



## Duquesne Light

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June 27, 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. 50-412/84-05  
and Supplement II to 50-412/82-01 Violation 82-01-01

Gentlemen:

The purpose of this letter is to provide Beaver Valley Power Station Unit 2 (BVPS-2) response to the commitment identified by the NRC in NRC Inspection Report 50-412/84-05. The following is BVPS-2's position regarding the disposition of the 26 accessible and 177 inaccessible pipe-to-fitting welds as being acceptable in relation to NRC Violation 82-01-01.

On May 22, 1984, NRC, BVPS-2, and Stone & Webster Engineering Corporation (SWEC) representatives met to discuss NRC Violation 82-01-01. Violation 82-01-01 is concerned with a notch condition on the surface of ASME III, Class 3 butt welds. Earlier discussions on this matter resulted in acceptance criteria being added to specification 2BVS-920 (Field Fabrication and Erection of Piping) and Site Quality Control (SQC) reinspecting ASME III, Class 3 butt welds to the new specification criteria. As a result of the meeting of May 22, 1984, the NRC requested additional information in order to reach a final decision on the pipe-to-fitting welds. The information requested by the NRC is as follows:

1. Identify the systems and weld identification numbers for the 26 accessible welds and the 177 inaccessible welds.
2. Identify the number of thermal cycles to which each of the welds will be subjected.
3. Tabulate the calculated stress results (based on equations 9 and 10 of ASME III) at the location of each of the 26 accessible welds and compare this to the allowable stresses.
4. Verify that the number of thermal cycles for each of the 177 inaccessible welds is "much less than" the 7,000 cycles of the fatigue curve.

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5. Clarify the second paragraph on page 2 (Reference 1) as requested by the NRC.

In response to Items 1, 2, 3, and 4 above, the Senior Resident NRC Inspector will be provided the information in table form by July 6, 1984. In addition to the 26 accessible pipe-to-fitting welds identified on N&D-6599c as "accept as is," an additional 83 pipe-to-fitting welds will be tabulated similar to the 26 pipe-to-fitting welds in the same manner. These 83 welds are identified on N&D-7380 as "accessible." This information will also be made available to the Senior Resident NRC Inspector by August 30, 1984. The clarification as requested by Item 5 is provided:

"In support of this assessment, the existing ASME III, Class 3 criteria requires that stress intensification factors (SIF) be applied to fittings but not to valves. The SIF required by ASME III, ND/NC-3472, typically ranges between 1.3 and 4.5 for fittings adjacent to the welds in questions, thus requiring the maximum allowable moment loading to be reduced by the amount of the factor. The reduced moment loadings, a low number of thermal cycles, and the low temperature and pressure applications contribute to an overall conservative design for the piping systems within which these welds exist. This conservative design sufficiently offsets potential weld surface concerns expressed in Violation 82-01-01."

DUQUESNE LIGHT COMPANY

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

SDH/wjs

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

REFERENCES: (1) 2NRC-4-027, dated 3/14/84  
(2) NRC Inspection Report 50-412/84-05, dated 6/8/84

SUBSCRIBED AND SWORN TO BEFORE ME THIS  
27<sup>th</sup> DAY OF June, 1984.

Anita Elaine Reiter  
Notary Public

ANITA ELAINE REITER, NOTARY PUBLIC  
ROBINSON TOWNSHIP, ALLEGHENY COUNTY  
MY COMMISSION EXPIRES OCTOBER 20, 1986

