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

Report No.: 50-416/84-23

Licensee: Mississippi Power and Light Company
Jackson, MS 39205

Docket No.: 50-416

License No.: NPF-13

Facility Name: Grand Gulf 1

Inspection Dates: June 25 - July 13, 1984

Inspection at Grand Gulf site near Port Gibson, Mississippi

Inspectors: R E Carroll Jr for 7/27/84
A. G. Wagner Date Signed

R E Carroll Jr for 7/27/84
J. L. Caldwell Date Signed

Approved by: for C. A. Julian, Section Chief 7/27/84
Division of Reactor Projects Date Signed

SUMMARY

Areas Inspected

This routine, announced inspection involved 87 resident inspector-hours on site in the areas of Operational Safety Verification, Maintenance Observation, Surveillance Observation, ESF System Walkdown, Reportable Occurrences, Reactor Scrams, Inspector Followup Items, Quality Assurance Surveillance Activities, and Licensee Organization.

Results

Of the nine areas inspected, no violations or deviations were identified in eight areas; one apparent violation was found in one area (Failure to comply with Technical Specification Organization, paragraph 13).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*J. E. Cross, General Manager
*J. D. Bailey, Plant Compliance
*L. F. Daughtery, Compliance Supervisor
*J. Summers, Compliance

Other licensee employees contacted included technicians, operators, mechanics, security force members, and office personnel.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 13, 1984, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection findings.

3. Licensee Action on Previous Inspection Findings

(Closed) Violation 416/84-05-02: The inspector has reviewed the corrective actions, results achieved and steps taken to avoid recurrence as stated in Mississippi Power and Light Company (MP&L) letter AECM 84/0211 dated April 4, 1984. The inspector considers the corrective actions and steps taken to prevent recurrence to be satisfactory; therefore, this item is closed.

(Closed) Violation 416/83-58-02: The inspector has reviewed the corrective actions, results achieved and steps taken to avoid recurrence as stated in MP&L letters AECM 84/0156 dated March 13, 1984, and AECM 84/0260 dated April 23, 1984. The inspector considers the corrective actions and steps taken to prevent recurrence to be satisfactory; therefore, this item is closed.

(Closed) Violations 416/83-43-01 and 02: The inspector has reviewed the corrective actions, results achieved and steps taken to avoid recurrence as stated in MP&L letter AECM 84/0062 dated January 26, 1984. The inspector considers the corrective actions and steps taken to prevent recurrence to be satisfactory; therefore, this item is closed.

(Closed) Violation 416/83-56-03: The inspector has reviewed the corrective actions, results achieved and steps taken to avoid recurrence as stated in MP&L letter AECM 84/0089 dated February 9, 1984. The inspector considers the corrective actions and steps taken to prevent recurrence to be satisfactory; therefore, this item is closed.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Operational Safety Verification

The inspectors kept themselves informed on a daily basis of the overall plant status and any significant safety matters related to plant operations. Daily discussions were held with plant management and various members of the plant operating staff.

The inspectors made frequent visits to the control room such that it was visited at least daily when an inspector was on site. Observations included instrument readings, setpoints and recordings; status of operating systems; tags and clearances on equipment controls and switches; annunciator alarms; adherence to procedures; adherence to limiting conditions for operation; temporary alterations in effect; daily journals and data sheet entries; control room manning; and access controls. This inspection activity included numerous informal discussions with operators and their supervisors.

Weekly, when onsite, a selected ESF system is confirmed operable. The confirmation is made by verifying the following: accessible valve flow path alignment; power supply breaker and fuse status; major component leakage, lubrication, cooling and general condition; and instrumentation.

General plant tours were conducted on at least a biweekly basis. Portions of the control building, turbine building, auxiliary building and outside areas were visited. Observations included safety related tagout verifications; shift turnover; sampling program; housekeeping and general plant conditions; fire protection equipment; control of activities in progress; radiation protection controls; physical security; problem identification systems; and containment isolation.

No violations or deviations were identified in the areas inspected.

6. Maintenance Observation

During the report period, the inspectors observed the below listed maintenance activities. The observations included a review of the work documents for adequacy, adherence to procedure, proper tagouts, adherence to Technical Specifications (TS), radiological controls, observation of all or part of the actual work and/or retesting in progress, specified retest requirements, and adherence to the appropriate quality controls.

MWO E44245 Division I Diesel Generator

DCP No. M43653 Division I Diesel Generator TST1

MWO E44755 Safety Relief Valve Repair

No violations or deviations were identified in the areas inspected.

7. Surveillance Testing Observation

The inspectors observed the performance of the below listed surveillance procedures. The inspection consisted of a review of the procedure for technical adequacy, conformance to TS, verification of test instrument calibration, observation on the conduct of the test, removal from service and return to service of the system, and a review of test data.

06-IC-1B21-M-1012	ATWS - Reactor Vessel Level/Reactor Pressure Functional Test
06-IC-1E12-M-0005	Containment Pressure (Containment Spray) Functional Test
06-IC-1P75-R-0003	Standby Diesel Generator 18 Month Functional Test

No violations or deviations were identified in the areas inspected.

8. ESF System Walkdown

A complete walkdown was conducted on the accessible portions of the Low Pressure Core Spray System. The walkdown consisted of an inspection and verification, where possible, of the required system valve alignment, including valve power available and valve locking, where required; instrumentation valves in and functioning; electrical and instrumentation cabinets free from debris, loose materials, jumpers and evidence of rodents; and system free from other degradating conditions.

No violations or deviations were identified in the areas inspected.

9. Reportable Occurrence

The below listed Licensee Event Reports (LERs) were reviewed to determine if the information provided met NRC reporting requirements. The determination included adequacy of event description and corrective action taken or planned, existence of potential generic problems and the relative safety significance of each event. The following LERs are closed.

LER NO.	DATE	EVENT
84-026	05/24/84	Undersized Gas Turbine Fuel Tank
84-029	04/22/84	Improper Drywell Purge Compressor Retest
84-030	05/25/84	Low Water Level Reactor Scram

No violations or deviations were identified in the areas inspected.

10. Reactor Scrams

The inspectors reviewed activities associated with the below listed reactor scrams. The review included determination of cause, safety significance, performance of personnel and systems, and corrective action. The inspectors examined instrument recordings, computer printouts, operations journal entries, scram reports and had discussions with operations maintenance and engineering support personnel as appropriate.

Scram No. 4 and 5. These scrams were performed as part of the Startup Testing program. No post trip analysis was performed as a result of these scrams.

Scram No. 6, May 25, 1984. The reactor was at 4.2% reactor power. The reactor scram was automatically initiated by low reactor water level signals. The low reactor water level was the result of a trip of the operating condensate, condensate booster and reactor feedwater pumps. The pumps tripped on successive low suction pressure trips, starting with the condensate pump. The condensate pump tripped when its minimum flow valve failed open due to broken valve position linkage which occurred as technicians were investigating the cause of indication problems on the valve.

The operators experienced difficulty in establishing RCIC water flow to the reactor vessel. Flow was established on the third attempt. This problem has been corrected with an interim fix. The permanent corrective action will be accomplished during a subsequent outage. The Plant Safety Review Committee has approved of the temporary corrective action which has been previously used during operation. All other safety related systems functioned as required.

No violations or deviations were identified in the areas inspected.

11. Inspector Followup Items

(Closed) Inspector Followup Item 416/82-65-05: The licensee has conducted a re-review of IEC 81-14 and IEN 81-38. Additional corrective actions have been taken to reduce moisture problems in the instrument air system. Operators, on routine rounds, blowdown low points in the system and check the operation of the air dryer system. Humidity out of the dryer is alarmed in the control room. Annual maintenance is performed on the air dryer system to assure continued proper operation. There are no further questions. This item is closed.

(Closed) Inspector Followup Item 416/83-35-06: The inspector has monitored the LERs that have been submitted since this item was identified. The licensee's administrative actions to improve the quality of LER submittals has resulted in the LER submissions meeting regulatory requirements. There are no further questions. This item is closed.

12. Quality Assurance Surveillance Activities

The inspector reviewed field observations made by the site quality assurance organization. This has been previously identified as an area of concern due to the lack of depth of these types of QA observations. The observations are broken down into two basic categories. One category is spontaneous observations. The other is detailed surveillance audits. The following activities were reviewed:

Spontaneous Field Observations

84/0074 5-1-84, Condensate Storage Tank (RCIC) Low Level Functional Test
84-0081 5-4-84, Main Steam Line High Flow
84-0082 5-8-84, LPCS Monthly Functional Test
84-0080 5-3-84, Standby Gas Treatment System Operability
84-0079 5-3-84, SRM Channel Functional Test
84-0078 5-2-84, RHR Pump Discharge Pressure (ADS)
84-0077 5-1-84, RCIC/RHR and RCIC Steam Line High Flow
84-0076 5-1/2-84, Suppression Pool High Water Level (RCIC) Functional Test
84-0075 5-1-84, Interface Valve Pressure Functional Test

Detailed Surveillance Audits

MAR 84/0083 May 10 - June 11, 1984, Drywell Purge System Functional Test
MAR 84/0096 May 9 - June 20, 1984, Main Steam Line (MSL) Radiation Instrumentation
MAR 84/0090 April 9 - May 22, 1984, Radioactive Liquid Effluents and Offsite Dose Calculation Manual
MAR 84/0098 May 30 - June 20, 1984, RCIC System Actuation Instrumentation Suppression Pool Water Level - High

The inspector discussed minor comments with senior licensee representatives. This approach appears to be more effective in detecting problem areas and presents a greater quality assurance presence in the plant. Monitoring of this area will be continued during subsequent inspections.

No violations or deviations were identified in the areas inspected.

13. Licensee Organization

On May 24, 1984, the inspector was informed of organizational changes that were placed into effect. The reorganization created two corporate vice president positions, Vice President Nuclear Operations and Vice President Nuclear Support. The change created a position for Director Engineering and Construction and Director Nuclear Licensing and Safety. The titles were changed for Manager to GGNS General Manager. There does not appear to be a

technical problem with the new organization. The licensee has submitted a proposed change to the unit TS. However, the organizational changes should not have been put into effect without changing the TS.

TS paragraph 6.5.2.2 states that Vice President - Nuclear is the chairman of the Safety Review Committee (SRC). The new organization does not have such a position. The licensee proposed to change this requirement to allow the Vice President Nuclear Support to function as SRC chairman. Discussions with NRR indicated that this would be unacceptable. Discussions with licensee management indicate that this would only be a temporary change. The licensee would desire to name the Vice President Nuclear Operations as Chairman of the SRC when that position is filled. This is not clear in the proposed TS change submitted. An SRC meeting was held on June 26, 1984. The meeting was conducted with Vice President Nuclear Support acting as chairman.

These two examples of failure to meet the TS organization are an apparent violation (416/84-23-01). This is a repeat violation.