



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

December 18, 2015

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

SUBJECT: CLINTON POWER STATION BASELINE EMERGENCY PREPAREDNESS
BIENNIAL EXERCISE INSPECTION REPORT 05000461/2015502

Dear Mr. Hanson:

On November 20, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Clinton Power Station. The enclosed report documents the results of this inspection, which were discussed on November 20, 2015, with Mr. D. Kemper, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings were identified during this inspection.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Steven K. Orth, Chief
Plant Support Branch
Division of Reactor Safety

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

Enclosure:
Inspection Report 05000461/2015502;
w/Attachment: Supplemental Information

cc: Distribution via LISTSERV®

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000461/2015502

Licensee: Exelon Generation Company, LLC

Facility: Clinton Power Station

Location: Clinton, IL

Dates: November 16 – 20, 2015

Inspectors: G. Hansen, Senior Emergency Preparedness Inspector
M. Garza, Emergency Preparedness Inspector
D. Funk, Senior Project Specialist
E. Sanchez-Santiago, Resident Inspector
D. Reeser, Operations Engineer

Approved by: Steven K. Orth, Chief
Plant Support Branch
Division of Reactor Safety

Enclosure

SUMMARY

Inspection Report 05000461/2015502; 11/16/2015 – 11/20/2015; Clinton Power Station; Baseline Emergency Preparedness Biennial Exercise Inspection.

This report covers a 1-week period of announced baseline inspection by five regional inspectors. The U.S. Nuclear Regulatory Commission's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5, dated February 2014.

NRC-Identified and Self-Revealed Findings

Cornerstone: Emergency Preparedness

No findings were identified.

Licensee-Identified Violations

No violations were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP7 Exercise Evaluation – Hostile Action Event (71114.07)

.1 Exercise Evaluation

a. Inspection Scope

Title 10, of the *Code of Federal Regulations* (CFR), Part 50, Appendix E, Section IV.F.2.j, requires, in part, that nuclear power reactor licensees, in each 8 calendar year exercise cycle, provide the opportunity for its Emergency Response Organization (ERO) to demonstrate proficiency in the key skills necessary to respond to a Hostile Action (HA) Event directed at the plant site. Clinton Power Station staff designed the November 18, 2015, exercise to satisfy this requirement. The U.S. Nuclear Regulatory Commission (NRC) inspected this HA exercise to assess the licensee's ability to effectively implement its Emergency Plan during an HA Event and adequately protect public health and safety.

The exercise evaluation consisted of the following reviews and assessments:

- The adequacy of the licensee's performance in the biennial exercise conducted on November 18, 2015, regarding the implementation of the Risk-Significant Planning Standards in 10 CFR 50.47 (b)(4), (5), (9), and (10), which address emergency classification, offsite notification, radiological assessment, and Protective Action Recommendations, respectively.
- The overall adequacy of the licensee's emergency response facilities with regard to NUREG-0696, "Functional Criteria for Emergency Response Facilities," and Emergency Plan commitments. The facilities assessed were the Emergency Operations Facility, Alternate Technical Support Center, Alternate Operations Support Center, Control Room Simulator, and the Incident Command Post.
- A review of other performance areas such as the licensee ERO's recognition of abnormal plant conditions; command and control, including interactions with site security staff; intra and inter-facility communications; prioritization of mitigating activities; utilization of repair and field monitoring teams; interface with offsite agencies, including local law enforcement agencies; staffing and procedure adequacy; and the overall implementation of the Emergency Plan and its implementing procedures.
- Past performance issues from NRC inspection reports to determine the effectiveness of corrective actions, as demonstrated during this exercise, to ensure compliance with 10 CFR 50.47(b)(14).
- The adequacy of the licensee's post-exercise critiques, to evaluate the Clinton Power Station self-assessment of its ERO performance during the November 18, 2015, exercise and to ensure compliance with 10 CFR Part 50, Appendix E, Section IV.F.2.g.

Documents reviewed are listed in the Attachment to this report.

This exercise evaluation inspection constituted one inspection sample as defined in Inspection Procedure (IP) 71114.07.

b. Findings

No findings were identified.

1EP8 Exercise Evaluation – Scenario Review (71114.08)

a. Inspection Scope

Prior to the inspection activity onsite, the inspectors conducted an in-office review of the exercise objectives and scenarios submitted to the NRC using IP 71114.08, "Exercise Evaluation - Scenario Review," to determine if the exercise would test major elements of the Emergency Plan as required by 10 CFR 50.47(b)(14). Documents reviewed are listed in the Attachment to this report.

This review of the exercise objectives and scenario constituted one inspection sample as defined in IP 71114.08.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

Cornerstone: Emergency Preparedness

4OA1 Performance Indicator Verification (71151)

.1 Drill/Exercise Performance

a. Inspection Scope

The inspectors sampled licensee submittals for the Drill/Exercise Performance (DEP) Performance Indicator (PI) for the second quarter 2014 through the third quarter 2015. To determine the accuracy of the DEP data reported during this period, PI definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment PI Guideline," Revision 7, was used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes, including procedural guidance on assessing opportunities for the PI, assessments of PI opportunities during pre-designated Control Room Simulator training sessions, and performance during other drills. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one DEP PI verification inspection sample as defined in IP 71151.

b. Findings

No findings were identified.

.2 Emergency Response Organization Drill Participation

a. Inspection Scope

The inspectors sampled licensee submittals for the ERO Drill Participation PI for the second quarter 2014 through the third quarter 2015. To determine the accuracy of the PI data reported during this period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment PI Guideline," Revision 7, was used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI, performance during the 2014 and 2015 drills, and revisions of the roster of personnel assigned to key ERO positions. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ERO Drill Participation PI verification inspection sample as defined in IP 71151.

b. Findings

No findings were identified.

.3 Alert and Notification System

a. Inspection Scope

The inspectors sampled licensee submittals for the Alert and Notification System (ANS) PI for the second quarter 2014 through the third quarter 2015. To determine the accuracy of the PI data reported during this period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment PI Guideline," Revision 7, was used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI and results of periodic scheduled ANS operability tests. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ANS PI verification inspection sample as defined in IP 71151.

b. Findings

No findings were identified.

40A6 Management Meetings

.1 Exit Meeting Summary

On November 20, 2015, the inspectors presented the biennial exercise inspection results to Mr. D. Kemper, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

.2 Public and Media Briefing

On November 20, 2015, the inspectors summarized the NRC's preliminary exercise inspection conclusions at a public and media briefing hosted by Department of Homeland Security/Federal Emergency Management Agency, Region V, Field Office staff, at the DeWitt County Emergency Operations Center, in Clinton, Illinois.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

D. Kemper, Operations Director
D. Shelton, Regulatory Assurance Manager
R. Zacholski, Nuclear Oversight Manager
M. Friedmann, Emergency Preparedness Manager
J. Cunningham, Maintenance Director
J. Blount, Senior Manager Design Engineering
B. Brooks, Security Manager
M. Mayer, Security
S. O'Riley, Emergency Preparedness Coordinator
P. Quealy, Senior Drill and Exercise Specialist (Corporate)

U.S. Nuclear Regulatory Commission

E. Sanchez-Santiago, Resident Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, and Discussed

None.

LIST OF ACRONYMS USED

| | |
|-------|---|
| ADAMS | Agencywide Documents Access Management System |
| ANS | Alert and Notification System |
| CFR | <i>Code of Federal Regulations</i> |
| DEP | Drill and Exercise Performance |
| ERO | Emergency Response Organization |
| HA | Hostile Action |
| IP | Inspection Procedure |
| NEI | Nuclear Energy Institute |
| NRC | U.S. Nuclear Regulatory Commission |
| PARS | Publicly Available Records System |
| PI | Performance Indicator |

LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1EP7 Exercise Evaluation (71114.07)

- Clinton Station 2015 Hostile Action Based Graded Exercise; dated 11/18/15
- CPS 4305.01; Security Threat/Intrusion; Rev. 7
- EP-AA-1000; Exelon Nuclear Standardized Radiological Emergency Plan; Rev. 27
- EP-AA-1003; Exelon Nuclear Radiological Emergency Plan Annex for Clinton Station; Rev. 25
- EP-AA-1003, Addendum 3; Emergency Action Levels for Clinton Station; Rev. 0
- EP-AA-111; Emergency Classification and Protective Action Recommendation; Rev. 19
- EP-AA-112; ERO/Emergency Response Facility Activation and Operation; Rev. 17
- EP-AA-113; Personnel Protective Actions; Rev. 12
- EP-AA-114; Notifications; Rev. 12
- AR 02599885; Simulator NARS Phone Failure; dated 11/19/15
- AR 02590122; CLI-2015-EP-HABEX-SIM-UNSAT DC; dated 11/20/15
- AR 02590134; CLI-2015-EP-HABEX-AF-UNSAT DC; dated 11/20/15
- AR 02590138; CLI-2015-EP-HABEX-CAS/SAS/ICP-UNSAT DC; dated 11/20/15
- AR 02590141; CLI-2015-EP-HABEX-SIM-Other; dated 11/20/15
- AR 02590143; CLI-2015-EP-HABEX-AF-Other; dated 11/20/15
- AR 02590145; CLI-2015-EP-HABEX-EOF-Other; dated 11/20/15
- AR 02590146; CLI-2015-EP-HABEX-CAS/SAS/ICP-Other; dated 11/20/15
- AR 02590147; CLI-2015-EP-HABEX-JIC-Other; dated 11/20/15
- AR 02590149; CLI-2015-EP-HABEX-EOF-UNSAT DC; dated 11/20/15
- AR 02590151; CLI-2015-EP-HABEX-JIC-UNSAT DC; dated 11/20/15

1EP8 Exercise Evaluation – Scenario Review (71114.08)

- Clinton Power Station 2015 NRC Graded Exercise 60 Day Submittal; dated 09/2015

4OA1 Performance Indicator Verification (71151)

- LS-AA-2001; Collecting and Reporting NRC Performance Indicator Data; Rev. 14
- LS-AA-2110; Monthly Data Elements for NRC ERO Drill Participation; Rev. 6
- LS-AA-2110, Attachment 1; Monthly Data Elements for NRC ERO Drill Participation; dated 04/2014 to 09/2015
- LS-AA-2120; Monthly Data Elements for NRC DEP; Rev. 4
- LS-AA-2120, Attachment 1; Monthly Data Elements for NRC DEP; dated 04/2014 to 09/2015
- LS-AA-2130; Monthly Data Elements for NRC ANS Reliability; Rev. 5
- LS-AA-2130, Attachment 1; Monthly Data Elements for NRC ANS Reliability; dated 04/2014 to 09/2015

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

SUBJECT: CLINTON POWER STATION BASELINE EMERGENCY PREPAREDNESS BIENNIAL
 EXERCISE INSPECTION REPORT 05000461/2015502

Dear Mr. Hanson:

On November 20, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Clinton Power Station. The enclosed report documents the results of this inspection, which were discussed on November 20, 2015, with Mr. D. Kemper, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings were identified during this inspection.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,
 /RA/
 Steven K. Orth, Chief
 Plant Support Branch
 Division of Reactor Safety

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

Enclosure:
 Inspection Report 05000461/2015502;
 w/Attachment: Supplemental Information

cc: Distribution via LISTSERV®

DISTRIBUTION:

Janelle Jessie
 RidsNrrDorLpl3-2 Resource
 RidsNrrPMClinton Resource
 RidsNrrDirslrib Resource
 Cynthia Pederson
 Darrell Roberts
 Richard Skokowski

Allan Barker
 Carole Ariano
 Linda Linn
 DRSIII
 DRPIII
 Jim Clay
 Carmen Olteanu
ROPreports.Resource@nrc.gov

ADAMS Accession Number ML15352A208

Publicly Available Non-Publicly Available Sensitive Non-Sensitive

To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

| | | | | |
|--------|------------|----------|----------|------|
| OFFICE | RIII | RIII | RIII | RIII |
| NAME | GHansen:cl | DFunk | SOrth | |
| DATE | 12/17/15 | 12/17/15 | 12/18/15 | |

OFFICIAL RECORD COPY