



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

September 1, 2010

Mr. Michael Pacilio  
Senior Vice President, Exelon Generation Company, LLC  
President and Chief Nuclear Officer (CNO), Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

**SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN –  
DRESDEN NUCLEAR POWER STATION**

Dear Mr. Pacilio:

On August 5, 2010, the NRC staff completed its performance review of the Dresden Nuclear Power Station. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from July 1, 2009, through June 30, 2010. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only--Security Information" will include the Security Cornerstone review and resultant inspection plan.

Plant performance for the most recent quarter at the Dresden Nuclear Power Station was within the Licensee Response column of the NRC's Action Matrix for Unit 2 and within the Regulatory Response column for Unit 3. This is based on all PIs indicating performance at a level requiring no additional NRC oversight (Green) for both units and all inspection findings being classified as having very low safety significance (Green) for Unit 2. For Unit 3, we issued a preliminary White inspection finding on August 19, 2009, related to an inadvertent rod withdrawal event that occurred at Dresden on November 3, 2008 (ML092320164). On May 24, 2010, we completed our supplemental inspection for the White finding and, as a result, are returning Unit 3 to the licensee response column, effective at the beginning of July 2010. Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

In our annual assessment letter dated March 3, 2010 (ML100610336), we advised you of a substantive cross-cutting issue (SCCI) in the area of Human Performance (HP) with a cross-cutting theme in the aspect of Work Practices—Human Error Prevention Techniques, H.4(a). There were no new findings with a cross-cutting component of work practices identified in the last 6 months. However, during this assessment period, there were 14 findings documented with cross-cutting aspects in the HP area. While your facility continues to have problems in the area of HP as a whole, you have taken significant corrective actions in the aspect of human error prevention techniques, including: dedicating an SRO to reviewing operations procedures for quality, identifying a focus on the Electrical Maintenance Department for maintenance procedures, and developing corrective actions for decision making. Therefore, the SCCI in the aspect of H.4(a) will be closed.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through December 31, 2011. The inspections scheduled include: licensed operator initial qualification, emergency preparedness, outage related inspections, post-approval license renewal, triennial fire protection, and triennial heat sink. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last 9 months of the inspection plan are tentative and may be revised at the end-of-cycle review.

In accordance with 10 CFR 2.390 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 Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Mark Ring at (630) 829-9703 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

**/RA/ By Gary L. Shear Acting For/**

Steven West, Director  
Division of Reactor Projects

Docket Nos. 50-237; 50-249  
License Nos. DPR-19; DPR-25

Enclosure: Dresden Nuclear Power Station Inspection/Activity Plan

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Letter to M. Pacilio from S. West dated September 1, 2010

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN –  
DRESDEN NUCLEAR POWER STATION

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**Dresden**  
**Inspection / Activity Plan**  
**09/01/2010 - 12/31/2011**

Planned Dates		Inspection Activity	Title	No. of Staff on Site
Start	End			
		<b>RENEWAL - LICENSE RENEWAL 71003 - PHASE 2 - U3</b>		<b>4</b>
10/18/2010	10/29/2010	IP 71003	Post-Approval Site Inspection for License Renewal	
		<b>RENEWAL - LICENSE RENEWAL 71003 - PHASE 1 - U3</b>		<b>3</b>
11/01/2010	11/19/2010	IP 71003	Post-Approval Site Inspection for License Renewal	
		<b>BI ENG - INSERVICE INSPECTION - UNIT 2</b>		<b>1</b>
11/01/2010	11/19/2010	IP 7111108G	Inservice Inspection Activities - BWR	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
11/08/2010	11/19/2010	IP 71124.02	Occupational ALARA Planning and Controls	
11/08/2010	11/19/2010	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
11/08/2010	11/19/2010	IP 71151-OR01	Occupational Exposure Control Effectiveness	
		<b>OL PREP - DRESDEN INIT PREP - 02/2011</b>		<b>3</b>
02/14/2011	02/18/2011	W90229	OL - INITIAL EXAM - MARCH 2011 - DRES	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
02/21/2011	02/25/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
02/21/2011	02/25/2011	IP 71151-BI01	Reactor Coolant System Activity	
		<b>OL EXAM - DRESDEN INIT EXAM - 03/2011</b>		<b>3</b>
03/07/2011	03/18/2011	W90229	OL - INITIAL EXAM - MARCH 2011 - DRES	
		<b>BI EP - EP EXERCISE INSPECTION / PI VERIFICATION</b>		<b>3</b>
03/21/2011	03/25/2011	IP 7111401	Exercise Evaluation	
03/21/2011	03/25/2011	IP 71151-EP01	Drill/Exercise Performance	
03/21/2011	03/25/2011	IP 71151-EP02	ERO Drill Participation	
03/21/2011	03/25/2011	IP 71151-EP03	Alert & Notification System	
		<b>BI ENG - TRIENNIAL HEAT SINK INSPECTION</b>		<b>2</b>
03/28/2011	04/08/2011	IP 2515/177	Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System	
03/28/2011	04/08/2011	IP 7111107T	Heat Sink Performance	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
06/06/2011	06/10/2011	IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
06/06/2011	06/10/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
06/06/2011	06/10/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
06/06/2011	06/10/2011	IP 71124.04	Occupational Dose Assessment	
		<b>BI ENG - TRIENNIAL FIRE PROTECTION INSPECTION</b>		<b>3</b>
07/25/2011	07/29/2011	IP 7111105T	Fire Protection [Triennial]	
08/08/2011	08/12/2011	IP 7111105T	Fire Protection [Triennial]	
08/29/2011	09/02/2011	IP 7111105T	Fire Protection [Triennial]	

**Dresden**  
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Start	End			
		<b>BI ENG - INSERVICE INSPECTION - UNIT 2</b>		<b>1</b>
10/24/2011	11/23/2011	IP 7111108G	Inservice Inspection Activities - BWR	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
10/31/2011	11/04/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
10/31/2011	11/04/2011	IP 71124.02	Occupational ALARA Planning and Controls	
10/31/2011	11/04/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
12/12/2011	12/16/2011	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
12/12/2011	12/16/2011	IP 71151-PR01	RETS/ODCM Radiological Effluent	