



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

Report Nos.: 50-424/84-20 and 50-425/84-20

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 Dates: July 16-20, 1984

Inspection at Vogtle site near Waynesboro, Georgia

Inspector: J. J. Blake

6/2/84
 Date Signed

for W. C. Liu
 Approved by: J. J. Blake

6/2/84
 Date Signed

J. J. Blake, Section Chief
 Engineering Branch
 Division of Reactor Safety

SUMMARY

Areas Inspected

This routine unannounced inspection involved 34 inspector-hours on site in the areas of safety-related pipe support and restraint systems, safety-related structures (structural steel and support I), and licensee action on previous enforcement matters.

Results

One violation was identified - failure to follow procedures for hanger and structural steel inspections.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *H. Gregory, III, General Manager Construction
- *W. Nickerson, Deputy Project General Manager
- *M. Googe, Project Construction Manager
- *C. Hayes, QA Manager
- *R. McManus, QC Manager
- *B. Harbin, Manager - Engineering Support
- *G. McCarley, Project Compliance Coordinator
- *I. Innes, Assistant Civil Section Supervisor
- J. Blocker, QC - Assistant Manager
- R. Osborne, QC Supervisor

Other licensee employees contacted included QC inspectors and office personnel.

Other Organizations

- *D. Kinnsch, Project Engineer - Field, Bechtel Power Corporation
- B. Edwards, Resident Manager, Pullman Power Products
- J. Runyan, QA Manager, PPP
- T. Clark, Assistant QA Manager, PPP

NRC Resident Inspector

- *W. Sanders, Senior Resident Inspector - Constructor

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on July 20, 1984, with those persons indicated in paragraph 1 above. The licensee was informed of the inspection findings listed below. The licensee acknowledged the inspection findings and took no exceptions.

(Open) Violation 424, 425/84-20-01, Failure to Follow Procedures for Hanger and Structural Steel Inspections, paragraphs 5.b. and 6.b.

(Open) Unresolved Item 424/84-20-02, Material Receiving Inspection for Piping Systems, paragraph 5.b.

3. Licensee Action on Previous Enforcement Matters

(Closed) Violation 424/83-21-02, Failure to Follow Procedures for Hanger Inspection. GPC's letter of response dated January 16, 1984, has been reviewed and determined to be acceptable by Region II. The inspector held

discussions with the licensee's representatives and examined the corrective actions as stated in the letter of response. The inspector concluded that GPC had determined the full extent of the subject violation, performed the necessary survey and followup actions to correct the present conditions, and developed the necessary corrective actions to preclude recurrence of similar circumstances. The corrective actions identified in the letter of response have been implemented. This item is closed.

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 unresolved item was identified during this inspection and is discussed in paragraph 5.b.

5. Safety-Related Pipe Support and Restraint Systems (50090)

a. Review of Work Procedures

The inspector reviewed portions of the following procedures pertaining to safety-related pipe support and restraint systems to determine whether they have been approved by authorized personnel, whether appropriate procedures have been established, and whether they comply with NRC requirements and licensee commitments.

- Document No. X-4, Final Inspection (piping systems), May 17, 1984
- Document No. X-F, Field Receiving Inspection, December 12, 1982
- Document No. X-18, Field Welding Inspection, February 2, 1984
- Document No. VIII-1, Identification of Materials, Parts and Components, December 28, 1983
- Document No. IX-50, Pipe Support Field Installation and Fabrication, January 30, 1984

b. Observation of Work and Work Activities (Unit 1 only)

The inspector selected the following sample of four hangers in the area of safety-related fixed pipe supports and component support structures, that had been QC inspected and accepted, for a reinspection in order to determine the effectiveness of the hanger inspection program.

<u>Hanger No.</u>	<u>Piping system</u>
*VI-1206-007-H052, Rev. 1	Containment spray
VI-1206-003-H001, Rev. 5	Containment spray
VI-1202-035-H014, Rev. 2	Nuclear Service Cooling Water
*VI-1205-008-H042, Rev. 4	Residual Heat Removal

*Indicated spring hanger

The above hangers were reinspected against their detail drawings for configuration, identification, location, fastener installation, clearances, member size, welds and damage/protection. In general, the hangers were installed in accordance with design documents with the exception of one hanger identified below:

Hanger No. VI-1206-007-H052, Rev. 1, in the containment spray system was examined. It was noted that the threads on two bolts for Item No. 14 pipe clamp assembly were not upset. As a result, the bolt connections may become loose when the system is put in operation. In accordance with pullman power products hanger inspection procedure, bolt threads shall be upset after installation when single nut is used. The hanger QC inspector failed to follow procedure for verifying the aforementioned discrepancy during the inspection. This is a violation of 10 CFR 50, Appendix B, Criterion V, and is identified as first part of violation 424, 425/84-20-01, Failure to follow procedures for hanger and structural steel inspections.

During this inspection, the inspector further noted that part no. 5130 R/O, Eyenut for item no. 2 hanger assembly could not be verified. The part actually installed had a mark of A20 rather than 5130. The inspector held discussions with licensee representatives and acknowledged that two separate receiving inspections were performed for the piping systems. One was conducted by GPC's QC group, the other was conducted by PPP's QC group. A review of the receiving inspection records from the above two groups indicated that neither groups were able to identify the relationship between the mark of A20 and the part No. 5130 R/O as was specified by the design drawing. There is potential that nonconforming material could have been used for the hanger assembly based on above findings. Pending further evaluation to be performed by the licensee this matter is identified as Unresolved Item 424/84-20-02, Material Receiving Inspection for piping systems.

Within the areas inspected, part of one violation was identified.

6. Safety-Related Structures (48063B) - Units 1 and 2

a. Review of Work Procedures

The inspector reviewed portions of the following documents pertaining to safety-related structural steel and supports to determine whether appropriate procedures have been established, and whether they comply with NRC requirements and licensee commitments.

- CD-T-16, Structural steel and Q-Decking, Rev. 6
- GD-A-04, Calibration and Control, Rev. 9

- Specification No. X2AP01, Section No. C5.1, Erection of structural steel, Rev. 10
- AWS D1.1-75, Structural Welding code

b. Observation of Work and Work Activities

The inspector selected five safety-related structural steel beams in the control building to determine whether the records of these steel beams comply with NRC requirements and licensee commitments.

<u>Beam No.</u>	<u>Beam Size</u>	<u>Heat No.</u>	<u>Beam Location</u>
3101 B16	W24X94	170TI29	Elev. 301
1907 B1	W18X35	64617	Elev. 240
1915 B1	W36X300	H82854	Elev. 240
2810 B7	W36X300	2R3796	Elev. 280
2811 B21	W18X55	2R3794	Elev. 280

The above steel beams were partially verified with respect to the requirements of receipt inspection and storage, installation and erection, material identification, inspection and records, utilization of qualified inspection personnel, and calibration and use of proper test equipment. Furthermore, the inspector randomly selected four steel beams to determine whether these beams met drawing requirements in terms of beam size and locations.

During the inspection, the inspector noted that some welded studs on top of the steel beam located at Elevation 240.00 in the Unit 2 Control Building did not meet the drawing requirements. Drawing No. AX2D11F001, rev. 16, requires that welded studs on the top flange of steel beams shall be spaced at 12" on center. AWS D1.1-75, Structural Welding Code, provides acceptance criteria in that longitudinal and lateral spacings of stud shear connectors (i.e., welded studs) with respect to each other may vary a maximum of 1 inch. In other words, welded studs may be spaced from 11" to 13" if the specified 12" center to center spacing can not be maintained. The inspector noted in one area that two installed welded studs spaced at 14 1/4". These studs had previously been QC inspected and accepted. The QC inspector failed to verify the above discrepancy is a violation of 10 CFR 50, Appendix B, Criterion V, and is identified as second part of violation 424, 425/84-20-01, Failure to follow procedures for Hanger and structural steel inspections.

Within the areas inspected, part of one violation was identified.