



Duquesne Light

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February 13, 1986

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

ATTENTION: Mr. Edward C. Wenzinger, Chief
Projects Branch 3
Division of Reactor Project

SUBJECT: Beaver Valley Power Station - Unit No. 2
Docket No. 50-412
USNRC IE Inspection Report 50-412/85-25, Supplemental Response

REFERENCES: (a) Inspection Report No. 50-412/85-25, dated December 20, 1985
(b) 2NRC-6-008, dated January 16, 1986

Gentlemen:

In Reference (a), Region I transmitted a Notice of Deviation as Appendix B. Duquesne Light Company (DLC) provided a response in Reference (b). This is a supplemental response from DLC regarding the Notice of Deviation (85-25-02).

Response:

The BVPS-2 program for identifying potential interactions between safety related QA-I structures, systems, or components (SSC) and nonseismic equipment is given in Section 8.2 of Project Procedure 2BVM-165, Rev. 2. The program requires that any nonseismic equipment considered credible for failure shall be evaluated for potential interaction with safety related targets.

This program is limited to Category I structures with exception of portions of the main steam lines in the Turbine Building. Each QA-I structure is divided into review zones. These zones are reviewed for potential interactions using a combination of drawing reviews, site model review and in-plant walkdowns.

Once identified as a potential interaction, the QA-I target(s) and the nonseismic hazard source are entered into a database by review zone for tracking and monitoring.

The criteria for resolution of any interaction is contained in Project Procedure 2BVM-114, Rev. 7. It states that for identified interactions, it will be determined that either the safety related QA-I equipment is unaffected, the nonseismic equipment is adequately restrained or that structural upgrading of nonsafety equipment is required.

All identified interactions are carried as open items pending their resolution.

As noted in the opening paragraph, the BVPS-2 Hazards Analysis Program requires that any nonseismic equipment considered credible for failure

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shall be evaluated for potential interactions with safety related targets. Because the specification for the monorails which are the subject of Deviation 85-25-02 did not identify those components as Seismic Category II or provide the vendor with explicit seismic design criteria, it was necessary to address the seismic adequacy of these components in the Hazards Analysis Programs. Item 7 of Section 8.2 of Project Procedure 2BVM-165, Rev. 2 specifically indicated that the monorails and hoist equipment are not considered to be credible sources of failure. However, this statement did not provide the full technical rationale for the statement that the high factors of safety for vertical loadings of the components provide the necessary confidence that they will maintain their structural integrity under seismic loadings.

The rationale for the seismic adequacy of the components as purchased was provided in the original response to this deviation. In addition, in evaluating the seismic adequacy of the rail and embedments, consideration is given to the support detail. For monorail systems utilizing rigid supports, the natural frequency is above 12 cps. Therefore, rigid range values for seismic acceleration are used for both horizontal and vertical directions. The plant envelope of rigid range values are 0.602 horizontal and 0.561 vertical. Sufficient margin exists in the embedments and monorail tracks to conclude seismic adequacy and no further evaluation is required for monorail systems with rigid supports.

The other type of supports used are rod hangers which are flexible supports whose frequencies are below the predominant structural frequency. No significant load will be transferred to the embedments and it can be concluded that the monorails and embedments are seismically adequate.

The case-by-case assessment for each monorail located over safety related equipment will be clearly documented in the BVPS-2 Hazards Analysis Program.

Note that the number of monorails located over safety related equipment is eleven, not eight as indicated in the original response. This increase is due to equipment relocation which was verified by a site walkdown.

DUQUESNE LIGHT COMPANY

By J. J. Corey
J. J. Corey
Vice President

RWF/wjs

cc: Mr. P. Tam, Project Manager
Mr. W. Troskoski, Sr. Resident Inspector
Mr. G. Walton, NRC Resident Inspector

SUBSCRIBED AND SWORN TO BEFORE ME THIS
12 DAY OF November, 1986.

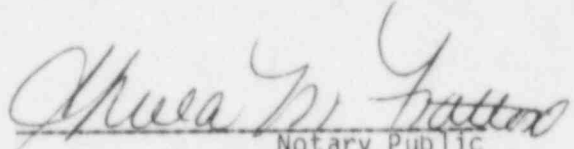
Sheila M. Fattore
Notary Public

SHEILA M. FATTORE, NOTARY PUBLIC
SHIPPINGPORT BORO, BEAVER COUNTY
MY COMMISSION EXPIRES OCT. 23, 1989

Notary Public for the State of West Virginia

COMMONWEALTH OF PENNSYLVANIA }
COUNTY OF BEAVER } SS:

On this 12th day of February, 1986, 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.


Notary Public

SHEILA M. FATORE, NOTARY PUBLIC
SHIPPINGPORT BORO, BEAVER COUNTY
MY COMMISSION EXPIRES OCT. 23, 1989
Member, Pennsylvania Association of Notaries