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

Report No.: 50-416/84-33

Licensee: Mississippi Power and Light Company
Jackson, MS 39205

Docket No.: 50-416 License No.: NPF-13

Facility Name: Grand Gulf 1

Inspection Conducted: September 11 - 14, 1984

Inspectors: P. T. Burnett — Date Signed: 24 Sep 84

K. E. Davenport — Date Signed: 9/25/84

Approved by: F. Jape, Section Chief — Date Signed: 9/24/84
Engineering Branch
Division of Reactor Safety

SUMMARY

Scope: This routine, unannounced inspection involved fifty-five inspector-hours on site in the areas of witnessing special tests, witnessing startup tests, and closeout of outstanding items.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Licensee Employees Contacted

*J. E. Cross, General Manager
*J. C. Roberts, Technical Superintendent
*D. Cupstid, Startup Supervisor
*L. F. Daughtery, Compliance Supervisor
*J. D. Bailey, Compliance Coordinator
M. Wright, Action Plant Manager - Nuclear Operations
S. Loeper, Mechanical Engineer

Other licensee employees contacted included three shift superintendents, three shift supervisors, three startup engineers, two security force members, and two office personnel.

Other Organization

T. Enright, General Electric

NRC Resident Inspectors

A. G. Wagner, Senior Resident Inspector
*J. L. Caldwell, Resident Inspector

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on September 14, 1984, with those persons indicated in paragraph 1 above. No followup items were identified.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Special Test (92705)

The licensee had earlier reported the failure of seismic supports in standby service water system B (SSW-B). The failures were believed to be the result of water hammer. Following repair of the supports, the licensee wrote, approved, and implemented test procedure TSTI P41-84-004-S, SSW Water Hammer Test. The inspectors witnessed the tests from two different vantage points,

each of which gave ready access to three or more sets of supports. During the first test, SSW-B was started and stopped using the normal plant procedure. The starting and stopping were each accompanied by a modest amount of pipe banging and low-amplitude, brief vibration. In the normal startup operation, the pump is started before the discharge valve starts to open. In the accident with loss of offsite power scenario, the SSW pump is sequenced on, but the discharge valve starts to open as soon as the diesel starts. Consequently, the valve begins to open about ten seconds before the pump starts. When this scenario was tested, two sets of supports failed. The visible and audible effects of the pump starting were noticeably greater throughout the system. During the remainder of the inspection, the licensee was actively reviewing and evaluating the test data.

The completed test package will be reviewed during a future inspection.

No violations or deviations were identified.

6. Startup Tests (72532)

The inspectors witnessed the performance of Section 4.4, RCIC Hot, Quick Start: CST Injection at Rated Pressure of Startup Test 1-E51-SU-14-H, Revision 3. During the first test, RCIC pump flow was slightly less than required. Following a readjustment of the turbine governor valve, the test was rerun successfully. Inspection in the RCIC room showed only minor steam leaks to be present. The leakage decreased with time and temperature. The room and equipment were clean and well maintained.

No violations or deviations were identified.

7. Inspector - Identified Items (92701)

(Closed) Inspector Followup Item 416/83-37-01: Verify reactor pressure vessel cooldown rates stay within Technical Specification limits during shutdown from outside the control room. By Change PTC-01 to Procedure 1-000-54-28-2, Shutdown From Outside the Main Control Room, which added evaluation steps 5.1.4 and 5.2.4, the licensee has satisfactorily addressed the concern.

(Closed) Inspector Followup Item 416/83-51-02: BOP System Piping Vibration Monitoring Program, 1C88ST04, rescheduling of tests. The inspector reviewed procedure 1C885T04 and noted that the following sections were completed:

7.1.2	RHR System Piping
7.2.4	RWCU Rated System Flow
7.1.5.5	Maximum Condensate Pump Recirculation Flow
7.2.6	Condensate Piping Transients

This item is closed.

(Closed) Inspector Followup Item 416/81-51-02: Module 70370, which was completed for Hot Operations needed to be looked at after fuel loading. The issues addressed in Module 70370 are being tracked by the review of the 1C88STOxx series of special tests. This item is closed.

(Open) Inspector Followup Item 416/83-11-01: Failure of drywell suppression pool bypass leakage rate test. In a letter dated October 31, 1983, from the NRC to the licensee, it was indicated that the NRC Office of Nuclear Reactor Regulation (NRR) concurred with the Region II position that the drywell bypass leakage test performed on March 10 - 13, 1983, was a failure. The licensee had determined that the failure was due to two open electrical conduits. As part of the corrective action, the licensee revised administrative procedure 1-S-07-1, Control of Work or Plant Equipment and Facilities, to include Section 6.13 on the Control of Work on Penetrations. In addition, the surveillance procedure 06-ME-1M10-R-0003, Drywell Bypass Leakage Rate, was revised to: (1) include the requirements for updating the testing schedule in the event of two consecutive failed tests, (2) include a prerequisite to review the previous Leak Rate Test for Technical Specification acceptance, and (3) require a sign-off on data sheet 1 for closing and/or sealing all new penetrations.

The test results for the most recent drywell leak rate test will be reviewed by the inspector prior to closing this item.