

U.S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 80-14

Docket No. 50-334

License No. DPR-66 Priority -- Category C

Licensee: Duquesne Light Company

435 Sixth Street

Pittsburgh, Pennsylvania 15219

Facility Name: Beaver Valley Power Station - Unit 1

Inspection at: Shippingport, Pennsylvania

Inspection conducted: May 19-23, 1980

Inspectors: *G. Napuda*  
G. Napuda

7/15/80  
date signed

*G. Simonetti*  
G. Simonetti

7/16/80  
date signed

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\_\_\_\_\_ date signed

Approved by: *E. Greenman*  
E. Greenman, Chief, Nuclear Support  
Section 2, RO&NS Branch

7/16/80  
date signed

Inspection Summary:

Inspection on May 19-23, 1980 (Report No. 50-334/80-14)

Areas Inspected: Routine, unannounced inspection by regionally based inspectors of the Quality Assurance Program (QAP) implementation including: design changes/modifications; design change/modification control; QA/QC surveillance; audits; and follow-up on previously identified items. The inspection involved 72 inspector-hours onsite by two NRC regionally based inspectors.

Results: Of the four areas inspected no items of noncompliance were identified.

## DETAILS

### 1. Persons Contacted

- \*F. A. Arnold, Construction Specialist
- F. Bovalino, Foreman-Fitters (Schneider)
- A. Demitras, Electrical Project Engineer (Seargent)
- \*C. E. Ewing, QA Supervisor
- \*S. C. Fenner, QC Supervisor
- \*J. H. Fetchen, Construction Engineer
- \*M. F. Gebhardt, Project Manager (Schneider)
- \*R. L. Hansen, Station Maintenance Supervisor
- \*E. Humer, Construction Specialist
- \*L. K. Hutchinson, Audit Coordinator
- \*F. J. Lipchick, Compliance Engineer
- \*A. J. Mizia, QA Engineer
- R. Pearson, Electrical Project Manager (Seargent)
- J. Rathake, Instrument Foreman
- \*E. J. Rush, Jr., QA Manager (Schneider)
- \*J. D. Sieber, Superintendent, Licensing and Compliance
- \*H. M. Siegel, Acting Supervisor (OEG)
- H. W. Thomas, Assistant Supervisor (OEG)
- P. Valent, Acting Supervisor, Station Engineering Group
- R. Washabaugh, QA Manager
- \*J. A. Werling, Station Superintendent

### Other Accompanying NRC Personnel

- \*J. Hegner, Resident Inspector

The inspectors also held discussions with and interviewed other members of the Power Station and Duquesne Light Company technical and administrative staff.

### 2. Previous Identified Items

(Open) Deviation (79-18-08): Failure of licensee to comply with commitments as stated in letter C. N. Dunn to B. H. Grier dated November 29, 1978. The inspector had previously verified (IE Report 50-334/80-08) that Station Engineering is no longer performing Category I work. During that inspection and this one the inspector verified that the station procedures addressing modifications have been revised. Also, during this inspection the licensee stated that all except four of the Design Change Packages (completed Category I modifications) in question had been transmitted to the Project Team.

The inspector stated that selected drawings, procedures, etc., affected by these completed Design Changes would be reviewed to verify that they had been updated after all Design Change Packages had been transmitted to the Project Team and this item remains open pending this review.

(Closed) Unresolved Item (80-08-01): Further review of calibration and control of measuring and test equipment by the NRC. The inspector re-reviewed the apparent discrepancies discussed in Paragraph 8 of IE Inspection Report 50-334/80-01 and the licensee's current method of control for test and measuring equipment calibration and storage. The inspector noted that a new "clean room" had recently been constructed and various equipment was in the process of being relocated to this facility. During discussions with cognizant licensee supervisory personnel the inspector verified that revisions to applicable procedures were being prepared. The inspector determined that he had no further questions with respect to this unresolved item and it therefore is closed for record purposes. However, a new unresolved item is discussed below.

During discussions with cognizant licensee supervision the inspector identified the need for applicable procedures to more clearly delineate the following with respect to measuring and test equipment:

- environmental requirements during the calibration of generic/specific items
- environmental requirements during storage of generic/specific items
- calibration methods for generic/specific items
- system of controls for the storage of items
- documentation requirements for the above four activities

The licensee representative stated that the appropriate implementing instructions/procedures would be revised to reflect the five aspects discussed above by September 1, 1980.

Pending review of the stated licensee actions this item is unresolved. (80-14-01)

### 3. Design Change/Modification Control

#### a. References

PPM 3.4; Document Control, Revision 2, 3/1/80

PPM 3.6; Control of Modification Activities, Revision 3, 10/16/79

PPM 3.7; Material Control, Revision 3, 8/28/79

PPM 3.8; Weld Material Control, Revision 3, 3/24/80

PPM 3.9; Tool and Equipment Control, Revision 3, 10/31/79

PPM 4.1; Pipe Fabrication and Installation Procedure, Revision 3, 3/25/80

PPM 4.2; Control of Electrical Work, Revision 2, 12/7/79

NPPP 3.2; Document Control, Revision 2, 4/2/79

NPPP 3.5; Modification (Design Change) Responsibility and Control, Revision 3, 12/14/79

NPPP 3.15; Review and Approval of As-Built Documents and DCP Quality Assurance Records Packages, Revision 0, 5/2/80

NPPP 3.16; Initiation and Control of Duquesne Light Engineering Memoranda, Revision 9, 4/2/79

NPPP 3.25; Field Fabrication Welding Control, Revision 3, 1/28/80

b. Program Review

The documents listed above were reviewed to determine whether administrative controls for design changes/modifications have incorporated the requirements as described in the Beaver Valley Quality Assurance Program.

This review determined that:

- procedures for control of design changes/modifications have been developed
- design document control has been established
- channels of communications between the design organization and the individual responsible for implementation exist
- design change/modification packages are being converted into plant records
- methods exist for identifying and reporting those design changes/modifications which are within the scope of 10 CFR 50.59
- procedural controls exist for temporary modifications, lifted leads and jumpers

- responsibilities have been delineated in writing to assure the implementation of the above.

No items of noncompliance were identified.

c. Implementation Review

The inspector reviewed the following design change packages (DCs) of modification work in progress.

- DC 298, Containment Sump Level Instrument
- DC 292, RCS PORV and SV position indication
- DC 190, Steam Line Break Protection Wraps
- DC 189, ORS Permanent NPSH Fix
- DC 130, Auxiliary Feed Pump Recirculation Piping Modifications
- DC 162, Outside Recirculation System to Low Head Safety Injection System Crossover
- DC 156, Control Room Chlorine Detection
- DC 257, Modifications required by IE Bulletin 79-02

The modifications listed above were reviewed to verify that the following requirements have been implemented.

- 10 CFR 50.59 reviews were performed and documented
- design changes/modifications were accomplished in accordance with written procedures
- acceptance testing was specified where necessary
- procedures and drawings required to be changed or generated as a result of the design change/modification were identified
- the design change/modification package contained the necessary instructions/records, etc., with respect to the status of work

No items of noncompliance were identified.

c. Observation of Work in Progress

Immediately after arriving at the plant the inspector toured the Electrical and Mechanical Weld Issue Cribs of the major contractor involved with outage tasks. The inspector noted that weld filler material had been issued for work on a number of modifications and elected to examine further work activities associated with DCs 242 and 277. The inspector then observed ongoing work in the Containment that was associated with these DCs.

The inspectors observed electrical and mechanical work in progress several times during the course of the inspection including electrical cable pulling and terminal board lead installation during the second shift on May 21, 1980. The various work activities were associated with DCs 156, 189, 190 and 257.

During these observations the inspectors verified conformance to the following requirements as applicable.

- instructions/procedures available
- proper tools and measuring devices utilized
- fire protection established
- radiation protection implemented
- work activities conducted in an acceptable fashion

No items of noncompliance were identified.

4. QA/QC Surveillance

a. References

- BVS 3000; Endorsement Specifications for Electrical Work for Continuing Service Tasks, Revision 2, 1/18/80
- BVS 3001; Endorsement Specifications for Criteria for Installation and Identification of Electrical Cables
- BVPP 61-2, Control Document, 10/18/79
- IP-E-03; Cable Pulling, Revision 3, 5/8/80
- IP-E-04; Cable Testing and Termination, Revision 8, 3/24/80

- QADI 18.3.2; Quality Assurance Surveillance, Revision 4, 2/4/80
- NSQC 10.1; NSQC Surveillance of Plant Maintenance, Revision 4
- NSQC 10.4; NSQC Surveillance of Inspection Activities Conducted by Contractor Quality Control, Revision 0

b. Program Review

The documents listed above were reviewed to determine that the:

- instructions/procedures contained quality acceptance criteria
- duties of QA/QC personnel were delineated
- surveillance activities were preplanned with respect to manpower assignments.

No items of noncompliance were identified.

c. Implementation Review

The inspector reviewed and observed the QA/QC surveillances of work in progress associated with DCs 156 and 190 (reference paragraph 3.c.) to determine:

- proper control of tools and materials
- QA/QC inspections/surveillances conducted as required
- hold/witness points observed
- QA/QC presence on station when required
- QA/QC inspection surveillance properly documented.

The inspectors noted that the surveillance activities were identifying any quality problems early in the work cycle when necessary corrective action can be undertaken more expediently. The inspectors stated that the conduct of the surveillance activities examined/reviewed appeared to enhance the effectiveness of the quality program. The licensee representative acknowledged the inspector's statement.

No items of noncompliance were identified.

5. Auditsa. References

-- OP-16; Audits, Revision 3. 9/11/78

b. Review

The inspectors reviewed Audits BV-1-80-2, Design Control (OEG); BV-1-80-13, Installation of Design Changes; and BV-80-14, Contractor Construction Activities; conducted by the Quality Assurance Department which included various activities of the engineering department. The inspectors verified that these audits were conducted in accordance with written procedures and checklists; with audit findings documented and reviewed; with followup action completed/initiated/closed out; and general audit conduct in accordance with established schedules and procedures.

No items of noncompliance were identified.

6. Plant Tour

The inspectors toured selected areas of the Auxiliary Building, Turbine Building and Maintenance Shops. The inspectors observed various activities in progress such as welding, general maintenance, document/drawing control and plant modification activities.

No items of noncompliance were identified.

7. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance or deviations. Unresolved items identified during this inspection are discussed in paragraph 2 of this report.

8. Exit Interview

The inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection May 23, 1980. The scope and findings of the inspection as stated in this report were presented and the licensee verified the target date for the unresolved item as discussed herein.