



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

November 18, 2011

Mr. Michael J. Pacilio
Senior Vice President, Exelon Generation Company, LLC
President and Chief Nuclear Officer (CNO), Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

**SUBJECT: CLINTON POWER STATION BASELINE EMERGENCY PREPAREDNESS
BIENNIAL EXERCISE INSPECTION REPORT 05000461/2011502**

Dear Mr. Pacilio:

On November 4, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed a Baseline Emergency Preparedness Biennial Exercise inspection at your Clinton Power Station. The enclosed report documents the results of this inspection, which were discussed on November 4, 2011, with K. Taber, 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.

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

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

Sincerely,

/RA/

Richard A. Skokowski, Chief
Plant Support Branch
Division of Reactor Safety

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

Enclosure: Inspection Report 05000461/2011502;
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 05000461/2011502

Licensee: Exelon Generation Company, LLC

Facility: Clinton Power Station

Location: Clinton, IL

Dates: October 31 through November 4, 2011

Inspectors: R. Jickling, Sr. Emergency Preparedness Inspector
J. Beavers, Emergency Preparedness Inspector
B. Kemker, Sr. Resident Inspector
F. Ramirez, Resident Inspector

Approved by: Richard A. Skokowski, Chief
Plant Support Branch
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000461/2011502(DRS); 10/31/2011 – 11/04/2011; Clinton Power Station; Baseline Emergency Preparedness Biennial Exercise Inspection.

This report covers a one week period of announced baseline inspection by two regional inspectors and two resident inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealed Findings

Cornerstone: Emergency Preparedness

No findings were identified.

B. Licensee-Identified Violations

No violations were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation (71114.01)

.1 Exercise Evaluation

a. Inspection Scope

The inspectors reviewed the November 2, 2011, biennial emergency preparedness exercise's objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's emergency plan and to verify that the exercise's simulated problems provided an acceptable framework to support demonstration of the licensee's capability to implement its plan. The inspectors also reviewed records of other drills and exercises conducted in 2009, 2010, and 2011, to verify that those drills' scenarios were sufficiently different from the scenario used in the November 2, 2011, exercise.

The inspectors evaluated the licensee's exercise performance, focusing on the risk significant activities of emergency classification, notification, and protective action decision making, implementation of accident mitigation strategies, and correction of past exercise weaknesses in the following emergency response facilities:

- Control Room Simulator (CRS);
- Technical Support Center (TSC);
- Operations Support Center (OSC); and
- Emergency Operations Facility (EOF).

The inspectors also assessed the licensee's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interfaces with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the licensee's emergency plan.

The inspectors attended post-exercise critiques in the CRS, OSC, TSC and EOF to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators and managers to obtain the licensee's findings and assessments of its exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and assessments to assess the licensee's ability to adequately critique its exercise performance. Documents reviewed are listed in the Attachment to this report.

This exercise evaluation inspection constituted one sample as defined in Inspection Procedure (IP) 71114.01-05.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

Cornerstone: Emergency Preparedness

4OA1 Performance Indicator (PI) Verification (71151)

.1 Drill/Exercise Performance

a. Inspection Scope

The inspectors sampled licensee submittals for the Drill/Exercise Performance PI for the period from the first quarter 2010 through third quarter 2011. So as to determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, were used. The inspectors reviewed the licensee's records associated with the performance indicator 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 drill/exercise performance sample as defined in IP 71151-05.

b. Findings

No findings were identified.

.2 Emergency Response Organization Drill Participation

a. Inspection Scope

The inspectors sampled licensee submittals for the Emergency Response Organization (ERO) Drill Participation PI for the period from the first quarter 2010 through third quarter 2011. So as to determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," and Revision 6, were 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 2010 and 2011 drills; and revisions of the roster of personnel assigned to key emergency response organization positions. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ERO drill participation sample as defined in IP 71151-05.

b. Findings

No findings were identified.

.3 Alert and Notification System

a. Inspection Scope

The inspectors sampled licensee's submittals for the Alert and Notification System (ANS) PI for the period from the first quarter 2010 through third quarter 2011. So as to determine the accuracy of the PI data reported during those periods, PI definitions, and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, were used. The inspectors reviewed the licensee's records associated with the PI to verify whether 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 alert and notification system sample as defined in IP 71151-05.

b. Findings

No findings were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On November 4, 2011, the inspectors presented the biennial exercise inspection results to Mr. K. Taber 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 4, 2011, the inspector summarized the NRC's preliminary exercise inspection conclusions at a public and media briefings 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

K. Taber, Plant Manager
G. Armstrong, Security Manager
J. Cunningham, Operations Director
A. Daniels, Corporate Emergency Preparedness Manager
A. Darelus, Emergency Preparedness Manager
B. Davis, Regulatory Assurance Manager
S. Deal, Nuclear Oversight
C. Dunn, Shift Operations Superintendent
S. Fatora, Maintenance Director
R. Frantz, Regulatory Assurance Representative
M. Friedman, RP Technical Lead health Physicist
S. Gackstetter, Training Director
W. Harris, Site Communications
A. Khanifar, Engineering Director
S. O'Riley, Emergency Preparedness Coordinator
C. Rocha, Nuclear Oversight Manager

Nuclear Regulatory Commission

B. Kemker, Senior Resident Inspector

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened, Closed and Discussed

None

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.

1EP1 Exercise Evaluation

Exelon Nuclear Standardized Radiological Emergency Plan; Revision 20
Exelon Nuclear Radiological Emergency Plan Annex for Clinton Station; Revision 19
Clinton Station November 2, 2011 NRC Graded Exercise 30 Day Submittal;
September 29, 2011
EP-AA-1000; Standardized Radiological Emergency Plan; Revision 20
EP-AA-1003; Radiological Emergency Plan Annex for Clinton Station; Revision 19
EP-AA-114; Notifications; Revision 10
EP-MW-114-100; Midwest Region Offsite Notifications; Revision 11
EP-MW-114-100-F-01; Nuclear Accident Reporting System Form; Revision F
EP-AA-110-301; Core Damage Assessment; Revision 8
EP-MW-110-200; Dose Assessment; Revision 9
EP-AA-112-200-F-01; Station Emergency Director Checklist; Revision G
EP-AA-112-200; TSC Activation and Operation; Revision 7
EP-AA-112-300; Operations Support Center Activation and Operation; Revision 7
EP-AA-112-300-F-01; OSC Director Checklist; Revision H
AR 01285248; Exercise-DEP Failure to Notify State In 15 Minutes; November 2, 2011

4OA1 Performance Indicator Verification

EP-AA-125-1001; EP Performance Indicator Guidance; Revision 6
EP-AA-125-1002; DEP Performance Indicator Summaries; January 2010 – September 2011
EP-AA-125-1003; Key ERO Participation and Stability Monthly Reports; March 2010 – September 2011
Clinton Power Monthly Siren Availability Reports; January 2010 – September 2011
LS-AA-2110; Monthly Data Elements for NRC ERO Drill Participation; March 2010 – September 2011
LS-AA-2120; Monthly Data Elements for NRC Drill/Exercise Performance; January 2010 – September 2011
LS-AA-2130; Monthly Data Elements for NRC ANS Reliability; January 2010 – September 2011

LIST OF ACRONYMS USED

ADAMS	Agency-wide Documents Access and Management System
ANS	Alert and Notification System
AR	Action Request
CFR	Code of Federal Regulations
CRS	Control Room Simulator
DRS	Division of Reactor Safety
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
IMC	Inspection Manual Chapter
IP	Inspection Procedure
IR	Inspection Report
NEI	Nuclear Energy Institute
NRC	U. S. Nuclear Regulatory Commission
OSC	Operations Support Center
PARS	Publicly Available Records
PI	Performance Indicator
SDP	Significance Determination Process
TSC	Technical Support Center

M. Pacilio

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Richard A. Skokowski, Chief
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