



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

Report Nos.: 50-416/33-32

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

Inspector: Frank Jape 8/17/83
for H. E. P. Krug Date Signed

Accompanying Personnel: A. P. Gilbert

Approved by: Frank Jape 8/17/83
F. Jape, Section Chief Date Signed
Engineering Program Branch
Division of Engineering and Operational Programs

SUMMARY

Inspection on July 14-18, 1983 and July 25-29, 1983

Areas Inspected

This routine, unannounced inspection involved sixty-four inspector-hours on site in the areas of independent inspection, surveillance test witnessing and the review of certain maintenance activities.

Results

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

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *C. McCoy, Plant Manager
- *P. Hughes, Corporate Regulatory Compliance
- *S. Feith, Acting Site QA Manager
- *L. Daughtery, MP&L Compliance Superintendent
- J. Cross, Assistant Plant Manager
- *J. Roberts, Startup Supervisor
- *G. Sparks, Shift Technical Advisor
- D. Cupstid, Startup Engineering
- S. Burris, Test Coordinator
- W. Beardon, Shift Superintendent
- L. Moulder, Shift Superintendent
- J. Frazier, Reactor Operator
- E. Cresap, Shift Supervisor
- B. Nealy, Clerk Typist
- J. Williams, Senior Micrographics Clerk
- J. Jackson, Chief Maintenance Planner
- T. Potts, Lead Mechanical Planner
- J. Strong, Mechanical Planner

Other licensee employees contacted included two technicians, two operators, and four office personnel.

Other Organizations

- *J. Bailey, Bechtel Compliance Coordinator
- R. McNulth, Bechtel Technical Support
- P. Lugo, GE Technical Staff Engineer

NRC Resident Inspector

- *A. Wagner

- *Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 29, 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. Witnessing of Integrated ECCS Testing (70312, 61701)

The inspector witnessed licensee performance of surveillance testing of the Division 1 and 2 ECCS diesels, switch gear and systems. The testing referred to as LOP/LOCA by the licensee, was being performed using the licensee's surveillance procedure 06-OP-1P75-R-0003 (Revision 20) titled "Surveillance Procedure, Standby Diesel Generator II: 18 Month Functional Test, Safety-Related."

The licensee had previously identified a problem with the Load Shed and Sequence System (LSSS) panel operating in the Auto Test Mode, and conducted the tests witnessed by the inspector with the LSSS operating in the manual mode. With the automatic testing feature thus bypassed, the LSSS appeared to be fully functional, and the licensee conducted testing on both divisions in the manual mode while evaluations of the problems with the automatic testing feature were pursued. The licensee subsequently reached the preliminary conclusion that the problems resulted from a design defect that permitted interference between the incoming LOCA signal and the automatic test signal under particular circumstances. Further evaluations are in progress.

The licensee also experienced additional problems with operation of the standby diesel generators, as well as with a number of safety-related valves. Licensee evaluations and corrective actions were in progress during the inspection period.

Of the areas inspected, no violations or deviations were disclosed.

6. Maintenance Activities (62700, 92706)

These inspection activities were performed in association with the witnessing of the simulated loss-of-coolant accident; integrated emergency core cooling system (ECCS) testing being performed following a simulated loss of offsite power (LOP). This testing, referred to as LOP/LOCA, was being performed by the licensee using the licensee's surveillance procedure 06-OP-1P75-R-0003 (Revision 20) titled "Surveillance Procedure, Standby Diesel Generator II: 18 Month Functional Test, Safety-Related."

One Maintenance Work Order (MWO) Number M2D562 titled "HPCS Diesel Generator," was selected for in-depth evaluation. This MWO was originated to correct the problem of oil collecting under both ends of the HPCS diesel engine.

Maintenance Planning Section records showed that the physical and paper work associated with MWO M2D562 was completed. To verify the accuracy of this and related information, the inspector obtained a reproduction of the master copy of MWO M2D562 from the quality records management system being main-

tained in the licensee's Document Control Center. The proper revision was on file. The inspector observed that the MWO was correctly filled out, signed and approved, in accordance with the licensee's administrative instructions. In addition, the inspector determined that Document Control Center personnel accurately performed a receipt inspection of MWO M2D562 consisting of a determination that the QA stamp is legible and properly filled in, and that any corrections are properly initialed and dated.

The inspector walked thru the licensee's procedure for scheduling and tracking preventive maintenance (PM), using the Division 3 (HPCS) diesel engine as the sample piece of equipment. The licensee's program includes a computer print out of safety-related preventive maintenance activities being conducted by plant maintenance personnel. Whereas MWO are used for safety related corrective maintenance activities, PM activities utilize a printed form, called a "Task Card", about the size of a computer card. Such cards for safety-related equipment are blue and are also designated level, on the card. One side of the card contains the equivalent of the information contained on MWO sheets (used for corrective maintenance), including work authorization signatures and signatures for the release of the equipment, for maintenance, including that of the shift supervisor. The front of the card also contains a remarks entry notation. If maintenance personnel performing the PM work detect a condition which could have safety significance, they are constrained to circle the "yes" near the "remarks" entry on the front of the card, and to include the actual remarks on the back of the card.

The inspector identified two administrative procedures which constrain maintenance personnel to seek corrective action for any deficiencies or questionable conditions found during the course of PM work, and to document the comments on the back of the Task Card. These provisions are promulgated by the licensee on page 11 of Revision 9 of Administrative Procedure Number 01-S-07-1, and paragraph 6.6.2.d of Administrative Procedure Number 01-S-07-7.

The Task Card also identifies a specific procedure, without revision number, which maintenance personnel are constrained to use in the performance of PM. The inspector examined copies of the following two PM procedures: 07-01-24-E22-S001-4 (Revision 1), titled "Preventive Maintenance Instruction, Periodic Inspection and Lubrication of the Woodward Governor, Safety Related" and 07-01-24-E22-S001-5, (Revision 1), titled "Preventive Maintenance Instruction, Periodic Governor Drive Element Replacement on the HPCS Diesel Engine, Safety Related". The second procedure was referred to by the first. Both procedures were properly prepared, reviewed and approved. The procedures appropriately addressed prerequisites, particularly formally obtaining authorization from the Releasing Organization before working on the diesel. The procedures also identify Technical Specifications which can be affected by the work. Engine isolation, inspection and restoration are all appropriately addressed. In particular, maintenance personnel are constrained by 7.4 of Procedure 07-1-24-E22-S001-4, to report any unusual conditions to the immediate supervisor.

No violations or deviations were disclosed.

7. Plant Tour (71302)

The inspector frequently toured the control room, reactor auxiliary building, diesel generator building and the maintenance planning area to observe work activities in progress, housekeeping and tag controls on equipment.

Within the areas inspected, no violations or deviations were identified.