. Violations to the housekeeping procedure will occur with the large number of personnel in the plant. Although much emphasis has been placed on housekeeping, the erablished monitoring program in the Quality Control Instruction Marual required only monthly monitoring activities of Zone IV areas. This monitoring had been increased to weekly by management direction prior to the time of this violation but the procedures had not been revised to reflect this. MP&L feels that these discrepancies would have been discovered and corrected within a one week period.

3. Corrective Steps Which Have Been Taken and the Results Achieved

MP&L has directed Bechtel, our constructor, to revise their Quality Control Instruction 0801T to require weekly monitoring of all Zone IV and accessible Zone V areas. The monitoring report will indicate the buildings by area and elevation and the dates the area was monitored, and will provide positive documentation of the monitoring. This revision will assure that deviations are promptly identified and corrected.

The emphasis placed on housekeeping at Grand Gulf over the past year has improved conditions. Although the discrepancies noted in this violation did occur, and isolated conditions may occur in the future, we feel that housekeeping at Grand Gulf is being maintained at a level commensurate with the status of the plant.

4. Corrective Steps Which Will Be Taken to Avoid Further Violations

Quality Control Instruction 0801T will be revised on/or before June 22, 1981 to formally require the monitoring outlined above. The monitoring is presently being performed, but the forms which are utilized to document the monitoring will be revised with QCI 0801T to indicate building area, elevation and date.

5. Date When Full Compliance Will Be Achieved

Full compliance will be obtained by June 22, 1981 with implementation of the revised QCI 0801T.

Attachment "B" AECM-81/178

RESPONSE TO VIOLATION NUMBER 146/81-04-09 "FAILURE TO PROVIDE CRITERIA FOR DETERMINING WHEN OPENINGS ARE REQUIRED TO BE COVERED"

1. Admission or Denial of the Alleged Violations

MP&L concurs with the violation in that specific acceptance criteria for determining when covers are required to be in place on pipe and equipment openings were not defined.

2. Reason for the Viclation

The cause has been determined to be lack of specificity in the procedures addressing protection of equipment.

3. Corrective Steps Taken and Results Achieved

MP&L has directed Bechtel, our constructor, to define in the appropriate procedure the method to be used for temporary protection of openings in electrical equipment prior to the time that permanent covers or closures can be installed or until they are turned over to MP&L. This specifically addresses top and side openings for cable entry in Switchgear, Load Control Centers, Motor Control Centers, Motor Control Centers, etc.

The Bechtel Construction Work Plan/Procedure WP/P-27 has required condulet covers to be in place at room/area turnover.

The MP&L Startup Manual has been revised by Advance Change Notice #11 to require: "At the time of turnover, all normally installed equipment protective devices and covers (thermowell caps, plugs, panel covers, etc.) will be installed unless work is in process on a particular piece of equipment or the permanent cover is not available. If the permanent cover is not available, a temporary cover will be installed until the permanent cover is available."

MP&L has also directed Bechtel to define, by Job Bulletin or appropriate WP/P, measures to be taken for protecting equipment while performing "dirty" work in the area. "Dirty" work is defined as work which can cause gross contamination of/or significant damage to equipment in the vicinity of the work. The definition is to be specific in defining exactly what work is considered "dirty" and who is responsible for ensuring that adequate precautions are taken. Examples of "dirty" work are fire proofing, insulation, concrete removal, sandblasting, painting, etc.

4. Corrective Steps Which Will Be Taken to Avoid Further Violations

The Bechtel procedures discussed above will be revised on/or before June 22, 1981.

Attachment "B" AECM-81/178

RESPONSE TO VIOLATION NUMBER 416, 81-04-09 "FAILURE TO PROVIDE CRITERIA FOR DETERMINING WHEN OPENINGS ARE REQUIRED TO BE COVERED" Page 2

5. Date When Full Compliance Will Be Achieved

Full complaince will be obtained by June 22, 1981 with implementation of the revised procedures.

Attachment "C" AECM-81/178

RESPONSE TO VIOLATION NUMBER 416/81-04-11 "DEBRIS IN RHR B PUMP"

1. Admission or Denial of the Alleged Violations

MP&L concurs with the violation in that non-ferrous grit or debris was found in the pump internals and determined to be a contributing factor to the pump coast down seizure on December 9, 1980. MP&L also concurs that the specific installation Work Plan and Inspection Record did not include a specific requirement to inspect the pump barrel for cleanliness. The Quality Control Engineer who performed the inspection has attested in writing that he performed a cleanliness inspection immediately prior to the assembled pump being inserted into the pump barrel, thus MP&L denies that the omission of the specific inspection requirement on the Work Plan was the cause of the pump seizure.

2. Reasons for the Violation

The Field Engineer responsible for writing the Work Plan, and the Quality Control Engineer who approved the Work Plan, interpreted another step on the Work Plan to meet the requirements for cleanliness in that the step required installation in accordance with the vendor manual, which addressed cleanliness of certain components. Therefore, a specific step for cleanliness was omitted from the Work Plan utilized for installation.

Most of the debris found in the pump was non-ferrous grit. The magnetic debris appeared to come from the RHR "B" pump casing wearing rings. Examination of RHR "A" pump, disclosed a significantly smaller amount of debris in the throttle busing. The debris found was similar to the non-ferrous grit found in RHR "B" pump.

The origin of the non-ferrous grit in the RHR "A" and "B" loops was from sandblasting on Ele. 208 in the Containment, during the the Integrated Recirculation Flush. The sandblasting took place over a two day period. During the flush, the Reactor Cavity Well was full of water and the Reactor Pressure Vessel head was removed. Thus, some of the sandblasting material fell into the flush path.

The RHR "B" pump was run in the shutdown cooling mode on the second night of the sandblasting. The RHR "B" pump was placed on line at 9:00 p.m., November 19, 1980. The RHR "A" pump was placed on line one hour later. Placing RHR "B" pump on line first resulted in the flow from the RPV through the recirculation line to RHR. No other systems were run with suction from the RPV or Reactor Cavity Well during this time. Running RHR "B" pump for one hour at flows from 5000 gpm to 7000 gpm would have resulted in at least one complete change out of RPV water.

Attachment "C" AECM-81/178

RESPONSE TO VIOLATION NUMBER 416/81-04-11 "DEBRIS IN RHR B PUMP" Page 2

2. Reasons for the Violation (Con't.

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Sandblasting operations were stopped and access to the refueling floor very strictly controlled. The recirculation flush continued until all water samples were found to be grade "B".

No other systems communicated with the RHR System except the portion of B21 Feedwater piping and the Reactor Recirculation System. These portions of these systems contain only pipe and valves and were flushed with large quantities of water. None of the ECCS Systems except RHR "A" & "B" took suction from the open containment pool water. Since RHR "B" pump was run first, it is most probable the non-ferrous grit from sandblasting accumulated in the largest quantity in the RHR "B" pump.

The FHR "B" pump was removed and returned to Byron Jackson, the manufacturer. Their investigation culminated in the opinion that the wear from pumping the foreign matter was not significant enough to adversely effect the pump reliability or pump integrity.

- 3. Corrective Steps Which Have Been Takan and the Results Achieved
 - All piping/mechanical QC Engineers were reinstructed in the requirements of QCIM 0719T which includes the reguirement for verification of cleanliness.
 - b) A clarification statement has been added to the Work Plan and Inspection Records for the other RHR pumps, the LPCS and HPCS pumps which attests to the cleanliness of those items during installation.
 - c) After reassembly of the pump, the RHR System was flushed to remove any remaining debris.
 - d) The area housing the upper containment pools and access to the RPV have been turned over to MP&L with very restrictive access requirements.
- 4. Corrective Steps Which Will Be Taken to Avoid Further Violations

All corrective steps to avoid further violations have been completed at this time.

5. Date When Full Compliance Will Be Achieved

Full compliance has been achieved at this time.