



UNITED STATES  
 NUCLEAR REGULATORY COMMISSION  
 REGION II  
 101 MARIETTA ST., N.W., SUITE 3100  
 ATLANTA, GEORGIA 30303

Report No. 50-416/82-25

Licensee: Mississippi Power and Light  
 P. O. Box 1640  
 Jackson, MS 39205

Facility Name: Grand Gulf

Docket No. 50-416

License No. CPPR-118

Inspection at Grand Gulf site near Port Gibson, Mississippi

|                |  |                |
|----------------|--|----------------|
| Inspectors:    | <u>Frank Jape</u>                              | <u>4/15/82</u> |
| for M. D. Hunt |  | Date Signed    |
|                | <u>R. C. Butcher</u>                           | <u>4/16/82</u> |
|                |  | Date Signed    |
| Approved by:   | <u>Frank Jape</u>                              | <u>4/15/82</u> |
|                | F. Jape, Section Chief                         | Date Signed    |
|                | Engineering Inspection Branch                  |                |
|                | Division of Engineering and Technical Programs |                |

SUMMARY

Inspection on March 30, 1982 thru April 2, 1982

Areas Inspected

This routine, unannounced inspection involved 50 inspector-hours on site in the areas of preoperational test procedure review, preoperational test results review, preoperational test witnessing, unresolved item followup, facility status review and independent inspection.

Results

Of the six areas inspected, no violations or deviations were identified.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*C. K. McCoy, Plant Manager
- \*J. W. Yelverton, QA Supervisor
- \*J. C. Roberts, Startup Supervisor
- \*M. A. Lacey, QA Consultant
- R. Roma, Test Supervisor
- G. Zinke, Test Supervisor
- R. Hutchinson, Startup Manager
- L. Eichenberger, Test Supervisor

#### NRC Resident Inspector

- \*A. G. Wagner, Senior Resident Inspector
- \*D. E. Scott, Resident Inspector

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on April 2, 1982, with those persons indicated in paragraph 1 above. The licensee concurred with the findings presented.

### 3. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item 416/81-21-10, Battery Capacity Test. The inspector reviewed Field Report No. L21-0042 which evaluated the 125 VDC battery performance during preoperational testing. The recommendation to change the HVAC control set points for the battery rooms and if needed add supplemental cooling later appears adequate. However, the licensee has committed to record the cell temperature during the battery capacity and recharging portion of preoperational test IE 21 PT01, Integrated ECCS and Loss of Off Site Power Test. Further evaluation under these conditions will determine the amount of additional room cooling required.

### 4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in paragraph 5.

## 5. Independent Inspection Effort

- a. Reactor Vessel Water Level Transmitter Response Time - The reactor vessel water level transmitter response time was found to be 0.4 to 0.64 seconds during actual testing. The proposed Grand Gulf Unit 1 technical specifications, table 3.3.1-2, Reactor Protection System Response Times, specifies a response time of less than or equal to 0.30 seconds and the Grand Gulf FSAR, Table 7.2-5, Reactor Protection System Time response (Design), specifies a maximum overall 0.30 second time delay. General Electric was contacted regarding the acceptability of the reactor vessel water level response times and they have responded that response times of up to 1.0 second are acceptable. This item remains unresolved pending acceptance by NRC of the changes in response time noted above (50-416/82-25-01).
- b. Turbine Stop Valve and Turbine Control Valve Fast Closure Response Time - The Grand Gulf Unit 1 proposed technical specifications, table 3.3.1-2, require a turbine stop valve response time of  $\leq 0.06$  seconds and a turbine control valve fast closure response time of  $\leq 0.07$  seconds. The Grand Gulf FSAR, Table 7.2-5, requires a maximum overall reactor protection system response time of 0.07 seconds for both sets of valves. Testing has shown that the actual response times exceed these requirements. General Electric has notified the licensee that analysis has shown that a response time of  $\leq 0.10$  seconds is acceptable. This item remains unresolved pending acceptance by NRC of the change in response time noted above (50-416/82-25-02).

The inspectors examined various portions of the reactor building to observe the completion status of equipment. It was noted that in many areas construction support materials such as ladders, scaffolding and construction power supply wiring are yet to be removed.

## 6. Review of Preoperational Test Results

Test SG17PT04, Revision 1, Liquid Radwaste System (RWCW Waste) Preoperational Test and Test SP52AT01, Revision 2, Service Air Acceptance Test were reviewed for verification of licensee evaluation of test results. During the review of the test results, test exceptions, TCN's field reports, etc. there were several minor discrepancies noted. These discrepancies were reviewed with the startup supervisor and he was given a copy for resolution and correction. No further action is required.

## 7. Witnessing of Preoperational Testing

The inspectors witnessed the conduct of Paragraph 7.15, Scram Discharge Volume Vent and Drain Test, which is part of the Reactor Protection System Preoperational Test Procedure 1C71PT01, Revision 1. The test was conducted per the procedure, the procedure was available and up to date and no discrepancies were noted. The inspectors had no further questions.

8. Loss of Offsite Power Test Procedure Review

The inspector reviewed preoperational test procedure 1E71PT01 Integrated ECCS - Loss of Offsite Power. This procedure is designed to test the response of the HPCS, LPCS and RHR Systems performance under offsite and onsite emergency power. The procedure was still in the review process by the test engineer responsible for the performance of this test. Several minor modifications were being made to this procedure. Further review will be required after revisions have been approved.

As outlined in paragraph 3 of this report, an additional set of data will be taken during the testing of the DC power capacity tests.

9. Licensee Identified Item (LII), 10CFR50.55(e)

(Closed) LII (PRD 80-72) Bettis Spring Return Actuators. The licensee's final report submitted September 15, 1981 to RII advised that the conditions reported were found on Unit 2 only.

(Closed) LII 416/82-25-03 (PRD-81/47) Pipe Support Spring Settings. the licensee submitted a final report dated March 15, 1982 which included the Bechtel Power Corporation Part 21 report. The actions taken appear adequate to resolve this Potentially Reportable Deficiency.