



**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

cc w/encl: Distribution via LISTSERV®

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DATE	08/27/2015							

**OFFICIAL RECORD COPY**

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			
1	09/21/2015	10/23/2015	<b>BI FIRE</b> IP 7111105T	<b>- FIRE PROTECTION INSPECTION &amp; BAG TRIP</b> Fire Protection [Triennial]	4
1	08/17/2015	09/30/2015	<b>TI 190</b> IP 2515/190	<b>- TI-190 FLOODING REEVALUATION</b> Inspection of Interim Actions of Near-Term Task Force Recommendation 2.1 Flooding Reevaluations	1
1	08/31/2015	09/04/2015	<b>BI RP</b> IP 71124.07	<b>- RADIATION PROTECTION BASELINE INSPECTION</b> Radiological Environmental Monitoring Program	1
1	08/31/2015	09/04/2015	IP 71151	Performance Indicator Verification	
1	09/14/2015	09/18/2015	<b>BI RP</b> IP 71124.02	<b>- RADIATION PROTECTION BASELINE INSPECTION</b> Occupational ALARA Planning and Controls	1
1	11/01/2015	11/20/2015	<b>STRIKE P</b> IP 92709	<b>- STRIKE PREPARATIONS</b> Licensee Strike Contingency Plans	1
1	05/09/2016	05/27/2016	<b>ENG BI</b> IP 7111117T	<b>- MODIFICATIONS / 50.59 INSPECTION</b> Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	3
1	05/16/2016	05/20/2016	<b>BI RP</b> IP 71124.06	<b>- RADIATION PROTECTION BASELINE INSPECTION</b> Radioactive Gaseous and Liquid Effluent Treatment	1
1	06/20/2016	06/24/2016	<b>TI191</b> IP 2515/191	<b>- FLEX/MITIGATING STRATEGIES/SFPI</b> Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	4
1	06/27/2016	07/01/2016	<b>BI RP</b> IP 71124.02	<b>- RADIATION PROTECTION BASELINE INSPECTION</b> Occupational ALARA Planning and Controls	1
1	07/01/2016	07/30/2016	<b>ISFSI</b> IP 60855.1	<b>- ISFSI OPERATION AT REACTOR SITE</b> Operation of an Independent Spent Fuel Storage Installation at Operating Plants	2
1	09/12/2016	09/16/2016	<b>BI EP</b> IP 7111401	<b>- EP EXERCISE INSPECTIN / PI VERIFICATION</b> Exercise Evaluation	5
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	
1	10/03/2016	10/07/2016	<b>BI HS</b> IP 7111107T	<b>- TRIENNIAL HEAT SINK INSPECTION</b> Heat Sink Performance	2
1	10/17/2016	10/21/2016	<b>BI RP</b> IP 71124.03	<b>- RADIATION PROTECTION BASELINE INSPECTION</b> In-Plant Airborne Radioactivity Control and Mitigation	1
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			
1	11/28/2016	12/02/2016	<b>BI RP</b> IP 71124.01	<b>- RADIATION PROTECTION BASELINE INSPECTION</b> Radiological Hazard Assessment and Exposure Controls	1
1	12/12/2016	12/16/2016	<b>OL-RQ</b> IP 7111111B	<b>- BIENNIAL REQUAL PROGRAM INSPECTION</b> Licensed Operator Requalification Program	2
1	01/09/2017	01/13/2017	<b>OL PREP</b> W90357	<b>- INIT EXAM/FEB 2017</b> OL - INITIAL EXAM - 2017 JAN-FEB - PERRY	3
1	02/06/2017	02/17/2017	<b>OL EXAM</b> W90357	<b>- INIT EXAM/FEB. 2017</b> OL - INITIAL EXAM - 2017 JAN-FEB - PERRY	3
1	02/13/2017	02/17/2017	<b>BI RP</b> IP 71124.01	<b>- RADIATION PROTECTION BASELINE INSPECTION</b> Radiological Hazard Assessment and Exposure Controls	1
1	03/06/2017	04/07/2017	<b>ISI</b> IP 7111108G	<b>- INSERVICE INSPECTION</b> Inservice Inspection Activities - BWR	1
1	04/17/2017	04/21/2017	<b>BI RP</b> IP 71124.08	<b>- RADIATION PROTECTION BASELINE INSPECTION</b> Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	1
1	06/19/2017	06/23/2017	<b>BI RP</b> IP 71124.05	<b>- RADIATION PROTECTION BASELINE INSPECTION</b> Radiation Monitoring Instrumentation	1
1	08/14/2017	09/15/2017	<b>BI ENG</b> IP 7111121	<b>- COMPONENT DESIGN BASIS INSPECTION</b> Component Design Bases Inspection	6
1	09/18/2017	09/22/2017	<b>BI EP</b> IP 7111402	<b>- EP BASELINE INSPECTION / PI VERIFICATION</b> Alert and Notification System Testing	1
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	
1	10/30/2017	11/17/2017	<b>BI PI&amp;R</b> IP 71152B	<b>- BIENNIAL PI&amp;R INSPECTION</b> Problem Identification and Resolution	4

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