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

Report Nos.: 50-424/84-25 and 50-425/84-25

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 Units 1 and 2

Inspection Conducted: August 2, - September 14, 1984

Inspector: John F. Rogge, for 9/27/84
W. F. Sanders, Senior Resident Inspector Date Signed

Approved by: V. W. Panciera 9/27/84
V. W. Panciera, Section Chief Date Signed
Division of Reactor Projects

SUMMARY

Scope: This routine, unannounced inspection entailed 142 inspector-hours at the site during normal duty hours in the areas of transporting and lifting of NSSS equipment, installation and setting of the Unit 1 reactor pressure vessel, storage of Unit 1 reactor pressure vessel closure head, fit up of main steel in Unit 1 containment, and IE Bulletin 81-03.

Results: Of the four areas inspected, no violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

   Licensee Employees Contacted

   *W. T. Nickerson, Deputy General Project Manager
   *M. H. Googe, Project Construction Manager
   *C. W. Hayes, Vogtle Quality Assurance Manager
   *E. D. Groover, Quality Assurance Site Manager
   *R. W. McManus, Manager of Quality Control
   *G. A. McCarley, Project Compliance Coordinator
   *C. M. Burke, Senior Quality Assurance Field Representative
   *W. C. Gabbard, Assist Project Compliance Coordinator

   Other licensee employees contacted included craftsmen, technicians, supervision, inspectors and office personnel.

   Other Organizations

   *D. L. Kinnsch, Project Field Engineer, Bechtel Power Corporation
   *J. M. Mamon, Quality Engineer, Project Field Engineering, Bechtel Power Corporation

   *Attended exit interview

2. Exit Interview

   The inspection scope and findings were summarized on September 14, 1984, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings.

3. Licensee Action on Previous Inspection Items

   This area was not inspected.

4. Unresolved Items

   No unresolved items were identified during this inspection.

5. Construction Inspection

   Periodic inspections were made throughout this reporting period in the form of general type inspections in different areas of both facilities. The areas were selected on the basis of the scheduled activities and were varied to provide wide coverage. Observations were made of activities in progress to note defective items or items of noncompliance with the required codes and regulatory requirements. On these inspections, particular note was made of the presence of quality control inspectors, supervisors, and quality

control evidence in the form of available process sheets, drawings, material identification, material protection, performance of tests, and housekeeping.

Interviews were made with craft personnel, supervisors, coordinators, quality control inspectors, and others as they were available in the work areas.

Periodic observations were made of the ongoing work activities in the Units 1 and 2 Primary Containment, Auxiliary Building, Control Building, Service Cooling Water Structures, Concrete Placements, and Category 1 Backfill Operations.

6. Reactor Pressure Vessel Closure Head Storage (550053C)

An inspection was made of the Reactor Pressure Vessel Closure Head (RPVHD) which is stored in the Unit 1 Primary Containment awaiting the completion of the NSSS System. The requirements for storage of the RPVHD are found in ANSI Std 45.2.2, CD-T-09 and MIA 13, and requires storage in a manner that will provide measures for protection from the effects of temperature extremes, humidity and vapors, physical damage and airborne contamination. The inspector noted that precautions for these conditions had previously been taken in the form of electric heaters, personnel access barriers, and an envelope of fire-retardant plastic; however, during this inspection it was found that the wrapping of plastic had been violated in several areas and the side had been slit to permit access by working personnel, with no provision for limiting access. Subsequent meetings were held with quality control and engineering personnel regarding corrective action. The inspector was informed that these conditions would be corrected and the Quality Control Program for inspection surveillance for stored material would be modified to provide more timely inspection. This is an Inspector Follow-up Item (50-424/84-23-02).

7. Reactor Vessel Installation (50053C)

An inspection was made of the Unit 2 Reactor Pressure Vessel exterior condition prior to placement in the reactor cavity. Observations were made of the general condition after being stored outside for several years. Particular attention was given to the condition of the nozzle seals, flange seal cover plate, and protective seals on the instrumentation tubes. Observations were made of the transporting, up-ending, lifting over the containment top, and placement on the support pads in the reactor cavity. Observations were made of the leveling of the RPV using optical alignment equipment to measure from the core support ledge to a level plane. After the RPV was leveled in this manner and supported on jacking bolts, measurements were taken between the RPV support pads in order to custom machine support blocks that will have a 75% contact between the RPV support pads and the foundation support pads.

This inspection included a review of the equipment material storage records which document the quality control surveillance of the RPV while in storage. The following procedures used were:

ANSI 45.2.2 - Packaging, Shipping, Receiving, Storage and Handling

G.D.T 09 - Inspection and Maintenance of Items in Storage

MIA 13 - NSSS Desk-Top Instruction

HP 50 - Heavy Lifting Program

No violations or deviations were identified.

8. Structural Steel (48053C)

An inspection was made of the main steel system at the 180' and 184' elevations in the Unit 1 primary containment. This inspection was related to a telephone message received from one of the craftsmen who described three items of concern which he believes have quality implications.

a. Four (4) cutouts, each 6" diameter in flanges of two 14" wide horizontal steel beams. The semi-circle cutouts were done to eliminate interference between the steel beam and a vertical fire line pipe. The alternative would have been to relocate the pipe approximately 3" and keep the steel beam intact. This condition was discussed with Bechtel Engineering which stated that the cutouts in the beams had been approved on Field Change Requests C-FCRB 9504 and 9344. They stated that the conditions for SSE and OBE had been considered in the analysis; therefore, the structural strength had not been impaired and the condition was acceptable although it does not present a pleasing image.

b. Bolting Discrepancies. A number of bolt-up conditions were apparent which were not acceptable.

A number of unacceptable bolting conditions were apparent in this area. These conditions consist of square washers not flat due to interference with flange radii, bolts installed at angle, bolts and braces removed. Further information obtained revealed that these conditions were inspected by quality control inspection and were not accepted. The records show that there were 30 items of this kind which were put on a punch list and given to construction coordination for re-work in accordance with Field Procedure CD-T-16. The inspector reviewed this list and the Quality Control log used to track these items.

c. Rust on Uninstruct. Rust is located in the area where it is welded to the square tubular support shows signs of rust streaks from the space between. This appears to be a result of having a foreign material (flux, slag, etc.) which was not cleaned prior to dip galvanizing. This condition had been given to engineering for review.

No violations or deviations were identified.

9. IE Bulletin Followup (92703B)

IEB 81-03 (Closed) - Flow blockage of cooling water to safety system components by CORBICULA Sp. (Asiatic Clam) and MYTILUS Sp. (Mussel). The licensee responses dated July 18, 1981 and February 4, 1982, were reviewed. These responses indicate that the river water makeup system (RWMS) is the only direct interface with the affected water (Savannah River). The RWMS is to be continuously chlorinated as necessary during the CORBICULA spawning season up to a level of 10 ppm, providing a residual free chlorine level of 1 ppm. This item is considered closed.