

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-334/85-14

Docket No. 50-334

License No. DPR-66

Licensee: Duquesne Light Company

435 Sixth Street

Pittsburgh, Pennsylvania 15219

Facility Name: Beaver Valley Power Station, Unit No. 1

Inspection At: Shippingport, Pennsylvania 15077

Inspection Conducted: May 13 - 17, 1985

Inspectors:

P. H. Bisset
P. H. Bisset, Reactor Engineer

7/1/85
date

E. G. Racho
E. G. Racho Philippine Atomic
Energy Commission, IAEA Observer

7/1/85
date

Approved by:

P. K. Eapen
P. K. Eapen, Chief, QA Section
OB, DRS

7/10/85
date

Inspection Summary: Inspection on May 13-17, 1985 (Inspection Report No. 50-334/85-14)

Areas Inspected: Licensee action on previous inspection findings; and surveillance/calibration, including In-service Testing for pumps and valves.

The inspection involved 71 hours of onsite inspection by one region based inspector and an IAEA observer.

Results: No violations were identified.

DETAILS

1. Persons Contacted

- *H. Caldwell, Instrument and Controls Supervisor
- R. Druga, Manager, Technical Services
- L. Freeland, Operations Coordinator
- *S. Fenner, Director, Operations Quality Control
- *K. Grada, Manager, Nuclear Safety
- *S. Hall, Senior Test Coordinator
- R. Hansen, Station Maintenance Supervisor
- *D. Hunkele, Director, Quality Operations Assurance
- *W. Lacey, Plant Manager
- F. Lipchick, Senior Compliance Engineer
- *G. McCorkle, Nuclear Operations Engineer
- *A. Mizia, Senior QA Engineer
- *B. Sepelak, Nuclear Services Engineer
- *J. West, Nuclear Operations Engineer
- *T. Zyra, Supervisor, Testing and Plant Performance

USNRC

*W. Troskoski, Senior Resident Inspector

Other plant personnel, including technical, operations, and clerical, were contacted during the course of the inspection.

*Denotes those present at the exit meeting on May 17, 1985.

2. Action on Previous Inspection Findings

(Closed) Violation (334/84-06-01): Lack of management controls including quality assurance for the Inservice Testing (IST) Program for pumps and valves. This lack of management control was attributable to the licensee's failure to develop and implement applicable administrative procedures. Subsequently, the licensee developed: 1) a Nuclear Group Directive (NGD) to encompass all aspects of the IST program; 2) a Site Administrative Procedure (SAP) to delineate station responsibilities for those various groups involved with the IST program; 3) a Testing and Plant Performance administrative procedure detailing their responsibilities for the inservice testing of pumps and valves; and 4) an IST Manual containing specific code requirements and the method by which they will be accomplished.

The inspectors verified the licensee's corrective action through a review of the following:

-- Nuclear Group Directive 26 - Rules for Inservice Testing Program

- Site Administrative Procedure 27 - Inservice Testing Program
- Testing and Plant Performance (T&PP) Administrative Procedure 11, Inservice Testing Program
- T&PP Inservice Testing Manual for pumps and valves

Other examples of problems with the IST program, as noted in the Notice of Violation, and the results of corrective action taken by the licensee were also reviewed and verified by the inspectors.

These actions included: 1) the development of Operations Surveillance Test (OST) 1.46.6 and 1.46.7 to ensure that valves MOV-1HY-201A and MOV-1HY-201B are tested on a quarterly basis; 2) QA audit BV-1-85-14, Inservice Testing Program, scheduled to start on May 20, 1985, included, as part of the checklist, coverage of procedure implementation and observation of conduct of testing; 3) QA's copy of the updated IST program was an approved and controlled copy; and 4) BVPS modified Inservice Testing Program, as approved by NRR, had been reviewed and approved by the Onsite Safety Committee.

Based on the above review by the inspectors, this item is closed.

3. Safety-Related Calibrations and Surveillance Tests

3.1 References/Requirements

- Technical Specification, Section 6, Administrative Controls
- ANSI 18.7-1972, Administrative Controls For Nuclear Power Plants
- Regulatory Guide 1.33-1972, Quality Assurance Program Requirements

3.2 Administrative Controls

- Beaver Valley Power Station (BVPS)-Station Administrative Procedure (SAP), Operations Surveillance Testing
- BVPS-SAP 27, Inservice Testing (IST) Program
- BVPS-SAP 29, Technical Specification Changes
- BVPS Operating Manual, Operating Surveillances
- Nuclear Group Directive 26 - Rules for IST Program
- Nuclear Group Directive 11, Technical Specification for Matrix Changes

- Instrument and Controls Administrative Manual, Section C, Calibration Program
- Testing and Plant Performance Administrative Procedure 11, Inservice Testing Program
- Quality Assurance Instruction 18.3.2-QA Surveillances

3.3 Review and Implementation

The inspector reviewed and verified that the schedule and frequencies of the surveillance test, calibration and testing of pumps and valves were consistent with the requirements of the applicable standards and procedures detailed in paragraphs 3.1 and 3.2 above.

The following surveillance tests and calibrations were selectively reviewed and verified that they were conducted in accordance with the written checklist; surveillance and calibration findings were documented and reviewed; deficiencies were initiated/corrected; and, in general, surveillance test and calibrations were conducted in accordance with the established schedules and procedures.

- OST 1.7.1, Boric Acid Pump (CH-P-2A, CH-P-2B) Operational Test
- OST 1.11.10, Boron Injection Flow Path
- OST 1.24.2, Auxiliary Feedwater Motor Auxiliary Feed Pump Test (1FW-P-3A)
- OST 1.36.1, Diesel Generator #1 Monthly Test
- OST 1.36.7, Offsite to Onsite Power Distribution System Breaker Alignment Verification
- MSP 2.03, Power Range Neutron Flux, Channel N-N141 Quarterly Calibration
- MSP 6.20, Delta T-ave. Protection Channel Test (T-RC412)
- MSP 39.01, Battery No. 1 Test and Inspection
- ICP-6-PS-RV-RC551B, Pressurizer Relief Valve RV-RC551B Bellows Failure Pressure Switch PS-RV-RC551B Calibration
- ICP-36-PI201, Motor/Diesel Driven Starting Pressure Indicator Calibration
- ICP-33-PI100, Hydropneumatic Tank Pressure Indicator PI-FP100 Calibration

- LCP-6-7408A, Calibration of ΔT -Tave. Temperature Loops T-RC411, T-RC421
- LCP-6-P472, Pressurizer Relief Tank Pressure Loop P-RC472 Calibration
- BVT 1.1-1.16.1, Supplementary Leak Collection and Release System (VS-FL-4, 5 and 6) Filter Bank
- BVT 1.3-1.32, Incore Moveable Detection Normalization

The inspector observed the performance of OST 1.7.2, Boric Acid Transfer Pump (ICH-P-2B) Operational Test. Test performance was observed both in the control room and at the pump location. During the performance of the surveillance test, the inspector verified that the following:

- Test procedure was reviewed by personnel involved in the actual conduct of the test
- Test procedure was available and used at both locations
- Test prerequisites were met
- Test equipment used was calibrated
- Radiation Work Permit was posted and adhered to
- Acceptance criteria were met
- Following completion of the test, system was realigned for normal operation

The inspector also verified that a master schedule had been developed and maintained for surveillance and surveillance calibration testing. This review included assurance that the schedule reflected recent changes to the Technical Specifications (TS), whereby new procedures and/or revisions to existing procedures had been made. The inspectors reviewed TS amendments 90 and 91, (issued February, 1985), and noted that new procedures developed as a result of these TS changes were included in the Planning and Scheduling department's Master Index.

The inspector also reviewed the recently completed Technical Specification Procedure Matrix, which is intended as an useful aid in cross referencing technical specifications and applicable procedures (primarily surveillance procedures). The matrix, as delineated in the program description, can be used as an aid in identifying:

- Technical Specification Surveillance procedures
- Procedures affected by a Technical Specification Change Request
- Technical Specifications which are affected by a procedure change
- Surveillance procedures required for a particular mode or mode change
- Procedure frequency
- Surveillance procedure applicability for each department or section

The matrix can also be used to provide a Quality Assurance checklist for the Operations Review Committee Technical Specification required audit.

3.4 Findings

No violations were identified. However, although each department has its own administrative procedures for controlling surveillance tests for which it was responsible, the inspectors noted that there was no station procedure for governing the overall control and responsibilities of the station surveillance test/calibration program. Based on discussions with representatives of various departments and a review of applicable administrative procedures, it was determined that the scheduling of surveillance tests and calibrations is controlled primarily by the Planning and Scheduling Department. Representatives of the Planning and Scheduling Department agreed to develop a station administrative procedure to provide overall control and coordination of all surveillance testing and calibrations. Completion of licensee action in this area will be reviewed during a subsequent NRC inspection.

4. Quality Assurance Interface

- 4.1 Discussions were held with both the Operational Quality Assurance (OQA) and Operational Quality Control (OQC) Directors to ascertain their departments involvement in the station's surveillance/calibration program. OQC routinely reviews all procedures to ensure that OQC holdpoints are inserted, as necessary. Should problems arise during the performance of a test, OQC follows the procurement of replacement parts, if necessary.

OQA, as part of their audit checklist, perform surveillances of ongoing activities, including surveillance tests in the audited area. Also, inspections/surveillances are performed periodically by designated QA surveillance personnel. OQA, having recently hired an individual with more than 20 years operational experience at the now decommissioned Shippingport Atomic Power Station, plans to increase their involvement (via inspections, surveillances, audits, etc.) in ongoing routine plant operations.

5. Exit Meeting

The inspector met with licensee representatives on May 17, 1985, to summarize the scope and findings of the inspection.

At no time during the inspection was written material provided to the licensee by the inspectors.