Duquesne Light

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July 29, 1985

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
Revised Response to USNRC IE Inspection Report 50-412/85-04

REFERENCE: 2NRC-5-078, dated May 30, 1985

Gentlemen:

The following is a revised response to the Notice of Violation cited in Inspection Report 50-412/85-04 for violation 85-04-02 and 85-04-04. This is being submitted per NRC request in a telecon with Mr. Ralph Paolino (NRC), Mr. Glen Walton (NRC), Mr. Les Arch (DLC), and Mr. Stanley Hall (DLC) on June 28, 1985.

Duquesne Light Company's (DLC) previous response to violation 85-04-02 (see above reference), relating to the third and fourth specific actions on Page 2, reads as follows:

- The instrument installation specific (2BVM-977) for separation criteria for instrument tubing was reviewed. This review determined that clarifications were required to distinguish between hazard and nonhazard areas; these clarifications were issued as E&DCR 2P4652B on February 27, 1985.

- All issued isometric drawings for QA Category I instrument tubing were reviewed. Some 75 of over 900 reviewed required revisions by means of a note to indicate where specific deviations from the E&DCR 2P4652B were allowable pending confirmation by the Hazards Analysis Program. However, the review in general confirmed that the intended design requirements were being fulfilled.

The information presented above reaffirms the responses provided to Audit SPC-4 regarding SQC verification of adequate instrument tubing separation. The engineering and design process for instrument tubing isometrics, coupled with SQC verification of tubing installation in accordance with the isometrics, provide sufficient controls to ensure compliance with separation criteria.

The following is DLC's revised response providing additional information regarding action taken:

- The instrument installation specific (2BVS-977) for separation criteria for instrument tubing was reviewed. This review determined that clarifications were required to distinguish between hazard and nonhazard areas; these clarifications were issued as E&DCR 2P4652B on February 27, 1985, and subsequently incorporated it into 2BVS-977, Rev. 2, dated April 29, 1985.

- In order to ensure compliance with the modified separation requirements contained in E&DCR 2P4652B, SWEC initiated and completed a review of all existing isometric drawings for QA Category I instrument tubing. This review determined that noted instances where separation distances were not in accordance with relevant separation criteria were limited to those cases for which the lesser distances were shown on applicable SWEC isometric drawings.

- Over 900 isometric drawings were examined during this review, and approximately 75 were found to require revision. These drawings have been revised by the addition of a note that identifies the specific deviation from the separation criteria for E&DCR 2P4652B and indicates that confirmation of the acceptance of the deviation will be verified and documented under the BVPS-2 Hazards Analysis Program, in accordance with 2BVM-165.

- Each of these deviations from the separation requirements of E&DCR 2P4652B were evaluated and it was determined that, in each case, the noted conditions represented an acceptable instrument tubing configuration with no rerouting of tubing required. Hazards analysis confirmation of the acceptance of these conditions will be documented as part of the normal work activities and schedules comprising the Hazards Analysis Program.

- During the isometric drawing review, approximately 18 conditions were noted that represented deviations from the original separation criteria of 2BVS-977. Of these 18 deviations, 17 instances concerned redundant impulse lines separated by less than 4 feet in HELB hazard areas; one deviation represented redundant impulse lines on common supports in a nonhazard area. Final documentation will be developed following hazards analysis of the conditions, as previously discussed.

- Because the original tubing separation criteria of 2BVS-977 had not been properly implemented in certain isolated cases, and in order to strengthen the engineering and design process for instrument tubing isometrics, project procedure 2BVM-228 was revised as of April 24, 1985, to clearly translate the separation requirements of 2BVS-977 into detailed design procedures and design verification steps. Training of appropriate personnel regarding the content and use of revised 2BVM-228 has been completed.

In addition, DLC has re-evaluated the need for an SQC inspection for spatial separation of redundant safety-related instrument lines.

The following actions will be/have been taken to ensure SQC involvement in the verification of separation criteria.

1) SEG has furnished SQC with a list of safety-related instruments which identifies the redundant groups.

2) SQC is in the process of revising IP-7.2.9 to require inspection for redundancy of such instruments. This inspection will be done at the time of the tubing configuration inspection for future installations. SQC will issue the required revision to IP-7.2.9 by July 19, 1985.

   Those instruments which have previously been subject to a tubing configuration walkdown will be reinspected to ensure the redundancy requirements have been met. SQC estimates that it will be able to complete the reinspection by August 15, 1985.

3) Violations to the redundancy criteria will be processed as indicated below:

   a) Those which violate the redundancy criteria and installation drawing. These will be identified on N&D's.

   b) Those which violate the redundancy criteria but which are installed in accordance with the installation drawing. If they are not identified on the drawing as being reviewed by the Engineers, then they will be reported on a "Redundant Separation Evaluation Request." This "Request" will identify such violations to SEG. SEG will evaluate these conditions and in the space provided, justify them if they meet the reduced separation criteria. If the conditions do not meet the reduced separation criteria, or if the reduced separation criteria does not apply, SEG will indicate which drawings need to be revised to rework the condition.

      The SQC inspection plan will be revised by July 26, 1985, to address the use of the Redundant Separation Evaluation Request.

   c) Those which violate the redundancy criteria but which are installed in accordance with the installation drawing. If they are identified on the drawing as being reviewed by the Engineers, no corrective action will be required.

In regards to Violation 85-04-04, the following revised response is provided. The revisions are identified by an underscore.

Response

The proper designations for the instruments and supports referred to above, as indicated on drawings RK-303-AC-1 and RK-303-AA for elevation 728 ft.-6 in. of the main steam and cable vault area, are 2CCP-FT117B2, 2CCP-FT117A2, TSR-180, and TSR-189.

Neither these instruments nor their impulse lines are redundant safety-related components. For nonsafety-related instruments and impulse lines, the use of common supports is acceptable and is not prohibited by 2BVS-977. Therefore, the installations of concern noted in Violation 85-04-04 do not represent a deviation from applicable engineering requirements.

To provide further assurance that the requirements of 2BVS-977 regarding common supports have been properly implemented, SWEC initiated and completed an engineering review of all BVPS-2 isometric drawings issued for QA Category I instrument tubing. This review confirmed that supports for all redundant, safety-related instrument impulse lines had been properly specified, with one exception. This exception (redundant safety-related tubing on a common support) has been evaluated and determined to be acceptable. In accordance with 2BVS-977, and as clarified by E&DCR 2P4652B, the acceptability of this installation has been formally identified as requiring final confirmation by the Hazards Analysis Program. In order to provide general requirements for supports on safety-related and nonsafety-related instrument impulse lines, E&DCR 2P4652B was issued on February 27, 1985, against Specification 2BVS-977 and clarifies 2BVS-977 regarding requirements for supports.

DUQUESNE LIGHT COMPANY

By J. A. Carey
J. A. Carey
Vice President

SDH/wjs

cc: Mr. J. M. Taylor, Director (3)
Mr. B. K. Singh, Project Manager
Mr. G. Walton, NRC Resident Inspector
INPO Records Center
NRC Document Control Desk

SUBSCRIBED AND SWORN TO BEFORE ME THIS
15 DAY OF July, 1985.

Sheila M. Fattore
Notary Public

SHEILA M. FATTORE, NOTARY PUBLIC
SHIPPINGPORT BORO, BEAVER COUNTY
MY COMMISSION EXPIRES SEPT. 16, 1985
Member, Pennsylvania Association of Notaries

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF BEAVER)

On this 25th day of July, 1985, before me, a Notary Public in and for said Commonwealth and County, personally appeared J. J. Carey, 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.

Sheila M. Fattore
Notary Public

SHEILA M. FATTORE, NOTARY PUBLIC
SHIPPINGPORT BORO, BEAVER COUNTY
MY COMMISSION EXPIRES SEPT. 16, 1985
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