



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

MAY - 1 1980

Report Nos. 50-424/80-07 and 50-425/80-07

Licensee: Georgia Power Company  
270 Peachtree Street  
Atlanta, GA 30303

Facility Name: Vogtle Nuclear Plant, Units 1 & 2

Docket Nos. 50-424 and 50-425

License Nos. CPPR-108 and CPPR-109

Inspection at Vogtle site near Waynesboro, Georgia

Inspector:

J. J. Lenahan

*J. J. Lenahan*

5/1/80

Date Signed

Approved by:

T. E. Conlon, Section Chief, RCES Branch

*T. E. Conlon For*

5/1/80

Date Signed

#### SUMMARY

Inspection on April 14-16, 1980

#### Areas Inspected

This routine, unannounced inspection involved 18 inspector-hours on site in the area of foundations work activities and quality records, licensee action on previous inspection findings, licensee identified items, and the soils and concrete laboratory.

#### Results

Of the four areas inspected, no items of noncompliance or deviations were identified in three areas; one item of noncompliance was found in one area (Infraction - Failure to evaluate moisture check test results - paragraph 7).

8007110536

## DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*H. H. Gregory, III, Assistant Project Manager
- \*D. M. Figuet, Manager, Field Operations
- \*E. D. Groover, Site QA Supervisor
- \*R. Allen, Manager, QC
  - B. Harbin, Supervisor, Project Engineering
  - R. W. McManus, Civil QC Supervisor
  - A. N. Lankford, Civil QC Inspector
  - J. E. Seagraves, Assistant Civil QC Supervisor
  - J. F. D'Amico, Senior QA Field Representative

Other licensee employees contacted included 6 civil QC inspectors.

#### Other Organizations

- J. E. Mahlmeister, Resident Engineer, Bechtel
- F. R. McCarty, Project Manager, Walsh Construction Company

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on April 16, 1980 with those persons indicated in paragraph 1 above. The licensee acknowledged the noncompliance discussed in paragraph 7.

### 3. Licensee Action on Previous Inspection Findings

(Closed) Infraction (424/79-13-02): Improper Concrete Consolidation.

The inspector examined records of training sessions held for the construction craftsmen on an approximately monthly basis during which the craftsman are instructed in proper concrete consolidation practices. The inspector witnessed partial placement of pour number 1-05D-004, a wall in nuclear service water tower 1A. Based on the observation of concrete consolidation practices during this placement, and observation by the inspector during previous inspections, this item is closed.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Independent Inspection Effort

The inspector examined the following areas:

- a. Level D storage areas.
- b. Construction status.
- c. Concrete and soils laboratory and currentness of calibration of laboratory equipment.
- d. Concrete batch plant.

No deviations or items of noncompliance were identified.

6. Foundations - Observation of Work and Work Activities - Units 1 & 2

The inspector witnessed placement and inspection of fill between the Unit 2 tendon gallery wall and the west electric tunnel and between the tendon gallery wall and reactor cavity in the Unit 1 containment building. Acceptance criteria examined by the inspector appear in the following documents:

- a. Section 2C of the PSAR.
- b. Bechtel Specification X2AB01, "Site Preparation and Earthwork".
- c. Georgia Power Procedure number CD-T-01, "Earth Work Quality Control".

Dewatering is being controlled by well points and ditches. The fill material was placed and compacted at the specified moisture content. Lift thicknesses did not exceed the maximum allowed by the specifications. All fill operations were continuously monitored by QC inspectors.

No deviations or items of noncompliance were identified.

7. Foundations - Review of Quality Records - Units 1 and 2

The inspector reviewed the following quality records relating to fill placement in the powerblock area:

- a. Civil daily inspection reports for January through March, 1980.
- b. Results of field density tests and proctor tests performed in March, 1980.
- c. Results of daily moisture correlation check tests performed from September 13, 1979 through April 5, 1980.
- d. Training and qualification records of 6 QC inspectors.

Acceptance criteria examined by the inspector are listed in paragraph 6.

Examination of the above records disclosed the following noncompliance:

Appendix F to procedure number CD-T-01 requires that daily correlation check tests be performed to verify that the moisture content determined by use of the rapid (open pan) method correlates with the moisture

content determined by the ASTM D 2216 (oven) method. Review of the check test results and discussions with responsible inspectors and engineers disclosed that these test results had not been evaluated to verify that the rapid method correlates with the ASTM D 2216 method. Criterion XI of Appendix B to 10 CFR 50 requires that test results be evaluated to assure that test requirements have been satisfied. The failure to evaluate the moisture check test results was identified to the licensee as Infracation item 424, 425/80-07-01, "Failure to evaluate soils moisture test results".

No deviations were identified.

8. Licensee Identified Items (10 CFR 50.55(e))

Prior to this inspection the licensee identified the following items under 10 CFR 50.55(e):

- a. (Open) Item (424, 425/79-18-01): Erosion of Category I Backfill. The inspector toured the power block. The measures which have been taken to stabilize the slopes from further erosion have been effective. The licensee has completed installation of well point systems within the Unit 1 and Unit 2 containment tendon gallery areas and north of and parallel to the auxiliary building. The inspector examined the revised criteria for testing of water removed by the wellpoint systems. The purpose of the testing is to verify that fines are not being removed (pumped) from the foundation. The inspector examined water samples collected from the wellpoint system, the results of tests which have been performed on water samples, and civil daily inspection reports which document QC inspection of the wellpoint system. The inspector witnessed removal of a portion of mud mat for unit 1 containment tendon gallery and observed performance of in place (sand cone) density testing of the foundation material under the mud mat. The licensee plans to remove a portion of the mud mat from the Unit 2 containment tendon gallery and perform in place density testing of the foundation material below the mud mat in the near future. Region II and NRR will be notified prior to start of this testing.
- b. (Closed) Item (424, 425/79-19-01): Voids in auxiliary building concrete. The licensee notified Region II on December 20, 1979, of a deficiency involving voids in concrete in the wall of the auxiliary building. The voids occurred in walls which were heavily congested with reinforcing steel, embedments, pipe sleeves and blockouts. The inspector toured the auxiliary building area and examined walls in which concrete had been placed since this deficiency was identified. Based on observations of the completed pours, the corrective actions taken by the licensee to minimize the occurrences of voids in the concrete appear to have been effective. The inspector reviewed the licensee's final report received in Region II office on March 3, 1980 concerning this deficiency, and discussed the problem and corrective action with licensee engineers. This item is closed.

- c. (Open) Item 425/80-04-01: Undermining of the control building Unit 2 electric tunnel foundation. The inspector reviewed the disposition of nonconformance report number CD-780 which documents the corrective action for repair of the erosion damaged foundation. The corrective action included removal of loose foundation materials, in-place density testing to verify foundation materials remaining in-place conform to design and specification requirements, and placement of fill concrete or grout to replace foundation materials which were eroded or excavated. This item remains open pending review of the licensee's final report.