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

Report Nos.: 50-416/83-14

Licensee: Mississippi Power and Light Company
Jackson, MS 39205

Docket Nos.: 50-416

License Nos.: NPF-13

Facility Name: Grand Gulf 1

Inspection at Grand Gulf site near Port Gibson, Mississippi

Inspectors: L J Watson for A. G. Wagner — 4/28/83 Date Signed

L J Watson for D. E. Scott — 4/29/83 Date Signed

R. C. Butcher — 5/2/83 Date Signed

Approved by: P. E. Fredrickson for D. R. Quick, Section Chief — 5/2/83 Date Signed
Project Branch No. 1A
Division of Project and Resident Programs

SUMMARY

Inspection on March 16 to April 15, 1983

Areas Inspected

This routine, unannounced inspection involved 146 inspector-hours on site in the areas of Operational Safety Verification; Maintenance Observation, Surveillance Observation, ESF System Walkdown, Reportable Occurrence Follow-up, IE Bulletin Follow-up, and Maintenance Activities.

Results

Of the seven areas inspected, no violations or deviations were identified in six areas; one violation was found in one area (Failure to follow procedure, paragraph 7c.).

REPORT DETAILS

1. Persons Contacted

   Licensee Employees

   C. K. McCoy, Plant Manager
   J. Cross, Assistant Plant Manager
   *C. R. Hutchinson, Nuclear Support Manager
   J. P. McGaughy, Jr., Vice President Nuclear
   J. Richard, Senior Vice President Nuclear
   *J. W. Yelventon, Site QA Manager
   *P. R. Hughes, Compliance Supervisor
   *L. F. Daughtery, Plant Compliance
   J. Bailey, Plant Compliance
   R. Keeton, Operations Superintendent
   *S. M. Feith, Operations QA Supervisor

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

   *Attended exit interview

2. Exit Interview

   The inspection scope and findings were summarized on April 15, 1983, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection findings.

3. Licensee Action on Previous Enforcement Matters

   Not inspected.

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.

The following comments were noted:

a. The control boards had amber lights installed in the place of white information lights. The inspector was informed that the correct lights will be installed prior to nuclear heatup. This will be designated as Inspector Followup Item 416/83-14-01.

b. The inspector discussed the installation of permanent position markers on valve bodies for motor operated valves. The valves have indicating arrows installed. The position of the valve is to be determined by the relative position of the arrow to the pipe run, parallel-open and perpendicular-closed. It is the inspector's concern that this convention may be confused by lessor experienced persons or after maintenance the arrow may become misaligned. In either case, incorrect valve position may be reported. There are also applications where the valve of this type is normally throttled, which may also add to the confusion. It is the inspectors understanding that senior licensee management will review this item and appropriate corrective action will be taken. The inspector will review these actions during a subsequent inspection. This will be identified as Inspector Follow-up Item 416/83-14-02.

6. Maintenance Observation

During the report period, the inspectors observed the below listed maintenance activities for procedure adequacy, adherence to procedure, proper tagouts, adherence to technical specifications, radiological controls and adherence to Quality Control hold points.

a. MWO P33742 Change Isolation Valve Logic Relay Power Supply.

b. MWO P33743 Rework Fire Barriers.

c. MWO I30923 Calibration of C88 Buffer Amplifier.

There were no violations or deviations 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 technical specifications, 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.

a. 06-OP-E21 - Temp. 1, Revision 0, Retest of LPCS Jockey Pump Functional Test.

No comments.

b. 06-IC-IE31-R008, Revision 3, RWCU Demineralizer Room Temperature High.

No comments.

c. 06-IC-IE31-R-0019, Revision 3, RHR Area High Differential Temperature Calibration.

Two instrument calibrations were performed during the conduct of this procedure. The technician noted that the first instrument did not respond properly at the start of the first calibration. The technician corrected the erroneous indication on the spot with a screwdriver. The inspector was not aware of what specific actions were taken. There was not additional authorization obtained for correcting the indication problem. The calibration for the first instrument was completed without additional problems. Upon review the inspector noted that the technician had not obtained an independent verification for the hardware modification as required by paragraph 5.7. At the start of the calibration of the second instrument the inspector pointed out the procedural requirement for independent verification prior to the calibration. The technician had the independent verification for the second instrument performed prior to proceeding.

The failure to obtain the independent verification is an apparent violation of paragraph 5.7. This will be identified as Violation 416/83-14-03, failure to follow procedure.

8. ESF System Walkdown

A complete walkdown was conducted of the accessible portions of the Low Pressure Coolant Injection 'A' 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 valved in and functioning; electrical and instrumentation cabinets free from debris, loose materials, jumpers and evidence of rodents; and system free from other degradating conditions.

A valve for E12-CE-N001A was not included on system valve lineup. It is the inspector's understanding that the item will be reviewed by licensee management and appropriate corrective action taken. The inspector will review the corrective action during a subsequent inspection. This will be designated Inspector Follow-up Item 416/83-14-04.

9. Reportable Occurrence

The below listed Licensee Event Reports (LER's) 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. Additional inplant reviews and discussion with plant personnel as appropriate were conducted for the reports indicated by an asterisk. The following LER's are closed.

LER NO.	DATE	EVENT
82-96/03L-0	10-01-82	Fire Detector Spurious Alarms
82-101/03L-0	10-22-82	Defective Fire Pull Station
82-102/99X-0	10-11-82	Removal of Fire Barrier for Work
82-104/03L-0	10-14-82	Fire Detector Spurious Alarm
82-110/03L-0	11-05-82	Smoke Detector Failed to Reset
82-112/03L-0	11-05-82	Smoke Detector Failed to Reset
82-113/03L-0	10-24-82	Smoke Detector Failed to Reset
82-114/03L-0	10-08-82	Smoke Detector Failed To Reset
82-115/03L-0	11-22-82	Fire Door Retractor Arm Broken
82-116/03L-0	11-23-82	Fire Door Locking Mechanism Broken
82-118/03L-0	11-04-82	Smoke Detector Failed to Reset
82-119/03L-0	11-04-82	Smoke Detector Failed to Reset
82-120/99X-1	11-05-82	Fire Door Opened for Maintenance
82-121/03L-0	10-22-82	Smoke Detector Failed to Reset
82-123/99X-1	11-02-82	Fire Penetration Opened for Maintenance
*82-124/03L-0	10-21-82	Loss of Drywell Cooling
82-126/99X-1	10-26-82	Fire Doors and Penetrations Opened for Maintenance

10. IE Bulletin

The regional office has reviewed the licensee response to IE Bulletin 82-04. There are no further questions concerning this item. This item is closed.

11. Maintenance Activities:

The inspector reviewed records associated with the following maintenance activities:

- MWO IN3032 - 18 month calibration for RHR system B flow, instrument FT-N015B

- MWO IN2390 - 18 month calibration for RHR system C flow, instrument FT-N015C

- MWO IN4059 - 18 month calibration for reactor vessel water level channel A, instrument N091A

- MWO IN5547 - 18 month time response check for reactor vessel water level, instrument N091A

- MWO IN6180 - 18 month calibration or recirculation flow for loop A, instrument N011A

- MWO IN6179 - 18 month calibration for recirculation flow for loop B, instrument N011B.

- MWO I2D015 - IRM 'F' failed during performance of SIIC-IC51-V-0001-6.

- MWO F2D025 - Rework penetration AC-54D and AJ-18E.

- MWO 2D034 - Smoke detector ZN-1530 at elevation 166 and 117 will not reset.

- MWO E32731 - Rework valve P47-F002D. Valve will not open automatically or with hand switch.

- MWO M32702 - Repair broken air supply line.

- MWO E32666 - Air compressor will not restart following loss of cooling water.

- MWO I32652 - Perimeter zone 1 alarms excessively.

- MWO I32601 - Calibrate Rosemount indicating trip unit setpoint value and reset value.

- MWO E32595 - Clean and calibrate spare breakers for use as temporary power.

The inspector reviewed the initiating paper work and verified the required administrative approvals were obtained prior to initiating the work, that approved procedures or instructions were used to conduct the maintenance activity, that functional testing was conducted where applicable and work was accomplished by the appropriate work group. The completed records were reviewed for completeness, proper signoffs, and that the records were readily obtainable from the records area.

The Maintenance Work Orders (MWOs) reviewed were performed in a timely manner and an excessive backlog did not appear to exist. The licensee assigned priorities to the work as it was received to ensure corrective action was timely and an engineering and quality assurance review were conducted following completion of the MWO to ensure adequate corrective action was performed.

Of the records noted above, only one MWO, M32590, completed on March 5, 1983, could not be immediately located. MWO M32590 was found after approximately three hours. All other records were available within a short time period.

The corrective maintenance MWOs were reviewed by the licensee for technical specification requirements and Limiting Condition for Operation (LCO) impact when initiated.

The following discrepancy was noted in the review of the records noted above. MWOs IN2390 and IN3032 utilized procedure 07-S-53-E12-12, revision 2, to calibrate RHR system loop flows. Temporary Change Notice (TCN) 7 was written on February 7, 1983, to correct errors discovered in the procedure. Page 11 of the procedure used for IN2390 had corrections marked on the page with no initials, date or reference to TCN 7. Page 11 of the procedure used for IN3032 had corrections marked on the page with "TCN 7" written beside them with no initials or date of the change. The calibration was completed on February 9, 1983. Subsequently, on February 14, 1983, changes on both of the above sheets were initialed and dated. Additionally, the cover sheet of the procedure was not marked to show the entry of the TCN and the initials or date of the person entering the TCN.

Administrative procedure 01-S-02-2, paragraph 6.4, requires that TCN entry changes be marked on the cover sheet of the basic directive with the initials and date of the person entering the TCN. Also, the TCN number should be listed in the margin beside the change on affected pages. This appeared to be an isolated incident and the licensee discussed the discrepancy with the responsible individual.

The inspector reviewed the following procedures which were used in the safety related maintenance activities noted above.

- 07-S-53-38, Revision 4, Maintenance Calibration Instruction, Rosemount 1151, 1152 and 1153 Pressure Transmitter.

- 07-S-12-50, Revision 3, General Maintenance Instruction, Insrection and Calibration of 480 V ITE K600S and K1600S Breakers.

No violations or deviations were identified in the areas inspected.