



FirstEnergy Nuclear Operating Company

76 South Main Street  
Akron, Ohio 44308

Gary R. Leidich  
President and Chief Nuclear Officer

330-384-5770  
Fax: 330-384-5669

Docket Number 50-346  
License Number NPF-3  
Serial Number 3225  
January 23, 2006

Mr. Michael R. Johnson  
Director, Office of Enforcement  
U.S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

Subject: Supplemental Reply to a Notice of Violation: EA-03-025; EA-05-066; EA-05-067;  
EA-05-068; EA-05-069; EA-05-070; EA-05-071; EA-05-072

Dear Mr. Johnson:

On April 21, 2005, the Nuclear Regulatory Commission ("NRC") issued to FirstEnergy Nuclear Operating Company ("FENOC") a Notice of Violation and Proposed Imposition of Civil Penalties - \$5,450,000 ("NOV") for apparent violations stemming from the reactor pressure vessel ("RPV") head degradation at the Davis-Besse Nuclear Power Station ("Davis-Besse"). On September 14, 2005, FENOC responded, via FENOC letter Serial Number 3190. On January 19, 2006, FENOC and the Department of Justice ("DOJ") entered into a Deferred Prosecution Agreement (the "Agreement") which caused the Company to reassess and amend its earlier reply to Violation I.E. as set forth in this supplemental reply in Enclosure 1. As previously noted by the NRC, FENOC has already taken corrective action and paid the civil penalty associated with this violation.

I am available to answer any questions you may have regarding FENOC's response. Should you wish to contact me, I can be reached at (330) 384-5770.

The statements contained in this submittal, including its associated enclosures are true and correct to the best of my knowledge and belief. I am authorized by the FirstEnergy Nuclear Operating Company to make this submittal. I declare under penalty of perjury that the foregoing is true and correct.

Executed on: January 23, 2006

By: Mary R. Leidich  
Gary R. Leidich, President & Chief Nuclear Officer

Docket Number 50-346  
License Number NPF-3  
Serial Number 3225  
Page 2 of 2

Enclosure 1: FirstEnergy Nuclear Operating Company's Supplemental Reply to a Notice of Violation and Proposed Imposition of Civil Penalties

Enclosure 2: Commitment List

cc: Director, Office of Nuclear Reactor Regulation  
Regional Administrator, NRC Region III  
Enforcement Officer, NRC Region III  
NRC Senior Resident Inspector  
NRC/NRR Project Manager  
USNRC Document Control Desk  
Utility Radiological Safety Board

Docket Number 50-346  
License Number NPF-3  
Serial Number 3225  
Enclosure 1

**FIRSTENERGY NUCLEAR OPERATING COMPANY'S**

**SUPPLEMENTAL REPLY**

**TO A**

**NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES**

**UNDER 10 CFR 2.201 - \$5,450,000**

**EA-03-025; EA-05-066; EA-05-067; EA-05-068;  
EA-05-069; EA-05-070; EA-05-071; EA-05-072**

**(4 pages to follow)**

**FIRSTENERGY NUCLEAR OPERATING COMPANY'S ("FENOC") SUPPLEMENTAL  
REPLY TO A NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL  
PENALTIES UNDER 10 CFR § 2.201 - \$5,450,000: EA-03-025; EA-05-066; EA-05-067;  
EA-05-68; EA-05-069; EA-05-070; EA-05-071; AND EA-05-072**

This supplements FENOC's September 14, 2005, response by amending FENOC's response to apparent Violation I.E. FENOC's earlier response remains unchanged in all other respects.

**I. VIOLATIONS ASSESSED A CIVIL PENALTY**

**Violation I.E.**

- A. 10 CFR 50.9 requires that information provided to the Commission by a licensee or information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the licensee shall be complete and accurate in all material respects.**

**NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," required all holders of operating licenses for pressurized water nuclear power reactors to provide information related to the structural integrity of the reactor vessel head penetration (VHP) nozzles for their respective facilities, including the extent of VHP nozzle leakage and cracking that has been found to date, the inspections and repairs that have been undertaken to satisfy applicable regulatory requirements, and the basis for concluding that their plans for future Inspections will ensure compliance with applicable regulatory requirements.**

**Contrary to the above, the licensee, a holder of an operating license for a pressurized water nuclear power reactor, the Davis-Besse Station, provided the Commission responses to Bulletin 2001-01 which included materially inaccurate and incomplete information as follows:**

- 1. In a September 4, 2001, response to the Bulletin entitled, "Response to Bulletin 2001-01," Serial 2731, the licensee made the following four materially inaccurate and incomplete statements:**
  - (a) The licensee's response to Bulletin Item 1.c, on page 2 of 19, stated: "the minimum gap being at the dome center of the RPV [reactor pressure vessel] head where it is approximately 2 inches, and does not impede a qualified visual inspection."**

**The licensee's response was materially inaccurate, in that, the statement contradicted statements in the licensee's documents identified as PCAQR 94-0295 and 96-0551, which clearly stated that inspection capability at the top of the reactor vessel head was limited.**

The limitation was stated to be caused by the restricted access to the area through the service structure “weep holes”, the curvature of the reactor pressure vessel head, and by the limited space to manipulate a camera due to the insulation that creates the two inch gap.

- (b) The licensee’s response to Bulletin Item 1.d, which requested inclusion of a description of any limitations (insulation or other impediments) to accessibility of the bare metal of the reactor pressure vessel head for visual examinations, did not include a description of any limitations.

The licensee’s response was materially incomplete in that the response did not mention that accessibility to the bare metal of the reactor pressure vessel head was impeded, during the Eleventh (1998) and the Twelfth (2000) Refueling Outages, by the presence of significant accumulations of boric acid deposits.

- (c) The licensee’s response to Bulletin Item 1.d, which also requested a discussion of the findings of reactor pressure vessel head inspections, stated that for the Twelfth Refueling Outage (2000), the inspection of the reactor pressure vessel head/nozzles indicated some accumulation of boric acid deposits.

The licensee’s response was materially incomplete and inaccurate in that it mischaracterized the accumulation of boric acid on the reactor pressure vessel head and did not mention the evidence of corrosion that was evidenced by the pictures and the video examination of reactor pressure vessel head conditions documented at the beginning and ending of the Twelfth Refueling Outage (2000).

- (d) The licensee’s response to the Bulletin, on Page 3, stated: “The boric acid deposits were located beneath the leaking flanges with clear evidence of downward flow. No visible evidence of nozzle leakage was detected.”

The licensee’s response was materially inaccurate in that the boric acid deposits were not all located under leaking flanges and the licensee lacked clear evidence of the absence of downward flow for all nozzles. Specifically, the presence of boric acid deposits was not limited only to the areas beneath the flanges, as implied by that statement. The build-up of boric acid deposits was so significant that the licensee could not inspect all of the nozzles. As a result, the licensee also did not have a basis for stating that no visible evidence of nozzle leakage was detected.

2. In an October 17, 2001, response to the Bulletin entitled, "Supplemental Response to Bulletin 2001-01," Serial 2735, the licensee stated: "In May 1996, during a refueling outage, the RPV [reactor pressure vessel] head was inspected. No leakage was identified, and these results have been recently verified by a re-review of the video tapes obtained from that inspection. The RPV head was mechanically cleaned at the end of the outage.

Subsequent inspections of the RPV head in the next two refueling outages (1998 and 2000), also did not identify any leakage in the CRDM [control rod drive mechanism] nozzle-to-head areas that could be inspected. Video tapes taken during these inspections have also been re-reviewed."

The licensee's response was materially inaccurate, in that: (1) each reactor pressure vessel head control rod drive penetration was not inspected in May 1996, as documented in PCAQR 96-0551, and; (2) the reactor pressure vessel head, including the area around each control rod drive penetration, was not completely cleaned, as noted in PCAQR 98-0649, which was prepared at the start of the Eleventh Refueling Outage (1998), which stated that there were old boric acid deposits on the head.

**This is a Severity Level I violation (Supplement VII).  
Civil Penalty - \$120,000 (EA-05-072)**

#### **FENOC Supplemental Reply to Violation I.E.**

1. Admission or Denial of the Alleged Violation:

FENOC admits the alleged violation.

2. Reason(s) for the Alleged Violation:

Refer to the reasons cited in FENOC letter Serial Number 3190, dated September 14, 2005, Enclosure 1 reply to Violations I.B and II.C. Specifically, refer to the FENOC response to Violation II.C, which cites FENOC's Completeness and Accuracy Root Cause Report (Condition Report CR 2002-04914). These reasons, as related to the above described Violation I.E, are further described in the "Apparent Violation of 10CFR50.9, Completeness and Accuracy Of Information," Root Cause Report (CR 2002-04914, dated April 4, 2003).

In its original reply of September 14, 2005, FENOC denied this violation because it believed that, although in hindsight letters Serial Number 2731 and Serial Number 2735 could have been more clear, when read in context and when further considered with the totality of the information provided to the NRC over the fall of 2001, FENOC's collective response to Bulletin 2001-01 was complete and accurate in all material respects.

FENOC has reassessed its earlier position, as set forth in the Statement of Facts attached to the Deferred Prosecution Agreement, executed on January 19, 2006, and consequently, FENOC herein amends its earlier response and admits the alleged violation.

3. Corrective Steps That Have Been Taken and the Results Achieved:

The Violation I.E. "Corrective Steps That Have Been Taken and the Results Achieved," are unchanged from FENOC's letter Serial Number 3190, dated September 14, 2005, response. FENOC's letter Serial Number 3190 Violation I.E. "Corrective Steps That Have Been Taken and Results Achieved," referred to Enclosure 1, reply to Violation I.B.

4. Corrective Steps To Avoid Further Violations:

See item 3, above.

5. Date When Full Compliance Will Be Achieved:

FENOC is currently in full compliance.

Docket Number 50-346  
License Number NPF-3  
Serial Number 3225  
Enclosure 2

### COMMITMENT LIST

The following list identifies those actions committed to by the Davis-Besse Nuclear Power Station in this document. Any other actions discussed in the submittal represent intended or planned actions by Davis-Besse. They are described only as information and are not regulatory commitments. Please notify the Manager, Regulatory Compliance, at (419) 321-8585 at Davis-Besse of questions regarding any associated regulatory commitments.

COMMITMENTS

DUE DATE

None

N/A

# NRC OUTGOING CORRESPONDENCE ROUTING AND APPROVAL FORM

CCN #

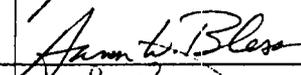
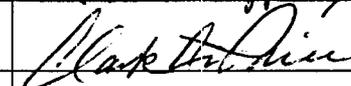
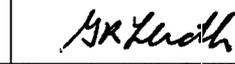
ED 7159-9

(1) Letter No.: **Serial 3225** (2) Letter Subject: **Supplemental Reply to Notice of Violation: EA-03-025; EA-05-066; EA-05-067; EA-05-068; EA-05-069; EA-05-070; EA-05-071; EA-05-072**

(3) Prepared By: **J. Sturdavant** **D. Jenkins** **D. Ferraro**  
 Phone Ext: **x8199** **\*825-5037** **Morgan & Lewis**

(4) Documents Associated With Letter: **Log 6292** **Serial 3190**

(5) Date Response Due to the NRC:  N/A **1/23/06** (Target)  
 (6) Verification Package Developed?  Yes  No  
 (7) Posting Required By 10 CFR 19.11?  Yes  No  
 (8) Commitments Contained in Letter?  Yes  No If yes, see commitment list included with letter.  
 (9) Notary Required (or affirmation contained in letter)?  Yes  No

(10) Technical Review* (Print Name & Section)	Signature	Date Provided to Reviewer	Date Reviewed	No Comments	Comments Attached on ED 6864
RA Cog <b>J. Sturdavant</b>			<b>1/18/06</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Verifier/Peer Reviewer <b>A. Bless</b>			<b>1/21/06</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cognizant RA Supervision <b>J. Sturdavant (Acting)</b>			<b>1/22/06</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Legal - Morgan & Lewis <b>J. Gutierrez</b>	<i>See Attached approval</i>		<b>1/23/06</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Director - Fleet Regulatory Affairs <b>G. Halnon</b>	<i>See Attached approval</i>		<b>1/23/06</b>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
Director - Performance Improvement <b>R. Schrauder</b>	<i>See Attached approval</i>		<b>1/23/06</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Manager - Regulatory Affairs <b>C. Price</b>		<b>1/23/06</b>	<b>1/23/06</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vice President, Nuclear <b>M. Bezilla</b>	<i>See Attached approval</i>		<b>1/23/06</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
President, FENOC <b>G. Leidich</b>		<b>1/23/06</b>	<b>1/23/06</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If applicable: On-Site Safety Review Committee Meeting Date \_\_\_\_\_ Off-Site Safety Review Committee Meeting Date \_\_\_\_\_

(11) Additional Information [For Regulatory Affairs Use Only—Review comments must be documented on a Document Review Form (ED 6864)]

Validation Package available from Regulatory Compliance – J. Sturdavant x8199

In accordance with NG-RA-00804, "NRC Communications," NOTE 6.3.10 in the interest of expediency the departmental review and approval of this submittal will be conducted in parallel. The cognizant Regulatory Compliance Supervisor has concurred with this parallel routing **1/21/06**

--- Parallel Routing ---

Reviewed by Nuclear Oversight in accordance with NG-RA-00804 Step 6.3.19 to provide additional assurance of completeness and accuracy.

Name DR Wall Date 1/23/06

- \* Signatures indicate that the submittal was reviewed for accuracy and completeness and represents the facts to the best of the reviewer's knowledge and that no significant information has been excluded from the submittal.
- \*\* Additional signatures may not be required from the Section/Department if responses are provided in writing and are signed by the Section/Department managers for providing input into the submittal. These documents should accompany the submittal when routing for final approvals.