UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

September 1, 2015

Mr. Bryan C. Hanson
Senior VP, Exelon Generation Company, LLC
President and CNO, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3 (REPORT 05000237/2015005; 05000249/2015005)

Dear Mr. Hanson:

On August 13, 2015, the U. S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Dresden Nuclear Power Station, Units 2 and 3. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2014 through June 30, 2015. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined the performance at Dresden Nuclear Power Station, Unit 2, during the most recent quarter was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix due to a PI, "Unplanned Scrams per 7000 Hours," exceeding the Green to White threshold of 3 scrams per 7000 hours in the first quarter of 2015. The PI returned to the Green performance band on April 1, 2015; the required supplemental inspection was completed and documented on August 7, 2015, in NRC Inspection Report 5000237/2015009 (ADAMS Accession Number ML15219A498), at which time Dresden Unit 2 returned to the Licensee Response Column.

Although plant performance is currently assessed in the Licensee Response Column, the NRC has not yet finalized the significance of apparent violation (AV) 05000237/201002–04, "Failure to Ensure Continued Operability of Unit 2 Electromatic Relief Valve 2–0203–3C Following Implementation of Extended Power Uprate Plant Conditions." The final safety significance determination may affect the NRC's assessment of plant performance and the enclosed inspection plan. The safety significance of that apparent violation is anticipated to be finalized in the third quarter of 2015 after you transmit to the NRC your written response to that finding as documented in NRC Inspection Report 05000237/2015002; 05000249/2015002, dated August 7, 2015 (ADAMS Accession Number ML15219A500).

The NRC determined the performance at Dresden Nuclear Power Station, Unit 3, during the most recent quarter was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix due to a White violation 05000249/2014005–02, "Failure to Ensure Continued Operability of Unit 3 Electromatic Relief Valve 3–0203–3E Following Implementation of Extended Power Uprate Plant Conditions." The finding was identified in the

fourth quarter of 2014 and documented in NRC Inspection Report 05000237/2014005; 05000249/2014005, dated January 29, 2015 (ADAMS Accession Number ML15029A177). In addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," after you notify the NRC of your readiness for that inspection. The objectives of the supplemental inspection procedure include providing assurance that the root causes and contributing causes of risk-significant performance issues are understood; that the extent of condition and extent of cause of risk-significant performance issues are identified; and that the licensee's corrective actions for risk-significant performance issues are sufficient to address the root and contributing causes and prevent recurrence.

The enclosed inspection plan lists the inspections scheduled through December 31, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

The NRC, as shown in the enclosed inspection plan, will conduct a pilot Component Design Baseline Inspection in February 2016 using Inspection Procedure 711121, "Component Design Bases Inspection." Additionally the biennial Problem Identification and Resolution inspection is scheduled for April 2016 using Inspection Procedure 71152, "Problem Identification and Resolution."

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The audit has been completed for the first unit at Dresden Nuclear Power Station, and the information gathered will aid staff in development of the ultimate Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Final Safety Evaluation will be issued. Then, the NRC staff will confirm through inspections the full implementation of the orders mentioned above performing TI 191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans".

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be 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 Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Please contact Mr. Jamnes Cameron, DRP, Chief, Branch 4, at 630-829-9833 with any questions you have regarding this letter.

Sincerely,

/RA/

Patrick L. Louden, Director
Division of Reactor Projects

Docket Nos. 50–237, 50–249
License Nos. DPR–19; DPR–25

Enclosure:
Dresden Nuclear Power Station, Units 2 And 3
Inspection Plan

cc w/encl: Distribution via LISTSERV®

Please contact Mr. Jamnes Cameron, DRP, Chief, Branch 4, at 630-829-9833 with any questions you have regarding this letter.

Sincerely,

/RA/

Patrick L. Louden, Director
Division of Reactor Projects

Docket Nos. 50–237, 50–249
License Nos. DPR–19; DPR–25

Enclosure:
Dresden Nuclear Power Station, Units 2 And 3
Inspection Plan

cc w/encl: Distribution via LISTSERV®

DISTRIBUTION w/encl:
Kimyata MorganButler
RidsNrrDorlLpl3-2 Resource
RidsNrrPMDresden Resource
RidsNrrDirsIrib Resource
Cynthia Pederson
Darrell Roberts
Richard Skokowski
Allan Barker
Carole Ariano
Linda Linn
DRPIII
DRSIII
Jim Clay
Carmen Olteanu
ROPassessment.Resource@nrc.gov

ADAMS Accession Number: ML15239B365
☒ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☒ Non-Sensitive

OFFICE	RIII	RIII	RIII	RIII
NAME	JRutkowski:tr	JCameron	PLouden	
DATE	8/21/2015	8/24/2015	8/27/2015	

OFFICIAL RECORD COPY

Dresden
Inspection / Activity Plan
09/01/2015 - 12/31/2017

Unit Number	Planned Dates Start	End	Inspection Activity	Title	No. of Staff on Site
			EP	**- FOLLOWUP OF HPCI AUX OIL PUMP**	**2**
2, 3	07/12/2015	09/30/2015	IP 7111401	Exercise Evaluation	
			BI RP	**- RADIATION PROTECTION BASELINE INSPECTION**	**1**
2	11/16/2015	11/20/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
2	11/16/2015	11/20/2015	IP 71124.02	Occupational ALARA Planning and Controls	
2	11/16/2015	11/20/2015	IP 71151	Performance Indicator Verification	
			ENG BI	**- COMPONENT DESIGN BASES INSPECTION PILOT**	**6**
2, 3	02/08/2016	02/26/2016	IP 7111121	Component Design Bases Inspection	
			BI RP	**- RADIATION PROTECTION BASELINE INSPECTION**	**1**
2	01/04/2016	01/08/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
2	01/04/2016	01/08/2016	IP 71124.02	Occupational ALARA Planning and Controls	
			PI&R B	**- BIENNIAL PI&R INSPECTION**	**4**
2, 3	04/11/2016	04/29/2016	IP 71152B	Problem Identification and Resolution	
			BI EP	**- EP ROUTINE INSPECTION/ PI VERIFICATION**	**1**
2, 3	02/16/2016	02/19/2016	IP 7111402	Alert and Notification System Testing	
2, 3	02/16/2016	02/19/2016	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
2, 3	02/16/2016	02/19/2016	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
2, 3	02/16/2016	02/19/2016	IP 71151	Performance Indicator Verification	
			ISFSI	**- PROGRAM REVIEW**	**1**
2	03/01/2016	03/31/2016	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			BI RP	**- RADIATION PROTECTION BASELINE INSPECTION**	**1**
2	03/14/2016	03/18/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
2	03/14/2016	03/18/2016	IP 71124.04	Occupational Dose Assessment	
2	03/14/2016	03/18/2016	IP 71151	Performance Indicator Verification	
			BI OLRQ	**- BIENNIAL REQUAL PROGRAM INSPECTION**	**2**
2, 3	05/16/2016	05/20/2016	IP 7111111B	Licensed Operator Requalification Program	
			BI ENG	**- COMPONENT DESIGN BASIS INSPECTION PILOT**	**3**
2, 3	06/20/2016	06/24/2016	IP 7111121	Component Design Bases Inspection	
			OL PREP	**- INIT PREP/JULY 2016**	**2**
2	07/18/2016	07/22/2016	W90346	OL - INITIAL EXAM - 2016 JULY-AUG - DRESDEN	
			OL EXAM	**- INIT EXAM/AUGUST 2016**	**3**
2	08/08/2016	08/12/2016	W90346	OL - INITIAL EXAM - 2016 JULY-AUG - DRESDEN	

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

Dresden
Inspection / Activity Plan
09/01/2015 - 12/31/2017

Unit Number	Planned Dates Start	End	Inspection Activity	Title	No. of Staff on Site
			BI RP	**- RADIATION PROTECTION BASELINE INSPECTION**	**1**
2	10/31/2016	11/04/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
2	10/31/2016	11/04/2016	IP 71124.02	Occupational ALARA Planning and Controls	
2	10/31/2016	11/04/2016	IP 71151	Performance Indicator Verification	
			ISI	**- INSERVICE INSPECTION ON UNIT 3**	**1**
3	10/31/2016	11/11/2016	IP 7111108G	Inservice Inspection Activities - BWR	
			BI ENG	**- TRIENNIAL FIRE PROTECTION AND BAG TRIP**	**3**
2, 3	01/16/2017	02/17/2017	IP 7111105T	Fire Protection [Triennial]	
			BI RP	**- RADIATION PROTECTION BASELINE INSPECTION**	**1**
2	02/27/2017	03/03/2017	IP 71124.05	Radiation Monitoring Instrumentation	
			BI EP	**- EP EXERCISE INSPECTION / PI VERIFICATION**	**5**
2, 3	04/17/2017	04/21/2017	IP 7111401	Exercise Evaluation	
2, 3	04/17/2017	04/21/2017	IP 7111406	Drill Evaluation	
2, 3	04/17/2017	04/21/2017	IP 7111408	Exercise Evaluation – Scenario Review	
2, 3	04/17/2017	04/21/2017	IP 71151	Performance Indicator Verification	
			BI RP	**- RADIATION PROTECTION BASELINE INSPECTION**	**1**
2	05/15/2017	05/19/2017	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
2	05/15/2017	05/19/2017	IP 71151	Performance Indicator Verification	
			TI191	**- FLEX/MITIGATING STRATGIES/SFPI**	**4**
2	07/17/2017	07/21/2017	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			OL PREP	**- INIT EXAM/AUG 2017**	**3**
2	07/24/2017	07/28/2017	W90354	OL - INITIAL EXAM - 2017 JULY-AUG - DRESDEN	
			OL EXAM	**- INIT EXAM/AUG 2017**	**3**
2	08/21/2017	09/01/2017	W90354	OL - INITIAL EXAM - 2017 JULY-AUG - DRESDEN	
			BI ENG	**- TRIENNIAL HEAT SINK INSPECTION**	**2**
2, 3	10/16/2017	10/20/2017	IP 7111107T	Heat Sink Performance	

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.