



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

Report No. 50-416/81-57

Licensee: Mississippi Power and Light Company  
Jackson, Mississippi 39205

Facility Name: Grand Gulf

Docket No. 50-416

License No. CPPR-118

Inspection at Grand Gulf site near Port Gibson, Mississippi

Inspector: M. O. Hunt for 12/23/81  
A. H. Johnson Date Signed

Approved by: M. O. Hunt for 12/23/81  
F. Jape, Section Chief Date Signed  
Engineering Inspection Branch  
Engineering and Technical Inspection Division

SUMMARY

Inspection on November 30 - December 4, 1981

Areas Inspected

This routine, unannounced inspection involved 32 inspector-hours on site in the areas of preoperational and special test procedure review, preoperational test witnessing and maintenance activities.

Results

Of the three areas inspected, no violations or deviations were identified in two areas; one violation was found in one area (paragraph 6.a) use of nonsafety-related MWO's to perform safety-related functions (416/81-57-01).

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*G. B. Rogers, Site Manager
- \*C. R. Hutchinson, Startup Manager
- \*C. L. Stuart, Assistant Plant Manager
- \*D. L. Hunt, Plant QA Superintendent
- \*J. W. Yelverton, QA Supervisor
- \*J. C. Roberts, Startup Supervisor
- \*S. F. Janner, QA Coordinator
- \*J. C. Bell, QA Representative
- \*M. A. Lacey, QA Representative

Other licensee employees contacted included startup engineers, technicians, and operators.

#### NRC Resident Inspector

- \*A. G. Wagner

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on December 4, 1981 with those persons indicated in paragraph 1 above. The licensee had no questions except as stated in paragraph 6.a.

### 3. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item 416/81-49-02. Concern that special test procedure 1-M61-ST-01, Rev. 2, Containment Local Leak Rate (LLRT) Testing was not being reviewed by an MP&L quality organization in accordance with the MP&L Operational QA Program. The licensee's action included:

- a. The MP&L Plant Quality organization performed a quality review of test procedure 1-M61-ST-01 and all changes thereto.
- b. The applicable comments generated from the above quality review were resolved and incorporated into test procedure 1-M61-ST-01 by test change notice (TCN) number 1.
- c. The licensee committed to perform an MP&L quality review on any subsequent changes/revisions including temporary changes to test procedure 1-M61-ST-01.

There are no further questions concerning the above and this item is closed.

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 6.b.

5. Preoperational and Special Test Procedure Review and Test Witnessing

- a. Containment Local Leak Rate (LLRT) Testing. The inspector reviewed portions, including completed and signed-off data sheets, of special test procedure 1-M61-ST-01, Rev. 2, Containment Local Leak Rate (LLRT) Testing.
- b. Containment Integrated Leak Rate (CILRT) Testing. The inspector reviewed portions of preoperational test procedure 1-M10-ST-01, Draft, Containment Integrated Leak Rate (CILRT) Test.
- c. Reactor Recirculation and Flow Control System Preoperational Test. The inspector reviewed portions of preoperational test procedure 1B33PT01, Rev. 1, Reactor Recirculation and Flow Control System.
- d. HPCS Diesel Generator Preoperational Test. The inspector reviewed and witnessed portions of preoperational test procedure 1P81PT02, Rev. 1, HPCS Diesel Generator.
- e. Standby Diesel Generator Fuel Oil System Preoperational Test. The inspector reviewed portions, including Test Supervisor's Log, of preoperational test procedure 1P75PT02, Rev. 1, Standby Diesel Generator Fuel Oil System.
- f. Residual Heat Removal (RHR) Preoperational Test. The inspector reviewed portions of preoperational test procedure 1E12PT01, Rev. 1, Residual Heat Removal System.
- g. Reactor Core Isolation Cooling (RCIC) Preoperational Test. The inspector reviewed portions of preoperational test procedure 1E51PT01, Rev. 1, Reactor Core Isolation Cooling System.

Within the areas reviewed and witnessed, no violations or deviations identified.

6. MP&L Maintenance Work Orders (MWO)

- a. On April 21, 1981, MWO number 005228, was issued to supply craft labor, M&TE, and necessary consumables to support run-in (SRI) of system P81-HPCS Diesel Generator. The MWO was designated category QA type 3,

indicating a non-safety related function. However, from May 11, 1981 through September 16, 1981, safety-related work was performed using the non-safety related MWO-005228 and thereby going beyond the scope of the issued MWO (which was primarily to document labor). The above action bypassed reviews and controls that ensure quality and identify possible retesting requirements following maintenance or system alteration involving concurrent system run-in and preoperational testing. The preceeding is contrary to plant procedure 07-S-01-06, Rev. 2, Conduct of Maintenance Activities, section 6.2.2 (h) which states that the Plant Quality Superintendent will review all safety related MWO's, sign and date the MWO, and return it to the appropriate Maintenance Planner. Further, OQAM, MPL - Topical - 1 paragraph 10.4.2 states that all safety-related work authorizations will be reviewed by the Plant Quality Supervisor for determination of any quality inspection requirements.

As pointed out by the licensee, during the Exit Meeting of December 4, 1981, a Corrective Action Request (CAR) number 391 was issued on September 29, 1981 concerning maintenance work orders (MWO's). As part of the corrective action, a review was performed of Safety Related Maintenance Work Orders (MWO's) for the period 9-1-80 to 8-31-81 and no problems were encountered during this review.

The inspector acknowledges the endeavor to research and correct concerns having to do with safety related MWO's; however, the violation identified by the inspector is different. It is against using a nonsafety related MWO to perform safety related functions. (Violation 416/81-57-01).

- b. On November 30, 1981, MWO-812981 and 812982 were issued to disassemble and investigate valve intervals of recirculation flow control valves on A and B recirculation loops, with a category QA type 1, indicating a safety related function. Plant procedure 07-5-01-6, Rev. 2, Conduct of Maintenance Activities, section 6.2.2(k) note, states that for equipment under start-up jurisdiction, the appropriate Start-up Test Supervisor must initial the ATS (authorization to start) block of the MWO prior to performing the task. The initialing was not performed by the Start-up Test Supervisor for MWO-812981 and 812982 and the recirculation control valve under MWO-812981 was disassembled. Further, MP&L Startup Manual, SUM5000, step 4.1.4.8.1 states that Maintenance Work Orders issued for work on systems with equipment under Start-up jurisdiction will be reviewed by the Cognizant Test Supervisor for retest requirement. The Test Supervisor will indicate agreement with the designated retest requirements by initially the ATS (authorization to start) block of the Maintenance Work Order (MWO).

This item is considered unresolved pending further inspection (Unresolved Item 416/81-57-02).

7. Plant Quality Deficiency Report (PQDR) 00061-81

The inspector recieved the latest documented information concerning PQDR 00061-81, from the licensee, in order that a review might be performed in the Regional Office. The PQDR addresses the Hot Operations Testing where several temperature cycles were seen on the reactor vessel bottom head metal. Four temperature swings as large as 148 degrees F per hour were identified.

This is contrary to technical specification 3/4.4.6 and FSAR section 5.3.3.6 where heatup and cooldown rates shall not exceed 100 degrees F per hour. General Electric is continuing their evaluation of this matter.

8. HPCS Diesel Prototype Testing

As per NEDO - 10905-3 the licensee has installed a temporary forced cooling system for the 69 prototype HPCS diesel test starts. The inspector questioned the licensee about this temporary forced cooling system because the temporary systems use could invalidate other HPCS preoperational tests. The licensee stated that the temporary forced cooling system would only be used between the 69 prototype HPCS diesel starts.

The inspector had no further questions.