

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

Region I

Report No. 50-334/79-29

Docket No. 50-334

License No. DPR-66 Priority -- Category C

Licensee: Duquesne Light Company

435 Sixth Avenue

Pittsburgh, Pennsylvania 15219

Facility Name: Beaver Valley Power Station, Unit 1

Inspection at: Shippingport, Pennsylvania

Inspection conducted: December 12-14, 1979

Inspectors: W A Rekito

W. A. Rekito, Reactor Inspector

P. D. Graham for

T. Foley, Reactor Inspector

1/30/80  
date signed

1/30/80  
date signed

date signed

Approved by: D. L. Capton

D. L. Capton, Chief, Nuclear Support  
Section No. 1, RO&NS Branch

1/30/80  
date signed

Inspection Summary:

Inspection on December 12-14, 1979 (Report No. 50-334/79-29)

Areas Inspected: Routine, unannounced inspection by regional based inspectors of pipe support and restraint systems surveillance; Inservice Inspection Program for class 1 and 2 restraints; and licensee action on previous inspection findings. The inspection involved 40 inspection hours on site by two regional based inspectors.

Results: Of the three areas inspected, one item of noncompliance was identified in one area (Deficiency - Failure to follow approved procedures paragraph 3.a) and no noncompliances were identified in the other areas.

## DETAILS

### 1. Persons Contacted

R. Balcerek, Maintenance Supervisor  
R. Burski, Senior Engineer  
R. Hansen, QC Engineer  
J. Kasunick, Maintenance Engineer  
C. Kirschner, Engineer  
E. Kurtz, Jr., Senior QA Engineer  
A. Lonnet, Associate Engineer  
J. Werling, Station Superintendent  
H. Williams, Chief Engineer

#### NRC Personnel

D. A. Deckman, Resident Inspector

The inspector also talked and interviewed other licensee personnel during this inspection. They included members of the technical and operating staffs.

\*Denotes those present at the exit interview.

### 2. Licensee Action on Previous Inspection Findings

#### a. Items Closed

(Closed) Unresolved Item (334/77-30-02): The licensee established acceptable bleed rates for Bergen-Paterson snubbers. These snubbers were overhauled and tested at Wyle Laboratories during the 1979 summer outage. This item is closed.

(Closed) Unresolved Item (334/77-30-04): The licensee reset the bleed rates on the two Recirculation Spray snubbers and the Fuel Pool Cooling System snubbers during the functional testing program in July 1979. This item is closed.

(Closed) Unresolved Item (334/77-20-07): Amendment No. 18 to BV Technical Specifications revised Table 3.7-4 to include all safety related snubbers. This item is closed.

(Closed) Unresolved Item (334/79-12-05) The licensee submitted to the NRC a revision to the B'PS Unit I Reactor Containment Integrated Leak Rate Test Report which corrected each of the inspector identified errors. This item is closed.

b. Items Remaining Open

(Open) Unresolved Items (334/77-20-11 and 78-13-02) Snubber Piston Setting: The licensee's representative stated that verification of the snubber piston settings was not included in the visual inspection completed in August 1979 because all the necessary design information was not available from the architectural engineer at that time. However, the licensee does understand the NRC position that verification of snubber piston settings is an essential element of the TS required snubber visual inspection to determine operability. The licensee's representative committed to including this verification in the visual inspection procedures prior to the next inspection scheduled for summer of 1980. This item remains open.

(Open) Unresolved Item (334/79-12-01): The licensee has not yet established a method for keeping track of snubbers found inoperable during an inspection interval and including this record with the total number of inoperable snubbers found during the next TS required visual inspection. The licensee's representative stated that procedures will be revised to include provisions for this by April 15, 1980. This item remains open.

3. Surveillance of Pipe Support and Restraint Systems

a. Record Review

The inspector reviewed the following records for conformance with procedural and TS requirements:

- Hydraulic Snubber Functional Testing Records for July, 1979 (Procedure CMP-1-75-159, Rev. 0, dated 7/5/75 "Operating and Maintenance Procedure for ITT Grinnell Snubber Tester")
- NSQC General Inspection Report dated 9/4/79
- Hydraulic Snubber Visual Inspection Records for August, 1979. (Procedure ISI 5.0, Rev. 2, dated 8/25/79, "Reactor Coolant System Hydraulic Pipe Support Examination")
- Inservice Inspection of Pipe Supports and Hangers for January and August 1979 (Procedure ISI 8.0, Rev. 3, dated 8/28/77, "ASME Class 2, 3, and NC Hydraulic Snubbers and Pipe Support Examination")

With the exception of the item listed below the inspector identified no significant problems.

- (1) The inspector noted that the hydraulic fluid temperature was not recorded on the Test Report Form PHD-5434-F for more than 50 snubbers which were functionally tested from July 5-18, 1979. Section IV.B.14 of procedure CMP No. 1-75-159 requires that the hydraulic fluid temperature be measured and recorded on the Test Report Form for each snubber functionally tested. The licensee's representative initially did not know why these values were omitted from the record but later explained that the fluid temperatures were not measured because the ITT Grinnell Service Representatives assisting in the functional tests did not think it was necessary.

This failure to follow an approved procedure is contrary to Technical Specification 6.8.1 and Station Administrative Directive No. 8, "Adherence to Procedures" and is an item of noncompliance at the deficiency level (334/79-29-01)

b. Review of Program and Procedures

The inspector reviewed the following documents to determine whether the licensee's procedures and program are technically adequate and are in accordance with Technical Specifications and applicable regulations.

- Beaver Valley Unit I Technical Specification Table 3/4.7.9, Hydraulic Snubbers.
- Procedure CMP-1-75-159, Rev. 0, dated 7/5/75, "Operating and Maintenance Procedure for ITT Grinnell Snubber Tester"
- Procedure ISI 5.0, Rev. 2, dated 8/25/79, "Reactor Coolant System Hydraulic Pipe Support Examination"
- Procedure ISI 8.0, Rev. 3, dated 8/28/77, "ASME Class 2, 3, and NC Hydraulic Snubbers and Pipe Support Examination"

With the exception of the items listed below the inspector identified no significant problems.

(1) Piston Position Verification

It is an NRC position that installed snubber piston positions are required to be verified in order to determine operability of snubbers during a visual surveillance. The licensee was informed

of this fact during previous inspections 77-20, 78-13, and 79-12. The licensee's representative stated that the reason for not having incorporated the piston measurement prior to the performance of the visual surveillance of August 1979, as identified in inspection report 79-12, was due to delays in receiving design data from the Architect Engineer. However, the licensee's representative stated that the surveillance procedures would be revised to include a hot and cold set point for each snubber, requirement to measure the piston position and suitable acceptance criteria for this measurement. The licensee's representative also stated that a visual surveillance of all TS related snubbers using this revised procedure would be completed next plant startup. This matter will continue to be tracked as unresolved items (334/77-20-11 and 334/78-13-02).

(2) Temperature Effect

The snubber functional test procedure CMP-1-75-159 has an acceptance criteria of 6 to 25 inches per minute for lockup velocity and 2 to 10 inches per minute for bleed rate velocity. The inspector questioned whether or not the established acceptance criteria considered the effects of operating temperatures on the viscosity of the snubber hydraulic fluid. The licensee's representative stated that an evaluation would be performed for those snubbers located in high temperature areas to determine that the snubber lock-up rates at operating temperature fall within the provided acceptance criteria. This item is unresolved pending review of the licensee's evaluation. (334/79-29-02).

c. Observations

The inspector, accompanied by licensee's representative, toured the areas of the Reactor Containment Auxilliary Building and Turbine Building to observe the general condition of snubbers and pipe support components as well as visually examine selected components to verify conformance to design drawings and the following:

- adequacy of hydraulic fluid levels;
- piston and reservoir vents were clear;
- snubbers were installed in the correct locations;
- nuts, bolts, washers and fasteners were properly installed;
- snubbers were correctly oriented;

- no visible signs of fluid leaks;
- no observable deterioration or corrosion
- support plates, extension rods and connecting points were not bent, deformed or loose; and
- spring hanger indicators show the appropriate "hot" or "cold" position

With the exception of the items listed below the inspector identified no discrepancies.

- (1) Snubber RC-HC-5A appeared to have hydraulic fluid leaking passed the piston seal. The licensee's representative stated that this snubber along with all other large Bergen Paterson Snubbers would be removed, overhauled and tested during this current refueling outage.
- (2) Snubber FPD-HSS-209 was found to be nearly fully compressed (within 1/4 inch of end stroke) and snubber SI-HSS-411 was extended to within 3/8 inch of full stroke.
- (3) Snubber SI-HDD-514 and 519 had very little freedom of movement and could possibly be frozen in position. Also SI-HSS-514 did not appear to have the correct self centering bushing at the rear clevis fitting.

Items 1-3 are considered unresolved pending review of licensee's evaluation and possible corrective action. (334/79-29-03)

#### 4. Inservice Inspection and Testing Meeting

At various times during the inspection the inspector participated in a meeting held between the licensee and the NRC's Office of Nuclear Reactor Regulation. This meeting concerned the licensee's Inservice Inspection and Testing Program for safety related pumps and valves in accordance with Section XI of the ASME Boiler and Pressure Vessel Code. The various components to be included in the program and the licensee's requests for relief from certain Code requirements were discussed in detail.



5. Unresolved Items

Items about which more information is required to determine acceptability are considered unresolved. Paragraphs 3.b and 3.c of this report contain unresolved items.

6. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on December 14, 1979. The inspector summarized the inspection scope and findings including the Unresolved Items and Item of Noncompliance. The licensee commitments described in the report were confirmed at this time.