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March 4, 2005 L-05-034

U. S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555-0001

Subject: Beaver Valley Power Station, Unit Nos. 1 and 2 BV-1 Docket No. 50-334, License No. DPR-66 BV-2 Docket No. 50-412, License No. NPF-73 Response to Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors"

This letter provides the FirstEnergy Nuclear Operating Company (FENOC) response for the Beaver Valley Power Station to Generic Letter 2004-02, which requests addressees to perform a mechanistic evaluation of the potential for the adverse effects of post-accident debris blockage and operation with debris-laden fluids to impede or prevent the recirculation functions of the emergency core cooling system (ECCS) and containment spray system (CSS) following all postulated accidents for which the recirculation of these systems is required. With regard to this evaluation the generic letter requests two responses, the first due within 90 days of the date of the safety evaluation report providing guidance for the evaluation, and the second due no later than September 1, 2005.

Attachment 1 to this letter provides the information requested within 90 days of the date of the safety evaluation report providing guidance for the evaluation. Attachment 2 provides a list of regulatory commitments made in this submittal.

If there are any questions concerning this matter, please contact Mr. Henry L. Hegrat, Supervisor - Licensing, at 330-315-6944.

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I declare under penalty of perjury that the foregoing is true and correct. Executed on March $\frac{4}{2}$, 2005.

Sincerely,

Attachments:

- 1. Response to Generic Letter 2004-02, Requested Information Item 1
- 2. List of Regulatory Commitments
- c: Mr. T. G. Colburn, NRR Senior Project Manager Mr. P. C. Cataldo, NRC Senior Resident Inspector Mr. S. J. Collins, NRC Region I Administrator Mr. D. A. Allard, Director BRP/DEP Mr. L. E. Ryan (BRP/DEP)

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> Response to Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors"

Requested Information

- 1. Within 90 days of the date of the safety evaluation report providing the guidance for performing the requested evaluation, addressees are requested to provide information regarding their planned actions and schedule to complete the requested evaluation. The information should include the following:
 - (a) A description of the methodology that is used or will be used to analyze the susceptibility of the ECCS and CSS recirculation functions for your reactor to the adverse effects identified in this generic letter of post-accident debris blockage and operation with debris-laden fluids identified in this generic letter. Provide the completion date of the analysis that will be performed.
 - (b) A statement of whether you plan to perform a containment walkdown surveillance in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in this generic letter. Provide justification if no containment walkdown surveillance will be performed. If a containment walkdown surveillance will be performed, state the planned methodology to be used and the planned completion date.

Response

FirstEnergy Nuclear Operating Company plans to analyze the susceptibility of the (a) emergency core cooling system and containment spray system recirculation functions to the adverse effects of post-accident debris blockage and operation with debris-laden fluids identified in Generic Letter 2004-02, for Beaver Valley Power Station Unit Nos. 1 and 2 (BVPS-1 and 2). The analysis is to be performed using Nuclear Energy Institute (NEI) document titled "Pressurized-Water Reactor (PWR) Sump Performance Methodology," dated May 28, 2004 as guidance. This document was approved and supplemented by the NRC in an SER dated December 6, 2004. This methodology and the associated NRC SER have been issued collectively as NEI Report NEI 04-07, "Pressurized Water Reactor Sump Performance Methodology," Revision 0, dated December 2004. A Beaver Valley specific scoping analysis for this issue was developed during the Summer of 2004. Formal analysis using the above methodology will begin during March 2005. Currently, no exceptions to the SER have been identified. However, as the analysis develops, the current licensing basis or plantspecific features may require that exceptions be taken. Alternatives to the methodology, including the basis would be documented. Analyses will be performed to support submittal of information requested by GL 2004-02 Item 2 by September 1,

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> 2005. Because the first reasonable opportunity to gather complete walkdown information at BVPS-2 is during the April 2005 refueling outage, it is possible that analysis results being reported for this unit in September may need to be revised or supplemented at a later date. If this becomes necessary, the September response would describe plans for updating the analysis to incorporate walkdown information. Regardless, the dates by which corrective actions resulting from the BVPS-2 analysis would be implemented would not be affected.

(b) A walkdown for BVPS-2 in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions, to the adverse effects of debris blockage identified in the generic letter, is planned during the April 2005 refueling outage. The BVPS-1 walkdown was conducted during the fall 2004 outage. NEI 02-01, Revision 1, "Condition Assessment Guidelines: Debris Sources Inside PWR Containments" was used for guidance at BVPS-1 and will likewise be used at BVPS-2. Beaver Valley Power Station, Unit Nos. 1 and 2 Response to Generic Letter 2004-02 L-05-034

ATTACHMENT 2

Commitment List

The following list identifies those actions committed to by FirstEnergy Nuclear Operating Company (FENOC) for Beaver Valley Power Station (BVPS) Unit Nos. 1 and 2 in this document. Any other actions discussed in the submittal represent intended or planned actions by FENOC. They are described only as information and are not regulatory commitments. Please notify Mr. Henry L. Hegrat, Supervisor - Licensing at 330-315-6944 of any questions regarding this document or associated regulatory commitments.

<u>Commitment</u>

Using NEI 04-07 as guidance, analyze the susceptibility of the emergency core cooling system and containment spray system recirculation functions, to the adverse effects of post-accident debris blockage and operation with debris-laden fluids identified in Generic Letter 2004-02, for BVPS-1 and 2.

Because the first reasonable opportunity to gather complete walkdown information at BVPS-2 is during the April 2005 refueling outage, it is possible that analysis results being reported for this unit in September may need to be revised or supplemented at a later date. If this becomes necessary, the September 1, 2005 response would describe plans for updating the analysis to incorporate walkdown information.

Using NEI 02-01 as guidance, perform a containment walkdown for BVPS-2 in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions, to the adverse effects of debris blockage identified in the generic letter.

Due Date

September 1, 2005

September 1, 2005

Spring 2005 Refueling Outage