



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

Report No. 50-416/81-21

Licensee: Mississippi Power and Light Company
Jackson, MS 39205

Facility Name: Grand Gulf Unit 2

Docket No. 50-416

License No. CPPR-118

Inspection at Grand Gulf Nuclear facility near Port Gibson, MS

Inspector: M. D. Hunt 7/13/81
M. D. Hunt Date

Approved by: P. Burnett 7-14-81
P. Burnett, Acting Section Chief Date
Engineering Inspection Branch
Division of Engineering and Technical
Inspection

SUMMARY

Inspection on June 9-12, 1981

Areas Inspected

This routine, unannounced inspection involved 26 inspector-hours onsite in the areas of preoperational testing; licensee identified items and violation corrective actions.

Results

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

DETAILS

1. Persons Contacted

Licensee Employees

- *S. F. Tanner, QA Coordinator
- *J. M. Kelly, QA Specialist
- *J. C. Bell, QA Representative
- *J. W. Yelverton, QA Supervisor
- *B. C. Lee, QA Representative
- *B. D. Stewart, Construction Manager
- *C. R. Hutchinson, Start-up Manager
- G. B. Rogers, Site Manager

Other Organizations

- *M. R. Lindsey, QA Supervisor, Bechtel Power Corporation (BCP)
NRC Resident Inspector
- *A. G. Wagner
- *Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on June 12, 1981 with those persons indicated in Paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

(Closed) INF 50-416/80-08-01, Failure to follow pipe support installation and inspection procedures. The licensee's final report dated June 17, 1980 informed Region II that two nonconforming reports and two condition reports had been issued regarding this noncompliance. The inspector verified that these reports are now completed and closed.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Pre-Operational Tests - Procedure Review

- a. The following test procedures was reviewed for conformance with R.G.1.68, FSAR Chapter 14, Grand Gulf Startup Manual chapters 5000 and 7000, and MPL-Topical-1 Quality Assurance Manual.

Procedure No. 1CIPT01, Rev. 1, Control Rod Drive Hydraulic System.

It was noted that in several instances the instruction/procedure required the removal of a jumper that had been installed in several steps previously. The removal instructions contain only the words "Remove the jumper installed in step...". The inspector commented that the procedure would insure more accuracy if the jumper points of installation were identified in the removal statement. The licensee representatives advised the inspector that as a rule the points of jumpers installation were identified in removal instructions and the case in point was an oversight.

The procedure had been reviewed and approved by management, stated the pertinent prerequisites, specified initial test conditions, provided for signoffs of each step and review by the appropriate personnel.

- b. The following procedure while classified as a startup procedure involved certain testing during pre-op testing:

Procedure 1-E41-ST01, Rev. 1, Reactor Vessel Flow - Induced Vibration Testing Prior to Fuel Load.

This is a prototype BWR/6 reactor vessel internals for a 251 inch inside diameter vessel. Therefore a comprehensive assessment program has been developed to include in-depth analysis of extensive field measurements and full inspection as required by R.G 1.20. Part of this test was performed during the open vessel injection portion of the high pressure core spray system pre-operation test 1-E22-PT-01.

The procedure was compared to the requirements of FSAR Sections 3.9.2.4 and 14.2.12.1.37 and RG 1.20. The review revealed no items of concern.

Within the areas examined, no violation were identified.

6. Plant Tour

The inspector conducted a walk-through examination of the control, auxiliary and reactor buildings. It was noted that in several areas conduit was being attached to cable tray supports. The licensee advised the inspector that the conduit and additional cable weights had been included as part of the seismic support analysis.

Testing for turnover to pre-op was in progress in several areas. Access control to certain rooms has been instituted.

Within the areas examined, no violations were identified.

7. Jumper Control

The inspector noted that the pre-op procedures required the use of jumpers. The procedures require the removal and signoff for these jumpers, but there is no inventory taken of the jumpers used and jumpers removed.

The inspector inquired of the licensee about the establishment of a method for jumper control. During discussions it was pointed out that numbered jumpers assigned to certain tests could provide a method for identifying any jumper that might be overlooked during the removal effort. The licensee agreed to look further into this situation.

8. Licensee Identified items (LII) 10 CFR 50.55(e)

(Closed) LII 50-416/80-02-02: Polypropylene pulling rope cut through cable jacket and insulation and exposed the conductors. MP&L reported this item to Region II March 13, 1980. The inspector reviewed the results of tests conducted as reported May 19, 1981. The corrective actions appear adequate.

(Closed) LII 50-416/80-12-18: Consip Inc. reported Part 21 pertaining to pump damage where sample inlet and outlet are closed off while the pump is running. This item was reported April 30, 1980. The final report submitted May 30, 1980 called for a bypass or recirculation line with a pressure operated check valve to be installed between the pump discharge and the pump suction lines. Records indicate the work is complete and tested.

(Closed) LII 50-416/81-21-01: Consip Inc. Motor Shaft Failure. This item was reported to Region II February 11, 1981. The final report dated May 26, 1981 stated the manufacturer had redesigned the motor shafts to make them stronger.

(Closed) LII 50-416/79-04-01: Work performed without a QA program. That a GE subcontractor had performed and was performing electrical activities without a QA program was reported to Region II February 12, 1979. The final report dated May 29, 1981 advised that a QA program was instituted February 16, 1979 and all work done prior to this date was reinspected and evaluated. The inspector reviewed various records that support this information.

(Closed) LII 50-416/79-04-03: "As shipped" panels do not match "as shipped drawings". This item was reported to Region II February 23, 1979. The final report dated May 29, 1981 advised that this item resulted due to changes requested by the AE and made by the vendor, but due to time lag in drawing revisions the mismatch occurred. The site QC organization performed a comparison inspection between the panels and drawings and identified the discrepancies. The drawings were then revised to reflect the "as shipped" conditions. A QA audit (80-93) was reviewed by the inspector. This audit was a sampling check of cabinets and verified that the cabinets checked did conform to the drawings.

(Closed) LII 50-416/79-04-02: Inadequate crimping of connecting pins. This item was reported February 23, 1979. The final report dated February 20, 1981 contained a summary of test results for pull tests of samples of the crimped connections. The test results indicate the connector crimp is acceptable.

(Closed) LII 50-416/79-20-04: Powell valve company computer code challenged. This item was reported September 4, 1979. The final report dated August 1, 1980 indicated that corrective actions were in progress. This work has now been completed for Unit 1.

(Closed) LII 50-416/80-20-19: Bechtel supplier drawing revision notice program inadequate controls. This item was reported to Region II August 6, 1980. The final report dated April 10, 1981 indicates that the problem was investigated and corrective actions taken.

(Closed) LII 50-416/80-19-03: Anchor bolt ultimate strength. This item was reported August 14, 1980. The final report was submitted May 5, 1981 and included a Part 21 evaluation. The manufacturer has now revised the load capacities of the 1" diameter bolt anchor, and the licensee's AE has incorporated these specifications in their design.

(Closed) LII 50-416/80-20-08: Station Service water pumps picked up debris from SSW Basin. This item was reported June 13, 1980. The final report submitted March 6, 1981 advises that pump suction services have now been installed.

(Closed) LII 50-416/80-20-11: Diesel generator - fractured valve body on water jacket. This item was reported June 26, 1980. The final report dated April 3, 1981 advised that the valves had been replaced and the installation instructions have been revised to preclude recurrence.

(Closed) LII 50-416/80-20-20: RPV servicing lines - possible shearing by reflective insulations. This item was reported August 8, 1980. The final report dated May 1, 1981 advises that design changes have been made to include pipe sleeve extensions and reflectors to protect the insulation panels from maximum pressure watered by the LOCA.

(Closed) LII 50-416/80-12-05: Loss of offsite power effects. This item was reported to Region II March 17, 1980. The licensee's final report dated April 21, 1981 concluded that the item was not reportable under 10 CFR 50.55(e), but did conclude that the power supply configuration was operationally undesirable. Evaluations are underway to address this situation. The licensee will provide descriptions of all actions taken in this regard.

(Open-Closed) LII 50-416/81-21-02: Starter/Breaker plug-in drawers not seismically qualified. This item was reported to Region II February 27, 1981. The final report was dated June 1, 1981. This deficiency concerns Klockner-Moeller supplied starter/breakers (24 inch) plug-in drawer that were not seismically qualified. The unqualified equipment will be replaced with qualified drawers of varying sizes.