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

Report Nos. 50-321/79-25 and 50-366/79-29

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

Facility Name: Hatch, Units 1 and 2

Docket Nos. 50-321 and 50-366

License Nos. DPR-57 and NPF-5

Inspection at Hatch Nuclear Power Plant site near Baxley, Georgia

Inspectors: H C Dance for 8/9/79
D. G. Hinckley Date Signed

R. C. Sauer 8/13/79
R. C. Sauer Date Signed

H C Dance 8/9/79
G. A. Belisle Date Signed

P. M. Stein for 8/17/79
A. H. Johnson Date Signed

Approved by: R. W. Wiley for 8/17/79
H. C. Dance, Section Chief, RONS Branch Date Signed

SUMMARY

Inspection on July 23-27, 1979

Areas Inspected

This routine, unannounced inspection involved 114 inspector-hours onsite in the areas of IE Bulletin 79-08 followup, review of Unit 2 startup test data, snubber inspection and followup on outstanding items.

Results

Of the four areas inspected, no apparent items of noncompliance or deviations were identified in three areas; one apparent item of noncompliance was found in one area (Deficiency-Failure of PRB to review temporary changes to procedures within allowable timeframe, paragraph 6).

DETAILS

1. Persons Contacted

Licensee Employees

*M. Manry, Plant Manager
*T. V. Greene, Assistant Plant Manager
D. Brock, Startup Test Director
*C. Coggins, Superintendent of Engineering Services
B. D. Coleman, Shift Foreman
R. D. Hilderbrand, Maintenance Foreman
T. L. Elton, Engineering Services
J. A. Edwards, Engineering Associate
*C. Miles, QA Field Supervisor
*P. E. Fornel, QA Field Representative
G. E. Spell, Senior QA Field Representative
C. Belflower, QA Site Supervisor

Other licensee employees contacted included licensed operators and office personnel.

NRC Resident Inspector

*R. F. Rogers

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on July 27, 1979, with those persons indicated in Paragraph 1 above. The item of noncompliance concerning failure of the PRB to review temporary procedure changes within the timeframe specified in the Technical Specifications was discussed (paragraph 6). The licensee also committed to visually reinspect the Unit 1 safety-related accessible and inaccessible snubbers prior to heatup of the plant (paragraph 8.b).

3. Licensee Action on Previous Inspection Findings

(Open) Unresolved Item 50-366/78-10-01: Fracture Mechanics Analysis to determine acceptability of a UT indication discovered in the closure head flange weld. The following information was brought back to Region II for Construction Branch review: CE letter, AEG 79005, dated April 23, 1979 and Reports-Calculation No. RS900; "Flaw Evaluation of an Ultrasonic Indication in a BWR Closure Head" and Calculation No. RT-900, "Thermal Analysis of Reactor Closure Region".

(Closed) Noncompliance 50-321/78-36-06: Failure to meet administrative procedural controls over maintenance of a low pressure coolant injection system time delay. Administrative maintenance procedure HNP-8 has been revised to ensure that department and operations supervisors review maintenance requests prior to work being performed, and to look specifically at how maintenance would affect the operability of safety equipment.

(Closed) Unresolved Item 50-321/78-09-01: Surface crack repair of Residual Heat Removal valve E11-F067B. Review of Maintenance Request 78-824 and Metallurgist Report Number 1729 indicate the repair welds, liquid penetrant inspections and operating hydrostatic test were all satisfactory.

(Open) Open Item 50-321/78-37-03: Change to the Unit 1 Technical Specifications to make the Plant Organization Chart compatible with Unit 2 Technical Specifications. The Unit 1 changes to indicate the Quality Control Engineer as a Quality Control Specialist, and to indicate the Senior Training Specialist reports to the Superintendent of Engineering Services were submitted to NRR for approval on December 21, 1979. This item shall remain open until NRR approval of the requested change is received.

(Closed) Unresolved Item 50-321/78-42-02: Measures to assure all cable tray covers are installed after maintenance in the cable spreading room is complete. Revision 3 to maintenance procedure HNP-6921, "Cable and Cable Ways Installation" on April 11, 1979, gives responsibility of ensuring cable tray covers are replaced to the shift foreman.

(Closed) Open Item 50-321/78-27-04: Submittal of a supplement to LER 50-321/78-43 dated June 30, 1978 to include the significance of why two modified Safety/Relief Valves failed to operate during a functional test and the corrective action which resulted. Revision 1 to LER 50-321/78-43 and the results of Design Change Request DCR 79-08 and corresponding Maintenance Requests for valves B21 F013A-E, G-L and one spare were reviewed by the inspector and considered acceptable.

(Closed) Open Item 50-366/78-36-01: System vibration and expansion data points not performing as expected were analyzed by Bechtel Power Corporation as being acceptable.

(Closed) Open Item 50-321/78-28-01 and 50-366/78-36-03: Visual and functional test acceptance criteria were incorporated in Unit 1 and Unit 2 procedure-3915.

(Closed) Open Item 50-321/78-28-04 and 50-366/78-36-05: "Representative Sample" guidelines were incorporated in Unit 1 and Unit 2 procedure-3915.

(Closed) Open Item 50-321/78-28-02: Lock-up velocity and bleed rate were incorporated in Unit 1 procedure-3915 as recommended in letter dated, February 9, 1979, from Bechtel Power Corporation to Georgia Power Company.

(Closed) Unresolved Item 50-321/78-33-02: Snubber visual surveillance frequency is now updated from inputs to the Surveillance Coordinator through procedure comments section, LERs and memorandums.

(Open) Unresolved Item 50-366/78-32-01: Licensee evaluation of shock suppressor piston settings and the basis of the current acceptance criteria to determine that the current settings (midrange at cold condition) are acceptable. Licensee's evaluation, "Interpretation of STI-17 Level 1 Criteria on Snubber Operability", dated September 14, 1978 was brought back to Region II for further evaluation and review.

(Open) Open Item 50-321/78-28-03 and 50-366/78-36-04: Licensee evaluation of snubber seal material (ethylene propylene). Licensee is awaiting Bergen-Paterson letter containing the results of investigation being performed by Bergen-Paterson quality control personnel.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Review of IE Bulletin 79-08, Events Relevant to Boiling Water Reactors Identified During Three Mile Island Incident

Onsite inspection of Engineered Safety Features (ESF) was performed by the inspectors to verify through examination of records, procedures and equipment that ESF sysems are operable according to technical specification requirements and that licensee procedures provide adequate assurance of continued operability.

a. The following procedures were reviewed to verify adequacy of valve, circuit breaker and switch alignment procedures against current P&ID's and single line diagrams.

- HNP-1-1100, "High Pressure Coolant Injection System"
- HNP-1-1105, "Automatic Depressurization System"
- HNP-1-1117, "Residual Heat Removal - Service Water"
- HNP-1-1118, "Residual Heat Removal - Standby Condition"
- HNP-1-1120, "Core Spray and Jockey Pump"
- HNP-1-1125, "Reactor Core Isolation Cooling System"
- HNP-1-1400, "Standby Liquid Control System"
- HNP-1-1505, "Standby Gas Treatment System"
- HNP-1-1670, "Diesel Generator Standby AC System Operating Instruction"

- HNP-1-1671, "Diesel Air Start System"

- HNP-1-1672, "Diesel Fuel Oil Operating Instructions"

The review identified three procedures of concern:

. HNP-1-1120, "Core Spray and Jockey Pump". The procedure valve lineup requires the low pressure drain valve to flow transmitter E21-N003B to be open vice closed. The licensee representative indicated that the procedure will be changed to reflect the proper valve lineup (Open Item 321/79-25-01).

. HNP-1-1118, "Residual Heat Removal-Standby Condition". The procedure has been revised to establish boundaries between the RHR primary system (HNP-1-1118) and the RHR Service Water System (HNP-1-1117). The boundaries include valve/breaker/switch alignments but did not include instrumentation. The licensee has committed to move the RHR Service water instrumentation from the 1118 procedure to the 1117 procedure (Open item 321/79-25-02).

. HNP-1-1117, "Residual Heat Removal-Service Water". The inspectors discussed a concern with the licensee representative on the desirability of updating drawings to ESF and other significant systems to reflect normal operating valve position status. Specifically, the referenced P&ID for the RHR Service Water pump details - Georgia Power Company's D-11004, Revision 8, identifies all valves in the system as open. The licensee representative indicated that the drawings would be reviewed and appropriate action taken.

b. The following surveillance procedures were reviewed to their last performance to verify that acceptance criteria were met and to assure the ESF systems were returned to operability at the conclusion of the test:

- HNP-1-3159, "RHR Auto Actuation"

- HNP-1-3160, "RHR Rated Flow"

- HNP-1-3162, "RHR MOV Operability"

- HNP-1-3178, "Containment Spray LSFT"

- HNP-1-3201, "Core Spray Rated Flow"

- HNP-1-3203, "Core Spray MOV Operability"

- HNP-1-3209, "Core Spray Auto Actuation"

- HNP-1-3252, "ADS LSFT"
- HNP-1-3302, "HPCI MOV Operability"
- HNP-1-3303, "HPCI Pump Rated Flow"
- HNP-1-3319, "HPCI Auto Isolation LSFT"
- HNP-1-3322, "HPCI Automatic Actuation"
- HNP-1-3402, "RCIC MOV Operability"
- HNP-1-3405, "RCIC Pump Rated Flow"
- HNP-1-3406, "RCIC Auto Actuation"
- HNP-1-3418, "RCIC Auto Isolation LSFT"
- HNP-1-3651, "Standby Gas Treatment System - LSFT"
- HNP-1-3654, "Standby Gas Treatment Train - Auto Initiation"
- HNP-1-3702, "Standby Liquid Control Pump Discharge Test and Relief Valve"
- HNP-1-3703, "Standby Liquid Control Test Actuation from Control Room"
- HNP-1-3802, "Diesel-Generator Auto Start"
- HNP-1-3804, "Diesel-Generator Initiate LSFT"

No items of noncompliance or deviations were identified in this area.

c. ESF system walkdowns were conducted to verify by visual observations that the major components and flowpaths were in the status required by technical specifications and operating procedures. Since final valve lineups prior to startup had not been conducted, several valves were found out of position or valves requiring locked position status were found unlocked. The discrepancies found were due to the existing plant conditions at the time of the inspection.

The inspectors did note on the walkdown two items of concern:

. RHR pump 1C (E11-C002C) was found to have an excessive leak at its mechanical seal. When noted, the licensee took immediate steps to secure the pump. The event was subsequently discussed in Notification of Reportable Occurrence No. 50-321/1979-50.

. Conductivity element E11-N001 was found not to be at the location identified by Georgia Power Company, drawing H-16329, Revision 8. The element was discovered between valve piping to E11-F112B and E11-F079B vice E11-F079B and E11-F051B valve piping. The licensee representative indicated that an As-Built Notice will be written on this item.

6. Startup Test Results Evaluation for Hatch 2

Eleven completed startup test procedures for Hatch 2 were reviewed by the inspector to ascertain whether uniform criteria are being applied for evaluating completed startup tests to assure their technical and administrative adequacy. Each procedure was reviewed to verify:

a. Each procedure change was approved in accordance with the pertinent administrative procedures.

b. That the test change had been completed if it entailed specific action.

c. That the procedure change did not change the basic objectives of the test.

d. That all test exceptions had been resolved and that the resolution had been accepted by appropriate management.

e. That outstanding exceptions have been identified and if completed, proper approval signature obtained.

f. If required, the retest requirements have been completed.

g. Licensee review and evaluation of the test results and acknowledgement that testing demonstrated system design requirement

h. That the licensee specifically compared test results which established acceptance criteria.

i. That data sheets had been completed and that all data recorded were required are within acceptable tolerance.

j. That those personnel charged with responsibility for review and acceptance of test results have documented their review and acceptance of test package.

The following documents were reviewed:

- *HNP-2-10400, Power Testing-T. C. 1
- HNP-2-10514, RCIC System-T. C. 2
- HNP-2-10615, HPCI System-T. C. 3
- *HNP-2-10600, Power Testing-T. C's 2, 3 and 7

- *HNP-2-10629, Flow Control-T. C. 3
- HNP-2-10930, Recirculation System-T. C. 6
- *HNP-2-10927, Generator Load Rejection,-T. C. 6
- HNP-2-10929, Flow Control-T. C. 6
- HNP-2-10922, Pressure Regulator Startup Testing-T. C. 6
- HNP-2-10913, Process Computer-T. C. 6
- *HNP-2-10935, Recirculation Calibration-T. C. 6

Those test procedures marked with an asterisk (*) have not received final Plant Review Board (PRB) review. Proper review and approvals were made for all test plateaus. All items not completed for any test were minor in nature and were evaluated prior to operation at higher power levels.

During the review, temporary changes to four test procedures were identified as having not been reviewed by the PRB and approved by the Plant Manager within 14 days as required by Hatch 2 Technical Specification 6.8.3.c. The procedures involved and the temporary change and PRB review dates are listed below.

Procedure	Change Date	PRB Review Date
HNP-2-10922	12/19/78	2/28/79
HNP-2-10927	6/03/79	8/18/79
HNP-2-10929	12/21/78	1/05/79
HNP-2-10935	12/18/78	1/05/79

The Plant Hatch QA group had also identified the failure for timely review of procedure HNP-2-10927 as well as several others not listed.

Failure of the PRB to perform reviews with Plant Manager's approval for temporary procedure changes within the time frame specified by Technical Specification 6.8.3.c is an apparent item of noncompliance (366/79-29-01).

7. Quality Assurance Audits

The following Plant Hatch QA audits of startup activities performed by the onsite QA staff were reviewed:

QA Audit Number	Startup Test Audited
QA-78-282	HNP-2-10709, Water Level Measurements-T. C. 4 HNP-2-10716, Selected Process Temperatures-T. C. 4 HNP-2-10722, Pressure Regulator Startup Testing-T. C. 4
QA-78-283	HNP-2-10719, Core Performance-T. C. 4 HNP-2-10721, Core Power-Void Mode Response-T. C. 4
QA-79-026	HNP-2-10519, Core Performance-T. C. 2 HNP-2-10919, Core Performance-T. C. 6

Within the areas inspected, no items of noncompliance or deviations were identified.

8. Pipe Supports and Restraints

The inspector reviewed the licensee's surveillance program for safety-related hydraulic supports and restraints. This included a review of procedures for technical adequacy and examination of various installed dynamic and fixed pipe supports and restraints. Pertinent aspects of this review are discussed below.

a. Shock Suppressor Surveillance Procedures

The inspector reviewed surveillance procedure-3915 for Unit 1 and Unit 2, observing that previous inspection concerns of visual and functional test requirements had been incorporated into both procedures. The inspector had no further questions regarding this procedure.

b. Unit 1 Accessible and Inaccessible Snubber Inspection

The inspector examined a random sample of accessible and inaccessible snubbers finding a number with loose lock nuts, loose piston rods to clevis, and missing or backed off bolts. The inspector observed that anchor bolt maintenance work was being performed prior to, during, and after the completion of surveillance procedure-3915, "Hydraulic Shock and Sway Arrestor Inspection and Functional Test".

Open Item: The licensee committed to reperform the "visual" inspection section of surveillance procedure-3915 for accessible and inaccessible safety-related snubbers prior to unit heatup (321/79-25-03).