



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

March 2, 2022

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

SUBJECT: ANNUAL ASSESSMENT LETTER FOR QUAD CITIES NUCLEAR POWER
STATION, UNITS 1 AND 2 (REPORT 05000254/2021006 AND
05000265/2021006)

Dear Mr. Rhoades:

The NRC has completed its end-of-cycle performance assessment of Quad Cities, 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."

The NRC determined the performance at Quad Cities, 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, 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” (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.

The NRC plans to perform Inspection Procedure (IP) 71003, “Post-Approval Site Inspection for License Renewal,” at your facility.

All of the NRC inspections that occurred at your facility in 2021 were performed while the operating license was held by Exelon Generation Company, LLC. However, on February 1, 2022, the operating license was transferred to Constellation Energy Generation, LLC (Constellation), as documented in a license amendment (ML22021B660). As such, this letter, and future communications regarding your facility will be addressed to and refer to the licensee as Constellation.

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 Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at 630-829-9628 with any questions you have regarding this letter.

Sincerely,

/RA/

Kenneth Riemer, Chief
Branch 1
Division of Reactor Projects

Docket Nos. 05000254, 05000265, and
07200053
License Nos. DPR-29; DPR-30

Enclosure:
Inspection Plan

cc: Distribution via LISTSERV®

Letter to David Rhoades from Kenneth Riemer dated March 2, 2022.

SUBJECT: ANNUAL ASSESSMENT LETTER FOR QUAD CITIES NUCLEAR POWER
STATION, UNITS 1 AND 2 (REPORT 05000254/2021006 AND
05000265/2021006)

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|--------|-----------|--|----------|--|--|--|--|
| OFFICE | RIII | | RIII | | | | |
| NAME | NShah:ve | | KRiemer | | | | |
| DATE | 2/24/2022 | | 3/1/2022 | | | | |

OFFICIAL RECORD COPY

Site Inspection Activity Plan

07200053 - Quad Cities (ISFSI)

01/01/2022 - 12/31/2023

| Unit | Start | End | Activity | CAC | Title | Staff Count |
|---------------------------|-----------|-----------|----------|--------|---|-------------|
| ISFSI Security Inspection | | | | | | 1 |
| | 4/24/2023 | 4/28/2023 | IP 81311 | 001006 | Physical Security Requirements for Independent Spent Fuel Storage Installations | |

Site Inspection Activity Plan

Quad Cities

01/01/2022 - 12/31/2023

| Unit | Start | End | Activity | CAC | Title | Staff Count |
|--|------------|------------|-----------------|--------|---|-------------|
| URI Closure -Inservice Inspection Quad Cities Unit 1 | | | | | | 1 |
| 1 | 1/3/2022 | 3/4/2022 | IP 71111.08G | 000701 | Inservice Inspection Activities (BWR) | |
| 1 | 3/6/2022 | 3/31/2022 | IP 71111.08G | 000701 | Inservice Inspection Activities (BWR) | |
| Inservice Inspection Quad Cities Unit 2 | | | | | | 1 |
| 2 | 3/21/2022 | 4/1/2022 | IP 71111.08G | 000701 | Inservice Inspection Activities (BWR) | |
| RP Baseline Inspection | | | | | | 1 |
| 1 | 3/28/2022 | 4/1/2022 | IP 71124.01 | 000725 | Radiological Hazard Assessment and Exposure Controls | |
| 1 | 3/28/2022 | 4/1/2022 | IP 71124.03 | 000727 | In-Plant Airborne Radioactivity Control and Mitigation | |
| Evaluations of Changes, Test, and Experiments Inspection | | | | | | 3 |
| 1,2 | 5/23/2022 | 5/27/2022 | IP 71111.17T | 000709 | Evaluations of Changes, Tests, and Experiments | |
| RP Baseline Inspection | | | | | | 1 |
| 1 | 6/6/2022 | 6/10/2022 | IP 71124.06 | 000730 | Radioactive Gaseous and Liquid Effluent Treatment | |
| 1 | 6/6/2022 | 6/10/2022 | IP 71151 | 000746 | Performance Indicator Verification | |
| Emergency Preparedness Exercise Inspection / Performance Indicator Verification | | | | | | 4 |
| 1,2 | 7/11/2022 | 7/15/2022 | IP 71114.01 | 000716 | Exercise Evaluation | |
| 1,2 | 7/11/2022 | 7/15/2022 | IP 71151 | 001397 | Performance Indicator Verification | |
| Security Baseline Inspection | | | | | | 2 |
| 1,2 | 7/18/2022 | 7/22/2022 | IP 71130.02 | 000734 | Access Control | |
| 1,2 | 7/18/2022 | 7/22/2022 | IP 71130.05 | 000737 | Protective Strategy Evaluation | |
| 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 71130.09 | 001656 | Security Plan Changes | |
| 1,2 | 10/3/2022 | 10/7/2022 | IP 71151 | 001338 | Performance Indicator Verification | |
| RP Baseline Inspection | | | | | | 1 |
| 1 | 9/19/2022 | 9/23/2022 | IP 71124.05 | 000729 | Radiation Monitoring Instrumentation | |
| Biennial Problem Identification and Resolution Inspection | | | | | | 4 |
| 1,2 | 9/19/2022 | 10/7/2022 | IP 71152B | 000747 | Problem Identification and Resolution | |
| License Renewal Phase 4 | | | | | | 4 |
| 1,2 | 11/14/2022 | 11/18/2022 | IP 71003 | 000687 | Post-Approval Site Inspection for License Renewal | |
| Triennial Fire Protection | | | | | | 3 |
| 1,2 | 11/28/2022 | 12/16/2022 | IP 71111.21N.05 | 001646 | Fire Protection Team Inspection (FPTI) | |
| Quad Cities January 2023 Initial License Exam | | | | | | 4 |
| 1,2 | 1/2/2023 | 1/7/2023 | OV | 000956 | FB-OR-ONSITE VALIDATION OF INITIAL LICENSE EXAMINATION (OV) | |
| 1,2 | 1/29/2023 | 2/4/2023 | EXAD | 000500 | FB-OR-INITIAL LICENSE EXAM ADMINISTRATION (EXAD) | |

Site Inspection Activity Plan

| | | | | | | |
|---|------------|------------|--------------|--------|---|---|
| 1,2 | 2/5/2023 | 2/10/2023 | EXAD | 000500 | FB-OR-INITIAL LICENSE EXAM ADMINISTRATION (EXAD) | |
| Corporate Security Baseline Inspection | | | | | | 3 |
| 1,2 | 1/23/2023 | 1/27/2023 | IP 71130.08 | 000740 | Fitness For Duty Program | |
| Security Baseline Inspection | | | | | | 1 |
| 1,2 | 2/27/2023 | 3/3/2023 | IP 71130.02 | 000734 | Access Control | |
| 1,2 | 2/27/2023 | 3/3/2023 | IP 71130.08 | 000740 | Fitness For Duty Program | |
| 1,2 | 3/27/2023 | 3/31/2023 | IP 71130.07 | 000739 | Security Training | |
| 1,2 | 4/24/2023 | 4/28/2023 | IP 71130.09 | 001656 | Security Plan Changes | |
| 1,2 | 4/24/2023 | 4/28/2023 | IP 71151 | 001338 | Performance Indicator Verification | |
| Unit 1 Inservice Inspection | | | | | | 1 |
| 1 | 3/27/2023 | 4/14/2023 | IP 71111.08G | 000701 | Inservice Inspection Activities (BWR) | |
| Radiation Protection Baseline Inspection | | | | | | 1 |
| 1,2 | 4/3/2023 | 4/7/2023 | IP 71124.01 | 000725 | Radiological Hazard Assessment and Exposure Controls | |
| Cyber Security Inspection | | | | | | 4 |
| 1,2 | 5/15/2023 | 5/19/2023 | IP 71130.10 | 000741 | Cybersecurity | |
| Radiation Protection Baseline Inspection | | | | | | 1 |
| 1,2 | 6/5/2023 | 6/9/2023 | IP 71124.04 | 000728 | Occupational Dose Assessment | |
| Security Baseline Inspection | | | | | | 1 |
| 1,2 | 9/5/2023 | 9/8/2023 | IP 71130.14 | 000743 | Review of Power Reactor Target Sets | |
| Design Basis Assurance Inspection (Team) | | | | | | 6 |
| 1,2 | 10/16/2023 | 11/3/2023 | IP 71111.21M | 000713 | Design Bases Assurance Inspection (Teams) | |
| Quad Cities 2023 Biennial Licensed Operator Requalification Program Inspection | | | | | | 2 |
| 1,2 | 11/13/2023 | 11/19/2023 | IP 71111.11B | 000704 | Licensed Operator Requalification Program and Licensed Operator Performance | |
| RP Baseline Inspection | | | | | | 1 |
| 1 | 11/13/2023 | 11/17/2023 | IP 71124.08 | 000732 | Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation | |
| 1 | 11/13/2023 | 11/17/2023 | IP 71151 | 000746 | Performance Indicator Verification | |