



FirstEnergy Nuclear Operating Company

April 11, 2008

L-08-131

10 CFR 50.54(f)

ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
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

Three Month Response to NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems"

The Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2008-01 dated January 11, 2008, to request that each licensee evaluate the licensing basis, design, testing, and corrective action program for the Emergency Core Cooling Systems (ECCS), Decay Heat Removal system, and Containment Spray system, to ensure that gas accumulation is maintained less than the amount that challenges operability of these systems, and that appropriate action is taken when conditions adverse to quality are identified.

The NRC, in GL 2008-01, requested each licensee to submit a written response in accordance with 10 CFR 50.54(f) within nine months of the date of the GL to provide the following (summarized) information:

- (a) A description of the results of evaluations that were performed pursuant to the requested actions of the GL
- (b) A description of all corrective actions that were determined necessary; and
- (c) the schedule for completion of the corrective actions, and the basis for that schedule.

Additionally, the NRC requested that if a licensee cannot meet the requested nine month response date, the licensee "shall provide a response within 3 months of the date of this GL." In the three month response, the licensee was requested to describe "the alternative course of action that it proposes to take, including the basis for the acceptability of the proposed alternative course of action."

The attachments to this letter contain the Beaver Valley Power Station (BVPS) three month response to NRC GL 2008-01. A nine month response will be submitted by October 13, 2008, as requested, to summarize the actions and evaluations that have been completed, and the schedule and basis for those yet to be completed.

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If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager - Fleet Licensing, at (330) 761-6071.

I declare under penalty of perjury that the foregoing is true and correct. Executed on April 11, 2008.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter P. Sena III", with a long horizontal flourish extending to the right.

Peter P. Sena III

Attachments:

1. BVPS Three Month Response to NRC Generic Letter 2008-01
2. Regulatory Commitment List

cc: NRC Region 1 Administrator  
NRC Resident Inspector  
NRC Project Manager  
Director BRP/DEP  
Site BRP/DEP Representative

**BVPS Three Month Response to NRC Generic Letter 2008-01**  
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This attachment provides the three month response requested in Generic Letter (GL) 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," dated January 11, 2008. It provides:

- The required evaluations that will not be complete prior to the nine month response,
- The alternative course of action planned, and
- The basis for the acceptability of the alternative course of action.

For the Beaver Valley Power Station (BVPS), the following systems were determined to be within the scope of GL 2008-01:

- High Head Safety Injection (HHSI) system
- Low Head Safety Injection (LHSI) system
- Quench Spray System (QSS)
- Recirculation Spray System (RSS)
- Residual Heat Removal (RHR) system

The requested information for the nine month response to GL 2008-01 includes "A description of the results of evaluations that were performed...", and a description of the resulting corrective actions. The requested evaluations are those necessary to ensure that the subject systems are sufficiently filled with water that they can reliably perform their intended functions. For BVPS, it has been concluded that an in-field verification is a necessary component of the design and testing evaluations for some segments of the subject system piping. However, the in-field verification on a subset of those segments will not be complete prior to the nine month response, due to one or more of the following reasons:

- Radiological dose due to entry into high radiation areas,
- Need to erect scaffolding (dose or adjacent equipment operability concerns),
- Prolonged containment entries during power operation, or
- The need for (or restrictions on) removal of insulation from piping

Therefore, the full scope of the requested evaluations, and the list of resultant corrective actions, will not be complete prior to the nine month GL response for the following systems:

- High Head Safety Injection
- Low Head Safety Injection
- Quench Spray System

With respect to the in-field verifications, for Unit 1, discharge side piping in the subject systems that is located inside containment is not planned to be in-field-verified prior to the nine month GL response.

Necessary in-field verifications of the Unit 1 suction side piping, and the discharge side piping that is outside of containment, are planned to be complete prior to the nine month response except where issues such as those summarized above prevent completion. One identified issue is that segments of this piping are located six feet or more above the floor, where current radiological surveys are not available. If high radiation areas are identified during preparations for the inspections, it may be necessary to delay them to allow for additional planning or compensatory measures. Any piping segments that are determined to need in-field verification, but have not received it prior to the nine month GL 2008-01 response, will be in-field verified no later than restart from the next refueling outage, which for Unit 1 is currently scheduled for the spring of 2009.

For Unit 2, a refueling outage is scheduled for April 2008. Necessary in-field verifications on both the suction side piping and the discharge side piping have been added into the outage and are planned to be completed except where issues such as those summarized above prevent completion. One identified issue is that segments of this piping are located six feet or more above the floor, where current radiological surveys are not available. If high radiation areas are identified during preparations for the inspections, it may be necessary to delay them for additional planning or compensatory measures. Any piping segments that are determined to need in-field verification, but have not received it prior to the nine month GL 2008-01 response, will be in-field verified no later than restart from the next refueling outage after the nine month response, which for Unit 2 is currently scheduled for the fall of 2009.

Completion of a portion of the in-field verifications after the nine month response to the GL is considered to be acceptable. As a result of a 2002 gas accumulation experience at BVPS Unit 2, plant procedures at both units have been improved based on lessons learned. By the date of the nine month response, the GL-requested evaluations of the as-built piping drawings are planned to be complete, including reviews of the drawings for the piping segments that will not yet have received in-field verifications. The in-field verifications that will be completed after the nine month response are intended to confirm the conclusions of those completed drawing evaluations. Finally, by the date of the nine month response, the GL-requested evaluation of site procedures, which ensure the piping systems are sufficiently full of water to perform their function, is also planned to be complete.

**Regulatory Commitment List**  
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The following list identifies those actions committed to by FirstEnergy Nuclear Operating Company (FENOC) for the Beaver Valley Power Station in this submittal. Any other actions discussed in the submittal represent intended or planned actions by FENOC, are described only for information, and are not Regulatory Commitments. Please notify Mr. Thomas A. Lentz, Manager - Fleet Licensing, at (330) 761-6071 of any questions regarding this document or associated Regulatory Commitments.

Regulatory Commitment

Due Date

1. Unit 1

Any piping segments that are determined to need in-field verification, but have not received it prior to the nine month GL 2008-01 response, will be in-field verified no later than restart from the next refueling outage, which for Unit 1 is currently scheduled for the spring of 2009

No later than restart from Unit 1  
refuel outage 19

2. Unit 2

Any piping segments that are determined to need in-field verification, but have not received it prior to the nine month GL 2008-01 response, will be in-field verified no later than restart from the next refueling outage after the nine month response, which for Unit 2 is currently scheduled for the fall of 2009

No later than restart from Unit 2  
refuel outage 14