CENTRAL FILES

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 50-412

OCT 17 1979

Duquesne Light Company
ATTN: Mr. E. J. Woolever
Vice President
435 Sixth Avenue
Pittsburgh, Pennsylvania 15219

Gentlemen:

Subject: Significant Deficiency Concerning Power Piping Corp. Safety Related Piping (Your letter of October 9, 1979)

Thank you for your letter, referenced above, which forwarded a final report pursuant to 10 CFR 50.55(e) regarding the subject matter.

Your report will be reviewed and evaluated, and should we require additional information concerning this matter, we will contact you.

Your cooperation with us is appreciated.

Sincerely,

R. T. Carlson

R. T. Carlson, Chief
Reactor Construction and
Engineering Support Branch

cc:
R. J. Washabaugh, Quality Assurance Manager

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Duquesne Light

435 Sixth Avenue
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15219

(412) 471-4300

October 9, 1979

United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

ATTENTION: MR. BOYCE H. GRIER, DIRECTOR

SUBJECT: Beaver Valley Power Station - Unit No. 2
Docket No. 50-412
Significant Deficiency 79-02
Final Report Concerning Deficiency with Power Piping Corp. Safety Related Piping

Gentlemen:

On September 14, 1979, R. E. Martin, Duquesne Light Company Nuclear Engineer, notified your offices of a possible reportable deficiency as defined by 10CFR50.55e(1)(i) and (iv) in the shop welding of some safety-related piping for Beaver Valley Power Station - Unit No. 2. Attached herewith is the final report on this subject.

DUQUESNE LIGHT COMPANY

By E. J. Woolever
E. J. Woolever
Vice President

ATTACHMENT

COPIES TO: Dr. V. Stello (15)
Mr. W. G. McDonald (1)

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NRT/plm

bcc: Messrs: W. H. Bohlke
H. A. Van Wassen
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J. J. Carey
R. Cartrette - S&W (Boston)
C. N. Dunn
R. E. Martin
G. W. Moore
F. Salmon
R. J. Washabaugh
R. J. Swiderski
J. A. Werling
E. J. Woolever

References: 2DLS-9396, dated 10/5/79
2DLS-9316, dated 9/14/79
SDR 79-02, dated 9/14/79

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FINAL REPORT
ON
WELDER QUALIFICATION DEFICIENCY
AT
BEAVER VALLEY POWER STATION - UNIT NO. 2

I. Description of Deficiency

Pipe fabrications supplied by Power Piping Company (PPCo) for use in Beaver Valley Power Station - Unit No. 2 (BVPS-2) were fabricated by personnel whose welding qualifications did not comply with ASME Boiler and Pressure Vessel Code, Sections III and IX, as required by the procurement specification governing this work. This situation developed as a result of PPCo.'s failure to comply with the requirements of the ASME Code for welder performance qualification. Specifically, the problem is related to welder qualifications for attached bosses 2 inch and smaller nominal pipe size to larger diameter pipe, butt welding of small diameter pipe, welding machine operator qualification, and multi-process welder qualification. As a direct result of this nonconformance, welders performed production welding operations on 167 piping fabrications before their qualifications to perform those operations were achieved and/or documented.

The nonconformance was discovered by members of Duquesne Light Company Vendor Surveillance Group (DLC-VSG) while performing shop inspections as required by the procurement specifications. Nonconformance and Disposition (N&D) reports were generated and forwarded to Stone & Webster Engineering Corporation (SWEC), agents for Duquesne Light Company (DLC) performing the engineering and construction management for BVPS-2.

SWEC completed their evaluation of the above nonconformance on September 13, 1979, and determined that a reportable deficiency under 10CFR50.55(e) existed at this time. SWEC informed DLC on September 14, 1979, that the reportable deficiency exists. Mr. R. Martin of DLC informed Mr. McGaughy of the NRC Inspection and Enforcement Division, Region I, on September 14, 1979, of this reportable deficiency.

II. Analysis of Safety Implications

The affected 167 piping fabrications constitute subassemblies of piping systems required for safe shutdown of or accident mitigation for BVPS-2. Failure of weld joints in these systems could impair the ability of these systems to perform their safety functions.

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III. Corrective Action

Corrective action has been/is being performed as follows:

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1. Unqualified welders were identified and prevented from further welding pending proper qualification.

2. A comprehensive review of the applicable documentation was completed which resulted in the identification of 167 affected fabrications.

3. Of the 167 affected fabrications, 46 are located at PPCo.'s Donora facility, and the remaining are located at the BVPS-2 site. These fabrications were placed on a quality control reject status.

4. The following disposition will be applied to the welds with deficient welder qualifications:

   A. The welders/welding operators will be qualified by radiographically examining production welds in accordance with ASME IX requirements, or

   B. The welds will be qualified by radiographically examining the welds to the acceptance criteria of ASME III, or

   C. The welds will be ground out and rewelded by properly qualified welders or welding operators.

   All radiographed welds found unacceptable by acceptance criteria of ASME III, Article NB-5000, will be reworked.

5. PPCo. is responsible for completing the above corrective action and estimates that the corrective action will be complete by January 17, 1980.

IV. Supplemental Information

The above-described deficiency was reported by PPCo. to the NRC as a failure to comply under 10CFR21. The failure to comply was initially reported to Mr. R. McCoy of the NRC Inspection and Enforcement Division Region I, by Mr. H. Ray Good, Director, Corporate Quality Assurance for PPCo., by telephone on September 14, 1979. A written report was transmitted to the District Director, U.S. Nuclear Regulatory Commission, Region I by Mr. W. R. Patterson, Executive Vice President, PPCo., on September 19, 1979. In this report, PPCo. indicated that the failure to comply affected only BVPS-2.