



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

September 1, 2015

Mr. Ernest Harkness
Site Vice President
FirstEnergy Nuclear Operating Company
Perry Nuclear Power Plant
P. O. Box 97, 10 Center Road, A-PY-290
Perry, OH 44081-0097

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR PERRY NUCLEAR POWER PLANT
(REPORT 05000440/2015005)**

Dear Mr. Harkness:

On August 13, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Perry Nuclear Power Plant. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2014 through June 30, 2015. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined that overall, Perry Nuclear Power Plant operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Perry Nuclear Power Plant during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through December 31, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence. Notable infrequent inspections planned include the; biennial Problem Identification and Resolution inspection, Temporary Instruction (TI) -190 Flooding Reevaluation, TI-191 Flex/Mitigating Strategies inspection, Triennial Heat Sink inspection, and Component Design Basis inspection.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the

Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The audit has been completed for the Perry Nuclear Power Plant, and the information gathered will aid staff in development of the ultimate Safety Evaluation for the site, which will be issued after the NRC staff receives the Final Compliance letter for the site. The NRC staff will then confirm through inspections the full implementation of the orders mentioned above by performing TI 191 "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

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 will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of 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).

Please contact me at (630) 829-9618 with any questions you have regarding this letter.

Sincerely,

/RA/

Michael A. Kunowski, Chief
Branch 5
Division of Reactor Projects

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

Enclosure:
Perry Nuclear Power Plant
Inspection Plan

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DATE	08/27/2015							

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Letter to E. Harkness from M. Kunowski dated September 1, 2015

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR PERRY NUCLEAR POWER PLANT
(REPORT 05000440/2015005)

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Perry
Inspection / Activity Plan
09/01/2015 - 12/31/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
Start	End				
			BI FIRE - FIRE PROTECTION INSPECTION & BAG TRIP		4
1	09/21/2015	10/23/2015	IP 7111105T	Fire Protection [Triennial]	
			TI 190 - TI-190 FLOODING REEVALUATION		1
1	08/17/2015	09/30/2015	IP 2515/190	Inspection of Interim Actions of Near-Term Task Force Recommendation 2.1 Flooding Reevaluations	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	08/31/2015	09/04/2015	IP 71124.07	Radiological Environmental Monitoring Program	
1	08/31/2015	09/04/2015	IP 71151	Performance Indicator Verification	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	09/14/2015	09/18/2015	IP 71124.02	Occupational ALARA Planning and Controls	
			STRIKE P - STRIKE PREPARATIONS		1
1	11/01/2015	11/20/2015	IP 92709	Licensee Strike Contingency Plans	
			ENG BI - MODIFICATIONS / 50.59 INSPECTION		3
1	05/09/2016	05/27/2016	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	05/16/2016	05/20/2016	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
			TI191 - FLEX/MITIGATING STRATEGIES/SFPI		4
1	06/20/2016	06/24/2016	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	06/27/2016	07/01/2016	IP 71124.02	Occupational ALARA Planning and Controls	
			ISFSI - ISFSI OPERATION AT REACTOR SITE		2
1	07/01/2016	07/30/2016	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			BI EP - EP EXERCISE INSPECTIN / PI VERIFICATION		5
1	09/12/2016	09/16/2016	IP 7111401	Exercise Evaluation	
1	09/12/2016	09/16/2016	IP 7111406	Drill Evaluation	
1	09/12/2016	09/16/2016	IP 7111408	Exercise Evaluation – Scenario Review	
1	09/12/2016	09/16/2016	IP 71151	Performance Indicator Verification	
			BI HS - TRIENNIAL HEAT SINK INSPECTION		2
1	10/03/2016	10/07/2016	IP 7111107T	Heat Sink Performance	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	10/17/2016	10/21/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	10/17/2016	10/21/2016	IP 71124.04	Occupational Dose Assessment	
1	10/17/2016	10/21/2016	IP 71151	Performance Indicator Verification	

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

Perry
Inspection / Activity Plan
09/01/2015 - 12/31/2017

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Start	End				
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	11/28/2016	12/02/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			OL-RQ - BIENNIAL REQUAL PROGRAM INSPECTION		2
1	12/12/2016	12/16/2016	IP 7111111B	Licensed Operator Requalification Program	
			OL PREP - INIT EXAM/FEB 2017		3
1	01/09/2017	01/13/2017	W90357	OL - INITIAL EXAM - 2017 JAN-FEB - PERRY	
			OL EXAM - INIT EXAM/FEB. 2017		3
1	02/06/2017	02/17/2017	W90357	OL - INITIAL EXAM - 2017 JAN-FEB - PERRY	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	02/13/2017	02/17/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			ISI - INSERVICE INSPECTION		1
1	03/06/2017	04/07/2017	IP 7111108G	Inservice Inspection Activities - BWR	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	04/17/2017	04/21/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	06/19/2017	06/23/2017	IP 71124.05	Radiation Monitoring Instrumentation	
			BI ENG - COMPONENT DESIGN BASIS INSPECTION		6
1	08/14/2017	09/15/2017	IP 7111121	Component Design Bases Inspection	
			BI EP - EP BASELINE INSPECTION / PI VERIFICATION		1
1	09/18/2017	09/22/2017	IP 7111402	Alert and Notification System Testing	
1	09/18/2017	09/22/2017	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	09/18/2017	09/22/2017	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	09/18/2017	09/22/2017	IP 71151	Performance Indicator Verification	
			BI PI&R - BIENNIAL PI&R INSPECTION		4
1	10/30/2017	11/17/2017	IP 71152B	Problem Identification and Resolution	

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