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

Report Nos.: 50-321/84-07 and 50-366/84-07

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

Docket Nos.: 50-321 and 50-366

License Nos.: DPR-57 and NPF-5

Facility Name: Hatch 1 and 2

Inspection at Hatch site near Baxley, Georgia

Inspectors: John T. Loggie for — 3/9/84
R. V. Crlenjak, Senior Resident Inspector — Date Signed

John T. Loggie for — 3/9/84
P. Holmes-Ray, Resident Inspector — Date Signed

Approved by: V. Panciera — 3/12/84
V. Panciera, Chief, Project Section 2B — Date Signed
Division of Project and Resident Programs

SUMMARY

Inspection on January 2 - February 20, 1984

Areas Inspected

This inspection involved 106 inspector-hours on site in the areas of Technical Specification compliance, operator performance, overall plant operations, quality assurance practices, station and corporate management practices, corrective and preventive maintenance activities, site security procedures, radiation control activities, surveillance activities, LER review, design change system and independent verification (TMI I.C.6).

Results

Of the ten areas inspected, no violations or deviations were identified in seven areas, three violations were found in three areas (Paragraphs 5, 6 and 10).

REPORT DETAILS

1. Persons Contacted

   Licensee Employees

   *J. T. Beckham, Vice President and General Manager, Nuclear Generation
   *H. C. Nix, Site General Manager
   *T. Greene, Deputy Site General Manager
   S. Baxley, Superintendent of Operations
   *C. Belflower, QA Site Supervisor
   B. Tipps, Superintendent of Regulatory Compliance

   Other licensee employees contacted included technicians, operators, mechanics, security force members and office personnel.

   *Attended exit interview

2. Exit Interview

   The inspection scope and findings were summarized on February 23, 1984, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

   a. (Closed) Violation Item (366/82-09-03) - Failure to report RCIC steam isolation setpoint being nonconservative: Plant Review Board members reviewed the reporting requirements of Section 6.9 of Technical Specifications.

   b. (Closed) Violation Item (321/82-12-01) - Failure to maintain the RHRSW intake structure valves locked shut: This item has been reviewed and is resolved.

   c. (Closed) Violation Item (366/82-37-01) - Failure to Follow Procedure HNP-2-1117: This item has been reviewed and is resolved.

   d. (Closed) Violation Item (366/83-02-01) - Failure to make the 24 hour telephone report within the required time limit: This item have been reviewed and resolved.

   e. (Closed) Violation Item (321/83-07-01) - RHR service water lineup improper: This item has been reviewed and resolved.

   f. (Closed) Violation Item (321/83-07-02) - Wrenches used to override keylock switch spring tension: This item has been reviewed and is resolved.

g. (Closed) Violation Item (321/83-13-01) - Failure to sample control room ventilation filter after painting. This item has been reviewed and resolved.

h. (Closed) Violation Item (321/83-15-01) - Failure to maintain valves in proper condition - not locked: This item has been reviewed and resolved.

i. (Closed) Violation Item (366/83-20-01) - Procedures were not followed to color code electrical cables at ten foot intervals. This item has been reviewed and resolved.

j. (Closed) Violation Item (366/83-23-02) - Failure to provide second person verification with the rod worth minimizer inoperable. This item has been reviewed and resolved.

k. (Closed) Violation Item (366/83-23-03) Performance of an activity making the rod sequence control system inoperable. This item has been reviewed and resolved.

l. (Closed) Violation Item (366/83-29-01) Improper ADS operability verification method, inadequate Plant Review Board review of Revision 7, HNP-2-3901. This item has been reviewed and resolved.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Plant Tours (Units 1 and 2)

The inspectors conducted plant tours periodically during the inspection interval to verify that monitoring equipment was recording as required, equipment was properly tagged, operations personnel were aware of plant conditions, and plant housekeeping efforts were adequate. The inspector also determined that appropriate radiation controls were properly established, critical clean areas were being controlled in accordance with procedures, excess equipment or material was stored properly and combustible material and debris were disposed of expeditiously. During tours the inspectors looked for the existence of unusual fluid leaks, piping vibrations, pipe hanger and seismic restraint settings, various valve and breaker positions, equipment caution and danger tags, component positions, adequacy of fire fighting equipment, and instrument calibration dates. Some tours were conducted on backshifts.

During a routine inspection of the intake structure on February 16, 1984, the inspector noted that thermal insulation and electrical heat tracing was found to be improper on one run of Plant Service Water (PSW) piping. Approximately three feet of pipe downstream of the Unit 1, Division 1, PSW Strainer A backwash valve, P41-F313A had the thermal insulation removed with the electrical heat tracing hanging away from the pipe. 10 CFR 50, Appendix B, Criterion X, specifies that inspections be performed to verify conformance with documented instructions, procedures and drawings. The

failure to return these systems/components to specified conditions is a violation (321/84-07-01).

6. Plant Operations Review (Units 1 and 2)

The inspectors periodically during the inspection interval reviewed shift logs and operations records including data sheets, instrument traces, and records of equipment malfunctions. This review included control room logs and auxiliary logs, operating orders, standing orders, jumper logs and equipment tagout records. The inspectors routinely observed operator alertness and demeanor during plant tours. During normal events, operator performance and response actions were observed and evaluated. The inspectors conducted random off-hours inspection during the reporting interval to assure that operations and security remained at an acceptable level. Shift turnovers were observed to verify that they were conducted in accordance with approved licensee procedures.

On February 3, 1984, while performing an inspection of the Unit 2 torus interior, the licensee discovered a through-wall crack approximately 330° around the circumference of the 4.5 ft. diameter vent header. Unit 2 had been shutdown on January 13, 1984, for replacement of recirculation piping. Investigations into the cause was conducted by licensee and contractor personnel and NRC inspectors. It was determined that the metal failure was of a brittle nature and that the positioning of the nitrogen inerting system torus inlet was such that nitrogen was discharging into the torus directly above the vent header crack. Based on the above information it was determined that the vent header failure was caused by cooling of the vent header metal below its nil-ductility transition temperature by admitting liquid nitrogen or supercooled nitrogen vapor into the torus which resulted in a brittle failure of the metal.

The resident inspectors continued the investigation into other possible contributing causes of the event. The inspectors were informed by the licensee that over approximately a period of at least the last six months, many operational problems had been encountered with the nitrogen inerting system. Most significant of these problems was the failure of a thermal switch which signals an isolation valve to close if the nitrogen temperature out of the vaporizer falls to 0°F. Review of the operating procedure for the nitrogen inerting system which is contained in HNP-2-1500, Primary Containment Atmospheric Control system, specifies that the system is not to be placed in operation, discharging nitrogen to the torus, until nitrogen temperature reaches 100°F. However, the procedure does not specify actions to be taken if temperature falls below 100°F after the system is placed in operation. The inadequacy of the procedure to address actions to be taken in the event that the nitrogen discharge temperature falls below the specified value of 100°F is a violation. (366/84-07-01)

7. Technical Specification Compliance (Units 1 and 2)

During this reporting interval, the inspector verified compliance with selected limiting conditions for operations (LCO's) and the results of selected surveillance tests. These verifications were accomplished by direct observation of monitoring instrumentation, valve positions, switch positions, and review of completed logs and records. The licensee's compliance with selected LCO action statements were reviewed on selected occurrences as they happened.

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

8. Physical Protection (Units 1 and 2)

The inspector verified by observation and interviews during the reporting interval that measures taken to assure the physical protection of the facility met current requirements. Areas inspected included the organization of the security force, the establishment and maintenance of gates, doors and isolation zones in the proper condition, that access control and badging was proper, and procedures were followed.

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

9. Review of Nonroutine Events Reported by the Licensee

The following Licensee Event Reports (LERs) were reviewed for potential generic impact, to detect trends, and to determine whether corrective actions appeared appropriate. Events which were reported immediately were also reviewed as they occurred to determine that Technical Specifications were being met and that the public health and safety were of utmost consideration. The following LER's are considered closed:

Unit 1: 83-84, 113, 114, 116, 120, 122, 124, and 126.

Unit 2: 83-71, 86, 96, 105, 113, 114, 132, 134, 135, 136, 137, 139, 140, and 143.

10. Design Change System Review (Units 1 and 2)

On February 15, 1984, while performing a routine inspection of the Hatch Design Change Request (DCR) system, the inspector noted that Drawing H-11304, Fire protection P&ID, had not been revised as required by As-Built Notice (ABN) 83-238. DCR 83-28 was issued to replace a defective " globe valve in a Unit 1 reactor feed pump deluge fire protection system with an equivalent ball valve. ABN 83-238 was issued to ensure that the above referenced plant drawing was revised to include the change of valve F034E from a globe valve to a ball valve. Both DCR 83-28 and ABN 83-238 have been closed out as completed, however, the drawing change; shown in the ABN package as Revision 7 was not made. This is a violation (321/84-07-02).

11. Independent Verification (TMI TAP I.C.6)

During an inspection ending September 30, 1983, (IE Report 50-321/83-27 and 50-366/83-29) the inspector discussed NUREG 0737, Item I.C.6 in detail with the licensee to insure that the regional position on independent verification was understood. GPC is committed to the concept of double verification of equipment in safety-related systems. Valve lineups and other equipment are also double verified in procedures such as:

1. Drywell close out,

2. Return to service from surveillance procedures, and

3. Return to service from instrument calibration.

Also, included in the double verification category are switches, breakers, and electrical links. Electrical links are all to be in the closed position unless tagged. Prior to a plant startup following an outage, a panel walkdown is performed to verify the link positions by identifying any tagged links.

The licensee is continuing to perform work in this area to define what extent of coverage is needed for all other systems. Inspector followup will continue on the item and will track as item 50-321/50-366 83-BB-04.