

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-354/85-26

Docket No. 50-354

License No. CPPR-120

Priority --

Category B

Licensee: Public Service Electric and Gas Company
80 Park Plaza - 71C
Newark, New Jersey 07101

Facility Name: Hope Creek Generating Station

Inspection At: Hancock's Bridge, New Jersey

Inspection Conducted: June 10 - 14, 1985

Inspectors: Larry E Briggs
L. Briggs, Lead Region Engineer

7/5/85
date

Approved by: P. Eselgroth
P. Eselgroth, Chief
Test Programs Section, DRS

7/15/85
date

Inspection Summary: Inspection on June 10 - 14, 1985 (Report No. 50-354/85-26)

Areas Inspected: Routine, unannounced inspection (39 hours) by one region-based inspector of preoperational test procedure review and verification, preoperational test witnessing, preoperational test results evaluation review, QA/QC interface with preoperational testing and plant tours.

Results: No violation were identified.

DETAILS

1.0 Persons Contacted

- *A. Barnabei, Principal Quality Assurance (QA) Engineer
- R. Briggs, QC Engineer
- *J. Carter, Startup Manager
- *R. Donges, QA Engineer
- *J. Fisher, QC Supervisor
- *A. Giardino, Manager QA, Engineering and Construction
- *C. Jaffee, Startup Engineer
- W. Johnson, B&W Representative, Outage Management and Support
- *C. Lambert, Supervising Engineer
- *S. LaBruna, Assistant General Manager, HCO
- C. Langton, System Test Engineer (Radwaste and Drywell HVAC)
- *E. Logan, Site Manager, Construction
- *M. Metcalf, Principal QA Startup Engineer
- *R. Salversen, General Manager, Hope Creek Operations
- S. Soonthornpong, System Test Engineer (Drywell HVAC)
- H. Wise, Manager, B&W Outage Management and Support

Other NRC Personnel

- *J. Lyash, Resident Inspector
- S. Chaudhary, Senior Resident Inspector, Construction

*Denotes those present at the exit meeting conducted on June 14, 1985.

The inspector also contacted other personnel of the licensee's operating and QA/QC staff.

2.0 Preoperational Test Procedure Review and Verification

2.1 PTP Review and Verification

The PTP listed below was reviewed in preparation for test witnessing, for technical and administrative adequacy and for verification that testing is planned to adequately satisfy regulatory guidance and licensee commitments. It was also reviewed to verify licensee review and approval, proper format, test objectives, prerequisites, initial conditions, test data recording requirements and system return to normal.

-- PTP-AB-1, Main Steam System, Revision 0, April 30, 1985.

2.2 Findings

During the above review, the inspector had several questions concerning Main Steam Isolation Valve isolation logic which were discussed with the licensee and resolved. In addition, a comparison was made of containment isolation valves being tested in the procedure to

those listed in FSAR table 6.2.16 for penetrations P-1A, 1B, 1C and 1D. The review indicated that four valves were not being tested. When questioned the licensee produced appendix R of PTP-SM-1, Isolation Valve Testing Cross-Reference. The appendix lists all containment penetrations, and their associated isolation valves and the PTP that performs appropriate valve testing. The four valves in question, HV-5834A through HV-5837A, are to be tested under PTP-KP-1, MSIV Sealing System. The inspector reviewed the referenced paragraphs of PTP-KP-1 and verified that the valves in question are scheduled to be tested.

During the review the inspector also discussed a previous item identified during Inspection 50-354/85-13 (Paragraph 2.3) concerning review and approval of General and Detailed Test Procedures that are used to satisfy FSAR Preoperational Test Program commitments. The licensee has revised Startup Administrative Procedure (SAP) 24, "Preoperational Test Procedure, Format and Instructions", to require that General and Detailed Test Procedures used to satisfy FSAR preoperational test program commitments be attached to the associated PTP for PORC results review and approval.

The inspector had no further questions.

3.0 Preoperational Test Witnessing

3.1 Scope

Testing witnessed by the inspector included the observations of overall crew performance stated in Paragraph 3.0 of Inspection Report 50-354/85-18.

3.2 Findings

On June 10, the inspector observed alarm testing of a Recirculation Pump Motor Generator set being conducted under PTP-BB-2, Reactor Recirculation System. Testing was being performed in accordance with the criteria of Paragraph 3.1 above.

No unacceptable conditions were observed.

On June 14, the inspector observed the performance of PTP-GT-1, Drywell Ventilation, Section 8.4, Drywell Cooler Fan B2V212. This section of the test verified alarms, manual controls and indications for fan B2V212. The inspector also reviewed the preceeding completed portions of the procedure, on-the-spot procedure changes and test exceptions. The testing was being conducted in accordance with the criteria of Paragraph 3.1 above. Quality control coverage was being provided by two QC inspectors, one in the drywell and one roving between the control room and the Bailey Logic Cabinets for appropriate procedural witness points.

No unacceptable conditions were noted.

4.0 Preoperational Test Results Evaluation Review

4.1 Scope

The four completed test procedures listed below were reviewed during this inspection to verify that adequate testing had been conducted to satisfy regulatory guidance, licensee commitments and FSAR requirements and to verify that uniform criteria were being applied for evaluation of completed test results in order to assure technical and administrative adequacy.

The inspector reviewed the test results and verified the licensee's evaluation of test results by review of test changes, test exceptions, test deficiencies, "As-Run" copy of test procedure, acceptance criteria, performance verification, recording conduct of test, QC inspection records, restoration of system to normal after test, independent verification of critical steps or parameters, identification of personnel conducting and evaluating test data, and verification that the test results have been approved.

- PTP-AN-2, Demineralized Water Storage and Transfer System, Revision 0, Results Approved April 19, 1985;
- PTP-PH-1, Class 1E 480 Volt Motor Control Centers, Revision 0, Results Approved April 19, 1985;
- PTP-PK-1, 125VDC Class 1E Power System, Revision 1, Results Approved April 19, 1985; and,
- PTP-SG-1, Seismic Monitoring System, Revision 0, Results Approved May 10, 1985 and PTP-SG-1 Retest, Results Approved June 7, 1985.

4.2 Findings

During review of PTP-AN-2, the inspector noted that testing of HV-2600 had been deleted from the test because the valve was "Q" listed and PTP-AN-2 was not a "Q" procedure. The licensee stated that HV-2600 would be tested separately under DTP-AN-001, Testing Reactor Building Service Isolation Valve AN-HV-2600, a "Q" procedure. The licensee provided a copy which was reviewed by the inspector. In addition the licensee has submitted FSAR change notice No. 838 to have this valve deleted from FSAR table 3.9-19.

PTP-SG-1 required retest because the battery powered recorder would not operate for the required 25 minutes. The retest was successfully completed after battery replacement.

No unresolved discrepancies or violations were identified during the above review; however, several open test exceptions require resolution by the licensee and collectively constitute unresolved item 354/85-26-01, as follows:

<u>Procedure No.</u>	<u>Short Title</u>	<u>SDR No.</u>
PTP-AN-2	Demin. WTR Storage and Trans.	AN-0039
PTP-PK-1	125 VDC Class IE	PK-0117, 0119 and 0120

No unacceptable conditions were identified.

5.0 Plant Tours

The inspector made several tours of various areas of the facility to observe work in progress, housekeeping, cleanliness controls and status of construction and preoperational test activities.

5.1 On June 10, 1985 while touring the control room the inspector noted that Condensate Storage Tank (CST) level recorder LR-2043 indicated approximately zero level. Discussion with the control room operator indicated that this occurred when chemistry samples of the CST were being obtained. The practice, at present, is to obtain a sample from the level instrument line drain valve. A review of the P&ID for the Condensate Storage and Transfer System shows that in addition to the level transmitter the low level swapover instruments for both High Pressure Coolant Injection (HPCI) and the Reactor Core Isolation Cooling (RCIC) pumps are sensed from the same instrument tap. The inspector discussed this item with the licensee; in particular, the sampling method to be used during plant operation (after operating license). The licensee stated that the current method being used to sample the CST was temporary. A copy (preliminary) of CH-SA.ZZ-006(Q), Sampling from the Turbine Building Sample Station (B.O.P. Panel) was provided to and reviewed by the inspector. Normal CST samples will be drawn at the sample sink and will not affect CST instrumentation.

The inspector accompanied by the resident inspector also observed plant maintenance personnel disassembling, cleaning and regreasing limitorque valve operators. These activities were being performed under the direction of two B&W Outage Management and Support Personnel sent to the site for this specific activity. The inspectors discussed the operation of Limitorque valve operators, different lubricants used and the kind of problems that could be experienced with the valve operators. The inspector noted that an approved lubricant was to be installed in all Limitorque valve operators; however, its temperature rating is only 150°F. The inspector asked

the licensee why a different lubricant approved for nuclear environment conditions with a 250°F rating was not being used in Limitorque valve operators, particularly those installed in the drywell. The licensee stated that the primary reason was to minimize the number of different lubricants and subsequently reduce the possibility of using the wrong grease. During subsequent discussions the licensee agreed to evaluate using the approved high temperature lubricant.

The inspector also noted that full 24 hour QC coverage was being provided during the Limitorque disassembly and reassembly operation.

The inspector had no further questions.

6.0 QA/QC Interface with the Preoperational Test Program and Maintenance Activities

The inspector verified by direct observation and document review that adequate QA/QC coverage was being provided as discussed in Paragraph 3.2, 4.1 and 5.1 of this report.

No unacceptable conditions were observed.

7.0 Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable, an item of noncompliance or a deviation. An unresolved item is identified in paragraph 4.2.

8.0 Exit Interview

A management meeting was held at the conclusion of the inspection on June 14, 1985, to discuss the scope and findings as detailed in this report (see Paragraph 1 for attendees). No written information was provided to the licensee at any time during the inspection.