



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

Report Nos.: 50-321/84-13 and 50-366/84-13

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: <u>John F. Rogge, Jr.</u>	<u>6/4/84</u>
R. V. Crlenjak, Senior Resident Inspector	Date Signed
<u>John F. Rogge, Jr.</u>	<u>6/4/84</u>
P. Holmes-Ray, Resident Inspector	Date Signed
<u>John F. Rogge, Jr.</u>	<u>6/4/84</u>
L. Garner, Resident Inspector, Brunswick	Date Signed
<u>John F. Rogge</u>	<u>6/4/84</u>
J. Rogge, Project Engineer (April 9-13, 1984)	Date Signed
Approved by: <u>V. Panciera</u>	<u>6/5/84</u>
V. Panciera, Chief, Project Section 2B	Date Signed
Division of Reactor Projects	

SUMMARY

Inspection on March 21 - April 20, 1984

Areas Inspected

This inspection involved 233 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, and surveillance activities, LER review, and TMI action plan followup.

Results

Of the areas inspected, one violation was identified in one area (Failure to restore system to original design requirements; paragraph 5).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- H. C. Nix, Site General Manager
- *T. Greene, Deputy Site General Manager
- L. Sumner, Acting Operations Manager
- *C. Bellflower, Site QA Manager
- *S. 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 April 19, 1984, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

50-321/83-32-07 and 50-366/83-34-07 Deviation (Closed) - The licensee's corrective actions as described in the response to the Notice of Deviation, dated February 6, 1984 were reviewed and found satisfactorily complete.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Plant Tours (Unit 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 inspectors 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.

The inspectors routinely conducted partial walkdowns of ECCS systems. Valve and breaker/switch lineup and equipment conditions were randomly verified both locally and in the control room. During the inspection period the

inspectors conducted a complete walkdown of the accessible areas of the Unit 1 High Pressure Coolant Injection System (HPCI) to verify that the lineup was in accordance with licensee requirements for operability and equipment material conditions were satisfactory. On April 12, 1984, while performing the system walkdown the inspectors noted that the HPCI pump minimum flow valve E41-F012 had several loose bolted connections. One packing gland nut was backed-off of the gland retainer approximately 1/4 inch with the gland retainer cocked. Additionally, one of the four studs utilized in securing the Limitorque operator to the valve bonnet was backed out approximately 1/2 inch. The stud appeared to be bent (later determined to be cocked) and the threads damaged. The licensee was notified and actions were taken to ensure component operability. A HPCI system operability surveillance was performed and found that the valve would not stroke. Failure of this valve to stroke resulted in the HPCI system being inoperable. The licensee explained that the problems were brought about by vibrations which normally occur during HPCI system operation and that during the performance of MR 1-E1-1832 the studs had been installed without the proper thread engagement. The cause of this event, due to the stud orientation and thread damage, appears to be the result of improper maintenance and QC practices. This is a violation (321/84-13-01).

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 are observed and evaluated. The inspector 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.

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

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 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.

During the reporting period the licensee experienced a failure in their security system. On April 4, 1984 a member of the plant engineering staff entered the protected area and the Unit 2 reactor building without his badge and without "coding" into these areas. A Region II security inspector was dispatched to the site to investigate the event and insure that immediate corrective measures were adequate.

Within the areas inspected, no violation 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: *79-21, 83-60, 64, and 84-01.

Unit 2: *83-15, *32, 29, *41, 129, *46, 65, 87, 141 and 144.

*In-depth review performed.

10. Surveillance Testing and Calibration Control Program

The inspector reviewed the following procedures.

HNP-832	Calibration Program for Instrumentation Not Covered by Technical Specifications
HNP-904	Inservice Inspection Program
HNP-907	Inservice Inspection Visual Examination Surveillance Procedure for Class 1, 2, and 3 Pipe Supports
HNP-908	Inservice Inspection Pump and Valve Surveillance Program
HNP-916	Inservice Inspection Visual Examination Surveillance Procedure for Class 1 and 2 Bolting
HNP-2-3003-M	Reactor Water Level (RPS) F.T.&C.

HNP-2-3013-0 Reactor Manual Scram Functional Test
 HNP-2-3015-0 Nuclear Boiler System Valve Operability
 HNP-2-3052-M IRM Instrument Functional Test
 HNP-1-3054-0 APRM Instrument F.T.&C.
 HNP-2-3190-M Time Response Testing of Pressure Sensors
 HNP-2-3191-M Channel Logic Time Response Test
 HNP-2-3302-0 HPCI Valve Operability
 HNP-2-3303-0 HPCI Pump Operability
 HNP-2-3304-M HPCI Steam Line Pressure Instrument
 HNP-2-3309-M HPCI Turbine Exhaust Diaphragm Pressure Instrument FTBC
 HNP-2-5279 Barksdale Pressure Switch Calibration

The above listed procedures were reviewed by the inspector to ascertain procedural conformance to ANSI N18.7, Technical Specifications, and ASME Section XI in that they were analyzed for embodiment of necessary test prerequisites, acceptance criteria, sufficiency of technical content, and documentation of acceptability and review. The inspector verified that recent technical specification revisions had been incorporated into the test program and the responsibility for maintaining the surveillance, and calibration schedule up to date has been assigned. A review of calibration requirements for safety related components not identified in technical specifications was performed.

No violations or deviations were identified.

11. TMI Action Plan Requirement Followup (Units 1 and 2)

The licensee implementation of the following requirements associated with NUREG 0737 TMI Action Plan was reviewed. This review was conducted to verify completion of Licensee Commitments to the NRC and where appropriate included verification of equipment installation/modification, preoperational testing, and current usage. For those items requiring TS changes for final completion the licensee proposed change was reviewed.

II.F.1.1.B.2 (Closed) Noble Gas Monitor - Long Term and II.F.1.2.B.2 (Closed) Iodine/Particulate. The licensee has installed three KAMAN KMG-HRH effluent monitors. Each monitor has four chambers, one for Noble gas (normal and high range) and three for particulate and iodine. Each system is normally in a standby mode and is set to start on a high alarm from the normal monitors. The release points monitored are the main stack and the

two reactor vents. The inspection verified the sample equipment installation for the main stack and the Unit 1 reactor vent. A licensee representative manually operated the system sampling function and demonstrated the changeout of the iodine sample cartridge. The inspector reviewed operating procedures HNP-7411, Main Stack Effluent Accident Range Gas Monitor; HNP-7412, Reactor Vents Effluent Accident Range Gas Monitor; and vendor manual SX-190.491. The inspector also reviewed the licensee's February 6, 1984, proposal to amend the technical specification (TS). This TS revision will require a program be established, implemented, and maintained to ensure the capability to obtain and analyze these samples. This item will be inspected at a later date.

II.F.1.(3)(Closed) Containment High-Range Monitor - This item was previously closed for both units in IE Report 50-321/81-21 and 50-366/81-21. Subsequent inspections by the NRC health physics inspectors were conducted in reports 50-321/83-32, 83-04 and 50-366/83-34, 83-04. This inspection verified that the licensee has met his commitment. The licensee's action in response to a Notice of Deviation is described in paragraph 3. One inspector followup item was identified to review vendor documentation showing that the detector's energy response was linear for photons from 0.1 Mev to 3.0 Mev with response down to 60 Kev and vendor calibration records to verify source calibration of each detector prior to initial use for at least one point per decade between 10 R/hr and 1E+3 R/hr. This item will be tracked as Inspector Followup Item (321/84-13-02).

II.F.1.4 (Closed) Containment Pressure Monitor. This inspection verified the installation by the licensee of the required pressure indication and recorders. Calibration procedures HNP-1-5364 and HNP-2-5364, addressing the Rosemount 1153 series "B" type pressure transmitters, and surveillance procedures HNP-1-3881 and HNP-2-3881 were reviewed. The NRR safety evaluation, dated September 6, 1983, was considered during the inspection of this item.

II.F.1.5 (Closed) Containment Water Level. This inspection verified the installation of the water level instruments and recorders. The instrument surveillance and loop calibration procedure, HNP-1/2-3880M, was reviewed. The NRR Safety evaluation dated September 6, 1983, was considered during the inspection of this item.

II.F.1.6 (Open) Containment Hydrogen. The licensee has installed a Hays Hydrogen Analyzer on Unit 1 and is installing a Consip Delphi Model K-IV Hydrogen Analyzer on Unit 2. The licensee originally met NUREG 0737 requirements with the exception of the environmental qualification of the Hays analyzer. Due to these qualification problems, the Consip Delphi analyzer was selected as a replacement. Unit 2 should complete installation by July 1985 and Unit 1 will be completed at the next refuel outage. This item will be re-inspected in a future inspection.

II.K.3.16B (Open) Challenges and Failures to Relief Valves - Modifications. The licensee's proposal, dated April 16, 1981, was to (1) replace three-stage pilot assemblies on the Safety Relief Valves (SRV) with two

stages (2), reset the Main Steam Isolation Valve low-level trip setpoint to a lower level, and (3) adopt a procedure to manually open appropriate SRV's following an automatic pressure-relief action. On April 12, 1984, NRR issued the initial results of the preimplementation review and requested a sixty day response. This item will be further inspected in a future inspection.