



**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 QUAD CITIES NUCLEAR POWER  
STATION, UNITS 1 AND 2 (REPORT 05000254/2015005; 05000265/2015005)**

Dear Mr. Hanson:

On August 13, 2015, the U.S. Nuclear Regulatory Commission (NRC) staff completed its mid-cycle performance review of Quad Cities Nuclear Power Station, Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators 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 the plans for future inspections at your facility.

The NRC determined that overall, Quad Cities Nuclear Power Station, Units 1 and 2, was operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined that the performance at Quad Cities Nuclear Power Station, Units 1 and 2, during the most recent quarter, as well as the previous three quarters of the assessment period, was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix, because all inspection findings had very low (i.e., Green) safety significance and all performance indicators indicated that your performance was within the nominal, expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through December 30, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last 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.

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 Quad Cities 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 by performing Temporary Instruction 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, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the 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 me at 630-829-9731 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Karla Stoedter, Chief  
Branch 1  
Division of Reactor Projects

Docket Nos. 50-254, 50-265  
License Nos. DPR-29, DPR-30

Enclosure:  
Quad Cities Nuclear Power Station  
Inspection/Activity Plan

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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 Quad Cities 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 by performing Temporary Instruction 191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

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 Karla Stoedter, Chief  
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**ADAMS Accession Number:** ML15239B437

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OFFICE	RIII	RIII	RIII	
NAME	KStoedter for RNg:mp	KStoedter		
DATE	8/26/2015	8/26/2015		

**OFFICIAL RECORD COPY**

Letter to B. Hanson from K. Stoedter dated September 1, 2015

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR QUAD CITIES NUCLEAR POWER  
STATION, UNITS 1 AND 2 (REPORT 05000254/2015005; 05000265/2015005)

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**Quad Cities**  
**Inspection / Activity Plan**  
**09/01/2015 - 12/31/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>BI FIRE - FIRE PROTECTION INSPECTION &amp; BAG TRIP</b>		<b>4</b>
1, 2	11/02/2015	12/04/2015	IP 7111105T	Fire Protection [Triennial]	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	09/21/2015	09/25/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	09/21/2015	09/25/2015	IP 71151	Performance Indicator Verification	
			<b>BI OLRQ - BIENNIAL REQUAL PROGRAM INSPECTION</b>		<b>2</b>
1, 2	10/05/2015	10/09/2015	IP 7111111B	Licensed Operator Requalification Program	
			<b>BL EPR - EP ROUTINE INSPECTION / PI VERIFICATION</b>		<b>1</b>
1, 2	10/05/2015	10/09/2015	IP 7111402	Alert and Notification System Testing	
1, 2	10/05/2015	10/09/2015	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	10/05/2015	10/09/2015	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	10/05/2015	10/09/2015	IP 71151	Performance Indicator Verification	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	03/21/2016	03/25/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	03/21/2016	03/25/2016	IP 71124.02	Occupational ALARA Planning and Controls	
			<b>ISI - INSERVICE INSPECTION ON UNIT 2</b>		<b>1</b>
2	03/21/2016	04/08/2016	IP 7111108G	Inservice Inspection Activities - BWR	
			<b>OL PREP - INIT PREP/MARCH 2016</b>		<b>3</b>
1	03/21/2016	03/25/2016	W90350	OL - INITIAL EXAM - 2016 MAR-APR - QUAD CITIES	
			<b>OL EXAM - INIT EXAM/APRIL 2016</b>		<b>3</b>
1	04/18/2016	04/29/2016	W90350	OL - INITIAL EXAM - 2016 MAR-APR - QUAD CITIES	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	06/06/2016	06/10/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	06/06/2016	06/10/2016	IP 71124.04	Occupational Dose Assessment	
			<b>ENG BI - MODIFICATIONS / 50.59 INSPECTION</b>		<b>5</b>
1, 2	08/08/2016	08/26/2016	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	09/12/2016	09/16/2016	IP 71124.07	Radiological Environmental Monitoring Program	
1	09/12/2016	09/16/2016	IP 71151	Performance Indicator Verification	
			<b>ISFSI - ISFSI OPERATION AT AN OPERATING REACTOR</b>		<b>2</b>
1, 2	09/06/2016	10/05/2016	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			<b>PI&amp;R - BIENNIAL PI&amp;R INSPECTION</b>		<b>4</b>
1, 2	09/12/2016	09/30/2016	IP 71152B	Problem Identification and Resolution	

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

**Quad Cities**  
**Inspection / Activity Plan**  
**09/01/2015 - 12/31/2017**

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	Start	End			
			<b>BI EP - EP EXERCISE INSPECTION / PI VERIFICATION</b>		<b>5</b>
1, 2	11/14/2016	11/18/2016	IP 7111401	Exercise Evaluation	
1, 2	11/14/2016	11/18/2016	IP 7111406	Drill Evaluation	
1, 2	11/14/2016	11/18/2016	IP 7111408	Exercise Evaluation – Scenario Review	
1, 2	11/14/2016	11/18/2016	IP 71151	Performance Indicator Verification	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	12/12/2016	12/16/2016	IP 71124.05	Radiation Monitoring Instrumentation	
			<b>BI ENG - COMPONENT DESIGN BASIS INSPECTION</b>		<b>6</b>
1, 2	01/30/2017	03/03/2017	IP 7111121	Component Design Bases Inspection	
			<b>BI EP - EP BASELINE INSPECTION / PI VERIFICATION</b>		<b>1</b>
1, 2	02/13/2017	02/17/2017	IP 7111402	Alert and Notification System Testing	
1, 2	02/13/2017	02/17/2017	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	02/13/2017	02/17/2017	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	02/13/2017	02/17/2017	IP 71151	Performance Indicator Verification	
			<b>ISI - INSERVICE INSPECTION</b>		<b>1</b>
1	03/27/2017	04/12/2017	IP 7111108G	Inservice Inspection Activities - BWR	
			<b>OL-RQ - BIENNIAL REQUAL PROGRAM INSPECTION</b>		<b>2</b>
1, 2	10/16/2017	10/20/2017	IP 7111111B	Licensed Operator Requalification Program	

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