→ Docket Room

Duquesne Light

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August 8, 1984

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

ATTENTION: Mr. Richard W. Starostecki
Division of Project and Resident Programs

SUBJECT: Beaver Valley Power Station - Unit No. 2
Docket No. 50-412
USNRC IE Inspection Report No. 50-412/83-11, Final Report

Gentlemen:

This letter provides Duquesne Light Company's (DLC) final response to the subject inspection report.

Thirty-five (35) spools received post-weld heat treatment (PWHT) under procedure N-1141-P-8. Twenty-three (23) of these spools have been determined to be acceptable as is. The remaining 12 spools will receive final PWHT in the field to ensure compliance with ASME III, NB4620, Winter 1973 Addenda. The following items describe the basis for these determinations.

1. A BVPS-2 inspection and enforcement position relative to the identification of ASME code editions in the FSAR was presented to Mr. G. Walton, the NRC Senior Resident Inspector, and to NRR staff representatives during a meeting on July 26, 1984. This position addresses both the concerns of Inspection Report 50-412/83-07 (Unresolved Item 83-07-02) and the concern of the subject inspection.

2. Power Piping Company (PPCo) has revised heat treatment procedure N-1141-P-8 (Revision 1 at the time of the violation) to comply with the current requirements of specification 2BVS-58.

3. PPCo has reported that all its fabrication, examination, and testing procedures are in compliance with 2BVS-58 requirements.

4. A furnace survey was performed in accordance with PPCo Procedure SFT-1, Revision 0. The results indicate that a maximum variance of 75°F in the furnace working zone at the 1100°F to

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1200°F soaking temperature range was achieved. This degree of temperature uniformity provides sufficient assurance that the number of recording thermocouples used was acceptable to control PWHT for piping spools.

5. Spools which received acceptable PWHT have been recertified by PPCo and their ANI as having received PWHT in compliance with NB-4620 of ASME Section III, 1971 Edition through and including Winter 1973 Addenda, and PPCo Procedure N-1141-P-8, Revision 2, dated November 8, 1983.

6. Spools which received excessive heating and cooling rates during PWHT have been identified on DLC field N&D's 6841 and 7291.

7. The actual heating and cooling rates used were determined to be technically acceptable based on an engineering calculation. The results showed that the peak thermal stress was low to moderate thus supporting the acceptance of PPCo heat treatment practices. However, welds on those spools which were heat treated in accordance with PPCo practices and which required PWHT in accordance with ASME III, NB4620, Winter 1973, will receive a final PWHT in the field to ensure compliance with the code.

8. The base metal and weld repairs made on Spool Nos. MSS-043-3 and MSS-043-6 using 175°F preheat without final PWHT are acceptable. The base materials have reported carbon content less than 0.30 percent and, as such, are exempt from PWHT without preheat in accordance with ASME III, Table NB-4623.1-2, Winter 1973. The 2BVS-58 requirement for a 200°F preheat for all P-1 material in excess of 3/4 in. was intended to avoid potential nonconformances due to material carbon content differences and to simultaneously satisfy ANSI B31.1 and ASME III preheat rules for exempting PWHT.

9. Documentation for MSS-043-2 has been revised to reference an approved procedure qualified with the same essential variables but including PWHT for shop weld "A."

10. PPCo Welding Procedures 1021 and 1042 were revised to permit PWHT temperatures between 1100°F and 1250°F which is acceptable in accordance with ASME III, Table NB-4623.1-1, Winter 1973. Requalification of these welding procedures was not required in accordance with ASME Interpretation No. IX-79-13. Spool No. MSS-043-6 is acceptable on this basis.

11. The NPP-1 forms for the acceptably heat treated spools have been revised to include a reference to ASME III, NB-4620, Winter 1973, for PWHT.

Data for the 35 spools covered by this report has been made available to Mr. G. Walton, the NRC Senior Resident Inspector.

DUQUESNE LIGHT COMPANY

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

RW/wjs

cc: Ms. M. Ley, Project Manager
Mr. E. A. Licitra, Project Manager
Mr. G. Walton, NRC Resident Inspector
NRC Document Control Desk

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

On this 7th day of August, 1984, before me, a Notary Public in and for said Commonwealth and County, personally appeared E. J. Woolever, who being duly sworn, deposed and said that (1) he is Vice President of Duquesne Light, (2) he is duly authorized to execute and file the foregoing Submittal on behalf of said Company, and (3) the statements set forth in the Submittal are true and correct to the best of his knowledge.

Elva G. Lesondak
Notary Public

ELVA G. LESONDAK, NOTARY PUBLIC
ROBINSON TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES OCTOBER 20, 1986