

February 19, 2004

Mr. John L. Skolds  
President and Nuclear Officer  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: NRC INSPECTION REPORT 05000010/2004-004(DNMS) - DRESDEN UNIT 1

Dear Mr. Skolds:

On January 22, 2004, the NRC completed an inspection at the Dresden Unit 1 Station. The purpose of the inspection was to determine whether decommissioning activities were conducted safely and in accordance with NRC requirements. At the conclusion of the inspection on January 22, the NRC inspector discussed the findings with members of your staff.

This inspection consisted of an examination of decommissioning activities at the Dresden Unit 1 Station as they relate to safety and compliance with the Commission's rules and regulations. Areas examined during the inspection are identified in the enclosed report. Within these areas, the inspection consisted of a selective examination of procedures and representative records, and interviews with personnel.

Based on the results of this inspection, the NRC did not identify any violations.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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>.

We will gladly discuss any questions you may have regarding this inspection.

Sincerely,

*/RA/*

Christopher G. Miller, Chief  
Decommissioning Branch

Docket No. 05000010  
License No. DPR-2

Enclosure: Inspection Report 05000010/2004-004(DNMS)

See Attached Distribution

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| NAME   | Kulzer:mb |                          | Miller   |                          |                          |                          |                          |
| DATE   | 02/19/04  |                          | 02/19/04 |                          |                          |                          |                          |

**OFFICIAL RECORD COPY**

cc w/encl: Site Vice President - Dresden Nuclear Power Station  
Dresden Nuclear Power Station Plant Manager  
Dresden Nuclear Power Station Decommissioning Plant Manager  
Regulatory Assurance Manager - Dresden  
Chief Operating Officer  
Senior Vice President, Nuclear Services  
Senior Vice President - Mid-West Regional Operating Group  
Senior Vice President - Operations Support  
Vice President - Licensing and Regulatory Affairs  
Director Licensing - Mid-West Regional Operating Group  
Manager Licensing - Dresden and Quad Cities  
Director Project Management  
Senior Council, Nuclear Mid-West Regional Operating Group  
Document Control Desk - Licensing  
M. Aguilar, Assistant Attorney General  
Illinois Emergency Management Agency  
State Liaison Officer  
Chairman, Illinois Commerce Commission  
A. C. Settles, Emergency Management Agency

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No. 05000010  
License No. DPR-2

Report No. 05000010/2004-004(DNMS)

Licensee: Exelon Nuclear

Facility: Dresden Station Unit 1

Location: 6500 N. Dresden Road  
Morris, IL 60450

Date: January 20/22, 2004

Inspector: Edward Kulzer, CIH, CSP  
Decommissioning Reactor Inspector

Approved by: Christopher G. Miller, Chief  
Decommissioning Branch  
Division of Nuclear Materials Safety

## **EXECUTIVE SUMMARY**

Dresden Station Unit 1  
NRC Inspection Report 05000010/2004-004(DNMS)

This routine decommissioning inspection was focused on aspects of facility organization and management, radiological safety, and spent fuel material control.

### Facility Management and Control

- There were no concerns identified with staffing and funding for maintaining Dresden Unit 1 in a safe condition. (Section 1.1)
- The licensee made no design changes or modifications to Unit 1 since the last inspection. The inspector had no concerns in this area. (Section 1.2)

### Radiological Safety

- The licensee conducted the environmental monitoring as required in Technical Specifications Sections 1.0, 5.1, and 6.14. Effluent releases met regulatory requirements. (Section 2.1)

## Report Details<sup>1</sup>

### Summary of Plant Activities

Since the previous inspection, the plant remained in a safe storage condition (SAFESTOR) with no major work activities in progress.

#### **1.0 Facility Management and Control**

##### 1.1 Organization, Management and Cost Controls ( 36801)

###### a. Inspection Scope

The inspector evaluated the licensee's decommissioning organization and staffing, as well as cost controls. The inspector discussed staffing and decommissioning funding with the acting Engineering Director. The inspector reviewed a March 31, 2003, letter titled, "Report on Status of Decommissioning Funding for Reactors."

###### b. Observations and Findings

The licensee currently has no employees working at Dresden Unit 1. Employees from Units 2 and 3 perform required maintenance. The licensee planned to appoint a Dresden Unit 1 Project Manager in the first calendar quarter of 2004.

If the extended operating life program (License Renewal) for Units 2 and 3 is not approved, the three Dresden units will be decommissioned, and dismantlement will begin as early as 2010. During the inspection, licensee officials indicated that Exelon plans to seek license renewal for Units 2 and 3. The SAFESTOR license DRP-2 Amendment No. 27 for Dresden Unit 1, has an expiration date of April 10, 2029.

The funding mechanism being used at Dresden Unit 1 is an external sinking fund containing over \$138 million in a non-bypassable charge, to collect decommissioning funds for Exelon Generation Company.

###### c. Conclusions

There were no concerns identified with staffing and funding for maintaining Dresden Unit 1 in a safe condition.

##### 1.2 Safety Reviews, Design Changes, and Modifications (37801)

###### a. Inspection Scope

The inspector interviewed the acting Engineering Director to determine if any design changes and/or modifications had been made or were being planned for Unit 1. The inspector conducted a walk-down in the basement of the RadWaste Building to determine the extent of water leakage in this area.

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<sup>1</sup>NOTE: A List of acronyms used in the report is included at the end of the Report Details.

b. Observations and Findings

The inspector determined that no design changes or modifications were made since the last inspection. The licensee told the inspector that the water in the Unit 1 spent fuel pool will be drained this year. The licensee is considering various options on how to drain the pool.

In the past, the basement of the RadWaste Building collected water in the valve tunnel. The inspector observed the build-up of approximately one-half inch of water in this area, which was not excessive compared to previous years. The licensee was aware of this condition. Based on the radiological conditions in the valve tunnel, the inspector determined there were no adverse radiological or environmental conditions resulting from the water intrusion.

c. Conclusions

The licensee made no design changes or modifications to Unit 1 since the last inspection. The inspector had no concerns in this area.

1.3 Temporary Instruction (TI) 2515/154, "Spent Fuel Material Control and Accounting At Nuclear Power Plants"

The inspector conducted a walk-down of the spent fuel pool in Units 1, 2, and 3. The licensee removed spent fuel rods and fuel assemblies from Unit 1, and placed these in Units 2 and 3 spent fuel pools. No fuel remains in the Unit 1 spent fuel pool. The inspector completed Phase I of the TI for Unit 1. The NRC resident inspectors for the Dresden site will complete the TI for Units 2 and 3.

**2.0 Radiological Safety**

2.1 Radioactive Waste Treatment, Effluent and Environmental Monitoring (IP 84750)

a. Inspection Scope

The inspector reviewed those areas of the Dresden Off-Site Dose Calculation Manual (ODCM), Chapter 12, Revision 12, dated October 2003 that were specific to Unit 1, including: Table 12.2-3 titled, "Radioactive Gaseous Effluent Monitoring Instrumentation Unit 1;" Table 12.4-1, titled, "Radioactive Gaseous Waste Sampling And Analysis Program Unit 1;" and Table 12.2-4 titled, "Radioactive Gaseous Effluent Monitoring Instrument Surveillance Requirements Unit 1." The inspector also reviewed Work Order No. 00624340, titled, "Quarterly Technical Specification Effluent Monitoring SPING - 4 Function Test," dated October 7, 2004, and a letter to NRC titled, "Revised Dresden Nuclear Power Station 2002 Radioactive Effluent Release Report," dated August 7, 2003. The inspector reviewed Technical Specification Sections 1.0, 5.1, and 6.14 to ensure that environmental monitoring was properly conducted.

b. Observations and Findings

The licensee conducted the environmental monitoring as required in Technical Specifications Sections 1.0, 5.1, and 6.14. The "Revised Dresden Nuclear Power Station Radioactive Effluent Release Report," dated August 7, 2003, included sections

on Gaseous Effluents, Solid Waste and Irradiated Fuel Shipments, and Radiological Impact on Man. Based upon a review of this report, the inspector determined that effluent releases from Unit 1 were well below limits found in 10 CFR Part 20, Appendix B.

c. Conclusions

The licensee conducted the environmental monitoring as required in Technical Specifications Sections 1.0, 5.1, and 6.14. Effluent releases met regulatory requirements.

**3.0 Other**

- a. Closed URI 07200037/2001-004-001: Verification of Fuel Pin Inventories. The licensee committed to re-inspect the existing three fuel baskets in the Dresden Units 2 and 3 Spent Fuel Pools to verify fuel pin inventories and to revise Surveillance Procedure NF-AA-330, "Special Nuclear Material Physical Inventories," because verifying only that the baskets were present did not actually verify the presence of the fuel rods.

The licensee inspected the three baskets and determined that the existing inventory sheets were correct. The licensee revised the procedure to include actually verifying that each fuel rod is present in the location shown on the audit maps. This item is closed.

- b. Closed IFI 0500010/2000-020-001: Winterization Program. The licensee committed to resolve the time requirement disparity between Administrative Procedure DAP12, "Winterization Program," and the referenced predefined surveillances, DOS 0010-19, "Preparation for Cold Weather," and DOS 010-20, "Initiation of Cold Weather Operations Unit 1," because the two surveillances were not completed within the time frames stated in DAP 12, but were completed within the timeframe specified in the surveillances. The licensee revised DAP 12 and deleted references to the surveillances' due dates, allowing the timing of the surveillance procedure requirements to govern. This item is closed.

**4.0 Exit Meeting Summary**

The inspector presented the inspection results during the exit meeting on January 22, 2004. The licensee did not identify any of the documents or processes reviewed by the inspector as proprietary.

**PARTIAL LIST OF PERSONS CONTACTED**

Licensee

- \*J. Hansen, Regulatory Assurance Manager
- D. Nutsel, Environmental Monitoring Manager
- \*E. Flick, Acting Engineering Director
- \*J. Griffin, Senior Regulatory Specialist
- \*R. Rybak, Senior License Engineer

\* Indicates presence at exit meeting.

## ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened

None

### Closed

07200037/2001-004-001      URI      Verification of Fuel Pin Inventories

0500010/2000-020-001      IFI      Winterization Program

### Discussed

None

## INSPECTION PROCEDURES USED

IP 36801      Organization, Management , and Cost Controls  
IP 37801      Safety Reviews, Design Changes, and Modifications at Permanently Shut Down Reactors  
IP 84750      Radioactive Waste Treatment , Effluent and Environmental Monitoring;  
TI 2515/154      Spent Fuel Material and Accounting At Nuclear Power Plants

## LIST OF ACRONYMS USED

CFR      Code of Federal Regulations  
NRC      Nuclear Regulatory Commission  
DDP      Dresden Decommissioning Procedure  
DOS      Dresden Operating Surveillance  
IFI      Inspection Follow-up Item  
NF      Nuclear Fuel  
UFI      Unresolved Follow-up Item

## DOCUMENTS REVIEWED

Documents utilized during the inspection were specifically identified in the Report Details, above.