



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, ILLINOIS 60532-4352

March 2, 2018

Mr. Bryan C. Hanson
Senior VP, Exelon Generation Company, LLC
President and CNO, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: ANNUAL ASSESSMENT LETTER FOR CLINTON POWER STATION, UNIT 1
(REPORT 05000461/2017006)

Dear Mr. Hanson:

The NRC has completed its end-of-cycle performance assessment of Clinton Power Station, Unit 1, reviewing performance indicators (PIs), inspection results and enforcement actions from January 1, 2017, through December 31, 2017. 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 Clinton Power Station, Unit 1, during the most recent quarter was within the Regulatory Response Column (Column 2) of the NRC's Reactor Oversight Process (ROP) Action Matrix. This conclusion was based on two inspection findings having low-to-moderate safety significance (i.e., White) in the Mitigating Systems Cornerstone and all PIs within the expected range (i.e., Green). Therefore, in addition to ROP baseline inspections, the NRC plans to conduct supplemental inspection(s) in accordance with Inspection Procedure 95001, "Supplemental Inspection Response to Action Matrix Column 2 Inputs."

The objectives of the supplemental inspection are to assure that the root causes and contributing causes of the significant performance issue are understood; to assure that the extent of condition and extent of cause of the performance issue are identified; to assure that corrective actions taken to address and preclude repetition of the significant performance issue are prompt and effective; and to assure that corrective plans direct prompt actions to effectively address and preclude repetition of the significant performance issue. The inspections will be scheduled after you notify the NRC of your readiness.

The NRC identified a cross-cutting theme in the Human Performance cross-cutting area. Specifically, there were 22 findings which had a cross-cutting aspect in this area. In addition, there were 5 findings which had a cross-cutting aspect of work management, one less than being a cross-cutting theme itself. The NRC will continue to monitor your staff's effort and progress in addressing the theme until the theme criterion is no longer met.

The enclosed inspection plan lists the inspections scheduled through December 31, 2019. 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. 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 inspection, the NRC inspection schedule includes an infrequently performed inspection in accordance with Inspection Procedure 60855.1, "Operation of an Independent Spent Fuel Storage Installation at Operating Plants." The NRC also plans to perform Inspection Procedure 92702, "Followup on Traditional Enforcement Actions including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, and Alternative Dispute Resolution Confirmatory orders" to review your corrective actions related to Notice of Violation 2017002-02, "Failure to Perform Adequate Evaluation of Crane Rail Clips."

This letter and its enclosure 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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Please contact Karla Stoedter at 630-829-9731 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Patrick L. Loudon, Director
Division of Reactor Projects

Docket No. 50-461
License No. NPF-62

Enclosure: Inspection Plan

cc: Distribution via LISTSERV®

Letter to Bryan C. Hanson from Patrick L. Louden dated March 2, 2018

SUBJECT: ANNUAL ASSESSMENT LETTER FOR CLINTON POWER STATION, UNIT 1
(REPORT 05000461/2017006)

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|--------|-----------|-----------|-----------|--|
| OFFICE | RIII | RIII | RIII | |
| NAME | RNg:lg | KStoedter | PLouden | |
| DATE | 2/14/2018 | 2/15/2018 | 2/23/2018 | |

OFFICIAL RECORD COPY

IP 22 Inspection Activity Plan Report

Clinton

03/01/2018 - 12/31/2019

| Unit | Start | End | Activity | CAC | Title | Staff Count |
|---|------------|------------|--------------|--------|---|-------------|
| SECURITY BASELINE INSPECTION | | | | | | 1 |
| 1 | 04/09/2018 | 04/13/2018 | IP 71130.04 | 000736 | Equipment Performance, Testing, and Maintenance | |
| 1 | 04/09/2018 | 04/13/2018 | IP 71151 | 001338 | Performance Indicator Verification | |
| INSERVICE INSPECTION UNIT 1 | | | | | | 1 |
| 1 | 04/30/2018 | 05/04/2018 | IP 71111.08G | 000701 | Inservice Inspection Activities - BWR | |
| RADIATION PROTECTION BASELINE INSPECTION | | | | | | 1 |
| 1 | 04/30/2018 | 05/11/2018 | IP 71124.01 | 000725 | Radiological Hazard Assessment and Exposure Controls | |
| 1 | 04/30/2018 | 05/11/2018 | IP 71124.05 | 000729 | Radiation Monitoring Instrumentation | |
| CORRECTIVE ACTIONS FOR NOV 2017002-02 | | | | | | 1 |
| 1 | 06/25/2018 | 06/29/2018 | IP 92702 | 000238 | Followup On Corrective Actions For Violations And Deviations | |
| TRIENNIAL 50.59 INSPECTION | | | | | | 3 |
| 1 | 07/30/2018 | 08/03/2018 | IP 71111.17T | 000709 | Evaluations of Changes, Tests, and Experiments | |
| SECURITY BASELINE INSPECTION | | | | | | 1 |
| 1 | 07/30/2018 | 08/03/2018 | IP 71130.05 | 000737 | Protective Strategy Evaluation | |
| INITIAL PREP AUG/SEPT 2018 | | | | | | 3 |
| 1 | 08/06/2018 | 08/10/2018 | OV | 000956 | VALIDATION OF INITIAL LICENSE EXAMINATION (OV) | |
| INITIAL EXAM AUG/SEPT 2018 | | | | | | 3 |
| 1 | 08/27/2018 | 09/07/2018 | EXAD | 000500 | LICENSE EXAM ADMINISTRATION (EXAD) | |
| ISFSI Cask Loading Inspection | | | | | | 2 |
| 1 | 10/01/2018 | 10/05/2018 | IP 60855.1 | 000590 | Operation of an Independent Spent Fuel Storage Installation at Operating Plants | |
| EP BASELINE INSPECTION / PI VERIFICATION | | | | | | 1 |
| 1 | 10/22/2018 | 10/26/2018 | IP 71114.03 | 000718 | Emergency Response Organization Staffing and Augmentation System | |
| 1 | 10/22/2018 | 10/26/2018 | IP 71114.05 | 000720 | Correction of Emergency Preparedness Weaknesses and Deficiencies | |
| 1 | 10/22/2018 | 10/26/2018 | IP 71151 | 001397 | Performance Indicator Verification | |
| 1 | 11/05/2018 | 11/09/2018 | IP 71114.02 | 000717 | Alert and Notification System Testing | |
| DBA PROGRAM | | | | | | 3 |
| 1 | 10/29/2018 | 11/16/2018 | IP 71111.21N | 000714 | Design Bases Assurance Inspection (Programs) | |

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

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Clinton

03/01/2018 - 12/31/2019

| Unit | Start | End | Activity | CAC | Title | Staff Count |
|---|------------|------------|--------------|--------|---|-------------|
| RADIATION PROTECTION BASELINE INSPECTION | | | | | | 1 |
| 1 | 11/26/2018 | 11/30/2018 | IP 71124.08 | 000732 | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation | |
| 1 | 11/26/2018 | 11/30/2018 | IP 71151 | 000746 | Performance Indicator Verification | |
| DBA TEAM | | | | | | 6 |
| 1 | 03/11/2019 | 03/29/2019 | IP 71111.21M | 000713 | Design Bases Assurance Inspection (Teams) | |
| RP Baseline | | | | | | 1 |
| 1 | 03/11/2019 | 03/15/2019 | IP 71124.02 | 000726 | Occupational ALARA Planning and Controls | |
| EP EXERCISE INSPECTION / PI VERIFICATION | | | | | | 2 |
| 1 | 03/18/2019 | 03/22/2019 | IP 71114.01 | 000716 | Exercise Evaluation | |
| 1 | 03/18/2019 | 03/22/2019 | IP 71114.06 | 000721 | Drill Evaluation | |
| 1 | 03/18/2019 | 03/22/2019 | IP 71151 | 001397 | Performance Indicator Verification | |
| SECURITY BASELINE INSPECTION | | | | | | 1 |
| 1 | 04/01/2019 | 04/05/2019 | IP 71130.02 | 000734 | Access Control | |
| 1 | 04/01/2019 | 04/05/2019 | IP 71130.06 | 000738 | Protection of Safeguards Information | |
| BIENNIAL PI&R IINSPECTION | | | | | | 4 |
| 1 | 05/06/2019 | 05/24/2019 | IP 71152B | 000747 | Problem Identification and Resolution | |
| CYBER SECURITY INSPECTION | | | | | | 5 |
| 1 | 08/05/2019 | 08/23/2019 | IP 71130.10P | 000741 | Cyber Security | |
| RP Baseline | | | | | | 2 |
| 1 | 08/26/2019 | 08/30/2019 | IP 71124.06 | 000730 | Radioactive Gaseous and Liquid Effluent Treatment | |
| 1 | 08/26/2019 | 08/30/2019 | IP 71124.07 | 000731 | Radiological Environmental Monitoring Program | |
| SECURITY BASELINE INSPECTION | | | | | | 1 |
| 1 | 08/26/2019 | 08/30/2019 | IP 71130.07 | 000739 | Security Training | |
| 1 | 08/26/2019 | 08/30/2019 | IP 71151 | 001338 | Performance Indicator Verification | |
| 2019 Clinton Exam | | | | | | 3 |
| 1 | 09/15/2019 | 09/15/2019 | OV | 000956 | VALIDATION OF INITIAL LICENSE EXAMINATION (OV) | |
| 1 | 10/13/2019 | 10/25/2019 | EXAD | 000500 | LICENSE EXAM ADMINISTRATION (EXAD) | |

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Clinton

03/01/2018 - 12/31/2019

| Unit | Start | End | Activity | CAC | Title | Staff Count |
|-------------------------------------|------------|------------|--------------|--------|--|-------------|
| INSERVICE INSPECTION UNIT 1 | | | | | | 1 |
| 1 | 09/16/2019 | 10/06/2019 | IP 71111.08G | 000701 | Inservice Inspection Activities - BWR | |
| RP Baseline | | | | | | 2 |
| 1 | 09/23/2019 | 09/27/2019 | IP 71124.01 | 000725 | Radiological Hazard Assessment and Exposure Controls | |
| 1 | 09/23/2019 | 09/27/2019 | IP 71124.02 | 000726 | Occupational ALARA Planning and Controls | |
| 1 | 09/23/2019 | 09/27/2019 | IP 71124.03 | 000727 | In-Plant Airborne Radioactivity Control and Mitigation | |
| 1 | 09/23/2019 | 09/27/2019 | IP 71124.04 | 000729 | Occupational Dose Assessment | |
| CLINTON Biennial RQI | | | | | | 2 |
| 1 | 10/28/2019 | 11/01/2019 | IP 71111.11B | 000704 | Licensed Operator Requalification Program and Licensed Operator Performance - Biennial | |
| SECURITY BASELINE INSPECTION | | | | | | 1 |
| 1 | 11/08/2019 | 11/12/2019 | IP 71130.14 | 000743 | Review of Power Reactor Target Sets | |