

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-412/85-14

Docket No. 50-412

License No. CPPR-105

Priority --

Category A

Licensee: Duquesne Light Company
Post Office Box 4
Shippingport, PA 15077

Facility Name: Beaver Valley Power Station, Unit 2

Inspection At: Shippingport, Pennsylvania

Inspection Conducted: June 24-28, 1985

Inspector: Robert A. McBrearty
R. A. McBrearty, Reactor Engineer

July 23, 1985
date

Approved by: J. J. Wiggins
J. J. Wiggins, Chief, Materials & Processes
Section EB, DRS

7/23/85
date

Inspection Summary: Inspection on June 24-28, 1985 (Report No. 50-412/85-14)

Areas Inspected: Routine, unannounced inspection of licensee action on previous inspection findings and preservice inspection program activities. The inspection involved 36 hours onsite by one regional based inspector.

Results: One violation was identified: Failure to provide required longitudinal minimum clear access for welds requiring surface or volumetric inservice examination.

DETAILS

1. Persons Contacted

Duquesne Light Company (DLC)

- *L. E. Arch, Senior Project Engineer
- *J. A. Bajuszik, Director, Construction Engineering
- *D. W. Denning, Assistant Director, Quality Control (QC)
- *C. R. Davis, Director, Quality Assurance (QA)
- *E. Ewing, Manager, QA
- *J. J. Hayden, S. Q. C. - PSI
- *E. J. Horvath, Senior Project Engineer
- *J. A. Hultz, Construction Liaison
- J. Haughton, Technical Advisor
- *A. F. Mosso, QA Engineer
- *C. S. Majumdar, Assistant Director, QC
- *S. D. Nall, Senior Compliance Engineer
- *R. A. Perry, Supervisor, NDE Services
- R. Reba, Engineering
- *D. K. Rohm, Assistant Director, QC
- *W. Sikorski, Director, ISI
- R. Wallaur, Compliance Engineer
- M. Zaki, NCD

Stone and Webster Engineering Corporation (SWEC)

- *W. Baranowski, Assistant Project Manager
- *H. W. Durkin, Superintendent, Engineering
- *A. A. Dassenbrock, Senior Construction Manager
- *D. Lessard, Assistant Superintendent, Engineering
- *J. Purcell, Assistant Superintendent, Engineering
- *R. C. Wittschen, Licensing Engineer

Westinghouse Electric Corporation

F. R. Howard, Construction Services Manager

U. S. Nuclear Regulatory Commission

- *L. J. Prividy, Resident Inspector
- *G. A. Walton, Senior Resident Inspector

*Denotes those present at the exit meeting on June 28, 1985.

2. Preservice Inspection (PSI) Program

Based on 10 CFR 50.55a(g)(2) the applicable ASME Code Edition and Addenda for PSI at Beaver Valley, Unit 2 is the 1971 Section XI with Addenda through Winter 1972. This was the code edition in effect six months prior to the issuance of the construction permit on May 3, 1974.

As permitted by 10 CFR 50.55a(g), the licensee has elected to update the code requirements to the 1980 Edition of Section XI with Addenda through Winter 1980, and, as required by 10 CFR 50.55a(b)(2)(iv) for Class 2 piping welds, apply the 1974 Edition with Addenda through Summer 1975 for the selection of welds to be examined in the Residual Heat Removal (RHR) System, Emergency Core Cooling System (ECCS), and Containment Heat Removal (CHR) System. The licensee plans to include additional welds for examination based on the 1983 Edition of Section XI with Addenda through Winter 1983 for compatibility with anticipated ISI requirements.

Procedures have been prepared for the selection, marking and profiling of Class 2 welds requiring volumetric examination. These include requirements for locating the weld centerline and other reference points necessary for documenting examination results.

The licensee has established a schedule for the completion of tasks associated with Class, 1, 2 and 3 items and intends to have a PSI Program ready for submittal to the NRC by the end of 1985.

No violations were identified.

3. Weld Accessibility for the Performance of Preservice/Inservice Inspection (PSI/ISI)

The inspector made a tour of the reactor building to ascertain that welds were prepared for the performance of PSI/ISI including identification, surface preparation and weld accessibility.

The inspector noted that pipe support number 2 RCS-PSSP007X was approximately 3 1/4 inches from shop weld "A" on 6 inch diameter line 2 RCS-006-107-1, and that pipe support number 2 RCS-PSR-036 was touching 3 inch diameter weld number 2 RCS-109-F500. Specification No. 2 BVS-920, "Specification for Field Fabrication and Erection of Piping ASME Section III, Classes 1, 2 and 3 and ANSI B 31.1.0, Class 4, requires that minimum longitudinal clear access equal to $4T + 2$ inches be provided for welds which require PSI/ISI. Weld "A" requires minimum access of 4.876 "based on a nominal wall thickness of 0.719." Weld 2 RCS-109-F500 requires minimum access of 3.752 "based on a nominal wall thickness of 0.438." The welds and supports were installed under the purview of specification 2 BVS-920, which contains the requirement for notification of engineering if access requirements cannot be met, and for resolution by engineering of the condition prior to welding. No record was available of notification regarding access conditions or of engineering resolution of the existing condition.

The welds were fabricated and inspected prior to the support installation, and acceptance was based on procedure IP-7.2. At that time the access problem did not exist. Subsequent to installation of the supports,

IP-7.3.1, "Fabrication and Installation of Pipe Supports", was used to inspect and accept the supports. IP-7.3.1 did not contain minimum clear access criteria which resulted in acceptance of the support as installed although the access requirements of 2 BVS-920 were not met. This is considered a violation of 10 CFR 50, Appendix B, Criteria V (412/85-14-01).

Prior to the exit meeting the licensee issued Nonconformance & Disposition Report (N&DR) number 8506 and N&DR number 8508 to address the above described weld access discrepancies. In addition IP-7.2 and IP-7.3.1 were revised by the licensee to include and clarify the requirements for minimum clear access to welds which require PSI/ISI. These actions by the licensee are intended to minimize the recurrence of similar problems.

The inspector's discussions with the licensee regarding the above disclosed that no general procedure or inspection requirements exist for pipe access regarding obstructions other than pipe supports. The inspector informed the licensee that this was considered unresolved pending licensee action and subsequent NRC review (412/85-14-02).

Several welds on line 2 RCS-006-107-1 were found to contain no identifying stamping. The inspector found that identification of these welds was maintained by the fabricator, Westinghouse Electric Corporation, in the form of weld maps and travelers. The inspector stated that, although weld traceability was maintained, the welds requiring PSI/ISI should be hard marked on the pipe. At the exit meeting the licensee committed to establishing a procedure for hard marking welds for PSI/ISI and to marking the applicable welds prior to the performance of PSI. This item is considered unresolved pending action by the licensee and subsequent NRC review (412/85-14-03).

4. Licensee Action on Previous Inspection Findings

(Open) Unresolved Item (84-15-01): Ultrasonic examination of overlaid welds. The licensee is exploring various techniques for examining this material. The licensee has contacted the Hope Creek Nuclear Site regarding their use of cracked samples to qualify a procedure and anticipates meeting with Hope Creek personnel to discuss this matter. This item remains open pending further review of the licensee's action.

5. Unresolved Items

Unresolved items are matters about which more information is required to ascertain whether they are acceptable, violations or deviations. Unresolved items are discussed in paragraph 3.

6. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on June 28, 1985. The inspector summarized the purpose and scope of the inspection and the findings. At no time during this inspection was written material provided by the inspector to the licensee.