



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION I  
2100 RENAISSANCE BLVD.  
KING OF PRUSSIA, PA 19406-2713

March 1, 2017

Mr. Bryan Hanson  
Senior Vice President, Exelon Generation Co., LLC  
President and Chief Nuclear Officer, Exelon Nuclear  
4300 Winfield Rd.  
Warrenville, IL 60555

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR LIMERICK GENERATING STATION  
UNITS 1 AND 2 – REPORT NOS. 05000352/2016006 AND 05000353/2016006**

Dear Mr. Hanson:

The U.S. Nuclear Regulatory Commission (NRC) has completed its end-of-cycle performance assessment of Limerick Generating Station (LGS) Units 1 and 2, reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2016 through December 31, 2016. 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 concluded that overall performance at your facility preserved public health and safety.

The NRC determined the performance at LGS Units 1 and 2 during the most recent quarter was within the Licensee Response Column, the highest performance category of the NRC's Reactor Oversight Process (ROP) Action Matrix, because all inspection findings had very low safety significance (i.e., Green), and all PIs were within the 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 31, 2018. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. Additionally, the NRC plans to conduct temporary instruction (TI) 192, Inspection of the Licensee's Interim Compensatory Measures Associated with the Open Phase Condition Design Vulnerabilities in Electric Power Systems. The inspections listed during the last twelve months of the inspection plan are tentative and may be revised. 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 the plan for security-related inspections, which will be sent via separate, non-publicly available correspondence.

B. Hanson

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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 document system (ADAMS). ADAMS is accessible from the NRC's Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at 610-337-5262 with any questions you have regarding this letter.

Sincerely,

**/RA/**

Daniel L. Schroeder, Chief  
Reactor Projects Branch 4  
Division of Reactor Projects

Docket Nos. 50-352 and 50-353  
License Nos. NPF-39 and NPF-85

Enclosure:  
Inspection/Activity Plan

SUBJECT: ANNUAL ASSESSMENT LETTER FOR LIMERICK GENERATING STATION  
 UNITS 1 AND 2 – (REPORT NOS. 05000352/2016006 AND 05000353/2016006)  
 DATED MARCH 1, 2017

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| <input checked="" type="checkbox"/> SUNSI Review |            | <input checked="" type="checkbox"/> Non-Sensitive<br><input type="checkbox"/> Sensitive |  | <input checked="" type="checkbox"/> Publicly Available<br><input type="checkbox"/> Non-Publicly Available |  |
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| DATE   | 2/24/17    | 2/24/17   |  |   |  |

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**Limerick**  
**Inspection / Activity Plan**  
**01/01/2017 - 12/31/2018**

| Unit Number | Planned Dates Start | Planned Dates End | Inspection Activity  | Title   | No. of Staff on Site |
|-------------|---------------------|-------------------|----------------------|---|----------------------|
|             |                     |                   | <b>2/6EXAM</b>       | <b>- LIMERICK INITIAL OL EXAM</b>                         | <b>4</b>             |
| 1           | 01/15/2017          | 01/19/2017        | U01940               | FY17-LIMERICK INITIAL OPERATOR LICENSING EXAM             |                      |
|             |                     |                   | <b>50.59</b>         | <b>- EVALS OF CHANGES, TESTS, &amp; EXPERIMENTS</b>       | <b>3</b>             |
| 1, 2        | 03/06/2017          | 03/10/2017        | IP 7111117T-5059scrm | screenings and/or applicability determinations            |                      |
|             |                     |                   | <b>HP</b>            | <b>- RADIATION SAFETY - CLOSEOUT 02,03,04,05</b>          | <b>1</b>             |
| 1, 2        | 03/13/2017          | 03/17/2017        | IP 71124.02          | Occupational ALARA Planning and Controls                  |                      |
| 1, 2        | 03/13/2017          | 03/17/2017        | IP 71124.03          | In-Plant Airborne Radioactivity Control and Mitigation    |                      |
| 1, 2        | 03/13/2017          | 03/17/2017        | IP 71124.04          | Occupational Dose Assessment                              |                      |
| 1, 2        | 03/13/2017          | 03/17/2017        | IP 71124.05          | Radiation Monitoring Instrumentation                      |                      |
|             |                     |                   | <b>7111108G</b>      | <b>- U2 INSERVICE INSPECTION</b>                          | <b>1</b>             |
| 2           | 04/24/2017          | 04/28/2017        | IP 7111108G          | Inservice Inspection Activities - BWR                     |                      |
|             |                     |                   | <b>HP</b>            | <b>- RADIATION SAFETY - RAD HAZARDS</b>                   | <b>1</b>             |
| 1, 2        | 04/24/2017          | 04/28/2017        | IP 71124.01          | Radiological Hazard Assessment and Exposure Controls      |                      |
|             |                     |                   | <b>12/17EXM</b>      | <b>- DECEMBER 2017 LIMERICK INITIAL EXAM</b>              | <b>4</b>             |
| 1           | 11/20/2017          | 11/24/2017        | U01956               | FY18-LIMERICK INITIAL OPERATOR LICENSING EXAM             |                      |
| 1           | 12/18/2017          | 12/22/2017        | U01956               | FY18-LIMERICK INITIAL OPERATOR LICENSING EXAM             |                      |
|             |                     |                   | <b>7111107T</b>      | <b>- TRIENNIAL HEAT SINK</b>                              | <b>1</b>             |
| 1, 2        | 07/17/2017          | 07/21/2017        | IP 7111107T          | Heat Sink Performance                                     |                      |
|             |                     |                   | <b>HP</b>            | <b>- RADIATION SAFETY - REMP</b>                          | <b>1</b>             |
| 1, 2        | 08/28/2017          | 09/01/2017        | IP 71124.07          | Radiological Environmental Monitoring Program             |                      |
|             |                     |                   | <b>7111111B</b>      | <b>- LIMERICK REQUAL INSP W/ P/F RESULTS</b>              | <b>2</b>             |
| 1, 2        | 10/23/2017          | 10/27/2017        | IP 7111111A          | Licensed Operator Requalification Program - Annual Review |                      |
| 1, 2        | 10/23/2017          | 10/27/2017        | IP 7111111B          | Licensed Operator Requalification Program                 |                      |
|             |                     |                   | <b>EP</b>            | <b>- EP EXERCISE EVALUATION</b>                           | <b>4</b>             |
| 1, 2        | 11/13/2017          | 11/17/2017        | IP 7111401           | Exercise Evaluation                                       |                      |
| 1, 2        | 11/13/2017          | 11/17/2017        | IP 71151             | Performance Indicator Verification                        |                      |
|             |                     |                   | <b>7111121N</b>      | <b>- EQ PROGRAM</b>                                       | <b>3</b>             |
| 1, 2        | 10/23/2017          | 10/27/2017        | IP 7111121N          | Component Design Bases Inspection (Programs)              |                      |
| 1, 2        | 11/06/2017          | 11/10/2017        | IP 7111121N          | Component Design Bases Inspection (Programs)              |                      |
|             |                     |                   | <b>HP</b>            | <b>- RADIATION SAFETY - RAD HAZ &amp; PIV</b>             | <b>1</b>             |
| 1, 2        | 12/04/2017          | 12/08/2017        | IP 71124.01          | Radiological Hazard Assessment and Exposure Controls      |                      |
| 1, 2        | 12/04/2017          | 12/08/2017        | IP 71151-OR01        | Occupational Exposure Control Effectiveness               |                      |
| 1, 2        | 12/04/2017          | 12/08/2017        | IP 71151-PR01        | RETS/ODCM Radiological Effluent Occurrences               |                      |

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

**Limerick**  
**Inspection / Activity Plan**  
 01/01/2017 - 12/31/2018

| Unit Number | Planned Dates Start | Planned Dates End | Inspection Activity  | Title   | No. of Staff on Site |
|-------------|---------------------|-------------------|--|---|----------------------|
|             |                     |                   | <b>71124.08 - RADWASTE</b>                                 |   | <b>1</b>             |
| 1, 2        | 01/08/2018          | 01/12/2018        | IP 71124.08  | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation |                      |
|             |                     |                   | <b>HP - RADIATION SAFETY - ALARA</b>                       |   | <b>1</b>             |
| 1, 2        | 02/05/2018          | 02/09/2018        | IP 71124.02  | Occupational ALARA Planning and Controls  |                      |
|             |                     |                   | <b>HP - RADIATION SAFETY - RAD HAZ</b>                     |   | <b>1</b>             |
| 1, 2        | 04/02/2018          | 04/06/2018        | IP 71124.01  | Radiological Hazard Assessment and Exposure Controls  |                      |
| 1, 2        | 04/02/2018          | 04/06/2018        | IP 71124.02  | Occupational ALARA Planning and Controls  |                      |
| 1, 2        | 04/02/2018          | 04/06/2018        | IP 71124.03  | In-Plant Airborne Radioactivity Control and Mitigation  |                      |
|             |                     |                   | <b>U1 ISI - UNIT 1 INSERVICE INSPECTION</b>                |   | <b>2</b>             |
| 1           | 04/02/2018          | 04/06/2018        | IP 7111108G  | Inservice Inspection Activities - BWR   |                      |
|             |                     |                   | <b>11/18EXM - NOVEMBER 18 LIMERICK INITIAL EXAM (FY19)</b> |   | <b>4</b>             |
| 1           | 10/22/2018          | 10/26/2018        | U01971   | FY19- LIMERICK INITIAL OPERATOR LICENSING EXAM  |                      |
| 1           | 11/19/2018          | 11/23/2018        | U01971   | FY19- LIMERICK INITIAL OPERATOR LICENSING EXAM  |                      |
|             |                     |                   | <b>HP - RADIATION SAFETY - AIRBORNE</b>                    |   | <b>1</b>             |
| 1, 2        | 05/14/2018          | 05/18/2018        | IP 71124.03  | In-Plant Airborne Radioactivity Control and Mitigation  |                      |
|             |                     |                   | <b>711121M - DESIGN BASES ASSURANCE INSPECTION (TEAM)</b>  |   | <b>6</b>             |
| 1, 2        | 06/11/2018          | 06/15/2018        | IP 7111121M  | Component Design Bases Inspection (Teams)   |                      |
| 1, 2        | 06/25/2018          | 06/29/2018        | IP 7111121M  | Component Design Bases Inspection (Teams)   |                      |
|             |                     |                   | <b>71152B - PI&amp;R BIENNIAL</b>                          |   | <b>1</b>             |
| 1, 2        | 10/15/2018          | 10/19/2018        | IP 71152B  | Problem Identification and Resolution   |                      |
| 1, 2        | 10/29/2018          | 11/02/2018        | IP 71152B  | Problem Identification and Resolution   |                      |
|             |                     |                   | <b>EP - EP PROGRAM INSPECTION</b>                          |   | <b>1</b>             |
| 1, 2        | 12/03/2018          | 12/07/2018        | IP 7111402   | Alert and Notification System Testing   |                      |
| 1, 2        | 12/03/2018          | 12/07/2018        | IP 7111403   | Emergency Preparedness Organization Staffing and Augmentation System                              |                      |
| 1, 2        | 12/03/2018          | 12/07/2018        | IP 7111405   | Correction of Emergency Preparedness Weaknesses and Deficiencies                                  |                      |
| 1, 2        | 12/03/2018          | 12/07/2018        | IP 71151   | Performance Indicator Verification  |                      |
|             |                     |                   | <b>HP - RADIATION SAFETY - DOSIMETRY &amp; PIV</b>         |   | <b>1</b>             |
| 1, 2        | 11/12/2018          | 11/16/2018        | IP 71124.04  | Occupational Dose Assessment  |                      |
| 1, 2        | 11/12/2018          | 11/16/2018        | IP 71151-OR01  | Occupational Exposure Control Effectiveness   |                      |
| 1, 2        | 11/12/2018          | 11/16/2018        | IP 71151-PR01  | RETS/ODCM Radiological Effluent Occurrences   |                      |

Comments:

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