January 14, 1999

Mr. J. E. Cross President-Generation Group Duquesne Light Company Post Office Box 4 Shippingport, PA 15077

## SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING RESPONSE TO GENERIC LETTER (GL) 96-05 FOR BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2 (TAC NOS. M97015 AND M97016)

Dear Mr. Cross:

On September 18, 1996, the NRC issued Generic Letter (GL) 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves," to request that nuclear power plant licensees establish a program, or ensure the effectiveness of the current program, to verify on a periodic basis that safety-related motor-operated valves (MOVs) continue to be capable of performing their safety functions within the current licensing basis of the facility.

On April 13, 1998, Duquesne Light Company (DLC) submitted an updated response to GL 96-05 indicating its intent to implement the provisions of a Joint Owners Group (JOG) Program on MOV Periodic Verification at Beaver Valley Power Station, Units 1 and 2 (BVPS-1 and BVPS-2). The NRC staff has encouraged licensees to participate in the industry-wide JOG program to provide a benefit in reactor safety by sharing expertise and information on MOV performance and to increase the efficiency of GL 96-05 activities at nuclear plants.

The NRC staff has been reviewing your submittals, however, we have determined that additional information is required to complete our review of DLC's JOG Program implementation at BVPS-1 and BVPS-2. The NRC requests that you provide a response to the enclosed RAI within 60 days of receipt of this letter. This was discussed with Lyle Berry of your staff on January 6, 1999 and was established as a mutually agreeable timetable for your response. If circumstances result in the need to revise the target date, please call me at the earliest possible opportunity.

Sincerely, Original signed by: Daniel S. Collins, Project Manager

If you have any questions regarding this request, please contact me at (301) 415-1427.

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#### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

January 14, 1999

Mr. J. E. Cross President-Generation Group Duquesne Light Company Post Office Box 4 Shippingport, PA 15077

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The NRC staff has been reviewing your submittals, however, we have determined that additional information is required to complete our review of DLC's JOG Program implementation at BVPS-1 and BVPS-2. The NRC requests that you provide a response to the enclosed RAI within 60 days of receipt of this letter. This was discussed with Lyle Berry of your staff on January 6, 1999 and was established as a mutually agreeable timetable for your response. If circumstances result in the need to revise the target date, please call me at the earliest possible opportunity.

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Daniel S. Collins, Project Manager Project Directorate I-1 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosure: Request for Additional Information

cc w/encl: See next page

J. E. Cross Duquesne Light Company

Beaver Valley Power Station, Units 1 & 2

CC:

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Commissioner Roy M. Smith West Virginia Department of Labor Building 3, Room 319 Capitol Complex Charleston, WV 25305

Director, Utilities Department Public Utilities Commission 180 East Broad Street Columbus, OH 43266-0573

Director, Pennsylvania Emergency Management Agency Post Office Box 3321 Harrisburg, PA 17105-3321

Ohio EPA-DERR ATTN: Zack A. Clayton Post Office Box 1049 Columbus, OH 43266-0149

Dr. Judith Johnsrud National Energy Committee Sierra Club 433 Orlando Avenue State College, PA 16803

Duquesne Light Company Beaver Valley Power Station PO Box 4 Shippingport, PA 15077 ATTN: Kevin L. Ostrowski, Division Vice Bureau of Radiation Protection Pennsylvania Department of Environmental Resources ATTN: Michael P. Murphy Post Office Box 2063 Harrisburg, PA 17120

Mayor of the Borough of Shippingport Post Office Box 3 Shippingport, PA 15077

Regional Administrator, Region I U.S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

Resident Inspector U.S. Nuclear Regulatory Commission Post Office Box 298 Shippingport, PA 15077

Duquesne Light Company Beaver Valley Power Station PO Box 4 Shippingport, PA 15077 ATTN: S. C. Jain, Senior Vice President Nuclear Services (BV-A)

Mr. J. A. Hultz, Manager Projects & Support Services First Energy 76 South Main Street Akron, OH 44308

#### REQUEST FOR ADDITIONAL INFORMATION

### REGARDING RESPONSE TO GENERIC LETTER 96-05 FOR

# BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2.

### DOCKET NOS. 50-334 AND 50-412

- 1. In NRC Inspection Report No. 50-344 & 412/95-12, the NRC staff closed its review of the motor-operated valve (MOV) program implemented at the Beaver Valley Power Station, Unit Nos. 1 and 2 (BVPS-1 and BVPS-2), in response to Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance." In the inspection report, the NRC staff discussed certain aspects of Duquesne Light Company's (DLC's) MOV program to be addressed over the long term. For example, the inspectors noted that (1) DLC's periodic verification program will gather additional data to support the use of a 10% load sensitive behavior margin; (2) DLC planned to increase the thrust margin for the Unit 1 quench spray pump discharge valves prior to the end of the next refueling outage; (3) DLC relied on available valve factors in some cases where the assumed valve factors did not have strong support; and (4) DLC's periodic verification program will gather additional data to determine if stem lubricant degradation is occurring. Please describe the actions taken to strengthen group valve factor assumptions and address the specific long-term aspects of the MOV program at BVPS-1 and BVPS-2 noted in the subject NRC inspection report.
- In a letter dated November 18, 1996, DLC stated its commitment to implement the Joint 2. Owners Group (JOG) Program on MOV Periodic Verification in response to GL 96-05. The JOG program specifies that the methodology and discrimination criteria for ranking MOVs according to their safety significance are the responsibility of each participating licensee. In a subsequent letter dated April 13, 1998, DLC stated that risk ranking of MOVs at BVPS-1 and BVPS-2 for application of the JOG interim MOV static diagnostic testing program will be based on guidance provided in Westinghouse Owners Group (WOG) Engineering Report V-EC-1658-A (Revision 1), "Risk Ranking Approach for Motor-Operated Valves in Response to Generic Letter 96-05," with some stated exceptions. For example, DLC stated that (1) MOVs were only ranked based on Core Damage Frequency (CDF) importance measures, (2) only MOVs not modeled in the probabilistic risk assessment (PRA) were reviewed by the expert panel. (3) the PRA analyst used his judgment to review the quantitative ranking based on PRA CDF importance measures, and (4) MOVs that were only modeled as passive failures were ranked based on CDF, and then qualitatively reassessed by the PRA analyst. These exceptions do not appear to reflect the importance of the expert panel as described by WOG Engineering Report V-EC-1658-A and the NRC safety evaluation dated April 14. 1998. DLC should describe the composition and duties of the expert panel in risk ranking MOVs at BVPS-1 and BVPS-2. With respect to each of its specific exceptions. DLC should justify that its MOV risk-ranking approach is consistent with the guidance contained in WOG Engineering Report V-EC-1658-A and the NRC safety evaluation. In light of its exceptions to the WOG MOV risk-ranking approach, please discuss consideration of the example list of risk-significant MOVs provided by the WOG in the engineering report.

3. The JOG program focuses on the potential age-related increase in the thrust or torque required to operate valves under their design-basis conditions. In the NRC safety evaluation dated October 30, 1997, on the JOG program, the NRC staff specified that licensees are responsible for addressing the thrust or torque delivered by the MOV motor actuator and its potential degradation. Please describe the plan at BVPS-1 and BVPS-2 for ensuring adequate ac and dc MOV motor actuator output capability, including consideration of recent guidance in Limitorque Technical Update 98-01 and its Supplement 1.

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