



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

March 4, 2019

Mr. Bryan C. Hanson
Senior Vice President, Exelon Generation Company, 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 (REPORTS 05000352/2018006 AND 05000353/2018006)**

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, 2018, through December 31, 2018. 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 (Column 1) of the NRC's Reactor Oversight Process (ROP) Action Matrix in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program," 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, 2020. This updated inspection plan now includes planned security inspections which were formerly transmitted under separate correspondence. 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. The inspections listed during the last twelve months of the inspection plan are tentative and may be revised. You should be aware that the agency is pursuing potential changes to the ROP, including changes to engineering inspections (SECY-18-0113, "Recommendations for Modifying the Reactor Oversight Process Engineering Inspections"). Should these changes to the ROP be implemented, the engineering and other region-based inspections are subject to change in scope, as well as schedule, beginning in January 2020. Furthermore, all 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.

In addition to baseline inspections, the NRC will also conduct Temporary Instruction 2515/191, "Inspection of Licensee's Responses to Order EA-12-049, EA-12-051, and Emergency Preparedness Info Request," in June 2019; Inspection Procedure 60855.1, "Operation of an ISFSI at Operating Plant," in July 2019; and Inspection Procedure 37060, "10 CFR 50.69 Risk-

Informed Categorization and Treatment of Structures, Systems, and Components Inspection.” A date for conduct of the last inspection has not been identified, and NRC staff will coordinate with your staff to identify a mutually agreeable time.

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’s 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) 337-5337 with any questions you have regarding this letter.

Sincerely,

/RA/

Jonathan E. Greives, 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 Plan

cc w/encl: Distribution via ListServ

SUBJECT: ANNUAL ASSESSMENT LETTER FOR LIMERICK GENERATING STATION,
 UNITS 1 AND 2 (REPORTS 05000352/2018006 AND 05000353/2018006)
 DATED MARCH 4, 2019

DISTRIBUTION: (via email)

- DLew, RA (R1ORAMAIL Resource)
- RLorson, DRA (R1ORAMAIL Resource)
- DCollins, DRP (R1DRPMAIL Resource)
- DPelton, DRP (R1DRPMAIL Resource)
- JYerokun, DRS (R1DRSMAIL Resource)
- BWelling, DRS (R1DRSMAIL Resource)
- JGreives, DRP
- GCroon, DRP
- MRossi, DRP
- SRutenkroger, DRP, SRI
- MFannon, DRP, RI
- NEsch, DRP, AA
- MMcCoppin, RI OEDO
- RidsNrrPMLimerick Resource
- RidsNrrDorLpl1 Resource
- ROPreports Resource
- DRS Branch Chiefs (4)
- DTiff, SLO
- CGordon, SLO
- DScrenci, PAO
- NSheehan, PAO
- RidsNrrDirslpab Resource
- ROPassessment Resource

DOCUMENT NAME: S:\ROP Assessment Meetings\ROP-19 EOC Review\Branch 4\Limerick 2018 Annual Assessment- final.docx
 ADAMS ACCESSION NUMBER: **ML19060A178**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive Sensitive		<input checked="" type="checkbox"/> Publicly Available Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP			
NAME	GCroon via email	JGreives			
DATE	2/28/19	3/4/19			

OFFICIAL RECORD COPY

IP 22 Inspection Activity Plan Report

Limerick

01/01/2019 - 12/31/2020

Unit	Start	End	Activity	CAC	Title	Staff Count
TRIENNIAL FIRE PROTECTION						4
1, 2	01/28/2019	02/01/2019	IP 71111.05T	000696	Fire Protection (Triennial)	
1, 2	02/11/2019	02/15/2019	IP 71111.05T	000696	Fire Protection (Triennial)	
RADIATION SAFETY - INSTRUMENTS						1
1, 2	01/28/2019	02/01/2019	IP 71124.05	000729	Radiation Monitoring Instrumentation	
INSERVICE INSPECTION - UNIT 2						1
2	04/21/2019	04/27/2019	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
RADIATION SAFETY RAD HAZ						1
1, 2	04/22/2019	04/26/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	04/22/2019	04/26/2019	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	04/22/2019	04/26/2019	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
TI-191 FUKUSHIMA LESSONS-LEARNED						1
1, 2	06/10/2019	06/14/2019	TI 2515/191	000509	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
ISFSI OPERATIONAL INSPECTION						2
1, 2	07/08/2019	07/12/2019	IP 60855.1	000590	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
ACCESS CONTROL, EQUIP PERF, TRAINING						3
1, 2	07/08/2019	07/12/2019	IP 71130.02	000734	Access Control	
1, 2	07/08/2019	07/12/2019	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1, 2	07/08/2019	07/12/2019	IP 71130.07	000739	Security Training	
1, 2	07/08/2019	07/12/2019	IP 71151	001338	Performance Indicator Verification	
Material Control and Accountability						1
1, 2	08/18/2019	08/24/2019	IP 71130.11	000742	Material Control and Accounting (MC&A)	
RADIATION SAFETY - REMP						1
1, 2	09/09/2019	09/13/2019	IP 71124.07	000731	Radiological Environmental Monitoring Program	
DECEMBER 2019 LIMERICK INITIAL EXM FY20						4
1, 2	09/22/2019	09/27/2019	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	12/01/2019	12/06/2019	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	

This report does not include INPO and OUTAGE activities.

This report shows only on-site and announced inspection procedures.

IP 22 Inspection Activity Plan Report

Limerick

01/01/2019 - 12/31/2020

Unit	Start	End	Activity	CAC	Title	Staff Count
LIMERICK REQUAL INSP W/ P/F RESULTS						2
1, 2	10/20/2019	10/25/2019	IP 71111.11A	000703	Licensed Operator Requalification Program and Licensed Operator Performance (Annual)	
1, 2	10/20/2019	10/25/2019	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance (Biennial)	
EP EXERCISE INSPECTION						5
1, 2	11/18/2019	11/22/2019	IP 71114.01	000716	Exercise Evaluation	
1, 2	11/18/2019	11/22/2019	IP 71151	001397	Performance Indicator Verification	
Radiation Safety - RETS & PIV						1
1, 2	12/09/2019	12/13/2019	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	12/09/2019	12/13/2019	IP 71151	000746	Performance Indicator Verification	
Radwaste						1
1, 2	01/06/2020	01/10/2020	IP 71124.08	000732	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
Access Authorization and Fitness for Duty						3
1, 2	01/06/2020	01/10/2020	IP 71130.01	000733	Access Authorization	
1, 2	01/06/2020	01/10/2020	IP 71130.08	000740	Fitness For Duty Program	
Radiation Safety - ALARA						1
1, 2	01/27/2020	01/31/2020	IP 71124.02	000726	Occupational ALARA Planning and Controls	
CYBER FULL IMP						4
1, 2	01/27/2020	01/31/2020	IP 71130.10P	000741	Cyber Security	
1, 2	02/10/2020	02/14/2020	IP 71130.10P	000741	Cyber Security	
Radiation Safety - Rad Haz						1
1, 2	03/30/2020	04/03/2020	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1, 2	03/30/2020	04/03/2020	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1, 2	03/30/2020	04/03/2020	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
ISI - UNIT 1						1
1	04/06/2020	04/10/2020	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	

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

IP 22 Inspection Activity Plan Report

Limerick

01/01/2019 - 12/31/2020

Unit	Start	End	Activity	CAC	Title	Staff Count
PI&R Biennial Team Inspection						4
1, 2	06/08/2020	06/12/2020	IP 71152B	000747	Problem Identification and Resolution	
1, 2	06/22/2020	06/26/2020	IP 71152B	000747	Problem Identification and Resolution	
50.59 INSPECTION						3
1, 2	07/20/2020	07/24/2020	IP 71111.17T	000709	Evaluations of Changes, Tests, and Experiments	
LIMERICK EP PROGRAM INSPECTION						1
1, 2	09/07/2020	09/11/2020	IP 71114.02	000717	Alert and Notification System Testing	
1, 2	09/07/2020	09/11/2020	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1, 2	09/07/2020	09/11/2020	IP 71114.05	000720	Maintenance of Emergency Preparedness	
1, 2	09/07/2020	09/11/2020	IP 71151	001397	Performance Indicator Verification	
PROGRAM INSPECTION						3
1, 2	09/14/2020	09/18/2020	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
1, 2	09/28/2020	10/02/2020	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
Radiation Safety - Airborne						1
1, 2	09/14/2020	09/18/2020	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
Access Control, Protective Strategy, TSR						4
1, 2	10/05/2020	10/09/2020	IP 71130.02	000734	Access Control	
1, 2	10/05/2020	10/09/2020	IP 71130.05	000737	Protective Strategy Evaluation	
1, 2	10/05/2020	10/09/2020	IP 71130.14	000743	Review of Power Reactor Target Sets	
1, 2	10/05/2020	10/09/2020	IP 71151	001338	Performance Indicator Verification	
FY21 LIMERICK INITIAL OL EXAM						4
1	11/08/2020	11/13/2020	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1	12/06/2020	12/11/2020	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
TRIENNIAL HEAT SINK						1
1, 2	11/16/2020	11/20/2020	IP 71111.07T	000700	Heat Sink Performance -Triennial	
Radiation Safety - Dose & PIV						1
1, 2	12/14/2020	12/18/2020	IP 71124.04	000728	Occupational Dose Assessment	
1, 2	12/14/2020	12/18/2020	IP 71151	000746	Performance Indicator Verification	

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