Duquesne Light Company

Beaver Vailey Power Station P.O. Box 4 Shippingport, PA 15077-0004

June 20, 1994

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JOHN D. SIEBER Senior Vice President and Chiet Nuclear Officer Nuclear Power Division

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

Subject: Beaver Valley Power Station, Unit No. 2 Docket No. 50-412, License No. NPF-73 Combined Inspection Report 50-334/94-09 and 50-412/94-09 Reply to Notice of Violation

In response to NRC correspondence dated May 13, 1994, and in accordance with 10 CFR 2.201, the attached reply addresses the Notice of Violation transmitted with the subject inspection report.

If there are any questions concerning this response, please contact Mr. N. R. Tonet at (412) 393-5210.

Sincerely,

Sieber

Attachment

cc: Mr. L. W. Rossbach, Sr. Resident Inspector Mr. T. T. Martin, NRC Region I Administrator Mr. G. E. Edison, Project Manager Mr. E. M. Kelly, Chief, Systems Section, Engineering Branch



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Beaver Valley Power Station, Unit No. 2 Combined Inspection Report 50-334/94-09 and 50-412/94-09 Reply to Notice of Violation Page 2

bcc: ORC Members AIS Members M. L. Bowling (VEPCO) L. R. Freeland T. P. Noonan K. D. Grada N. R. Tonet F. D. Schuster A. M. Dulick T. M. McGhee E. Chatfield R. E. Duckworth S. C. Fenner D. G. McLain M. Pavlick R. G. Williams D. T. Jones H. M. Siegel J. E. Matsko Central File (2), ND2NSM:6567

References:

ND3MMP:0088

DUQUESNE LIGHT COMPANY Nuclear Power Division Beaver Valley Power Station Unit No. 2

Reply to Notice of Violation

Combined Inspection Report 50-334/94-09 and 50-412/94-09 Letter dated May 13, 1994

VIOLATION (Severity Level IV, Supplement I)

Description of Violation (50-412/94-09-01)

Title 10 of the Code of Federal Regulations, Part 50.55a(f), "Inservice Testing Requirements," requires in part that, throughout the service life of a pressurized water-cooled nuclear power facility, components, which are classified as ASME Code Class 1, Class 2 and Class 3, must meet the requirements set forth in Section XI of the ASME Boiler and Pressure Vessel Code and Addenda. Inservice tests to verify operational readiness of pumps and valves of which function is required for safety, must comply with the requirements of the code. The inservice test program for a pressurized water-cooled nuclear power facility must be revised as necessary to meet these requirements.

Contrary to the above, as of April 8, 1994, the inservice test program failed to include the following ASME Code Class 3 components of which function is required for safety:

- 1) The pumps and valves in the Unit 2 Emergency Diesel Generator Cooling Water System; and
- 2) The Unit 2 Emergency Diesel Generator Starting Air System check valves numbered [2EGA*148, 123, 151, 125, 118 and 119].

Discussion of and Reason for the Violation

We have performed a detailed review of the circumstances surrounding the violation and agree that the pumps and valves in items (1) and (2) above, have not been included in the Beaver Valley Unit 2 (BV-2) Inservice Testing (IST) Program and that sufficient documentation for their exclusion does not exist.

1) All of the pumps and valves encompassed by Item (1) above are manufacturer-supplied (skid-mounted components of the Emergency Diesel Generator (EDG), which are located in ASME III, Class 3 piping in the Jacket Water Cooling Subsystem. The Jacket Water Cooling Subsystem pumps and valves were not included in the scope of the BV-2 IST Program because they are skid-mounted components. The EDG was not designed with the instrumentation necessary to individually test the skid-mounted components in accordance with ASME XI requirements. Reply to Notice of Violation Combined Inspection Report 50-334/94-09 and 50-412/94-09 Page 2

An IST Position Statement on skid-mounted components was provided to the inspectors during the inspection which stated:

"Skid-mounted components are not included in the Beaver Valley Power Station IST Programs because they are <u>not</u> considered as individual components, but rather as sub-assemblies of a major component. Individual testing of each "skid-mounted component" is also not considered required because they are tested with the major component of which they are a sub-assembly. If the operational readiness of the major component has been proven acceptable by testing, then it is assumed that the operational readiness of any sub-assembly (i.e., skid-mounted component) is also verified acceptable."

Although BV-2 elected to design certain EDG skid-mounted components in accordance with the rules of ASME III, Class 3, they were not designed to be tested in accordance with ASME XI and, as such, are not included in the BV-2 IST Program. It should be noted that the intent of the ASME XI Code is that components important to safety be adequately tested. While these pumps and valves are not listed in the BV-2 IST Program, they are tested via the EDG surveillance tests. This testing is consistent with the requirements of Appendix A, GDC-1 and Appendix B, Criterion XI to 10 CFR Part 50.

2) The BV-2 EDG Starting Air System check valves encompassed by Item (2) in the Notice of Violation are also skid-mounted (except for excess flow check valves [2EGA*118 and 119]). Therefore, these valves were not included in the BV-2 IST Program for reasons described above. We concur, however, that excess flow check valves [2EGA*118 and 119] (as well as [2EGA*155 and 156] located on the opposite train) should have been included in the BV-2 IST Program. Because their function as excess flow check valves was apparently not adequately understood during previous reviews, they were not included in the BV-2 IST Program.

Corrective Actions Taken

Monthly BV-2 EDG surveillance tests (20ST-36.1 and 20ST-36.2) have been revised to include steps for testing the ability of excess flow check valves [2EGA*118, 119, 155 and 156] to close on excess flow. Verification of the ability of these check valves to close on excess flow was performed on May 12, 1994, for 2EGA*155 and 156 and on May 26, 1994, for 2EGA*118 and 119. Reply to Notice of Violation Combined Inspection Report 50-334/94-09 and 50-412/94-09 Page 3

The remaining components identified in this Notice of Violation have been verified to be functionally tested via their proper performance during the monthly surveillance test of the EDGs.

Testing of other BV-2 ASME Code class skid-mounted pumps and valves in other systems important to safety (i.e., Charging Pump and Auxiliary Feedwater Pump Lube Oil subsystems) has also been reviewed. These components were verified to be functionally tested by their proper performance during the applicable surveillance testing performed on these "skids." This testing is consistent with the requirements of Appendix A, GDC-1 and Appendix B, Criterion XI to 10 CFR Part 50.

Actions Taken to Prevent Recurrence

- Operational Surveillance Test 20ST-47.3A "Containment Penetration and ASME Section XI Valve Test" will be revised to test the ability of excess flow check valves [2EGA*118, 119, 155 and 156] to close on excess flow. This test is performed on an ASME required quarterly frequency. After this revision is approved, testing of the excess flow valves in 20ST-36.1 and 20ST-36.2 will be deleted.
- 2. A proposed revision to the BV-2 IST Program requesting relief from including ASME Code class manufacturer-supplied skid-mounted pumps and valves will be submitted to the NRC for approval.
- 3. Excess flow check valves [2EGA*118, 119, 155 and 156] will be included in the next revision of the BV-2 IST Program.
- Associated surveillance procedures which test ASME Code class skid-mounted components <u>not</u> included in the IST Programs will be revised to document the proper performance of the skid-mounted components during surveillance testing.

The development of the IST Program Basis will continue as an enhancement to our program. QA Category I valves not presently in the IST Programs will be reviewed and included in the basis to ensure that all necessary components have been included. These efforts will also ensure that all applicable ASME Code Class 1, 2 or 3 components are re-evaluated. It is possible that the extensive reviews performed in developing the IST Program Basis may identify additional components to be added to the IST Programs because of evolving industry philosophy/concerns since the programs were initially developed. The IST Programs will be revised as necessary if any additional components are identified. Reply to Notice of Violation Combined Inspection Report 50-334/94-09 and 50-412/94-09 Page 4

Dates When Full Compliance Will Be Achieved

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- 1. Operational Surveillance Test 20ST-4".3A will be revised by June 30, 1994.
- A proposed revision to the BV-2 IST program will be submitted to the NRC by August 31, 1994.
- 3. The BV-2 IST Program will be revised by May 31, 1995.
- 4. The surveillance procedures which test ASME Code class skid-mounted components <u>not</u> included in the IST programs will be revised by December 31, 1994.