

Exelon Generation  
Dresden Generating Station  
6500 North Dresden Road  
Morris, IL 60450-9765  
Tel 815-942-2920

[www.exeloncorp.com](http://www.exeloncorp.com)

July 23, 2003

RHLTR: #03-0051

Frank J. Congel  
Director, Office of Enforcement  
U. S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

Dresden Nuclear Power Station, Unit 3  
Facility Operating License No. DPR-25  
Docket No. 50-249

Subject: Reply to a Notice of Violation: EA-02-264; EA-02-265

Reference: Letter from J. E. Dyer (NRC) to J. L. Skolds (Exelon Generation Company, LLC), "Notice of Violation and Proposed Imposition of Civil Penalty - \$60,000; and Final Significance Determination for a White Finding [NRC Inspection Report 50-237/01-21 (DRS); 50-249/01-21(DRS)]; [NRC Office of Investigation Report 3-2001-054]," dated June 23, 2003

The referenced letter transmitted a Notice of Violation and Proposed Civil Penalty related to the completeness and accuracy of information provided by Dresden Nuclear Power Station (DNPS) personnel during a teleconference with the NRC on September 27, 2001. The referenced letter also transmitted a Notice of Violation related to inoperability of the High Pressure Coolant injection system.

In accordance with 10 CFR 2.201, "Notice of violation," Exelon Generation Company (EGC) LLC provides our response to the identified violations as attachments to this letter.

The attached responses contain no personal privacy, proprietary, or safeguards information.

EGC has completed payment via electronic transfer to the Treasurer of the United States in the amount of the proposed civil penalty of \$60,000, on July 22, 2003.

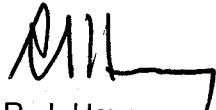
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If you have any questions regarding this response, please contact Mr. Jeff Hansen, Regulatory Assurance Manager, at (815) 416-2800.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 23<sup>rd</sup> day of July 2003.

Respectfully,



R. J. Hovey  
Site Vice President  
Dresden Nuclear Power Station

Attachments: Response to Apparent Violation EA-02-264  
Response to Apparent Violation EA-02-265

cc: Regional Administrator— NRC Region III  
NRC Senior Resident Inspector — Dresden Nuclear Power Station

**RESPONSE TO NOTICE OF VIOLATION  
EA-02-265**

Exelon Generation Company, LLC (EGC)  
Dresden Nuclear Power Station (DNPS) Unit 3

Docket No. 50-249  
License No. DPR-25

**Alleged Violation**

10 CFR 50.9 provides, in part, that information provided to the Commission by a licensee shall be complete and accurate in all material respects.

Contrary to the above, during a telephone conference call on September 27, 2001, Exelon Nuclear failed to provide complete and accurate information to the NRC Region III staff concerning the high pressure coolant injection (HPCI) system for Dresden Nuclear Station, Unit 3. Specifically, during the call, the NRC staff described various indications of a potential water hammer, including damaged, bent, or loose pipe supports and spalled concrete. In response during the call, Exelon Nuclear staff told the NRC that, had a water hammer occurred following a reactor scram on July 5, 2001, HPCI support M-1187D-83 would have been damaged. They stated that they had conducted a walk down of the system on September 26, 2001, that HPCI support M-1187D-83 was not observed to be damaged, and that no other signs of a water hammer existed. One employee of Exelon Nuclear found that HPCI support M-1187D-83 was loose during a visual examination on September 26, 2001, and did not provide that information to the NRC on September 27, 2001. The incomplete and inaccurate information provided to the NRC on September 27, 2001, was material to the NRC because the NRC staff was evaluating the licensee's operability determination for the Dresden Nuclear Station, Unit 3, HPCI system.

**Admission or Denial of the Alleged Violation**

Exelon Generation Company, LLC admits the violation and agrees with the NRC conclusion that we provided incomplete and inaccurate information to the NRC Region III during the conference call that occurred on September 27, 2001, with respect to HPCI support M-1187D-83.

**The Reason for the Apparent Violation**

Based on a walkdown performed on September 26, 2001, two engineers were aware that that the M1187D-83 support (trapeze) was loose. They had noticed the pipe support vibrating slightly under the pipe and thus concluded the support was not taking dead load. No support members were visibly deformed and the anchor plate was not damaged. The engineers' previous experience was that water hammer would produce significant damage to supports. Given the nature of the condition of the trapeze support, the engineers did not believe the loose support was indicative of a water hammer. They also noticed loose insulation on the floor. The loose insulation was from the vertical pipe penetration into the steam tunnel above. Loose insulation is not uncommon due to the effects of age and vibration and since they didn't see any other evidence of pipe movement, the engineers did not connect this damage with evidence of a water hammer. The engineers did not identify the small pieces of concrete among the loose insulation on top of the torus, which were subsequently identified by the NRC.

One of the engineers participated in the September 27, 2001, conference call with the NRC in which the condition of HPCI pipe supports was discussed. Since the engineer did not believe that the condition of the support was indicative of a water hammer, he believed that discussion of its

condition was not relevant and did not provide information regarding the M1187D-83 support. No one else on the conference call was aware of the condition of the support.

Despite his belief that the condition of the M1187D-83 support was not indicative of water hammer damage, the engineer made an error in judgment in not providing the information on the September 27 conference call. This error in judgment was part of an overall inadequate management response to the discovery of a damaged strut support (M1187D-80 support) in July 2001. Based on information known at the time of the conference call, DNPS personnel believed that there was no indication that a water hammer had previously occurred in the system, and thus believed that the HPCI system was operable despite the damaged support strut. However, given that there was no alternate explanation for the cause of the damage to the support strut, and considering the safety significance of the HPCI system, this initial response was inadequate. Upon discovery of the damaged support strut in July 2001, DNPS did not aggressively investigate the cause of the damage and/or repair the damaged support strut expeditiously to ensure system operability. This resulted in providing information to the NRC on the conference call without a complete understanding of the situation. Subsequent to the conference call, a thorough investigation determined that a water hammer transient had occurred, causing the damage to the support strut.

### **The Corrective Actions Steps That Have Been Taken And The Results Achieved**

Provided guidance and training on operability determinations and issue identification and management.

Discussions were held with key individuals involved in managing the issue on the need to provide complete and accurate information.

The Engineering Director discussed issue resolution with the plant's technical staff, using this issue as an example.

Training was provided to site engineering personnel based on a case study of this event.

Lessons learned were reviewed with site management personnel.

Lessons learned were issued to other EGC/AmerGen sites.

No issues regarding the accuracy or completeness of information provided to the NRC has been identified in the last year.

### **The Corrective Actions That Will Be Taken To Avoid Further Violations**

No additional corrective actions are required.

### **The Date When Full Compliance Will Be Achieved**

Full compliance has been achieved.

**RESPONSE TO NOTICE OF VIOLATION  
EA-02-264**

Exelon Generation Company, LLC (EGC)  
Dresden Nuclear Power Station (DNPS) Unit 3

Docket No. 50-249  
License No. DPR-25

**Alleged Violation**

Dresden Nuclear Station Technical Specification 3.5.1 requires, in part, that for operating Mode 1, should the high pressure coolant injection (HPCI) system become inoperable, the HPCI must be restored to an operable status within 14 days or the plant be placed in Mode 3 in 12 hours.

10 CFR Part 50, Appendix B, Criterion XVI, provides, in part, that conditions adverse to quality be promptly corrected, and in the case of a significant condition adverse to quality, that corrective action be taken to preclude repetition.

Contrary to the above, as of September 30, 2001, the licensee had not promptly corrected damaged pipe support M1187D-80 on Dresden Nuclear Station Unit 3 HPCI system, after it was identified on July 19, 2001. The licensee did not take corrective action to preclude repetition of the damage to support M1187D-80, a significant condition adverse to quality, until prompted by the NRC on September 30, 2001. As a result while the plant was operating in Mode 1, the HPCI system was inoperable from July 5, 2001, to September 30, 2001, a period in excess of 14 days.

**Admission or Denial of the Alleged Violation**

Exelon Generation Company, LLC agrees with the NRC conclusion that we did not take corrective action to preclude repetition of the damage to support M1187D-80, a significant condition adverse to quality, until prompted by the NRC on September 30, 2001.

**The Reason for the Apparent Violation**

On July 5, 2001, a Unit 3 reactor scram occurred with an HPCI system automatic initiation. Upon initiation, plant personnel took manual control and decreased flow demand for the system. On July 19, 2001, during a walk down, engineering personnel discovered a damaged support in the HPCI discharge piping. A condition report was initiated. Engineering performed an operability evaluation, but the evaluation only considered design basis loads. Based on that evaluation, the system was determined to be capable of performing its intended safety function. A work request was generated to repair the damaged support. Since the system was considered operable, the work request was screened as having low priority.

An Apparent Cause Evaluation (ACE) was assigned to be completed. The ACE attributed the support damage to a transient (water hammer), which may have occurred during the July 5, 2001, scram event. A follow up action was assigned to perform a water hammer evaluation for the system. However, this information was not communicated to senior management.

On September 26, 2001, NRC Region III personnel expressed concern with the operability of the HPCI system. In response to the concern engineering personnel performed system walkthroughs and accelerated the planned water hammer evaluation. Based on the results of the walkthroughs and other information available, DNPS personnel concluded that a water hammer had not occurred and that the HPCI system remained operable.

On September 30, following discussions with the NRC, DNPS repaired the damaged support. Additionally, DNPS initiated venting of the HPCI system and determined that a substantial

quantity of air existed in the system. Subsequent evaluations determined that a water hammer transient had occurred in the system during the system startup on July 5, 2001, and that, considering the damaged support and the potential for additional water hammer transients, the system had been inoperable from July 5, 2001, until September 30, 2001.

Our evaluation determined that there was inadequate issue management in response to the discovery of the damaged support on July 19, 2001. The operability evaluation only considered design basis loads, despite the potential source of additional loads. The ACE was not completed in a timely manner nor were the conclusions of the ACE and the identification of the additional loose support factored into the existing operability evaluation. Additionally, we lacked sensitivity to the safety implications of the degraded condition of the system.

### **The Corrective Actions Steps That Have Been Taken And The Results Achieved**

The damaged pipe support was repaired. Additionally, the system was properly vented. Plant venting procedures were revised to include venting of the intermediate loop in the system. System modifications were completed to extend the high point vent from an inaccessible area to an accessible area to accommodate periodic venting.

The Engineering Director discussed issue resolution with the plant's technical staff, using this issue as an example.

Training was provided to site engineering personnel based on a case study of this event.

Lessons learned were reviewed with site management personnel.

Additionally, lessons learned were issued to other Exelon/AmerGen sites.

### **The Corrective Actions That Will Be Taken To Avoid Further Violations**

No additional corrective actions are required.

### **The Date When Full Compliance Will Be Achieved**

Full compliance has been achieved.