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

Report Nos.: 50-424/86-14 and 50-425/86-08

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

Docket Nos.: 50-424 and 50-425 License Nos.: CPPR-108 and CPPR-109

Facility Name: Vogtle 1 and 2

Inspection Conducted: February 24-28, 1986

Inspector: T. D. Gibbons 4/14/86
T. D. Gibbons Date Signed

Approved by: T. E. Conlon 4-14-86
T. E. Conlon, Section Chief Date Signed
Engineering Branch
Division of Reactor Safety

SUMMARY

Scope: This routine, unannounced inspection involved 39 inspector-hours on site in the areas of electrical components and systems work observation and records review, licensee identified items, electrical cable work observation.

Results: One unresolved item was identified - Review the Retrievability of QC Installation Records for Equipment Released for Startup Testing.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*R. E. Conway, Senior Vice President
*M. H. Googe, Project Construction Manager
E. D. Groover, Site QA Manager
*B. C. Harbin, Manager, Quality Control
*F. Page, Electrical QC Section Supervisor
*G. A. McCarley, Project Compliance Coordinator
*W. E. Mundy, QA Audit Supervisor
*R. E. Folker, Project QA Engineer

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

NRC Resident Inspector

*J. F. Rogge, Senior Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on February 28, 1986, 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.

Unresolved Item 424/86-14-01, Review the Retrievability of QC Installation Records for Equipment Released for Startup Testing.

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 are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. One new unresolved item identified during this inspection is discussed in paragraph 5.

5. Electrical Components and Systems - Work Observation (Unit 1) (51053)

The inspector selected the following equipment for examination:

Emergency Diesel Generator (EDG) Panel	1-2403-P5-DG3
EDG Panel	1-2403-P5-DG4
125VDC Battery Charger	1-1806-B3-CBA
125VDC Battery Charger	1-1806-B3-CBB
4160VAC Medium Voltage Switchgear	1-1804-S3-A03
4160VAC Medium Voltage Switchgear	1-1804-S3-A02
480VAC Load Center	1-1805-S3-BBC
480VAC Motor Control Center	1-1805-S3-BBC
480VAC Load Center	1-1805-S5-BBA
125VDC Power Distribution Panel	1-1806-S3-DCB
Conduit	1BE311RL117
Conduit	1BE311RL118
Conduit	1BE311RL119

The above items were examined to assure that the receiving inspection was completed and documented in the areas of identification, physical condition, certification records and that there was an adequate inspection staff. The above items were reviewed using QC records. The inspector verified that the above equipment is installed in the plant and stored in place pending plant startup. The installation of the equipment examined was completed and some of the equipment was released for startup testing. The inspector verified that the proper procedures and drawing were used for installation, that the specified materials were used, and that the equipment was properly mounted. The equipment was clearly identified and protected from damage during construction activities in the immediate area. The records to verify that EDG "B" panels 1-2403-P5-DG3 and 1-2403-P5-DG-4 had been inspected in accordance with the licensee's procedure No. EG-T-04, Installation of Major Electrical Equipment were not available during this inspection. In a subsequent telephone conversation the licensee indicated that the inspection records had been located and will be available for review during a future NRC inspection. This item is identified as an unresolved item 424/86-14-01, Review the Retrievability of QC Installation Records for Equipment Released for Startup Testing.

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

6. Electrical Components and Systems - Record Review (Unit 1) (51055)

The inspector examined the records for the equipment identified in paragraph 5 above. The areas examined were receiving inspection, identification, specified material, vendor inspections, vendor test reports, and certificates of compliance. These records were clear and readily retrievable. The records reflect the reporting of deficiencies on receiving and stored equipment.

The installation records were examined to assure that equipment was installed to the correct drawings and procedures, specified materials were installed, and the equipment was anchored as required. The inspections were completed and documented except as noted in paragraph 5. The equipment installed was adequately separated, independent, and adequate protection was installed to protect the equipment from construction damage.

The licensee is taking action to independently authenticate the qualification records for his inspectors. A review of inspector qualifications is required by the QA program. The review requires verification of education and experience.

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

7. Licensee Identified Items

a. (Closed) Item 424/CDR 83-48, Westinghouse NLP Printed Circuit Cards (10 CFR 50.55(e)). The final report was submitted on January 6, 1986. The report has been reviewed and determined to be acceptable. The inspector held discussions with responsible contractor representatives and reviewed supporting documentation to verify that the corrective actions identified in the report have been completed. This item involved defective or missing heat sinks on three Westinghouse loop power supply (NLP) printed circuit cards. The cards were installed in Unit 1 balance of plant process cabinet 1604QSPP1. The cards were equipped with a thermal heat sink assembly which was subject to adhesive failure. The three cards found at Vogtle 1 were returned to Westinghouse for modification and documented on deviation report MD5317. The repaired cards have been installed and retested.

b. (Closed) Item 424/CDR 83-44 and 425/CDR 83-44, General Electric (GE) Company SFF-30 Underfrequency Relays Installed in Brown Boveri Electric (BBE) Inc. Switchgear (10 CFR 50.55(e)). The final report was submitted on October 6, 1983. The report has been reviewed and determined to be acceptable. The inspector held discussions with responsible licensee representatives and reviewed supporting documentation to verify that the corrective actions identified in the report have been completed. The licensee's vendor BBE identified the potential inability of the SFF-30 relay to pass the Vogtle seismic qualification. BBE tested a G.E. SFF-30 relay and a BBE device 81 (type FCX103b/1) relay to the Vogtle seismic profile. The BBE relay was qualified for use at Vogtle. The licensee has decided to use the BBE relay for all underfrequency relays. After evaluation, the licensee has determined that this item is not reportable under 10 CFR 50.55(e) or Part 21. The inspector concurs with the licensee's evaluation.

c. (Closed) Item 424/CDR 85-67 and 425/CDR 85-67, Reliance Electric Junction Boxes - Field Mounting Configuration (10 CFR 50.55(e)). The final report was submitted on February 8, 1985. The report has been reviewed and determined to be acceptable. The inspector held discussions with responsible licensee representatives and reviewed supporting documentation to verify that the corrective actions identified in the report have been completed. The installation drawing allowed mounting of the junction boxes in configurations which were not seismically qualified. The licensee's architect engineer (AE) performed an analysis to identify the qualified mountings. The drawings have been revised to assure that the proper configurations are met. A walkdown inspection of all installed junction boxes to assure that they are installed by the drawing details has been completed.

d. (Closed) Item 424/CDR 84-72 and 425/CDR 84-72, GE AKR 30 and 50 Circuit Breakers, (10 CFR 50.55(e)). The final report was submitted on February 1, 1985. The report has been reviewed and determined to be acceptable. The inspector held discussions with responsible licensee representatives and reviewed supporting documentation to verify that the corrective actions identified in the report have been completed. On June 15, 1982, the General Electric (GE) Company reported, under Part 21 that defects exist on certain of its low voltage power circuit breakers. GE contacted the licensee and identified that there was a possibility of defects in the low voltage switchgear which uses these breakers. The licensee has returned all of the GE AKR 30 and 50 circuit breakers at Vogtle to GE for rework. The breakers have been returned from GE after modification.

e. (Closed) Item 424/CDR 85-75 and 425/CDR 85-75, Jumper and Jumper Package Controls, (10 CFR 50.55(e)). The final report was submitted on August 15, 1985. The report has been reviewed and determined to be acceptable. The inspector held discussions with responsible licensee and/or contractor representatives and reviewed supporting documentation to verify that the corrective actions identified in the report have been completed. The licensee conducted an audit of the Jumper and Jumper Package Control which identified concerns with the program. The licensee established a program to retrain the engineers on procedures for jumper control, assigned an experienced termination engineer to the equipment group; and verified prior to turnover that the jumper packages were complete. Procedures were revised to establish control, inspection, and documentation of the jumper installation.

f. (Closed) Item 424/CDR 85-79 and 425/CDR 85-79, Electrical Conductor Seal Assemblies (ECSA), (10 CFR 50.55(e)). The final report was submitted on September 26, 1985. The report has been reviewed and determined to be acceptable. The inspector held discussions with responsible licensee representatives and reviewed supporting documentation. The licensee identified that it had not been

demonstrated that any of the combined ECSA-box assemblies would perform their safety function during or after a seismic event. A walkdown of installed ECSA box-assemblies was performed and the designer analyzed them to assure that there was no seismic problem. The licensee has concluded that the assemblies will meet the intended function. The licensee has determined that this issue is not reportable. The inspector concurs with the licensee's determination.

7. Part 21

(Closed) Item 424/Part 21-85-01 and 424/Part 21-85-01, Possible Defect in American Air Filter Intake Silencers provided with the Emergency Diesel Generator. The licensee received a letter from American Air Filter Corporation (AAF) notifying them of a possible defect on the Intake Silencers for the emergency diesel generators. AAF has reported this possible defect to the NRC under Part 21

The licensee has inspected all intake silencers received onsite and found that all end caps were welded to the silencers as required.