



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

Report No.: 50-416/85-18

Licensee: Mississippi Power and Light Company
Jackson, MS 39205

Docket No.: 50-416

License No.: NPF-29

Facility Name: Grand Gulf

Inspection Conducted: May 17 - 18, 1985

Inspector:

G. A. Schnebli

G. A. Schnebli

5/28/85

Date Signed

Approved by:

F. Jape, Section Chief
Engineering Branch
Division of Reactor Safety

Frank Jape

5/28/85

Date Signed

SUMMARY

Scope: This routine, unannounced inspection entailed 14 inspector-hours on site in the areas of startup test witnessing and followup on previously identified items.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

W. Cade, Shift Superintendent
J. Cross, General Manager
*D. Cupstid, Startup Supervisor
L. Daughtery, Compliance Superintendent
R. Rogers, Assistant to General Manager

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

Other Organization

*R. Bodily, General Electric, Engineer, Startup Test Design and Analysis
M. Haben, General Electric, Engineer, Startup Test Operations

NRC Resident Inspectors

R. Butcher, Senior Resident Inspector
J. Caldwell, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on May 18, 1985, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. Unresolved Items

Unresolved items were not identified during the inspection.

5. Independent Inspection Effort (92706)

The inspector conducted a general inspection of Grand Gulf Nuclear Station's adherence to proper housekeeping and formal behavior in the control room

during testing. The inspector noted that all personnel observed appeared to be attentive to their respective assigned duties and responsibilities. In general, the control room appeared to be maintained in a clean and orderly manner.

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

6. Startup Test Witnessing - Unit 1 (72514, 72528)

During this inspection, the inspector witnessed 1-000-SU-27-6, Generator Load Rejection-Test Condition 6. The following areas were observed:

- Testing was conducted in accordance with approved procedures and the latest revision of the test procedure was available and in use by personnel conducting the test.
- All test procedure prerequisites were met.
- Changes to the procedures were accomplished in accordance with the licensee's administrative controls.
- Adequate coordination existed among the responsible organizations to conduct the test properly and in a controlled manner.
- Test data were collected and recorded as required by the procedure or other administrative instructions.
- Preliminary review of the test results assured that the licensee's preliminary test evaluation was consistent with the inspector's observation.

Prior to the performance of this test, two items of concern were identified.

- a. The Level 1 acceptance criteria specified in step 6.1.1 of 1-000-SU-27-6 and 14.2.12.3.24.d.1. of the FSAR states:

"For turbine and generator trips at power levels greater than 50% NBR, there should be a delay of less than 0.1 seconds following the beginning of control or stop valve closure before the beginning of bypass valve opening. The bypass valves should be opened to a point corresponding to greater than or equal to 80 percent of their capacity within 0.3 seconds from the beginning of control or stop valve closure motion."

Due to cracks in the piping between "A" bypass valve and the condenser, "A" bypass valve was disabled which brought up the question as to whether or not the acceptance criteria could be met with only two of the three bypass valves operable. The licensee and General Electric stated that the three bypass valves response was successfully demonstrated in Test Condition 3 (TC-3). In addition, previous testing also

showed that the "A" valve leads the "B" and "C" valves in response. Therefore, they concluded that the Load Rejection Level 1 acceptance criteria could be verified indirectly by the "B" and "C" bypass valve response, assuming the "B" and "C" valves performed as previously demonstrated and met the Level 1 criteria during this test.

- b. The Level 1 acceptance criteria specified in step 6.1.3 of 1-000-SU-27-6 and 14.2.12.3.24.d.3 of the FSAR states:

"The two pump drive flow coastdown transient during the first three seconds must be equal to or faster than the upper bound criteria that is specified in 1-B33-SU-30-3."

During the performance of 1-B33-SU-30-3 in TC-3 this criteria could not be met as the pump coastdown data deviated slightly from the criteria specified. The licensee submitted a deviation on April 28, 1985, which was subsequently approved by the NRC on April 29, 1985. The deviation only addressed TC-3 and not Test Condition 6 (TC-6). The licensee contended that the data obtained during the performance of this test in TC-6 would initially be compared to the Level 1 acceptance criteria specified in the procedure and the FSAR. However, if the data did not meet the Level 1 criteria, it would be compared to the criteria allowed by the previously approved deviation for TC-3 and if meeting this, no further actions would be required since the deviation previously granted for TC-3 was based on 100% power. If the data did not meet that allowed by the deviation, an additional deviation would be requested.

Prior to performance of this test, the above concerns and resolutions were addressed in a conference call (May 17, 1985) between licensee management, Region II, and NRR and all parties concerned agreed that the licensee's proposals were acceptable.

Based on a preliminary review of the raw data available after the test, the "B" and "C" bypass valves responded as expected and the recirculation pump coastdown data met the criteria allowed by the previously approved deviation.

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

7. Followup On Previously Identified Items (92701)

(Closed) Inspector Followup Item (IFI) 416/85-10-01, concerning the inability to complete section 4.6 of SU-29-3 (Recirculation Flow Control System Test) due to APRM spikes. The inspector reviewed the licensee's actions to resolve this item which included changing the test procedure and reperforming the applicable section of the test. IFI 416/85-10-01 is closed.