



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

May 10, 2016

Mr. Anthony Vitale
Vice President, Operations
Entergy Nuclear Operations, Inc.
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043-9530

**SUBJECT: PALISADES NUCLEAR PLANT – BASELINE EMERGENCY PREPAREDNESS
BIENNIAL EXERCISE INSPECTION REPORT 05000255/2016502**

Dear Mr. Vitale:

On April 28, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Palisades Nuclear Plant. The enclosed report documents the results of this inspection, which were discussed on April 28, 2016, with you 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, records, observed activities, and interviewed personnel. No findings were identified during this inspection.

In accordance with Title 10 of the *Code of Federal Regulations* 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. 50-255
License No. DPR-20

Enclosure:
IR 05000255/2016502

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-255
License No: DPR-20

Report No: 05000255/2016502

Licensee: Entergy Nuclear Operations, Inc.

Facility: Palisades Nuclear Plant

Location: Covert, MI

Dates: April 25-28, 2016

Inspectors: G. Hansen, Senior Emergency Preparedness Inspector
J. Cassidy, Senior Health Physics Inspector
J. Maynen, Senior Physical Security Inspector
M. Garza, Emergency Preparedness Inspector

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

Enclosure

SUMMARY

IR 05000255/2016502; 04/25/2016 – 04/28/2016; Palisades Nuclear Plant; Baseline Emergency Preparedness Exercise Evaluation; Exercise Evaluation Scenario Review; and Performance Indicator Verification.

This report covers a 1-week period of announced baseline inspection by four 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

None

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation (71114.01)

.1 Exercise Evaluation

a. Inspection Scope

The inspectors reviewed the April 26, 2016, biennial emergency preparedness exercise 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 2014, 2015, and 2016, to verify that those drills' scenarios were sufficiently different from the scenario used in the April 26, 2016, exercise.

The inspectors observed and 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, TSC, OSC, 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.

b. Findings

No findings were identified.

1EP8 Exercise Evaluation – Scenario Review (71114.08)

a. Inspection Scope

Prior to the inspection activity, the inspectors conducted an in-office review of the exercise objectives and scenarios submitted to the U.S. Nuclear Regulatory Commission (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 Title 10 of the *Code of Federal Regulations* 50.47(b)(14).

Documents reviewed are listed in the Attachment to this report.

This review of the exercise objectives and scenario constituted one 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 period, from the first quarter 2015, through the first quarter 2016. To determine the accuracy of the PI data reported during this period, PI definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, “Regulatory Assessment Performance Indicator Guideline,” Revision 7, 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 DEP 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 Emergency Response Organization (ERO) Drill Participation PI for the period from the first quarter of 2015 through the first quarter of 2016. To determine the accuracy of the PI data reported during this period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, 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 2015 and 2016 drill, 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.

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 period from the first quarter of 2015 through the first quarter of 2016. To determine the accuracy of the PI data reported during this period, PI definitions and guidance contained in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, 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 and results of periodic scheduled ANS operability tests.

Documents reviewed are listed in the Attachment to this report.

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

b. Findings

No findings were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On April 28, 2016, the inspectors presented the biennial exercise inspection results to Mr. A. Vitale, 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.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

A. Vitale, Site Vice President
A. Williams, General Manager, Plant Operations
J. Haumersen, Senior Projects Manager
T. Mulford, Senior Operations Manager
P. Russell, Engineering Director
J. Hardy, Acting Regulatory and Performance Improvement Director
B. Dotson, Acting Regulatory Assurance Manager
W. Nelson, Training Manager
C. Plachta, NIOS Manager
D. Malone, Emergency Preparedness Manager
T. Horan, Emergency Planner
M. Fields, Emergency Planner
K. Howard, Emergency Planner
J. Lennartz, Emergency Planner
J. Standridge, Corporate Emergency Preparedness
D. White, Corporate Emergency Preparedness

U.S. Nuclear Regulatory Commission

J. Jandovitz, Acting 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 inspectors 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 (71114.01)

- Palisades Nuclear Plant Site Emergency Plan; Revision 26
- EI-1; Emergency Classification and Actions; Revision 57
- EI-3; Communications and Notifications; Revision 32
- EI-4.1; Technical Support Center Activation; Revision 23
- EI-4.3; Operations Support Center Activation; Revision 28
- EI-6.13; Protective Action Recommendations for Offsite Populations; Revision 24
- EI-11; Determination of Extent of Core Damage; Revision 7
- EI-12.1; Personnel Accountability and Assembly; Revision 19
- EAL Basis; Emergency Action Level Technical Bases; Revision 7
- Two Years of Drill and Exercise Scenario Timelines; Dated April 2014 – April 2016
- Two Years of Drill and Exercise Corrective Action Program Issues; Dated April 2014 – April 2016
- CR-PLP-2014-05196; HAB Exercise Accelerated Notification; Dated October 29, 2014
- CR-PLP-2015-01064; EP Radio Communication with EOF Almost Non-Existent; Dated March 11, 2015
- CR-PLP-2015-01471; Drill/Exercise Performance Opportunity; Dated April 9, 2015
- CR-PLP-2015-03567; Radio Communications Problems between EOF and Field Monitoring Teams; Dated August 28, 2015
- CR-PLP-2016-01684; Objective A.1, Command and Control, Evaluated as Needs Improvement; Dated April 7, 2016
- CR-PLP-2016-01688; Objective F.4, Communication Systems, Evaluated as Needs Improvement; Dated April 7, 2016
- CR-PLP-2016-01693; Objective K.1, Emergency Worker Exposure Control, Evaluated as Needs Improvement; Dated April 7, 2016
- CR-PLP-2016-01965; OSC Primary Offsite Base Radio Found Broken; Dated April 27, 2016
- CR-PLP-2016-01970; Fitness for Duty Screens not Performed during EP Drill; Dated April 27, 2016
- CR-PLP-2016-01971; Individual Without Prescribed Personnel Protective Equipment; Dated April 27, 2016
- CR-PLP-2016-01972; Entergy News Center/JIC did not Conduct an Objective by Objective Critique; Dated April 27, 2016
- CR-PLP-2016-01973; Some Site Personnel not Able to Perform Electronic Accountability; Dated April 27, 2016
- CR-PLP-2016-01974; Multiple Issues Identified with Use of Base Radio Communications; Dated April 27, 2016
- CR-PLP-2016-01975; TSC Rad Coordinator Provided Unearned Scenario Dose Rate Information; Dated April 27, 2016

- CR-PLP-2016-01982; EP Exercise Evaluation Criteria J.1 Rated Needs Improvement; Dated April 28, 2016
- CR-PLP-2016-01984; Procedure EN-EP-308, Emergency Panning Critiques, Attachment 9.3, Objective H.3; Dated April 28, 2016
- CR-PLP-2016-01985; Procedure EN-EP-308, Emergency Panning Critiques, Attachment 9.3, Objective J.5; Dated April 28, 2016

1EP8 Exercise Evaluation – Scenario Review (71114.08)

- Palisades EP Exercise 60-Day Scenario Submittal; Dated February 26, 2016

4OA1 Performance Indicator Verification (71151)

- NRC Performance Indicator Data; Emergency Preparedness – Drill/Exercise Performance; Dated April 2015 – March 2016
- NRC Performance Indicator Data; Emergency Preparedness – ERO Participation; Dated September April 2015 – March 2016
- NRC Performance Indicator Data; Emergency Preparedness – Alert and Notification System Reliability; Dated April 2015 – March 2016

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
ANS	Alert and Notification System
CRS	Control Room Simulator
DEP	Drill/Exercise Performance
EOF	Emergency Operations Facility
ERO	Emergency Response Organization
IP	Inspection Procedure
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
OSC	Operations Support Center
PARS	Publicly Available Records System
PI	Performance Indicator
TSC	Technical Support Center

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