



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

Report No.: 50-425/88-15

Licensee: Georgia Power Company  
P. O. Box 4545  
Atlanta, GA 30302

Docket No.: 50-425

License No.: CPR-109

Facility Name: Vogtle 2

Inspection Conducted: March 7-11, 1988

Inspector: P. A. Taylor 3/29/88  
for A. Szczepaniec Date Signed

Approved by: P. A. Taylor 3/29/88  
for F. Jape, Section Chief Date Signed  
Test Programs, Section Chief  
Division of Reactor Safety

SUMMARY

Scope: This routine, unannounced inspection was in the areas of Preoperational Testing and Readiness Review, Module 03A, Phase 1.

Results: No violations or deviations were identified.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

M. Ajluni, Operations Superintendent  
R. Ebner, Construction Side Engineering Group Supervisor  
\*E. Groover, Quality Assurance Site Manager - Construction  
\*S. Hall, Procedures Superintendent  
\*H. M. Handfinger, Project Startup Manager  
\*R. W. McManus, Readiness Review Manager  
\*P. D. Rice, Vice President and Project Director

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

#### NRC Resident Inspectors

\*C. W. Burger, Resident Inspector  
\*R. Schepens, Senior Resident Inspector - Construction

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on March 11, 1988, 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 following new items were identified during this inspection:

- 88-15-01 OPEN Inspector Followup Item (IFI), Review Sections 2 and 4 of Readiness Review Module 03A for update of organization and duties of personnel to match descriptions in Startup Manual.
- 88-15-02 OPEN IFI, Followup of compliance of resolution of finding 2RR-03A-005 in Section 6 of Readiness Review Module 03A, to meet FSAR requirements 14.2.8.1.57 regarding air dryer dewpoint capability.

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 this inspection.

#### 5. Readiness Review, Module 03A, Phase 1

Phase 1 of Module 03A, Initial Test Program, Preoperational Test Phase, for Vogtle Unit 2 Readiness Review was submitted with an effective date of September 1, 1987. The module was reviewed for program description and implementation and for technical commitment adequacy.

The module was found to be in agreement with the Vogtle Unit 2 Startup Manual (SUM) and the Final Safety Analysis Report (FSAR), with the following exceptions.

The description of the preoperational test phase organization was not current with the organization as it exists and is described in the SUM. The following differences were found. A flushing supervisor is described in the module, and his duties are listed in Paragraph 4.2.2.i of the module, yet this position is not in the SUM. An Operations Superintendent is not in the module's organization chart, yet the SUM recognizes this position as a key manager under the Assistant Plant Startup Manager (APSM). The provided organization chart does not properly show the relationship between the following key managers: Project Startup Manager, Plant Startup Manager, Assistant Plant Startup Manager and Plant Support Manager (PSM). The existing organization is as described in the SUM. Some responsibilities listed were not accurate. For example, Paragraph 4.2.3i states the PSM has final approval for all preoperational test procedure preparation. In practice, and in accordance with the SUM, this approval rests with the APSM. Paragraph 4.2.3.3 states approval of results of preoperational tests procedures is the same as for preparation. In practice, and in accordance with the SUM, this is not true; the PSM provides this approval.

The licensee has agreed that the Module 03A will be updated at the issuance of the next phase for this module. This followup is identified as IFI 88-15-01.

A review was also made of the commitment implementation of the module. The requirements of Chapter 14 of the FSAR were compared to planned test procedures to determine if the intent to meet each requirement in an allocated procedure was present. This review was previously completed and documented in Inspection Report No. 50-425/87-49. No problems between FSAR requirements and allocations to test procedures were found. A review was made to verify commitment implementation in procedures that have already been written. These commitments were to meet FSAR requirements other than those requirements listed in Chapter 14. These included readiness review commitment numbers 8.3.1.1.3.H.1, 8.3.2.2, 9.2.24, 9.5.6.4, 10.3.4.1, 14.2.2.2, and 14.2.4. No discrepancies were found. NRC question Q640.30 and other various Regulatory Guide 1.68 requirements listed in the Module 03A commitments matrix were also reviewed and no discrepancies were found.

One minor discrepancy found within the readiness review module itself was to commitment 4.2.8.1.85, which cites a "Reactor Protection System Preoperational Test." Per the FSAR, this commitment is to be met by the "Safeguards Test Cabinet Testing Capability" Test.

A review was also made of the Unit 1 preoperational testing followup items listed in the module. No discrepancies or difficulties were found with either the unit followup items or the assessment of the Unit 1 followup item made by the licensee, with one exception. The discrepancy found was with the assessment of readiness review finding 2RRF-03A-005, Level II. The readiness review conclusion was that the change in the design manual concerning air dryers had "no impact on tests or hardware." Section 6.1.5 of the module discusses the finding in detail, which concerns dewpoint requirements for Instrument Air pressure. The project response to the readiness review finding was that the requirement of Paragraph 9.3.1.2.2 of the FSAR "was a technical requirement for procured equipment" and "is not the basis for an acceptance criteria for satisfactory operation." However, in accepting this response, the readiness review failed to recognize that FSAR commitment 14.2.8.1.57, Instrument Air System preoperational testing, has the objective "to demonstrate operation of the air dryers" and an acceptance criterion that "air dryers perform as described in Subsection. . . 9.3.1." Subsection 9.3.1.2 states the capacity of the air dryers is -60°F dewpoint at 120 psig. Therefore, the dewpoint specification is not only a procurement specification, but a performance requirement as well and must be verified in a procedure. The change in the design manual, which the licensee intended to use as an acceptance criteria, was to specify a dewpoint of -15°F at line pressure. Testing and verifying this value only would not, however, verify the dryer capability as required by the FSAR. The licensee has agreed to resolve the discrepancy between the design manual, FSAR requirement and test procedure acceptance criteria. Test procedure 2-3K-01, which is the applicable procedure is not written yet, but clarification within the Readiness Review module is appropriate. The resolution of the testing requirements in the test procedure and the FSAR requirements is being identified as IFI 88-15-02.

All other Unit 1 followup items were found to be satisfactory, and those items needing corrective action differing from Unit 1 were found to be adequate and implemented.

#### 6. Preoperational Test Program (70301, 70312, 70433)

A review was conducted of the status of the test procedure issuance, and the schedule for performance of the primary hydrostatic test. A copy of the procedure issue schedule was obtained and appeared satisfactory. Procedures implementing a number of FSAR commitments were reviewed to verify that an objective of the test would indeed satisfy the commitments. The commitments reviewed are listed under the Readiness Review section above. No discrepancies were found.

During the inspection, portions of two separate preoperational tests were witnessed. Section 6.4 of Preoperational Test 2-3BG-01, SIS "Preop" performed a verification test of centrifugal charging pump performance. Section 6.1.3 of Preoperational Test 2-3BGB-01, CVCS System Preop, tested Valve 2-HV-8147 operation and associated control circuitry. The portions of the test observed were performed satisfactorily.

The latest revision of the test procedure was available and in use. Minimum crew requirements were met. Test prerequisites were met. Proper plant systems were in service. Special test equipment that was installed to support the test was calibrated. The tests were performed as required by the test procedure and a test interruption that occurred during the centrifugal charging pump test was documented in the procedure test log.

Crew actions were correct and timely during the performance of the test and adequate coordination existed among test crew members to conduct the test properly. Proper personnel collected the required data. Test results and performance observed indicated that the acceptance criteria were met. Procedure review and approval were in accordance with the Startup Manual.

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