



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

November 12, 2015

Mr. Bryan Hanson  
Senior Vice President, Exelon Generation  
President and Chief Nuclear Officer, Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION - NRC EVALUATED  
EMERGENCY PREPAREDNESS EXERCISE – INSPECTION REPORT  
05000219/2015502

Dear Mr. Hanson:

On October 1, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of the September 29, 2015, evaluated emergency preparedness exercise at your Oyster Creek Nuclear Generating Station. The enclosed inspection report documents the inspection results, which were discussed on October 1, 2015, with Mr. G. Stathes, Site Vice President, and other members of your staff.

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

Based on the results of this inspection, no findings were identified.

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 and its enclosure and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system, 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/

Raymond McKinley, Chief  
Plant Support Branch 1  
Division of Reactor Safety

B. Hanson

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Docket No. 50-219  
License No. DPR-16

Enclosure:  
NRC Inspection Report No. 05000219/2015502

cc w/encl: Distribution via ListServ  
D. Musick, RAC Chair, FEMA Region II

Mr. Bryan Hanson  
 Senior Vice President, Exelon Generation  
 President and Chief Nuclear Officer, Exelon Nuclear  
 4300 Winfield Road  
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Sincerely,

*/RA/*

Raymond McKinley, Chief  
 Plant Support Branch 1  
 Division of Reactor Safety

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DOCUMENT NAME: G:\DRS\Plant Support Branch 1\Barr\EP Ex15 Oyster Creek\Oyster Creek EP EX 2015 Report.docx  
 ADAMS ACCESSION NUMBER: ML15317A052

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NAME	SBarr	SKennedy	RMcKinley		
DATE	11/12/15	11/12/15	11/12/15		

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B. Hanson

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Letter to Bryan Hanson from Raymond McKinley dated November 12, 2015

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION - NRC EVALUATED  
EMERGENCY PREPAREDNESS EXERCISE – INSPECTION REPORT  
05000219/2015502

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**U.S. NUCLEAR REGULATORY COMMISSION  
REGION I**

Docket No.: 50-219

License No. DPR-16

Report No. 05000219/2015502

Licensee: Exelon Generation Company, LLC

Facility: Oyster Creek Nuclear Generating Station

Location: Forked River, New Jersey

Dates: September 28 – October 1, 2015

Inspectors: S. Barr, Senior Emergency Preparedness Inspector, Division of Reactor Safety (DRS), Region I  
B. Fuller, Senior Operations Inspector, DRS, Region I  
E. Schrader, Emergency Preparedness Specialist, Division of Preparedness and Response (DPR), Office of Nuclear Security and Incident Response (NSIR)  
T. Dunn, Operations Inspector, DRS, Region I  
D. Everhart, Physical Security Inspector, DRS, Region I  
E. Andrews, Resident Inspector, Oyster Creek, Division of Reactor Projects (DRP), Region I

Approved By: Raymond McKinley, Chief  
Plant Support Branch 1  
Division of Reactor Safety

## **SUMMARY**

Inspection Report 05000219/2015502; 9/28/2015 – 10/1/2015; Exelon Energy Company, LLC, Oyster Creek Generating Station; Exercise Evaluation – Hostile Action (HA) Event; Exercise Evaluation – Scenario Review; Performance Indicator Verification.

This was an announced inspection conducted by four Region I-based inspectors, one resident inspector, and one Headquarters inspector. No findings were identified during the inspection. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 5.

### **Cornerstone: Emergency Preparedness**

No findings were identified.

## REPORT DETAILS

### 1. REACTOR SAFETY

Cornerstone: Emergency Preparedness (EP)

1EP7 Exercise Evaluation – Hostile Action Event (71114.07 – 1 Sample)

#### a. Inspection Scope

Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Appendix E, Section IV.F.2.j, requires in part that nuclear power reactor licensees, in each eight calendar year exercise cycle, provide the opportunity for their emergency response organization (ERO) to demonstrate proficiency in the key skills necessary to respond to a hostile action (HA) directed at the plant site. Exelon designed the September 29, 2015, Oyster Creek EP exercise to satisfy that requirement, and the NRC inspected the Oyster Creek HA event exercise to assess Exelon's ability to effectively implement the Oyster Creek Emergency Plan during an HA event. This overall exercise inspection activity represented the completion of one sample on a biennial cycle.

The exercise evaluation consisted of the following review and assessment:

- The adequacy of Exelon's ERO performance in the biennial full-participation exercise regarding the implementation of the planning standards described in 10 CFR 50.47(b) (4), (5), (9), and (10), which are: emergency classification; offsite notification; radiological assessment; onsite protective actions, and public protective action recommendations, respectively.
- The overall adequacy of Exelon's emergency response facilities with regard to Emergency Plan commitments. The facilities assessed were the Control Room Simulator, the Alternative Facility, the Central Alarm Station (CAS), the local county Incident Command Post (ICP), the Joint Information Center (JIC) and the Emergency Operations Facility (EOF).
- A review of other performance areas, such as the Exelon 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.
- A review of past performance issues from the last NRC Oyster Creek EP exercise inspection report and recent Exelon Oyster Creek EP drill reports, to determine the effectiveness of licensee corrective actions as demonstrated during the September 29, 2015, exercise and to ensure compliance with 10 CFR 50.47(b)(14).

- The licensee's post-exercise critiques, to evaluate Exelon's self-assessment of its Oyster Creek ERO performance during the September 29, 2015, exercise and to ensure compliance with 10 CFR Part 50, Appendix E, Section IV.F.2.g.

The inspectors reviewed the documents listed in the attachment to this report.

b. Findings

No findings were identified.

1EP8 Exercise Evaluation – Scenario Review (71114.08 – 1 Sample)

a. Inspection Scope

Prior to the September 29, 2015, emergency preparedness exercise, the NRC inspectors conducted an in-office review of the exercise objectives and scenario, which Exelon had submitted to the NRC, to determine if the exercise would test major elements of the Oyster Creek Emergency Plan as required by 10 CFR 50.47(b)(14). This overall exercise inspection activity represented the completion of one sample on a biennial cycle.

The inspectors reviewed the documents listed in the attachment to this report.

b. Findings

No findings were identified.

**4. OTHER ACTIVITIES (OA)**

4OA1 Performance Indicator Verification (71151 – 3 Samples)

a. Inspection Scope

The inspectors reviewed data for the Oyster Creek EP Performance Indicators (PI), which are: (1) Drill and Exercise Performance (DEP) (EP01); (2) ERO Drill Participation (EP02); and (3) Alert and Notification System (ANS) Reliability (EP03). The last NRC EP inspection at Oyster Creek was conducted in the third calendar quarter of 2014, so the inspectors reviewed supporting documentation from EP drills and tests from the third calendar quarter of 2014 through the second calendar quarter of 2015, to verify the accuracy of the reported PI data. The review of these PIs was conducted in accordance with NRC Inspection Procedure 71151, using the acceptance criteria documented in NEI 99-02, "Regulatory Assessment Performance Indicator Guidelines," Revision 7.

This inspection activity represented the completion of three samples.



b. Findings

No findings were identified.

4OA6 Meetings, including Exit

On October 1, 2015, the inspectors presented the results of this inspection to Mr. G. Stathes, Site Vice President, and other members of Exelon's staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

**ATTACHMENT  
SUPPLEMENTAL INFORMATION  
KEY POINTS OF CONTACT**

Licensee Personnel

G. Stathes, Oyster Creek Site Vice President  
V. Cwietniewicz, Exelon Mid-Atlantic Emergency Planning Manager  
M. Chanda, Oyster Creek Emergency Planning Manager

**LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED**

None

**LIST OF DOCUMENTS REVIEWED**

Section 1EP7: Exercise Evaluation – Hostile Action (HA) Event

EP-AA-1000, Exelon Nuclear Standardized Emergency Plan (Revision 26)  
EP-AA-1010, Exelon Nuclear Radiological Emergency Plan Annex for Oyster Creek Station  
(Revision 10)  
EP-AA-112-700, Alternative Facility Operation (Revision 0)  
EP-AA-122, Drill and Exercise Program (Revision 18)  
EP-AA-122-200, Drill and Exercise Execution (Revision 0)  
EP-AA-122-300, Drill and Exercise Evaluation (Revision 1)  
ABN-41, Security Event (Revision 36)  
Oyster Creek Emergency Plan Implementing Procedures  
Oyster Creek September 29, 2015, Emergency Exercise Scenario Package  
Oyster Creek Emergency Preparedness Drill Reports, January 2014 - August 2015  
Exelon Generation Oyster Creek 2015 Graded Exercise Evaluation Report (dated 10/28/15)

Section 1EP8: Exercise Evaluation – Scenario Review

EP-AA-1000, Exelon Nuclear Standardized Emergency Plan (Revision 26)  
EP-AA-1010, Exelon Nuclear Radiological Emergency Plan Annex for Oyster Creek Station  
(Revision 10)  
EP-AA-122, Drill and Exercise Program (Revision 18)  
EP-AA-122-100, Drill and Exercise Planning and Scheduling (Revision 1)  
Oyster Creek September 29, 2015, Emergency Exercise Scenario Package

Section 4OA1: Performance Indicator (PI) Verification

LS-AA-2110, Monthly Data Elements for NRC Emergency Response Organization (ERO)  
Drill Participation (Revision 6)  
LS-AA-2120, Monthly Data Elements for NRC Drill/Exercise Performance (Revision 4)  
LS-AA-2130, Monthly Data Elements for NRC Alert and Notification System (ANS) Reliability  
(Revision 5)  
EP-AA-125-1001, EP Performance Indicator Guidance (Revision 7)  
DEP PI data, July 2014 – June 2015  
ERO Drill Participation PI data, July 2014 – June 2015  
ANS PI data, July 2014 – June 2015

**LIST OF ACRONYMS**

ADAMS	Agencywide Documents Access and Management System
ANS	Alert Notification System
CAS	Central Alarm Station
CFR	Code of Federal Regulations
DEP	Drill and Exercise Performance
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
HA	Hostile Action
ICP	Incident Command Post
JIC	Joint Information Center
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
PAR	Protective Action Recommendation
PI	Performance Indicator
RSPS	Risk Significant Planning Standard