



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I**  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

September 4, 2012

Mr. Michael J. Pacilio  
Senior Vice President, Exelon Generation Company, LLC  
President and Chief Nuclear Officer, Exelon Nuclear  
4300 Winfield Rd.  
Warrenville, IL 60555

**SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -  
LIMERICK GENERATING STATION  
(REPORT 05000352/2012006 and 05000353/2012006)**

Dear Mr. Pacilio:

On August 15, 2012, the U. S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of the Limerick Generating station Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2011 through June 30, 2012. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This assessment reflects the integration of the Security Cornerstone into the Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program."

The NRC determined the performance at Limerick Unit 1 during the most recent quarter 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 PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at Unit 1.

The NRC determined the performance at Limerick Unit 2 during the most recent quarter was within the Regulatory Response Column of the NRC's ROP Action Matrix because of a self-revealing finding of low to moderate safety significance (White) involving a failure by Exelon to ensure sufficient technical guidance was contained in operating procedures to: (1) ensure that a feedwater (FW) motor-operated valve (MOV) could close against expected system differential pressures; and (2) prevent operators from attempting to close FW MOVs out of sequence resulting in differential pressures for which they are not designed. As a result, two FW valves failed to fully shut resulting in a primary containment isolation valve and the reactor core isolation cooling system being inoperable for greater than their Technical Specification allowed outage time. This finding was assigned to the third quarter of 2011 (ML113410132).

On August 2, 2012, the NRC issued a supplemental inspection report and assessment follow-up letter (ML12215A272) documenting an inspection performed in accordance with Inspection Procedure (IP) 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," to review the performance of Limerick Unit 2 in addressing the White finding discussed above. The NRC concluded your actions met the objectives of IP 95001. Therefore, in accordance with the guidance in IMC 0305, the White finding will only be considered in

assessing plant performance for a total of four quarters. As a result, the NRC determined the performance at Limerick Unit 2 to be in the Licensee Response Column of the ROP Action Matrix beginning with the third calendar quarter of 2012.

The enclosed inspection plan lists the inspections scheduled through December 31, 2013. Routine inspections performed by resident inspectors are not included in the inspection plan. In addition to the baseline inspections, consistent with the Agency's actions related to Fukushima, the NRC will perform TI-187, "Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns" and TI-188, "Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns." We also plan to conduct independent spent fuel storage installation inspections (ISFSI) using Inspection Procedure 60855.1, "Operation of an ISFSI at Operating Plants," and an infrequently performed inspection using IP 92723, "Follow-Up Inspection for Three or More Severity Level IV Traditional Enforcement Violations in the Same Area in a 12-Month Period," to follow up on three traditional enforcement violations in the area of impeding the regulatory process that occurred between the 3<sup>rd</sup> quarter 2011 and the 2<sup>nd</sup> quarter 2012 (ML112550468, ML12128A373, and ML12215A272). The NRC will schedule and conduct IP 92723 when your staff has notified us of your readiness for this inspection. The inspections listed during the last nine months 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 accordance with 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 document 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 Paul Krohn at 610-337-5120 with any questions you have regarding this letter.

Sincerely,

/RA/

Darrell J. Roberts  
Division of Reactor Projects

Docket Nos. 50-532, 50-353  
License Nos. NPF-39, NPF-85

Enclosure: Limerick Generating Station Inspection/Activity Plan

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DOCUMENT NAME: S:\ROP-13 Mid-Cycle Review\Branch 4\Limerick\Limerick ROP13 Mid-Cycle Letter R1.docx  
ADAMS Accession No.: **ML12248A025**

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DATE	08/ 27 /12	08/27 /12	08/30 /12		

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**Limerick**  
**Inspection / Activity Plan**  
**07/01/2012 - 12/31/2013**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>10/08EXM - LIMERICK INITIAL OL EXAM</b>		<b>4</b>
1	09/10/2012	09/14/2012	U01858	FY13-LIMERICK INITIAL OPERATOR LICENSING EXAM	
1	10/08/2012	10/19/2012	U01858	FY13-LIMERICK INITIAL OPERATOR LICENSING EXAM	
			<b>HP - RADIATION SAFETY INSPECTIONS</b>		<b>1</b>
1,2	07/09/2012	07/13/2012	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	07/09/2012	07/13/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1,2	07/09/2012	07/13/2012	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			<b>TI-188 - SEISMIC WALKDOWNS</b>		<b>1</b>
1,2	07/30/2012	08/03/2012	IP 2515/188	Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns	
			<b>TI 182 - DEGRADATION UNDERGROUND PIPING - PHASE 1</b>		<b>1</b>
1,2	08/06/2012	08/10/2012	IP 2515/182	Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping	
			<b>TI-187 - TI-187 FLOODING WALKDOWNS</b>		<b>1</b>
1,2	08/03/2012	08/20/2012	IP 2515/187	Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns	
			<b>7111121 - CDBI</b>		<b>7</b>
1,2	08/27/2012	08/31/2012	IP 7111121	Component Design Bases Inspection	
1,2	09/10/2012	09/14/2012	IP 7111121	Component Design Bases Inspection	
1,2	09/24/2012	09/28/2012	IP 7111121	Component Design Bases Inspection	
			<b>7111111B - LIMERICK ON-SITE RQL INSP W/ P/F RESULTS</b>		<b>3</b>
1,2	11/05/2012	11/09/2012	IP 7111111B	Licensed Operator Requalification Program	
			<b>71152B - PI&amp;R</b>		<b>5</b>
1,2	10/22/2012	10/26/2012	IP 71152B	Problem Identification and Resolution	
1,2	11/05/2012	11/09/2012	IP 71152B	Problem Identification and Resolution	
			<b>HP - RADIATION SAFETY INSPECTIONS</b>		<b>1</b>
1,2	11/05/2012	11/09/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	11/05/2012	11/09/2012	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	11/05/2012	11/09/2012	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	11/05/2012	11/09/2012	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			<b>EP PROGR - EP PROGRAM INSPECTION</b>		<b>1</b>
1,2	12/03/2012	12/07/2012	IP 7111402	Alert and Notification System Testing	
1,2	12/03/2012	12/07/2012	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1,2	12/03/2012	12/07/2012	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	12/03/2012	12/07/2012	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
			<b>92723 - FOLLOWUP FOR 3 SLIV TE VIOS IN 12 MONTHS</b>		<b>1</b>
1,2	01/01/2013	03/31/2013	IP 92723	Follow Up Inspection for Three or More Severity Level IV Traditional Enforcement Violations in the S	

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

**Limerick**  
**Inspection / Activity Plan**  
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	Start	End			
			<b>7/15 EXM - LIMERICK LSRO INITIAL EXAM</b>		<b>2</b>
1	06/24/2013	06/28/2013	U01869	FY13-LIMERICK LSRO INITIAL OPERATOR LICENSING EXAM	
1	07/15/2013	07/19/2013	U01869	FY13-LIMERICK LSRO INITIAL OPERATOR LICENSING EXAM	
			<b>HP - RADIATION SAFETY INSPECTIONS</b>		<b>1</b>
1,2	03/04/2013	03/08/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	03/04/2013	03/08/2013	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	03/04/2013	03/08/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	03/04/2013	03/08/2013	IP 71124.04	Occupational Dose Assessment	
1,2	03/04/2013	03/08/2013	IP 71124.05	Radiation Monitoring Instrumentation	
			<b>60855 - ISFSI LOADING INSPECTION</b>		<b>2</b>
1,2	03/13/2013	06/30/2013	IP 60855	Operation Of An ISFSI	
1,2	03/13/2013	06/30/2013	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			<b>7111108G - U2 INSERVICE INSPECTION</b>		<b>1</b>
2	04/01/2013	04/05/2013	IP 7111108G	Inservice Inspection Activities - BWR	
			<b>HP - RADIATION SAFETY INSPECTIONS</b>		<b>1</b>
1,2	04/01/2013	04/05/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	04/01/2013	04/05/2013	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	04/01/2013	04/05/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	04/01/2013	04/05/2013	IP 71124.04	Occupational Dose Assessment	
1,2	04/01/2013	04/05/2013	IP 71124.05	Radiation Monitoring Instrumentation	
			<b>TRI FI - TRIENNIAL FIRE PROTECTION INSPECTION</b>		<b>4</b>
1,2	05/06/2013	05/10/2013	IP 7111105T	Fire Protection [Triennial]	
1,2	05/20/2013	05/24/2013	IP 7111105T	Fire Protection [Triennial]	
			<b>HP - RADIATION SAFETY INSPECTIONS</b>		<b>1</b>
1,2	07/08/2013	07/12/2013	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	07/08/2013	07/12/2013	IP 71124.07	Radiological Environmental Monitoring Program	
			<b>HP - RADIATION SAFETY INSPECTIONS</b>		<b>1</b>
1,2	11/04/2013	11/08/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	11/04/2013	11/08/2013	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	11/04/2013	11/08/2013	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			<b>TI 182 - DEGRAD IATION UNDERGROUND PIPING-PHASE 2</b>		<b>1</b>
1,2	11/12/2013	11/15/2013	IP 2515/182	Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping	
			<b>EP EX - EP EXERCISE EVALUATION</b>		<b>5</b>
1,2	11/18/2013	11/22/2013	IP 7111401	Exercise Evaluation	

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Limerick  
Inspection / Activity Plan  
07/01/2012 - 12/31/2013

Unit Number	Planned Dates Start End		Inspection Activity	Title	No. of Staff on Site
<b>EP EX - EP EXERCISE EVALUATION</b>					
1, 2	11/18/2013	11/22/2013	IP 7111404	Emergency Action Level and Emergency Plan Changes	5

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