



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

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

March 3, 2010

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

**SUBJECT: ANNUAL ASSESSMENT LETTER – DRESDEN NUCLEAR POWER STATION,  
UNITS 2 AND 3 (05000237/2010001; 05000249/2010001)**

Dear Mr. Pardee:

On February 11, 2010, the NRC staff completed its performance review of Dresden Nuclear Power Station, Units 2 and 3. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31 2009. 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.

Dresden Unit 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter as well as the first three quarters of the assessment cycle, was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections on Unit 2.

Dresden Unit 3 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter was within the Regulatory Response column of the NRC's Action Matrix, based on one inspection finding in the Mitigating Systems Cornerstone being classified as having low to moderate safety significance (White). This White finding, from the third quarter of 2009, involved the inadvertent withdrawal of three control rods by non-licensed operators during a shutdown condition. We will plan to conduct a supplemental inspection in accordance with Inspection Procedure (IP) 95001 in response to this White finding after we are notified of your readiness. This supplemental inspection will be in addition to baseline inspections at your facility.

Additionally, the staff has identified 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). During this assessment period, there were 14 findings documented with cross-cutting aspects in the HP area. Five of these findings shared a common cross-cutting Human Error Prevention Techniques aspect and were from different cornerstones. We have a concern with your progress in addressing this issue; specifically, your corrective actions have been in place for some time but have not yet proven to be effective. There has been no sustained period of improved performance. This substantive cross-cutting issue will remain open until the NRC gains confidence in your performance through your demonstration of positive, sustainable improvement in the area of Human Performance and after consideration of the number of findings with the same cross-cutting aspect.

In our 2009 mid-cycle assessment, we identified a cross-cutting theme in the area of Problem Identification and Resolution (PI&R) involving the station's ability to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity, P.1(d). We had determined that a substantive cross-cutting issue was not warranted in this area at the time since you had appropriately identified the theme, and scheduled or taken a range of corrective actions to address the issue. In this assessment we have determined that it appears the station has made improvement within this area as evident by the reduction in findings sharing the P.1(d) aspect. Therefore, we are not proposing a substantive cross-cutting issue at this time.

The enclosed inspection plan details the inspections, less those related to security, scheduled through June 30, 2011. 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. Additional inspections scheduled include: component design basis, independent spent fuel storage installation operation, post-approval license renewal (for Units 2 and 3), managing fatigue, and a supplemental inspection for the White finding on Unit 3. The inspections in the last 9 months of the inspection plan are tentative and may be revised at the mid-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 Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

C. Pardee

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If circumstances arise which cause us to change this 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/*

Steven West, Director  
Division of Reactor Projects

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

Enclosure: Dresden Inspection/Activity Plan

cc w/encl: Distribution via ListServ

C. Pardee

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Letter to C. Pardee from S. West dated March 3, 2010

SUBJECT: ANNUAL ASSESSMENT LETTER – DRESDEN NUCLEAR POWER STATION,  
UNITS 2 AND 3 (05000237/2010001; 05000249/2010001)

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**Dresden**  
**Inspection / Activity Plan**  
**03/01/2010 - 06/30/2011**

Planned Dates		Inspection Activity	Title	No. of Staff on Site
Start	End			
		<b>ISFSI - ISFSI INSPECTION</b>		<b>1</b>
03/01/2010	07/31/2010	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
		<b>BI PI&amp;R - BIENNIAL PI&amp;R INSPECTION</b>		<b>4</b>
03/01/2010	03/19/2010	IP 71152B	Identification and Resolution of Problems	
		<b>OL EXAM - DRESDEN INIT EXAM MARCH/2010</b>		<b>3</b>
03/08/2010	03/19/2010	W90218	OL - INITIAL EXAM - MAR 2010 - DRES	
		<b>BI ENG - COMPONENT DESIGN BASIS INSPECTION</b>		<b>6</b>
04/19/2010	05/21/2010	IP 7111121	Component Design Bases Inspection	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
05/03/2010	05/07/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
05/03/2010	05/07/2010	IP 71151-BI01	Reactor Coolant System Activity	
		<b>BI OL - LIC. OPERATOR REQUAL. PROGRAM EVALUATION</b>		<b>1</b>
05/24/2010	05/28/2010	IP 7111111B	Licensed Operator Requalification Program	
		<b>TI - TEMPORARY INSTRUCTION 2515/180</b>		<b>1</b>
06/17/2010	06/17/2010	IP 2515/180	Inspection of Procedures and Processes for Managing Fatigue	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
08/16/2010	08/20/2010	IP 71124.04	Occupational Dose Assessment	
08/16/2010	08/20/2010	IP 71124.07	Public Radiation Safety	
08/16/2010	08/20/2010	IP 71151-PR01	RETS/ODCM Radiological Effluent	
		<b>RENEWAL - LICENSE RENEWAL 71003 - PHASE 2 - U3</b>		<b>7</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 - ENGINEERING INSERVICE INSPECTION</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>BI ENG - RPV HEAVY LOADS SMART SAMPLE</b>		<b>1</b>
01/10/2011	01/28/2011	IP 7111120	Refueling and Other Outage Activities	
		<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	

**Dresden**  
**Inspection / Activity Plan**  
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		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
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>1</b>
03/28/2011	04/01/2011	IP 7111107T	Heat Sink Performance	
		<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
06/20/2011	06/24/2011	IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
06/20/2011	06/24/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
06/20/2011	06/24/2011	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
06/20/2011	06/24/2011	IP 71124.04	Occupational Dose Assessment	