



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-416/84-42

Licensee: Mississippi Power and Light Company
Jackson, MS 39205

Docket Nos.: 50-416

License No.: NPF-13

Facility Name: Grand Gulf 1

Inspection Conducted: September 17 - October 19, 1984

Inspector:

Robert L. Caldwell
J. L. Caldwell

11/9/84
Date Signed

Approved by:

V. Pancerra
V. Pancerra, Section Chief
Division of Reactor Projects

11/13/84
Date Signed

SUMMARY

Scope: This routine, unannounced inspection entailed 134.5 inspector-hours on site in the areas of Operational Safety Verification, ESF System Verification, Maintenance Observation, Surveillance Testing Observation, Power Ascension Test Witnessing and Reactor Startup.

Results: Of the six areas inspected, no apparent violations or deviations were identified in three areas; three apparent violations were found in three areas (failure to follow procedure for ensuring that standby service water basin syphon line was filled and vented, paragraph 5; failure to follow procedure for documenting the entry into a Technical Specification action statement, paragraph 7; and failure to follow procedure for completing verification steps (three examples), paragraphs 9 and 10).

8502060388 851115
PDR ADOCK 05000415
Q PDR

REPORT DETAILS

1. Licensee Employees Contacted

- *J. E. Cross, General Manager
- C. R. Hutchinson, Manager Plant Operations
- *M. J. Wright, Acting Manager Plant Operations
- *J. L. Robertson, Operations Superintendent
- *L. F. Daughtery, Compliance Superintendent
- *J. Bailey, Compliance Coordinator
- *D. Cupstid, Startup Supervisor
- *J. Roberts, Technical Superintendent

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

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on October 19, 1984, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection findings and had no comments regarding them.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. Unresolved Items

There were no unresolved items identified during this inspection.

5. Operational Safety Verification (71707)

The inspector kept himself 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 the 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:

On September 28, 1984, the inspector discovered, while reviewing the reactor operator's log, that the B Standby Service Water (SSW) level had dropped below the Technical Specification limit. Further inspection revealed that the proper Technical Specification action statement had been entered and the basin had been refilled, but there was no indication that the syphon line between A and B SSW basins had been checked filled and vented subsequent to the B SSW basin being refilled. The inspector was able to determine, through discussions with the reactor operator, that the syphon line had not been checked filled and vented, and the operators were not aware of the requirements to do so. The requirements for checking the syphon are stated in System Operating Instruction 04-1-01-P41-1, Revision 18, "Standby Service Water System and Alarm Response Instruction 04-1-02-1H13-P870-7A-F1, Revision 10, "SSW Basin B LVL HI/LO".

Verification of proper operation of the syphon line is important because without the syphon line Unit 1 of does not have the required 30 day supply of cooling water following the designed based loss of coolant accident.

The syphon line was subsequently checked and found to be properly filled and vented. The failure of the operators to have the SSW syphon line checked filled and vented is an apparent violation and will be identified as 416/84-42-01, failure to follow procedure.

6. ESF System Verification (71710)

A complete walkdown was conducted of the accessible portions of the Division I Diesel Auxiliary 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 degrading conditions.

No violations or deviations were identified in the areas inspected.

7. Maintenance Observation (62703)

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, 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.

I45935 - APRM Support Maintenance Work Order

I47132 - Check Setpoint on Leakage Detection System Equipment Area
Temperature Instrument for RWCU

On October 18, 1984, the inspector observed work being performed on the Reactor Water Clean Up (RWCU) System Leakage Detection System (LDS) per Maintenance Work Order I47132. The inspector observed that the LDS bypass switches for RWCU, RCIC and RHR isolation instrumentation had been placed in the bypass position. Further discussions with the technicians and a review of the associated surveillance procedure caused the inspector to suspect that a Technical Specification action statement had been entered.

A review of the Technical Specifications with the Shift Supervisor revealed this to be the case. Subsequently, the bypass switches were then taken out of the bypass position one hour and forty-eight minutes (1 hr, 48 min) after they had been placed in the bypass position. It was determined that Technical Specification Action Statement 3.3.2.c, which requires system isolation within two hours, had been entered once the LDS bypass switches had been placed in the bypass position.

The Shift Supervisor was not aware that action statement 3.3.2.c had been entered when the LDS had been placed in bypass. Therefore he did not document the entry into the technical specification action statement as required by Operations Procedure 02-S-01-17, Revision 2, "Control of Limiting Conditions for Operation".

The failure to recognize and document the entry into Technical Specification action statement 3.3.2.C is an apparent violation and will be identified as 416/84-42-02, failure to follow procedure.

8. Surveillance Testing Observation (61726)

The inspector observed the performance of the below listed surveillances. The observation included a review of the procedure for technical adequacy, conformance to Technical Specifications, verification of test instrument calibration, observation of all or part of the actual surveillances, removal from service and return to service of the system or components affected, and a review of the data for acceptability based upon the acceptance criteria.

06-IC-1M71-M-0003, Rev. 21, "Suppression Pool Temperature Monitoring
Instrumentation"

06-IC-1E31-M-0021-3, "HPCS Header Differential Pressure Instrument Test"

No violations or deviations were identified in the areas inspected.

9. Power Ascension Testing (72528C)

The inspector has monitored and observed the activities associated with startup testing. The inspector kept current on the test schedule and attended startup status and planning meetings. The startup engineer's log was reviewed during the daily control room tour.

The inspector observed all or part of the conduct, or preparation for conduct, of the below listed startup procedures and operations. The observation included a review of the procedure for meeting all test prerequisites, initial conditions, test equipment and calibration requirements. The overall crew performance was observed to ensure that minimum crew requirements were being met, that appropriate revised procedures were in use, that crew actions appeared to be correct and timely, that all data was collected by the proper personnel for final analysis, and that quick summary analysis showed proper plant response to the test. Where test results were available, in preliminary or final form, they were verified to be consistent with observations or that overall test acceptance criteria had been met.

1-CS1-SU-11-1, Revision 1, "LPRM Calibration"

1-C91-SU-13-1, Revision 1, "Process Computer"

1-B33-SU-29-1, Revision 3, "Recirculation Flow Control System"

The following observation was noted:

On October 10, 1984, the inspector entered the control room to observe the performance of a portion of 1-B33-SU-29-1, Revision 3, "Recirculation Flow Control System". The procedure had just been completed for one loop of the Recirculation System, so the inspector reviewed the completed procedure and data collected. This review revealed that the verification signature prerequisite step 3.1.4 and the Shift Test Supervisor's signature verifying that all the prerequisites were complete prior to commencing the test, were not made. In addition, all of the initials in the performance section of the test procedure were missing as well as the Shift Supervisor's signature for authorization to commence the test. The inspector questioned the Shift Test Engineer on the missing signatures and was told that he intended to make the verification signatures after the completion of the test. The inspector then asked if this was common practice and was told that it was not, but that the Shift Test Engineer had gotten in a hurry to complete the test. A discussion with the Shift Supervisor, revealed that he did not authorize the performance of the test and didn't even know that the test had been performed.

The Shift Superintendent and Startup Test Supervisor were notified of the problem and both decided that the test had to be reperfomed, making the appropriate verification signatures and initials as required. The inspector witnessed the reperformance of the startup test.

The failure of the Startup Test Engineer to make the proper verifications in the startup test procedure 1-B33-SU-29-1 when required, and the failure to get the Shift Supervisor's authorization to start the test prior to its performance is an apparent violation and will be identified as 416/84-42-03, failure to follow procedure.

Inspection Report 50-416/84-37, Paragraph 5, noted that the coupling check verification blocks in the Control Rod Movement Sequence Document were not initialed for control rods 20-05, 44-61, 60-21 and 04-45 during the reactor startup on September 12, 1984. This was considered as an isolated case, but will now be listed as an example of violation 416/84-42-03, failure to follow procedure. A third example is given in Section 10 below.

10. Reactor Startup (92706)

The inspector witnessed portions of the preparations and conduct of the Unit 1 startup, and the role of the main turbine per Integrated Operating Instructions (IOI) 03-1-01-1, Revision 22, "Cold Shutdown to Generator Carrying Minimum Load". During this inspection on October 4, 1984, the inspector found that step 5.10 of IOI 03-1-01-1 had not been initialed as completed. This step was required to be verified prior to reactor startup. The step being performed at the time was 5.31 which was well into the start up. Based on the context of the step and the Shift Supervisor's telephone conversation with the responsible operator, the step was verified as having been completed. The operator stated that he had verified the step but forgot to initial it.

The failure to initial step 5.10 of IOI 03-1-01-1 will be identified as another example of violation 416/84-42-03, failure to follow procedure.