



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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

October 11, 2018

Mr. David B. Hamilton  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Perry Nuclear Power Plant  
Reg Affairs–A210  
10 Center Road, P.O. Box 97  
Perry, OH 44081–0097

SUBJECT: PERRY NUCLEAR POWER PLANT—BASELINE EMERGENCY PREPAREDNESS  
BIENNIAL EXERCISE INSPECTION REPORT 05000440/2018503

Dear Mr. Hamilton:

On September 20, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an Emergency Preparedness inspection at your Perry Nuclear Power Plant. The NRC inspectors discussed the results of this inspection with Mr. F. Payne and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspectors did not identify any finding or violation of more-than-minor significance.

This letter, its enclosure, and your response (if any) 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 Title 10 of the *Code of Federal Regulations*, Part 2.390, “Public Inspections, Exemptions, Requests for Withholding.”

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

**/RA/**

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

Docket No. 50–440  
License No. NPF–58

Enclosure:  
Inspection Report 05000440/2018503

cc: Distribution via LISTSERV®

Letter to David B. Hamilton from Steven K. Orth dated October 11, 2018.

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BIENNIAL EXERCISE INSPECTION REPORT 05000440/2018503

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-440

License No: NPF-58

Report No: 05000440/2018503

Enterprise Identifier: I-2018-503-0003

Licensee: FirstEnergy Nuclear Operating Company (FENOC)

Facility: Perry Nuclear Power Plant

Location: North Perry, OH

Dates: September 17, 2018, through September 20, 2018

Inspectors: G. Hansen, Senior Emergency Preparedness Inspector  
M. Garza, Emergency Preparedness Inspector  
L. Haeg, Senior Resident Inspector  
D. Krause, Resident Inspector

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

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission continued monitoring licensee's performance by conducting an Emergency Preparedness Inspection at the Perry Nuclear Power Plant in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the U.S. Nuclear Regulatory Commission's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### **List of Findings and Violations**

No findings or violations were identified.

### **Additional Tracking Items**

None

## **INSPECTION SCOPES**

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## **REACTOR SAFETY**

### 71114.01—Exercise Evaluation (1 Sample)

The inspectors evaluated the September 18, 2018, Biennial Emergency Plan Exercise. The exercise scenario simulated an event at the Perry Nuclear Power Plant that initiated with the declaration and notification of an Unusual Event in response to an event associated with a leak in the plant's reactor coolant system. The scenario conditions simulated the escalation of the significance of the event, requiring the declaration and notification of an Alert, a Site Area Emergency, and then a General Emergency, as well as the development of Protective Action Recommendations that were communicated to the required state and local government agencies.

### 71114.08—Exercise Evaluation—Scenario Review (1 Sample)

The inspectors reviewed and evaluated the proposed scenario for the Biennial Emergency Plan Exercise on August 20, 2018.

## **OTHER ACTIVITIES—BASELINE**

### 71151—Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below. (3 Samples)

- (1) EP01: Drill/Exercise Performance—1 Sample (3<sup>rd</sup> Quarter of 2017–2<sup>nd</sup> Quarter of 2018);
- (2) EP02: Emergency Response Organization Drill Participation—1 Sample (3<sup>rd</sup> Quarter of 2017–2<sup>nd</sup> Quarter of 2018); and
- (3) EP03: Alert and Notification System Reliability—1 Sample (3<sup>rd</sup> Quarter of 2017–2<sup>nd</sup> Quarter of 2018).

## **INSPECTION RESULTS**

No findings or violations were identified.

## EXIT MEETINGS AND DEBRIEFS

The inspectors confirmed that proprietary information was controlled to protect from public disclosure. No proprietary information was documented in this report.

- On September 20, 2018, the inspectors presented the Emergency Preparedness inspection results to Mr. F. Payne, Plant Manager, and other members of the licensee staff.

## DOCUMENTS REVIEWED

### 71114.01—Exercise Evaluation

- Perry Nuclear Power Plant 2018 Emergency Preparedness Exercise Scenario; 06/18/2018
- Perry Nuclear Power Plant Emergency Plan; Revision 52
- PSI-0019; Emergency Action Level (EAL) Bases Document; Revision 20
- EPI-A1; Emergency Action Levels; Revision 28
- EPI-A2; Emergency Actions Based on Event Classifications; Revision 22
- EPI-A6; Technical Support Center Activation; Revision 29
- EPI-A7; Operations Support Center Activation; Revision 24
- EPI-A8; Emergency Operations Facility Activation; Revision 22
- Two Years of Drill and Exercise Corrective Action Program Items; 08/2016–08/2018
- Two Years of Scenario Timelines; 09/2016–09/2018
- EPI-B1; Emergency Notification System; Revision 27
- EPI-B4; First Aid and Medical Care; Revision 18
- EPI-B5; Personnel Accountability/Site Evacuation; Revision 17
- EPI-B8; Protective Actions and Guides; Revision 19
- EPI-B10; Emergency Radiological Environmental Monitoring Program; Revision 8
- EPI-B11; Emergency Dosimetry Issue; Revision 11
- EP-B13; Determination of Core Damage Under Accident Conditions; Revision 11
- NOP-LP-5007; Perry MIDAS Dose Assessment; Revision 3
- CR 2017-06375; ERO Drill – Operations Crew 2 Removed from Licensed Duties Pending Remediation Plan Actions for Performance During EPLAN Drill
- CR 2017-06442; ERO Drill Objective I7 Not Met – KI Issuance
- CR 2017-06443; ERO Drill Objective I3 Not Met – Dosimetry Issue
- CR 2017-09447; ERO Drill: Delay of Notification to State and County
- CR 2017-11780; Site Personnel Protection During Simulated Emergencies
- CR 2018-05335; ERO Drill 6-6-18: 5-Way Bridge Dropped Out on Several Occasions
- CR 2018-05454; ERO Drill 6-6-18: Objective B.1 Not Met – ERO Not Notified Within 10 Minutes of Classification
- CR 2018-05549; ERO Drill 6-6-18: Potassium Iodide (KI) Issuance without Emergency Coordinator Approval
- CR 2018-07283; ERO Drill – During 8/15/2018 Drill Objective B1, Notification of ERO, Was Not Met
- CR 2018-07289; ERO Drill: Simulator Auto Dialer Phone did not Connect to State and Ashtabula
- CR 2018-07292; ERO Drill – Objective C-1 Not Met, Failure to Notify Offsite Agencies within 15 Minutes

71114.08—Exercise Evaluation—Scenario Review

- Perry Nuclear Power Plant 2018 Emergency Preparedness Exercise Scenario 60 Day Submittal; 07/18/2018

71151—Performance Indicator Verification

- NRC Performance Indicator Data; Drill/Exercise Performance; 3<sup>rd</sup> Quarter of 2017–2<sup>nd</sup> Quarter of 2018
- NRC Performance Indicator Data; Emergency Response Organization Drill Participation; 3<sup>rd</sup> Quarter of 2017–2<sup>nd</sup> Quarter of 2018
- NRC Performance Indicator Data; Alert and Notification System Reliability; 3<sup>rd</sup> Quarter of 2017–2<sup>nd</sup> Quarter of 2018
- NEI 99-02; Regulatory Assessment Performance Indicator Guideline; Revision 7