



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

October 17, 2022

Mr. Rod Penfield
Site Vice President
Energy Harbor Nuclear Corp.
Perry Nuclear Power Plant
10 Center Road, P.O. Box 97
Perry, OH 44081

SUBJECT: PERRY NUCLEAR POWER PLANT – EMERGENCY PREPAREDNESS
BIENNIAL EXERCISE INSPECTION REPORT 05000440/2022501

Dear Mr. Penfield:

On September 29, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Perry Nuclear Power Plant and discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

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* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

A handwritten signature in black ink, appearing to read "S. Orth".

Signed by Orth, Steven
on 10/17/22

Steven K. Orth, Chief
Security, Emergency Preparedness, and Incident
Response Branch
Division of Radiological Safety and Security

Docket No. 05000440
License No. NPF-58

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: PERRY NUCLEAR POWER PLANT – EMERGENCY PREPAREDNESS
BIENNIAL EXERCISE INSPECTION REPORT 05000440/2022501

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**U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report**

Docket Number: 05000440

License Number: NPF-58

Report Number: 05000440/2022501

Enterprise Identifier: I-2022-501-0010

Licensee: Energy Harbor Nuclear Corp.

Facility: Perry Nuclear Power Plant

Location: Perry, OH

Inspection Dates: September 26, 2022 to September 29, 2022

Inspectors: J. Beavers, Senior Resident Inspector
N. Egan, Sr Physical Security Inspector
G. Hansen, Sr. Emergency Preparedness Inspector
J. Kutlesa, Emergency Preparedness Inspector
T. McGowan, Resident Inspector
P. Zurawski, Senior Resident Inspector

Approved By: Steven K. Orth, Chief
Security, Emergency Preparedness, and Incident Response Branch
Division of Radiological Safety and Security

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting an emergency preparedness biennial exercise inspection at Perry Nuclear Power Plant, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC'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 of more than minor significance 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 (IMC) 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

71114.07 - Exercise Evaluation - Hostile Action (HA) Event

Inspection Review (IP Section 02.01 - 02.11) (1 Sample)

- (1) The inspectors evaluated the biennial emergency plan exercise on September 27, 2022. The exercise scenario simulated an event at the Perry Nuclear Power Plant that initiated with the declaration and notification of an Alert in response to simulated hostile actions occurring within the site's owner controlled area (OCA). The scenario conditions simulated the escalation of the significance of the event, requiring the declaration of 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

Inspection Review (IP Section 02.01 - 02.04) (1 Sample)

- (1) The inspectors reviewed and evaluated the proposed scenario for the biennial emergency plan exercise on August 18, 2022.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

EP01: Drill/Exercise Performance (DEP) Sample (IP Section 02.12) (1 Sample)

- (1) October 1, 2021 through June 30, 2022

EP02: Emergency Response Organization (ERO) Drill Participation (IP Section 02.13) (1 Sample)

- (1) October 1, 2021 through June 30, 2022

EP03: Alert And Notification System (ANS) Reliability Sample (IP Section 02.14) (1 Sample)

(1) October 1, 2021 through June 30, 2022

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On September 29, 2022, the inspectors presented the emergency preparedness biennial exercise inspection results to Mr. Rod Penfield and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
71114.07	Corrective Action Documents	CR 2021-06999	ERO Drill: Simulator Accountability Message not Heard in Multiple Plant Facilities During Drill	09/16/2021	
		CR 2021-07005	ERO Drill: OSC Performance Challenges ERO Drill Objectives	09/17/2021	
		CR 2021-07006	ERO Drill: OSC Performance Challenges ERO Drill Objectives	09/17/2021	
		CR-2020-07251	NRC Eplan Drill: Information not Communicated to EOF Emergency Coordinator during Turnover with TSC Emergency Coordinator	09/17/2020	
		CR-2021-01680	Performance Assessment Elevation: Emergency Response Organization (ERO) Call-In Test / Drill	03/10/2021	
		CR-2022-01889	ERO Drill - Drill Objective B1 for ERO Alert Notification Not Met/Controller Inject Required	03/09/2022	
		CR-2022-01903	ERO Drill - Alert State/County Notification DEP and Objective (C1) Not Met During 3/8/22 Drill	03/09/2022	
		CR-2022-01908	Air Sampler at the TEC	03/09/2022	
		CR-2022-01974	ERO Drill - Drill Objective B2 to Demonstrate the Effective and Orderly Transfer of Emergency	03/10/2022	
		CR-2022-01981	ERO Drill – Preparation Improvement Opportunity	03/10/2022	
		CR-2022-01982	ERO Drill – Performance Improvement Opportunity	03/10/2022	
		CR-2022-02985	Unsuccessful Drill and Exercise Performance (DEP) Notification Opportunity	04/04/2022	
	Miscellaneous			Perry Nuclear Power Plant 2022 Evaluated Exercise Scenario Guide	1
				Emergency Preparedness Drill and Exercise Reports	09/01/2020-09/01/2022
				Two-Years of Drill and Exercise Corrective Action Program Items	09/01/2020 – 09/01/2022
	Procedures		EP 0000	Perry Nuclear Power Plant Emergency Plan	60
			NOP-LP-5011	Emergency Response Drill and Exercise Program	15
			NOP-LP-5020	Unified RASCAL Interface (URI) Dose Assessment Software General Administration	1

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		NOP-LP-5023	Perry Unified RASCAL Interface (URI) Dose Assessment Software	1
		NOP-LP-5024	Perry Unified RASCAL Interface (URI) Dose Assessment Software Integrated Assessments	0
		NOP-LP-5502	Event Classification	0
		NOP-LP-5503	Emergency Notifications	0
		NOP-LP-5504	Protective Measures	0
		NOP-LP-5505	Facility Activation, Operation, and De-Activation	0
		NOP-LP-5509	ERO Position Checklists	0
		PSI-0019	Emergency Action Level (EAL) Bases Document	21
71114.08	Miscellaneous		Perry Nuclear Power Plant 2022 Evaluated Exercise Scenario Guide	0
71151	Miscellaneous		NRC Performance Indicator Data; Drill/Exercise Performance	10/01/2021-06/30/2022
			NRC Performance Indicator Data; Alert and Notification System Reliability	10/01/2021-06/30/2022
			NRC Performance Indicator Data; Emergency Response Organization Drill Participation	10/01/2021-06/30/2022