



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

March 2, 2022

Mr. David P. Rhoades  
Senior Vice President  
Constellation Energy Generation, LLC  
President and Chief Nuclear Officer (CNO)  
Constellation Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: ANNUAL ASSESSMENT LETTER FOR LIMERICK GENERATING STATION,  
UNITS 1 AND 2 (REPORTS 05000352/2021006 AND 05000353/2021006)

Dear Mr. Rhoades:

The U.S. Nuclear Regulatory Commission (NRC) has completed its end-of-cycle performance assessment of Limerick Generating Station, Units 1 and 2, reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2021 through December 31, 2021. 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 baseline inspection program was completed at your facility as defined in Inspection Manual Chapter 2515, "Light-Water Reactor Inspection Program - Operations Phase." All NRC inspections that occurred at your facility in 2021 were performed while the operating license was held by Exelon Generation Company, LLC. On February 1, 2022, the operating license was transferred to Constellation Energy Generation, LLC (Constellation), as documented in a license amendment (ADAMS Accession No. ML22021B660). As such, this letter and future communications regarding your facility will be addressed to and refer to the licensee as Constellation.

The NRC determined the performance at Limerick Generating Station, 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 Limerick Generating Station, Units 1 and 2.

In addition to baseline inspections, the NRC will conduct Inspection Procedure (IP) 71003, "Post-Approval Site Inspection for License Renewal," for Unit 1 in April 2022. The NRC will also be performing a baseline inspection of your modification of instrumentation and control systems to digital in accordance with IP 52003, "Digital Instrumentation and Control Modification Inspection". The specific schedule to be used for this inspection is being developed by NRC staff to coincide with specific milestones and activities in your project plan. The start of this inspection is not expected to occur until 2023 and NRC staff will communicate the specific schedule with you as it is identified.

In addition, IP 71111.21N.03 is included in the inspection plan as a placeholder for your next Design Basis Assurance Inspection (Programs), which will be focused on Commercial Grade Dedication. The IP will be developed and made publicly available before these inspections begin.

The enclosed inspection plan lists the inspections scheduled through December 31, 2023. 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. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In response to the COVID-19 public health emergency (PHE), the NRC adjusted inspection plans and schedules in order to safeguard the health and safety of both NRC and licensee staff while still effectively implementing the ROP. While the PHE continues, overall conditions throughout the country support performance of our inspection and oversight activities to return to normal onsite presence by our resident and region-based inspectors and completion of nominal baseline inspection samples. We continue to monitor site-specific conditions and as discussed in our November 2, 2021 memo, "Implementation of Inspection Programs Following Re-Entry from the Public Health Emergency for the Reactor Safety Program" (ADAMS Accession No. ML21295A302), it may be necessary to alter how and when we perform our inspection and oversight activities as we balance the importance of protecting the health and safety of our staff with the need to conduct effective oversight that supports the NRC's critical safety mission.

For inspections requiring extensive coordination with offsite organizations, such as evaluated emergency preparedness exercises, NRC guidance and frequently asked questions for security and emergency preparedness can be found here: <https://www.nrc.gov/about-nrc/covid-19/security-ep/>. Similarly, the NRC has developed guidance if force-on-force inspections cannot be completed as scheduled due to an emergency, such as the COVID-19 PHE. These changes help ensure the health and safety of both NRC and licensee staff while maintaining the NRC's important safety and security mission during the COVID-19 PHE. The attached inspection plan is accurate on the date of issuance but remains subject to change based on approval of potential exemption requests or other changes needed due to changing conditions in the COVID-19 PHE. NRC staff will contact your appropriate regulatory affairs staff in order to coordinate inspection planning and scheduling.

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,

Jonathan E. Greives, Chief  
Projects Branch 4  
Division of Operating Reactor Safety

Docket Nos. 05000352 and 05000353  
License Nos. NPF-39 and NPF-85

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: ANNUAL ASSESSMENT LETTER FOR LIMERICK GENERATING STATION,  
UNITS 1 AND 2 (REPORTS 05000352/2021006 AND 05000353/2021006)  
DATED MARCH 2, 2022

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DOCUMENT NAME: <https://usnrc.sharepoint.com/teams/ROPAssessmentMeetings/Shared Documents/ROP-22 EOC Review/Branch 4/Limerick/Limerick 2021 Annual Assessment Letter.docx>

**ADAMS ACCESSION NUMBER: ML22059A037**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RI/DORS	RI/DORS			
NAME	LCasey	JGreives			
DATE	2/25/22	2/28/22			

OFFICIAL RECORD COPY

# Site Inspection Activity Plan

## Limerick

01/01/2022 - 12/31/2023

Unit	Start	End	Activity	CAC	Title	Staff Count
<b>Access Control, Equipment Testing and Maintenance, Training, SPR</b>						3
1, 2	1/17/2022	1/21/2022	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
<b>PI&amp;R BIENNIAL TEAM INSPECTION - LM</b>						4
1, 2	1/31/2022	2/4/2022	IP 71152B	000747	Problem Identification and Resolution	
1, 2	2/14/2022	2/18/2022	IP 71152B	000747	Problem Identification and Resolution	
<b>Rad Safety - 71124.08 Radwaste</b>						1
1, 2	3/7/2022	3/11/2022	IP 71124.08	000732	Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation	
<b>Rad Safety - 71124.01 Rad Hazards</b>						1
1, 2	4/4/2022	4/8/2022	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
<b>License Renewal Phase 1 - Limerick Unit 1</b>						1
1	4/11/2022	4/15/2022	IP 71003	000687	Post-Approval Site Inspection for License Renewal	
<b>Inservice Inspection - Limerick Unit 1</b>						1
1	4/11/2022	4/15/2022	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
<b>Fire Protection - Limerick</b>						3
1, 2	6/6/2022	6/10/2022	IP 71111.21N.05	001646	Fire Protection Team Inspection (FPTI)	
1, 2	6/20/2022	6/24/2022	IP 71111.21N.05	001646	Fire Protection Team Inspection (FPTI)	
<b>Material Control and Accountability - Limerick Units 1 and 2</b>						1
1, 2	6/27/2022	7/1/2022	IP 71130.11	000742	Material Control and Accounting (MC&A)	
<b>EP PROGRAM INSPECTION - LIMERICK</b>						1
1, 2	9/19/2022	9/23/2022	IP 71114.02	000717	Alert and Notification System Testing	
1, 2	9/19/2022	9/23/2022	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1, 2	9/19/2022	9/23/2022	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1, 2	9/19/2022	9/23/2022	IP 71114.05	000720	Maintenance of Emergency Preparedness	
1, 2	9/19/2022	9/23/2022	IP 71151	001397	Performance Indicator Verification	
<b>Rad Safety - Airborne, Dosimetry, &amp; PIV</b>						1
1, 2	10/3/2022	10/7/2022	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	10/3/2022	10/7/2022	IP 71124.04	000728	Occupational Dose Assessment	
<b>Access Control. Equip Perf, Sec Trng, SPR, PI-LIM</b>						3
1, 2	10/3/2022	10/7/2022	IP 71130.02	000734	Access Control	
1, 2	10/3/2022	10/7/2022	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1, 2	10/3/2022	10/7/2022	IP 71130.07	000739	Security Training	
1, 2	10/3/2022	10/7/2022	IP 71130.09	001656	Security Plan Changes	

# Site Inspection Activity Plan

1, 2	10/3/2022	10/7/2022	IP 71151	001338	Performance Indicator Verification	
<b>Rad Safety - 71124.07 REMP</b>						1
1, 2	11/7/2022	11/11/2022	IP 71124.07	000731	Radiological Environmental Monitoring Program	
<b>Limerick Requal Phone Feeder</b>						1
1, 2	11/21/2022	11/25/2022	IP 71111.11A	000703	Licensed Operator Requalification Program and Licensed Operator Performance	
<b>FY23 - Limerick Initial Licensing Examination</b>						4
1, 2	10/30/2022	11/4/2022	OV	000956	FB-OR-ONSITE VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	12/4/2022	12/16/2022	EXAD	000500	FB-OR-INITIAL LICENSE EXAM ADMINISTRATION (EXAD)	
<b>Access Control, AA, FFD, Sec Plan Review, PI-LIM</b>						3
1, 2	1/23/2023	1/27/2023	IP 71130.01	000733	Access Authorization	
1, 2	1/23/2023	1/27/2023	IP 71130.02	000734	Access Control	
1, 2	1/23/2023	1/27/2023	IP 71130.08	000740	Fitness For Duty Program	
1, 2	1/23/2023	1/27/2023	IP 71130.09	001656	Security Plan Changes	
1, 2	1/23/2023	1/27/2023	IP 71151	001338	Performance Indicator Verification	
<b>50.59 Team Inspection - Limerick Units 1 and 2</b>						3
1, 2	2/6/2023	2/10/2023	IP 71111.17T	000709	Evaluations of Changes, Tests, and Experiments	
<b>Rad Safety - 71124.05 Instruments</b>						1
1, 2	3/20/2023	3/24/2023	IP 71124.05	000729	Radiation Monitoring Instrumentation	
<b>Inservice Inspection - Limerick 2R17</b>						1
2	5/8/2023	5/12/2023	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
<b>Rad Safety - 71124.01 Rad Hazards</b>						1
1, 2	5/8/2023	5/12/2023	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
<b>ISFSI Loading Campaign Inspection (60855) - LM</b>						1
1, 2	8/21/2023	8/25/2023	IP 60855	001001	Operation Of An ISFSI	
<b>Design Bases Assurance Inspection - Programs - Commercial Grade Dedication - Limerick Units 1 and 2</b>						3
1, 2	9/11/2023	9/29/2023	IP 71111.21N.03		Design Bases Assurance Inspections (Programs) 2023 (Commercial Grade Dedication)	
<b>Limerick Requal Inspection with P/F Results</b>						2
1, 2	10/15/2023	10/20/2023	IP 71111.11A	000703	Licensed Operator Requalification Program and Licensed Operator Performance	
1, 2	10/15/2023	10/20/2023	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance	
<b>EP EXERCISE INSPECTION - LIMERICK</b>						5
1, 2	11/13/2023	11/17/2023	IP 71114.07	000722	Exercise Evaluation - Hostile Action (HA) Event	
1, 2	11/13/2023	11/17/2023	IP 71151	001397	Performance Indicator Verification	
<b>Heat Sink Inspection - Limerick</b>						1

# Site Inspection Activity Plan

1, 2	11/27/2023	12/1/2023	IP 71111.07T	000700	Heat Sink Performance	
<b>FY24 Limerick Initial License Exam</b>						4
1, 2	11/12/2023	11/17/2023	OV	000956	FB-OR-ONSITE VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1, 2	12/3/2023	12/8/2023	EXAD	000500	FB-OR-INITIAL LICENSE EXAM ADMINISTRATION (EXAD)	
<b>Cyber Security - Limerick</b>						4
1, 2	12/4/2023	12/8/2023	IP 71130.10	000741	Cybersecurity	