

December 12, 2006

EA-06-215

Mr. James Lash
Site Vice President, Beaver Valley Power Station
FirstEnergy Nuclear Operating Company
Post Office Box 4
Shippingport, Pennsylvania 15077

SUBJECT: FINAL SIGNIFICANCE DETERMINATION FOR A WHITE FINDING AND
NOTICE OF VIOLATION (NRC Inspection Report Nos. 05000334/2006009 and
05000412/2006009 - Beaver Valley Power Station)

Dear Mr. Lash:

The purpose of this letter is to provide you with the final results of our significance determination concerning a preliminary White finding at the Beaver Valley Power Station (BVPS) identified in the subject inspection report forwarded to you with our letter issued on September 18, 2006. In short, based on NRC review of information you have provided, the nature of the finding has been re-characterized and its significance has been re-evaluated and determined to be White (a finding with low to moderate increased importance to safety that may require additional NRC inspections). Hence, this letter issues a final White finding and an associated Notice of Violation.

In our September 18, 2006 letter, the NRC characterized the finding as a staff performance concern related to the dose projections and protective action recommendations (PARS) made during the 2006 emergency exercise that was the subject of the referenced NRC inspection report. Specifically, the NRC noted that (1) your dose assessment team made dose projections without a sound technical basis for the projected release duration, and (2) this exercise deficiency was similar to a prior NRC-identified weakness that occurred during a May 2004 emergency exercise.

Since the NRC preliminarily concluded in the September 18, 2006, letter that inadequate corrective actions for the May 2004 emergency exercise weakness may have resulted in the dose projection process adversely impacting the timeliness and adequacy of PARs made in the event of a radiological release, the NRC issued the preliminary White finding. The finding was preliminarily characterized as White in accordance with NRC Inspection Manual Chapter (IMC) 0609, Appendix B, "Emergency Preparedness (EP) Significance Determination Process (SDP)," because the apparent finding involved a failure to correct an exercise weakness associated with a Risk Significant Planning Standard (RSPS) area that is not covered by the performance indicator for Drill and Exercise Performance. In addition, the letter described an apparent violation of 10 CFR 50, Appendix E, Section IV.F.2.g, for failure to implement corrective actions for the 2004 exercise weakness. Our letter noted that the characterization of the apparent violation might change as a result of further NRC review.

As a result of this preliminary White finding, our September 18, 2006, letter also offered you the opportunity to present the NRC your perspective on the facts and assumptions we used to arrive at the preliminary finding, and to do so either at a Regulatory Conference or in a written response. At your request, a Regulatory Conference, open for public observation, was held on October 24, 2006, to further discuss your views on this issue. A copy of the handout you provided at this meeting is attached. During the conference, you disagreed with the NRC's characterization of the performance deficiency, contending that the 2006 exercise performance did not reveal a repetitive performance deficiency. In support of that contention, you noted that the 2004 exercise weakness involved inadequate communication among appropriate Emergency Response Organization (ERO) staff in developing dose projections, whereas you concluded that effective communications were made between the responsible ERO groups in 2006. You further contended that the ERO staff, in developing dose projections and PARs for the 2006 exercise, adhered to your emergency preparedness procedural requirements.

At the conference, the NRC also raised questions regarding the adequacy of the dose projection procedure which allowed your ERO staff at Beaver Valley to rely on a one-hour release duration for a radiological release, even if the actual duration, although unknown, was very likely to be greater than one hour. As a result, subsequent to the conference, you provided additional information to the NRC on October 30, 2006, indicating that the NRC 2006 exercise observations revealed a weakness in the BVPS dose projection procedure. Specifically, you acknowledged that when the release duration is unknown, that consideration of using a duration greater than one hour is appropriate, even though your current procedure specifies using a one-hour duration.

In your October 30, 2006, post-regulatory conference submittal, you contended that the best characterization of this issue is a weakness that was not critiqued in accordance with the EP Planning Standard (PS) set forth in 10 CFR 50.47(b)(14). Based on that characterization, you concluded this is a Green finding based on the guidance of IMC 0609, Appendix B. You further indicated that this issue has since been placed in your corrective action program via a condition report, and corrective actions have been taken or planned, including revising procedures and training to stress the importance of obtaining the best estimate release duration, as well as revising the one-hour period for unknown release durations to more closely align with industry practice. A copy of the information you submitted to the NRC after the regulatory conference is attached.

After considering the information developed during the inspection, and the information you provided at, and subsequent to, the regulatory conference, the NRC has re-characterized the inspection finding as a dose assessment procedure inadequacy that led to the exercise performance observations in June 2006. The NRC notes that IMC 0609, Appendix B, Section 4.14.2.1 specifies that if either the emergency plan or emergency implementing procedures are inadequate, then the finding is not considered a drill/exercise critique issue, but is rather a failure to comply with a PS. In this case, the dose assessment procedure inadequacy represented a program deficiency involving the procedural quality attribute of the EP Cornerstone objective to ensure that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. Further, this deficiency affected both RSPS 10 CFR 50.47(b)(9), "Methods, systems and equipment for assessment of radioactive releases are in use;" and, RSPS 10 CFR 50.47(b)(10), "A range of public PARs is available for implementation during emergencies."

The NRC has evaluated this deficiency pursuant to IMC 0609, Appendix B, relying upon the guidance contained in Sections 4.9 and 4.10 for the affected RSPSs. As such, the NRC considered that there was no indication of a complete loss of function for dose assessment capability, such as if the methods were inadequate (e.g., do not conform with RG 1.3 or 1.4 or are not technically justifiable) to estimate the source term and/or project offsite doses resulting from a radioactive release. Also, the NRC considered that there was no indication of a complete loss of function for PAR development, such as if the PARs issued to cover the affected population within 5 miles of the site would not be appropriate. However, the NRC considered that the inadequate dose assessment process could result in PAR development that is not in accordance with Plan commitments or federal guidance, to the extent that in a general emergency, appropriate PARs might, in certain circumstances, not be issued to cover the affected populated area within 5 to 10 miles of the site. Specifically, the NRC concluded that the BVPS PAR development process capability was degraded by the dose assessment process procedure deficiency, in that the procedure, under certain circumstances (i.e., events not explicitly described in the Final Safety Analysis Report or not having a release duration less than or equal to one hour) could result in untimely PARs, potentially affecting the populated area within 5 to 10 miles of the site. As a result, notwithstanding your contention that this finding is Green, the NRC concluded the dose assessment procedure inadequacy is appropriately characterized as White. You have 10 business days from the date of this letter to appeal the staff's determination of significance for the identified White finding. Such appeals will be considered to have merit only if they meet the criteria given in NRC IMC 0609, Supplement 3.

The NRC has also determined that the inadequate dose assessment procedure is a violation of NRC requirements specified in 10 CFR Part 50.47(b)(9), "Emergency Planning - Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use," as cited in the attached Notice of Violation (Notice). In accordance with the NRC Enforcement Policy, the Notice of Violation is considered escalated enforcement action because it is associated with a White finding.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. The staff is particularly interested in not only your planned corrective actions, but also your plans to eventually evaluate, through tabletop demonstrations and drills, the effectiveness of these actions. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements. Additionally, this issue causes Beaver Valley Power Station to be in the regulatory response band of the NRC Action Matrix, and we will notify you, by separate correspondence, of any further action we plan to take.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS) accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. The NRC also includes significant

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enforcement actions on its Web site at www.nrc.gov; select **What We Do, Enforcement**, then **Significant Enforcement Actions**.

Sincerely,

/RA/

Samuel J. Collins
Regional Administrator

Docket Nos. 50-334 and 50-412
License Nos. DPR-66, NPF-73

Enclosures: As stated

cc w/encl:

G. Leidich, President and Chief Nuclear Officer
J. Hagan, Senior Vice President of Operations and Chief Operating Officer
D. Pace, Senior Vice President, Fleet Engineering
J. Rinckel, Vice President, Fleet Oversight
L. Myers, Executive Vice President, Special Projects
R. Anderson, Vice President, FirstEnergy Nuclear Operating Company
Manager, Fleet Licensing, FirstEnergy Nuclear Operating Company
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L. Freeland, Director, Site Performance Improvement and Manager, Regulatory Compliance
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B. Sepelak, Supervisor, Nuclear Compliance
M. Clancy, Mayor, Shippingport, PA
D. Allard, PADEP
R. Janati, PADEP
C. O'Claire, State Liaison to the NRC, State of Ohio
Z. Clayton, EPA-DERR, State of Ohio
Director, Utilities Department, Public Utilities Commission, State of Ohio
D. Hill, Chief, Radiological Health Program, State of West Virginia
J. Lewis, Commissioner, Division of Labor, State of West Virginia
W. Hill, Beaver County Emergency Management Agency
J. Johnsrud, National Energy Committee, Sierra Club
A. King, PA Emergency Management Agency (PEMA)
Darrell Hammons, RAC Chair, DHS Region III

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*see prior concurrence

** via email from L. Trocine on 12/07/2006

Enclosure

NOTICE OF VIOLATION

FirstEnergy Nuclear Operating Company
Beaver Valley Power Station Units 1 & 2

Docket Nos. 50-334 and 50-412
License Nos. DPR-66, NPF-73
EA-06-215

During an NRC inspection conducted between June 26 and August 22, 2006, for which an exit meeting was held on August 22, 2006, and a Regulatory Conference was held on October 24, 2006, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR Part 50.47(b)(9), requires, in part, that adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Contrary to the above, as of June 27, 2006, the Beaver Valley Power Station (BVPS) method for assessing actual and potential offsite consequences of a radiological emergency condition was inadequate. Specifically, "BVPS Procedure 1/2-EPP-IP-2.6.3, Dose Projection - ARERAS/MIDAS With Real-Time Inputs, revision 13," stated that "IF the duration of a release cannot be estimated, THEN use 1.0 hour, and repeat the projection as better data become available." This is inadequate because the one hour default release duration may not adequately envelope existing plant conditions and therefore could lead to untimely protective action recommendations. As an example, during the June 27, 2006, emergency preparedness exercise, the licensee used one hour as a release duration time, even though the release had been occurring for at least 30 minutes and there was no reason to conclude the release would be terminated within one hour of initiation.

This violation is associated with a White Significance Determination Process finding.

Pursuant to the provisions of 10 CFR 2.201, FirstEnergy Nuclear Operating Company, is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region I, and a copy to the NRC Resident Inspector at the facility that is the subject of this Notice of Violation (Notice), within 30 days of the date of the letter transmitting this Notice. This reply should be clearly marked as a "Reply to a Notice of Violation; EA-06-215" and should include for each violation: (1) the reason for the violation or, if contested, the basis for disputing the violation or severity level; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response with the basis for your denial to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS) accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within 2 working days.

Dated this 12th day of December 2006

Enclosure 2

**FENOC Presentation Materials
October 24, 2006 Regulatory Conference**

Enclosure 3

**FirstEnergy Nuclear Operating Company
Post Regulatory Conference Submittal
Regarding Dose Assessment Procedure
Use and Adequacy**