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

Report No. 50-416/82-76

Licensee: Mississippi Power and Light Company
Jackson, MS

Facility Name: Grand Gulf 1

Docket No. 50-416

License No. NPF-13

Inspection at Grand Gulf Site near Port Gibson, Mississippi

Inspectors: Ross Butcher for — 12/6/82
A. G. Wagner — Date Signed

Ross Butcher for — 12/6/82
D. E. Scott — Date Signed

Approved by: Ross Butcher for — 12/6/82
F. S. Cantrell, Section Chief, Division of Project and Resident Programs — Date Signed

SUMMARY

Inspection on October 18 - November 15, 1982

Areas Inspected

This routine, announced inspection involved 138 inspector-hours on site in the areas of plant shutdown safety, maintenance observation, surveillance testing observation, calibration program and inspector followup items.

Results

Of the five areas inspected, no items of noncompliance or deviations were identified in three areas; one item of noncompliance, three examples, were found in two areas (Failure to follow procedure, paragraph 5.c.1; paragraph 5.e and paragraph 6).

DETAILS

1. Persons Contacted

   Licensee Employees

   *C. K. McCoy, Plant Manager
   *R. A. Ambrosino, Assistant Plant Manager
   *C. R. Hutchinson, Nuclear Support Manager
   *R. G. Keaton, Operations Superintendent
   *J. W. Yelverton, Field QA Manager
   *C. C. Hayes, Plant Quality Suupervisor
   *J. D. Bailey, Plant Quality

   Other licensee employees contacted included technicians and mechanics.

   *Attended exit interview

2. Exit Interview

   The inspection scope and findings were summarized on November 16, 1982, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection findings.

3. Licensee Action on Previous Inspection Findings

   (Open) Violation 416/82-60-02 and Inspector Followup Item 82-55-08.

   The inspector reviewed night order entries requiring adequate log entries, and held discussions with the Operational Superintendent. It appears that he appreciates the significance of the problem.

   The inspectors reviewed the Shift Superintendent's Log and the Control Room Operator's Log on a daily basis. There appears to be an improvement in the quality of the entries. However, there have been log entries that require explanation to understand the entry meaning. On October 26, 1982 the Shift Supervisor's Log indicated that a SBGT surveillance was conducted. A discussion with the Shift Superintendent indicated that the test could not be successfully completed. These was no log entry to that effect or explanation of the problems encounted. On November 6, 1982 the Control Room Operator's Log indicated tnat the "Fuel Handling Area Div. I Failed High." There were no additional entries explaining what failed. It was subsequently learned that the failure involved a radiation monitor.

   The inspector will continue to monitor log keeping practices. These items will be reviewed during a subsequent inspection.

   (Closed) Violation 416/82-60-01.

The inspector reviewed the revised administrative procedure 01-S-06-4, Rev. 4, Access and Conduct in the Control Room. It was noted that the requirements for maintaining an access list was deleted. Each organizational section reviewed their access list to remove personnel who do not need control room access. In addition the access lists are reviewed on a periodic basis to keep them current and ensure only the access level required is authorized. The inspector reviewed the results of these reviews. There are no further questions. This item is closed.

(Closed) Violation 416/82-60-03

The inspector has reviewed the operational standing order 82.0011. The order concerns overtime work by operators. It emphasises the necessity for each individual to ensure that the technical specification overtime limits are not exceeded. Operations management reviews shift schedules at the time of preparation to ensure that personnel are not scheduled to exceed the overtime limits. The inspector had no further questions concerning this item. 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 noncompliance or deviations. New unresolved items identified during this inspection are discussed in paragraph 8.

5. Plant Shutdown Inspection

The inspectors were kept 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 inspector 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 emergency standby systems; purpose of temporary tags on equipment controls and switches; annunciator alarms; adherence to procedures; adherence to limiting conditions for operations; temporary alterations in effect; daily journals and data sheet entries; and control room manning. This inspection activity also included numerous informal discussions with operators and their supervisors.

General plant tours were conducted on at least a weekly basis. Portions of the control building, turbine building, auxiliary building and outside areas were visited. Observations included valve positions and system alignment; snubber and hanger conditions; instrument readings; housekeeping; radiation protection controls; tag controls on equipment; work activities in progress; vital area controls; personnel badging, personnel search and escort; and vehicle search and escort. Informal discussions were held with selected plant personnel in their functional areas during these tours.

The following comments were noted:

a. During a control room tour it was noted that the Division II diesel generator had an engine trouble light lit. The operator informed the inspector that the diesel generators frequently received this alarm from the water jacket alarm set point, and had it verified. The inspector toured that diesel room and noted a local alarm for low starting air pressure. This also alarms on the engine trouble light in the control room. A subsequent check by the operators indicated that the starting air compressor breaker was open. The cause of which could not be identified. The inspector is concerned with the operators' acceptance of a recurring condition that may mask or cause to be overlooked other significant equipment alarms. In a discussion of this subject, the plant manager stated that this item will be reviewed and appropriate corrective action taken. This will be identified as Inspector Follow-up Item 416/82-76-01.

b. During a tour on November 2, 1982 the inspector noted that an I and C technician had wedged a quarter in the "RWCU Room Temperature" recorder switch. This would hold the switch in the "Read" position. The inspector verified that the action would not affect any trip function. The inspector is concerned that the use of unauthorized blocks may affect system operations. In a discussion of this subject the plant manager stated that appropriate corrective action would be taken. The inspector will review the corrective action during a subsequent inspection. This will be designated as an Inspector Follow-up Item 416/82-76-02.

c. On 11-9-82 a "fire" broke out in the containment. It was started by the hydrogen ignition system which was in contact with a type of Herculite material. Although there were no flames, a large amount of smoke was generated. There were no personnel injuries reported as a result of the "fire". There does not appear to be any equipment damage as a result of the heat and smoke generated. The possibility of damage is being evaluated by the licensee. A review of the operators log and discussions with personnel involved indicate that there were several problems encountered during the emergency.

   (1) When the control room was informed of the "fire" the fire alarm was sounded and an evacuation of the drywell and containment ordered. The security guard at lower containment exit required that the personnel exiting the containment "key card out". Reportedly he was also informed by the personnel exiting the area of the emergency that existed. They were still required by the guard to key out. Emergency Plan Procedure 10-S-01-16, Rev. 1, Personnnel Accountability, Section 6.1 states that personnel exiting an affected area or zone during an evacuation need not key card out of the area. The personnel are required to key into the

emergency accountability box. This requirement is applicable whether an announcement is made or in the event that personnel in the area determine a need for an evacuation. The failure to comply with the Emergency Plan Procedures is a violation and will be the first example of the violation identified as 416/82-76-03.

(2) These was a question as to whether all personnel in the plant heard the evacuation announcement. In a discussion of the subject, the plant manager stated that a survey is being conducted to ensure that the public address system can be heard in all plant areas. The inspector will review the results of this survey during a subsequent inspection. This will be identified as Inspector Followup Item 416/82-76-04.

(3) In response to the fire a plant staff member of the fire brigade was denied immediate emergency access to the containment to search for fire. The staff member was in fire brigade turn-out gear. He then left his vital area badge with the security guard and entered the area. The inspector is concerned with the apparent lack of adequate emergency plan training of the security force. In a discussion of this subject, the plant manager stated that this item would be reviewed and that appropriate corrective action taken. The inspector will review these corrective actions during a subsequent inspection. This will be identified as Inspector Followup Item 416/82-76-05.

d. During a review of the log for control of Technical Specification Limiting Conditions for Operation (LCO) the inspector noted several minor descrepancies. A cleared LCO was not signed off in the index and an eight hour verification was not initialed. The inspector discussed these items with plant management who took corrective action.

e. On 11-10-82 the inspector conducted an audit of the protective tagging system. The audit was conducted to verify compliance with plant administrative procedure 01-S-06-01. During the audit it was noted that safety-related components for four red equipment clearances were not independently verified as required by the procedure. The clearances were Nos. 4782, Valves and Switches E12F032A and B; 4941, Valves G33 F234 and 235; 4889, Valves B33F065A, F066A and G33 F100; and 4893, Valves B33F065B, F066B and G33F106. The failure to perform an independent audit as required by paragraph 6.2.2.c(6) is a violation. This is the second example of the failure to follow procedure, identified as violation 416/82-76-03.

6. Maintenance

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.

MWO E28195, Install locking springs on all 480 volts load center
No comments.

MWO E2B951, Inspect MPCS panel terminations.
No comments.

MWO M2B333, Replacement of recirculation pump 'A' seal assembly
No comments.

Procedure 07-S-15-6, Rev. 0, Lube oil sample collection
No comments.

MWO M2B679, and procedure 07-S-15-4, Rev. 0, Replacement of safety relief valve.

During the conduct of this maintenance activity the inspectors noted that plant quality personnel did not witness the final bolt torque pass. Step 7.16.3 of procedure 07-S-15-4, Rev. 0 requires plant quality witness the entire bolting and torquing sequence. When questioned about the witness point, the workers indicated that the plant quality inspector stated he only wanted to see the final torque pass, and it would be repeated when he came to the work site. The inspector contacted the Plant Quality Superintendent. The Plant Quality Superintendent stated that he had not authorized the deletion or modification of the inspection step. This is a violation of the Plant Quality Procedure 12-S-01-8, paragraph 6.2.2, which requires authorization by the Plant Quality Superintendent to delete quality witness points. This is the third example of the failure to follow procedure identified as violation 416/82-76-03.

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.

06-OP-1017-M-001, Rev. 11, Fuel Handling Area Sweep Exhaust Radiation Monitor Functional Test

No comments

06-IC-1C11-M-0004, Rev. 0, Low and Intermediate Limiter Functional Test of RPCS.

No comments.

06-IC-1B21-M-1009, Rev. 2, MSIVLCS Functional Test

No comments.

06-OP-1C51-V-0002, Rev. 2, Reactor Water Level - ADS Permissive

During a review of this item, an error on the as-built drawing was noted.

MP&L Drawing M-1077B, Rev. 14, Nuclear Boiler System contains a Table II "Water Level Instrument Contact Utilization" which identifies the trip unit for HPCS Level 8 trip point as "LS N674G" and slaved from transmitter "LT N073G". The HPCS Level 8 trip point actually comes from "LS N674L" and is slaved from transmitter "LT N073L". The error was identified to the licensee for review and correction.

8. Calibration Program

A review of the calibration program was conducted to verify compliance with the Operational Quality Assurance Manual, MPL-Topical-1, Policy 12 and Plant Administrative Procedure 01-S-07-3 Revision 5. This included an audit of Meter and Test Equipment (M&TE) nonconformance reports (NCR).

Plant records were reviewed to verify that "use-evaluations" were being completed for M&TE NCR's. The use-evaluation is part of the NCR form and is performed by maintenance engineering. There were a number of NCR's which could not be located. They were Nos. 305, 306, 307, 311, 319, 328, 333, 1000, 1001, 1002, 1003, 1004, 1005, 1007, 1008, 1009, 1010 and 1011. A new numbering system was stated at numbers 1000 after number 335.

The M&TE lab supervisor has copies of all NCR's sent to maintenance engineering. After evaluation by maintenance engineering, the form is required to be sent to plant records. The licensee is conducting a review to locate the missing NCR's and evaluations. Two of the missing evaluations were sent to Bechtel for evaluation. This item is considered unresolved pending review by the licensee. It will be designated as Unresolved Item 416/82-76-06.

Plant Administrative Porocedure 01-S-07-3 Rev. 5 requires in paragraph 6.8.3 that section procedures address the specific means by which a nonconforming item of M&TE shall be evaluated.

Maintenance Engineering has been transferred from the Maintenance Section to the Technical Section. The Technical Section is currently developing a section procedure to implement this requirement. The inspector was informed that the Maintenance Section Instructions would be followed until the issuance of the Technical Section Instructions. The inspector will review the implementing section instructions after their issuance. This will be identified as Inspector Follow-up Item 416/82-76-07.

9. Inspector Followup Items

(Open) IFI 416/82-59-01

The inspector was requested to close this item on diesel generator room and plant cleanliness. During a verification inspection of the plant on 11-5-82

the inspector noted that there was standing oil on the floor in the diesel generator room. Oil soaked rags, task and debris was observed in the room and piled against the wall. The inspector showed the existing condition to plant management personnel. This item will remain open due to a lack of adequate corrective action.

(Open) IFI 416/82-55-09

This item identified a lack of acceptance criteria for diesel generator surveillance test. The licensee stated that the technical specification item is also checked in other tests and is not required to be rechecked. The licensee has taken no action concerning this item. The inspector questions the lack of acceptance criteria even though redundant surveillances may also test the same function. A discussion with senior licensee management indicates that this item will be reviewed by a special engineering group presently engaged in a detailed surveillance procedure review. This item will remain open. It will be reviewed during a subsequent inspection after completion of the licensee surveillance review.