



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report Nos.: 50-321/84-25 and 50-366/84-25

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

Inspection Date: June 19 - 22, 1984

Inspection at Hatch site near Baxley, Georgia

Inspector: Frank Jape
for H. L. Whitener

7/19/84
Date Signed

Approved by: Frank Jape
F. Jape, Section Chief
Engineering Branch
Division of Reactor Safety

7/19/84
Date Signed

SUMMARY

Areas Inspected

This routine, unannounced inspection involved 26 inspector-hours on site in the areas of local leak rate test program review and followup of a previous violation.

Results

No violations or deviations were identified.

8408270338 840720
PDR ADOCK 05000321
Q PDR

REPORT DETAILS

1. Persons Contacted

- *H. Nix, General Manager
- *P. Fornel, QA Site Manager
- J. Robertson, LLRT Coordinator
- W. Kirkley, Plant Engineer
- T. Powers, I&C Superintendent
- G. Jones, I&C Foreman
- *R. Houston, QA Field Representative

Other licensee employees contacted included two leak rate technicians.

NRC Resident Inspectors

- *R. Crljenjak, Senior Resident Inspector
- *P. Holmes-Ray, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on June 22, 1984, with those persons indicated in paragraph 1 above. The licensee acknowledged the inspection findings without significant comment.

3. Licensee Action on Previous Enforcement Matters

(Closed) Violation (50-321/82-38-01) concerned the use of a local leak rate test procedure, HNP-1-3952, Revision 13, which did not adequately identify the Type C valve alignments and the use of an uncontrolled document to assist in determining these valve alignments. The licensee's response to the violation dated January 26, 1983, committed to discontinuance of the use of an uncontrolled document for valve alignment, revision of test procedures to incorporate adequate valve alignments, and inclusion of the test log in the quality record system. In a conference call on February 28, 1983, the Region accepted GPC's certification of Type C testing. Prior to each Type C test, the test engineer and leak rate test foreman reviewed the up-to-date drawings with the technicians assigned to the test to confirm the proper valve alignments. Further, a Type A test performed subsequent to the Type C leak rate program yielded leak rates well below the allowable leakage. Region II considered that the type A test demonstrated containment integrity and further supported the licensee's contention that the Type C testing had been performed properly.

During this inspection, the inspector found that the licensee has revised the Type C test procedures, HNP-1-3952E and HNP-2-3952E, to specify adequate valve alignments on the penetration drawings which are now incorporated into the test procedure. Use of an uncontrolled document to determine alignments has been discontinued. The test engineer confirmed that he and the test

foreman using up-to-date plant drawings had reviewed each Type C valve alignment with the test technicians prior to each test. A review of clearance orders for penetrations 8 and 18 (Unit 1) showed that system valves were properly positioned. The only unrecorded valve alignment was the vent path. The test engineer also confirmed that the test log is now maintained with plant QA records. The inspector concluded that the licensee has met the commitments made in the letter of January 26, 1983, as amended in the conference call of February 28, 1983. This item is considered closed.

4. Unresolved items

Unresolved items were not identified during this inspection.

5. Local Leak Rate Testing (61720)

The inspector reviewed and witnessed portions of the licensee's surveillance activities in the areas of Type B and Type C leak rate testing to determine that the testing is being performed in accordance to the requirements of Appendix J to 10 CFR 50 and Technical Specifications Section 3/4.6. Areas reviewed and the inspector's findings are discussed below.

a. Document Review

The inspector reviewed test procedures and associated documentation for Type B and Type C local leak rate testing as follows:

1. HNP-2-3952E, Revision 9, dated March 8, 1984, Primary Containment Periodic Type B and Type C Leakage Tests
2. HNP-1-3952E, Revision 15, dated April 6, 1984, Primary Containment Periodic Type B and Type C Leakage Tests (partial review)
3. Test results log for Unit 2 current outage
4. Clearance forms for penetrations 8 and 18, Unit 1
5. Technical Specification, Section 3/4.6
6. Appendix J to 10 CFR 50 as revised through January 1, 1984
7. Penetration drawings included in test procedures, items (1) and (2) above

8. Up-to-date as-built plant drawings for the following penetrations:

Unit 2

Penetration	Description
16A	Core Spray
51C	Drywell Pneumatic Return
67	Drywell N ₂ Vent
80	Drywell N ₂ Vent
81	Ns Makeup
217A	H ₂ O ₂ Sample
217B	H ₂ O ₂ Sample
226A	Core Spray

Unit 1

8	Condensate Drain
18	Equipment Drain
26	Purge Exhaust
42	Standby Liquid Control
210A	Jockey Pump Minimum Flow Line

6. Procedure Review (42400, 61720)

Review of HNP-2-3952E indicates that the local leak rate test procedures now contain the essential elements for an adequate leak rate measurement program as follows:

- Valve positions are specified for all boundary valves and for all other valves within the test boundary including the vent path and pressure connection path.
- Valve alignment are identified by up-to-date as-built system drawings which are incorporated into the procedure.
- Independent verifications are provided for system alignment, installation of jumpers, and for the restoration of the systems to the as-found status.
- Required instrument specifications are identified.
- As-found, as-left leakage and a summary of penetration leakage are maintained in a test log which is maintained as a test record.
- Recommended inservice inspection program leakage limits for each components are specified in the test procedure.

Review of portions of HNP-1-3952E indicates essentially the same revisions as HNP-2-3952E.

During this review, the inspector identified certain minor concerns in the above procedures where further clarification can prevent a potential misunderstanding of the procedural requirements. These areas were resolved with licensee management as follows:

- a. A statement in Section K of HNP-2-3952E allows the Test Coordinator to approve alternate pressurization or vent paths without submitting the change through the formal procedure change process. At the exit interview, plant management stated that all procedure changes at Hatch will be made in accordance with established administrative controls which conform to the Technical Specification requirements. To prevent confusion, the above statement will be deleted from HNP-2-3952E.
- b. A "Note" on page 1 of HNP-1-3952E and HNP-2-3952E specifies those items for which independent verification will be performed. The note specifies removal of any installed jumpers but does not address lifted leads. To avoid a potential problem, licensee management agreed to review the tests and, if applicable, to include restoration of lifted leads in the independent verification program.
- c. Section H of HNP-1-3952E and HNP-2-3952E contains the requirement that, prior to conducting Type C tests, the LLRT Coordinator will review applicable system P&IDs for revision changes and revise the test procedure accordingly. Although the system P&ID numbers are identified in the reference section (Section D) of the test procedure, the drawing revision number is not identified. Therefore, to meet the above requirement, the Test Coordinator must review the 187 penetration drawings against current P&IDs each time the Type C test program is performed. Licensee management stated that, subsequent to the initial review and approval of the test procedure, it is intended that the Test Coordinator reconfirm the procedure accuracy for only those systems to which changes have been made. The inspector agreed with the licensee's position. The test procedure will be revised to prevent future misunderstanding.

The inspector concluded that implementation of the revised procedures, HNP-1-3952E and HNP-2-3952E, will provide an adequate Type B and Type C leak rate surveillance program.

d. Test Results

Review of test results obtained using the above described procedures shows that, with the exception of several valves which exceeded allowable limits and are reported in LER 50-366/1984-04, the measured leakage is approximately 15% of the allowable 60% La leakage. Licensee management stated that when the Type B and Type C tests are completed an updated report will be submitted which will identify the test problems and provide an analysis of as-found, as-left penetration

leakage for both the Type C condition (highest leak rate in the leak path assuming a single active failure) and the Type A condition (realistic estimate of the leakage in a leak path based on the smaller identified leakages assuming a functional isolation system).

e. Observation of Tests

Leak rate tests which were observed during this inspection included portions of the drywell N₂ vent system penetrations 67 and 80. The tests were performed in accordance with the approved, revised procedure which was present at the test site. No leakage was observed in these tests. While witnessing these tests, the inspector identified several concerns which were resolved with licensee management as follows:

- (1) Temperature of the test media is not measured. Since the scale reading of the rotometer is determined for a specific calibration temperature and pressure, a difference in the test conditions from the calibration conditions will result in a difference in the actual flow from the indicated flow. In the tests witnessed and in most cases, the temperature of the test media is greater than the 70°F calibration temperature due to the temperature of the surrounding environment and, therefore, yields a conservative measurement of leakage. However, the licensee agreed that the assumption of conservatism should be supported by measured test parameters. The test media temperature will be recorded in the data package in future tests.
- (2) Pressure drop in the discharge tubing from the rotometer to the test volume has not been determined. The licensee said that the length of this tubing may be as much as 100 feet. Although judgement and experience would indicate that the pressure drop in unrestricted plastic tubing is minimal, the licensee agreed to confirm that the pressure drop for a worst case condition is within the test pressure tolerance of 1.5 psi.
- (3) The position of the bypass flow valve on the test panel is not recorded in the data package. A flow path which bypasses the flow measuring instrumentation is provided at the test panel to enable more rapid pressurization of large test volumes. Failure to adequately isolate this line could result in makeup flow to the test volume which is not monitored by the flow meters. The licensee agreed to require a signoff in the data package that the bypass flow path is isolated and vented to atmosphere.

At the exit interview the inspector stated that the concerns delineated in this report are not identified for special followup inspection but will be reviewed in the NRC routine inspection of leak rate testing.