



Duquesne Light

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July 18, 1985

U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Attn: Mr. Edward C. Wenzinger, Chief
Projects Branch No. 3
Division of Reactor Projects
Region 1
631 Park Avenue
King of Prussia, PA 19406

Reference: Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
Inspection Report 85-11

Gentlemen:

In response to your letter of June 18, 1985, and in accordance with 10 CFR 2.201, the attached reply addresses the Notice of Violation which was included with the referenced report.

If you have any questions concerning this response, please contact my office.

Very truly yours,

J. J. Carey
J. J. Carey
Vice President, Nuclear

Attachment

cc: Mr. W. M. Troskoski, Resident Inspector
U. S. Nuclear Regulatory Commission
Beaver Valley Power Station
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DUQUESNE LIGHT COMPANY
Beaver Valley Power Station
Unit No. 1

Reply to Notice of Violation
Inspection 85-11
Letter dated June 18, 1985

VIOLATION (Severity Level IV; Supplement I)

Description of Violation (85-11-02)

10CFR50, Appendix R, Section III.G, Fire Protection for Safe Shutdown Capability, requires power cables of redundant trains of systems necessary to achieve and maintain hot shutdown conditions that are located in the same fire area outside the primary containment to be separated by a fire barrier having a 3-hour rating, or alternate means be provided to ensure that one of the redundant trains is free of fire damage. The BVPS Fire Protection Assessment, dated June 30, 1982, requests no exemption in this area in complying with 10CFR50.48, Fire Protection.

Contrary to the above, a ventilation duct was routed between the cable spreading room and process instrument room fire areas, thereby interconnecting the areas where the redundant emergency diesel generator power cables are located, without the designed fire wrap or dampers to provide a fire barrier with 3-hour fire rating separating the redundant cables. The emergency diesel systems are necessary to achieve and maintain hot shutdown conditions.

Corrective Actions Taken

Engineering Change Notice (ECN) 589-5 was generated on March 9, 1985 by Engineering for construction to install fire-wrapping for the ductwork in question to isolate fire areas CR-2 (Control Room HVAC Equipment Room) from CS-1 (Cable Spreading Room) and CR-4 (Process Instrument Room). In the interim, a fire watch was posted by Operations per Technical Specification Requirement 3.7.15. Since all of the fire areas in question have operable detection systems, hourly fire watch patrol on at least one side of the affected assembly was established until the functional capability of the barrier was restored on April 12, 1985.

Actions Taken to Prevent Recurrence

As part of the Appendix A to 10CFR50 review of fire protection and the subsequent issuance of our Fire Protection Safety Evaluation Report and Technical Specification Amendment 18 on June 6, 1979, facility modifications for upgrading fire protection systems were made under Design Change Package (DCP) 268. As part of this DCP, the ventilation duct transversing fire areas CS-1, CR-2 and CR-4 was to have fire-wrapping installed. Subsequent to the review and initiation of Design Concept, ECN 268-449-OEG (issued on 12/11/80) revised the design on this duct to install a fire damper in place of the fire wrap. In

response to concerns raised by Quality Assurance Audit BV-1-84-36, a re-review of the design identified the fire damper as not providing equivalent protection as the originally proposed fire wrap. Therefore, the apparent cause of the violation was a breakdown in engineering controls to assure the original intent of the design was met.

To address this, engineering procedural requirements have been established to ensure the review of design outputs (including ECNs) against the Design Concept and 10CFR50 Appendix R requirements which were not in existence at the time DCP-268 was implemented. Specifically, the following procedures presently address this concern:

1. Nuclear Engineering Department Internal Instruction NEDII-31, "Appendix R Review of Design Change Packages" was issued 12/20/84 to establish the method for performing and documenting 10CFR50 Appendix R review of DCP's.
2. Nuclear Engineering Management Procedure NEMP 2.8, Rev. 3, "Handling of Design Change Packages", issued 5/22/84 specified that the Primary Sponsoring Engineer shall identify Fire Protection (Appendix R) considerations in the Design Concept for a DCP.
3. Nuclear Engineering Management Procedure NEMP 2.13, Rev. 2, "Design Verification Guidelines, Methods and Requirements", issued 4/5/84 included questions on the Design Review Checklist in addition to those required by ANSI N45.2.11 which require the Primary Verification Engineer to verify that the Design Outputs (which include ECN's) are in compliance with applicable Appendix R criteria/requirements and for compliance with the conditions and conclusions stated in the Design Concept and Safety Evaluation.

Specific to the fire protection program, the QA Audit which was performed and which initially identified this violation provides assurance that the programmatic defect which caused this violation did not result in other inadequacies in the fire protection program.

Date on Which Full Compliance Will be Achieved

A program for adequately reviewing plant modifications is presently in place and a fire barrier has been established in the affected area. Therefore, full compliance has been achieved.