



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

March 3, 2020

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 (REPORT 05000352/2019006 AND 05000353/2019006)

Dear Mr. Hanson:

The 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, 2019 through December 31, 2019. 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, 2021. 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. 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") and other changes to the baseline inspection program described in SECY-19-0067, "Recommendations for Enhancing the Reactor Oversight Process." 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. 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 Inspection Procedure (IP) 37060, "10 CFR 50.69 Risk-Informed Categorization and Treatment of Structures, Systems, and Components Inspection," in February 2020; Temporary Instruction (TI) 2515/193, "Hardened Containment Vent," in June 2020; IP 60854.1, "Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants," in August 2021; and IP 60855.1, "Operation of an Independent Spent Fuel Storage Installation at Operating Plants," in September 2021. Lastly, during calendar year 2020, the NRC will schedule an additional inspection per a revised version of TI 2515/194, "Inspection of the Licensee's Implementation of Industry Initiative Associated with the Open Phase Condition Design Vulnerability in Electrical Power Systems (NRC Bulletin 2012-01)," for any sites who elect to implement the guidance of the Industry Initiative on Open Phase Condition, Revision 3 (ML19163A176). Licensees will be individually notified when the NRC schedules these inspections.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Please contact me at (610) 337-5337 with any questions you have regarding this letter.

Sincerely,

X /RA/

Signed by: Jonathan E. Greives
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/Activity Plan

cc w/ encl: Distribution via LISTSERV®

SUBJECT: ANNUAL ASSESSMENT LETTER FOR LIMERICK GENERATING STATION,
UNITS 1 AND 2 (REPORT 05000352/2019006 AND 05000353/2019006) DATED
MARCH 3, 2020

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IP 22 Inspection Activity Plan Report

Limerick

01/01/2020 - 12/31/2021

Unit	Start	End	Activity	CAC	Title	Staff Count
Access Authorization and Fitness for Duty-LM						2
1, 2	01/06/2020	01/08/2020	IP 71130.01	000733	Access Authorization	
1, 2	01/06/2020	01/08/2020	IP 71130.08	000740	Fitness For Duty Program	
CYBER FULL IMP						4
1, 2	01/13/2020	01/17/2020	IP 71130.10P	000741	Cyber Security	
1, 2	01/27/2020	01/31/2020	IP 71130.10P	000741	Cyber Security	
Radiation Safety - Radwaste						1
1, 2	01/27/2020	01/31/2020	IP 71124.08	000732	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
10 CFR 50.69 Implementation Inspection						4
1, 2	02/10/2020	02/14/2020	IP 37060	000521	10 CFR 50.69 Risk-Informed Categorization and Treatment of Structures, Systems, and Components Inspection	
1, 2	02/24/2020	02/28/2020	IP 37060	000521	10 CFR 50.69 Risk-Informed Categorization and Treatment of Structures, Systems, and Components Inspection	
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)	
Radiation Safety - ALARA						1
1, 2	05/04/2020	05/08/2020	IP 71124.02	000726	Occupational ALARA Planning and Controls	
TI-193 Hardened Containment Vent						2
1, 2	06/01/2020	06/05/2020	TI 2515/193	000511	Inspection of the Implementation of EA-13-109: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions	
PI&R Biennial Team Inspection - LM						4
1, 2	06/08/2020	06/12/2020	IP 71152B	000747	Problem Identification and Resolution	

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

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PI&R Biennial Team Inspection - LM						4
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	
EP PROGRAM INSPECTION - LIMERICK						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 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
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	
Design Basis Assurance Inspection - Programs - Power Operated Valves - Limerick Units 1 and 2						3
1, 2	09/14/2020	09/18/2020	IP 71111.21N.02	001645	Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements	
1, 2	09/21/2020	09/25/2020	IP 71111.21N.02	001645	Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements	
1, 2	09/28/2020	10/02/2020	IP 71111.21N.02	001645	Design-Basis Capability of Power-Operated Valves Under 10 CFR 50.55a Requirements	
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-LM						4
1, 2	09/22/2020	10/09/2020	IP 71130.14	000743	Review of Power Reactor Target Sets	
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 71130.09	001656	Security Plan Changes	
1, 2	10/05/2020	10/09/2020	IP 71151	001338	Performance Indicator Verification	
TRIENNIAL HEAT SINK						1
1, 2	11/16/2020	11/20/2020	IP 71111.07T	000700	Heat Sink Performance	
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	
DESIGN BASIS ASSURANCE INSPECTION - TEAM						6
1, 2	01/24/2021	01/30/2021	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	

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DESIGN BASIS ASSURANCE INSPECTION - TEAM						6
1, 2	02/07/2021	02/13/2021	IP 71111.21M	000713	Design Bases Assurance Inspection (Teams)	
Radiation Safety - Instruments						1
1, 2	02/15/2021	02/19/2021	IP 71124.05	000729	Radiation Monitoring Instrumentation	
INSERVICE INSPECTION - UNIT 2						1
2	05/02/2021	05/08/2021	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
Radiation Safety - Rad Hazards						1
1, 2	05/03/2021	05/07/2021	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
FY21 Limerick Initial Examination						3
1, 2	06/13/2021	06/20/2021	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	07/11/2021	07/24/2021	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
FORCE-ON-FORCE PLANNING & EXERCISE WEEKS - LIM						6
1, 2	08/09/2021	08/13/2021	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
1, 2	08/30/2021	09/03/2021	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
ISFSI Dry Run & Operational Inspection - LM						3
1, 2	08/16/2021	08/20/2021	IP 60854.1	000589	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	
1, 2	08/30/2021	09/03/2021	IP 60854.1	000589	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	
1, 2	09/06/2021	09/10/2021	IP 60855.1	000590	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
Radiation Safety - REMP						1
1, 2	10/04/2021	10/08/2021	IP 71124.07	000731	Radiological Environmental Monitoring Program	
Limerick Requal Inspection with P/F Results						2
1, 2	10/18/2021	10/22/2021	IP 71111.11A	000703	Licensed Operator Requalification Program and Licensed Operator Performance	
1, 2	10/18/2021	10/22/2021	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance	
EP Exercise Inspection - Limerick						5
1, 2	11/15/2021	11/19/2021	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1, 2	11/15/2021	11/19/2021	IP 71114.07	000722	Exercise Evaluation - Hostile Action (HA) Event	

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Limerick

01/01/2020 - 12/31/2021

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EP Exercise Inspection - Limerick						5
1, 2	11/15/2021	11/19/2021	IP 71151	001397	Performance Indicator Verification	
Radiation Safety - RETS & PIV						1
1, 2	11/15/2021	11/19/2021	IP 71124.06	000730	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	11/15/2021	11/19/2021	IP 71151	000746	Performance Indicator Verification	
Access Control, Equipment Testing and Maintenance, Training, SPR						3
1, 2	11/29/2021	12/03/2021	IP 71130.02	000734	Access Control	
1, 2	11/29/2021	12/03/2021	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1, 2	11/29/2021	12/03/2021	IP 71130.07	000739	Security Training	
1, 2	11/29/2021	12/03/2021	IP 71130.09	001656	Security Plan Changes	
1, 2	11/29/2021	12/03/2021	IP 71151	001338	Performance Indicator Verification	