



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

March 4, 2011

Mr. Mark Bezilla
Site Vice President
FirstEnergy Nuclear Operating Company
Perry Nuclear Power Plant
P. O. Box 97, 10 Center Road, A-PY-A290
Perry, OH 44081-0097

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR PERRY NUCLEAR POWER PLANT,
UNIT 1 (REPORT 05000440/2011001)**

Dear Mr. Bezilla:

On February 17, 2011, the NRC completed its end-of-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 January 1, 2010, through December 31, 2010. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

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, Unit 1, 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. In addition to the ROP baseline, inspections are planned for Temporary Instruction (TI) 2515/179, "Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS," TI 2515/177, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," Independent Spent Fuel Storage Installation (ISFSI) Inspections 60854.1, "Preoperational Testing of ISFSIs at Operating Plants," 60855.1, "Operation of an ISFSI at Operating Plants," and 60856.1, "Review of 10 CFR 72.212(b) Evaluations at Operating Plants," and Inspection Procedure 92702, "Followup on Corrective Actions for Violations and Deviations."

Performance at the Perry Nuclear Power Plant during the assessment period continued to exhibit weaknesses in the area of human performance. In our mid-cycle assessment letter dated September 1, 2010, we advised you of a substantive cross-cutting issue in the area of human performance with a cross-cutting theme in the component of work planning (H.3(a)). The total number of findings with documented cross-cutting aspects in human performance remained constant with 14 findings in this assessment period. Our assessment of the findings

identified an additional cross-cutting theme in the human performance area, based on four findings with a cross-cutting aspect of documentation/procedures (H.2(c)). In addition, while the number of findings in the work planning (H.3(a)) cross-cutting aspect decreased from four to three during the most recent assessment period, it is apparent that your actions to date have not resulted in sustainable positive improvement in the area of work planning. Therefore, the human performance substantive cross-cutting issue will remain open until the number of findings in the H.2(c) and H.3(a) aspects are reduced and you demonstrate the implementation of effective corrective actions that result in sustained performance improvement in the human performance area.

This assessment period is the seventh consecutive assessment period identifying a substantive cross-cutting issue in the human performance area first opened in our March 3, 2008, end-of-cycle assessment letter [ADAMS ML080600303]. Based on the results of the most recent assessment period, the actions taken in response to continued human performance errors have not demonstrated sufficient progress in addressing the issue. Your effectiveness at implementing sustainable corrective actions to address this substantive cross-cutting issue was reviewed during our biennial Problem Identification & Resolution inspection in November 2010. The results of that inspection identified that improvements made to address the human performance substantive cross-cutting issue in work planning are not yet effective and that additional effort in this area is needed.

In our September 1, 2010, mid-cycle assessment letter, we notified you of the potential for the NRC to take additional actions not covered by the Action Matrix, as prescribed in Inspection Manual Chapter 0305. Based on our assessment of your actions to address the substantive cross-cutting issue in the human performance area, and the actions we have taken to date to assess your performance issues, we have determined that additional actions not covered by the Action Matrix are warranted. Prior to the 2011 mid-cycle assessment, the NRC will conduct an inspection of the long-standing, human performance substantive cross-cutting issue, beyond the baseline inspection program. Following the receipt of a letter from you informing us of Perry's readiness for inspection, the NRC will perform an inspection to assess the effectiveness of your corrective actions in addressing the human performance substantive cross-cutting issue, and specifically the theme in work planning (H.3a). The inspection will focus on evaluating Perry's progress in developing and implementing those corrective actions and the metrics and measures used to determine performance improvement effectiveness. This inspection will use NRC Inspection Procedure (IP) 92702, "Followup on Corrective Actions for Violations and Deviations," as guidance. We will conduct this inspection to evaluate whether adequate corrective actions have been implemented for the human performance substantive cross-cutting issue; verify that the root causes of these issues have been identified; that their generic implications have been addressed; and that your programs and practices have been appropriately enhanced to prevent recurrence. We will contact you separately to schedule this inspection.

The enclosed inspection plan lists the inspections scheduled through June 30, 2012. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last 9 months of the inspection plan are tentative and may be revised at the mid-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.

In accordance with 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 document 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 Jamnes Cameron at 630-829-9833 with any questions you have regarding this letter.

Sincerely,

/RA/

Steven West, Director
Division of Reactor Projects

Docket Nos. 50-440
License Nos. NPF-58

Enclosure: Perry Plant Inspection/Activity Plan

cc w/encl: Distribution via ListServ

Perry
Inspection / Activity Plan
03/01/2011 - 06/30/2012

Planned Dates		Inspection Activity	Title	No. of Staff on Site
Start	End			
		ISFSI - ISFSI DESIGN AND CONSTRUCTION		1
01/21/2011	04/01/2011	IP 60853	On-Site Fabrication Of Components And Construction On An ISFSI	
		ISFSI - ISFSI INSPECTION - SCHEDULE DEPENDENT		2
02/01/2011	03/31/2011	IP 60856.1	Review of 10 CFR 72.212(b) Evaluations at Operating Plants	
05/01/2011	12/31/2011	IP 60854.1	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	
		STRIKE - STRIKE CONTINGENCY-OPS/MAINT/RP/CHEM/I&C		2
04/01/2011	05/15/2011	IP 92709	Licensee Strike Contingency Plans	
		BI ENG - INSERVICE INSPECTION		1
04/18/2011	05/22/2011	IP 7111108G	Inservice Inspection Activities - BWR	
		BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
05/02/2011	05/06/2011	IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
05/02/2011	05/06/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
		BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
07/11/2011	07/15/2011	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
		BI EP - EP ROUTINE INSPECTION / PI VERIFICATION		1
09/12/2011	09/16/2011	IP 7111402	Alert and Notification System Testing	
09/12/2011	09/16/2011	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
09/12/2011	09/16/2011	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
09/12/2011	09/16/2011	IP 71151	Performance Indicator Verification	
		BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
09/19/2011	09/23/2011	IP 71124.07	Radiological Environmental Monitoring Program	
09/19/2011	09/23/2011	IP 71151-BI01	Reactor Coolant System Activity	
		BI ENG - COMPONENT DESIGN BASIS INSPECTION		7
10/31/2011	12/02/2011	IP 2515/177	Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System	
10/31/2011	12/02/2011	IP 7111121	Component Design Bases Inspection	
		BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
11/28/2011	12/02/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
		ISFSI - ISFSI INSPECTION - SCHEDULE DEPENDENT		2
01/01/2012	05/31/2012	IP 60854.1	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	
06/01/2012	11/30/2012	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
		BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
02/06/2012	02/10/2012	IP 71124.02	Occupational ALARA Planning and Controls	
02/06/2012	02/10/2012	IP 71151	Performance Indicator Verification	
		BI ENG - FIRE PROTECTION INSPECTION & BAG TRIP		3
03/12/2012	04/13/2012	IP 7111105T	Fire Protection [Triennial]	

Perry
Inspection / Activity Plan
03/01/2011 - 06/30/2012

Planned Dates		Inspection Activity	Title	No. of Staff on Site
Start	End			
04/16/2012	04/20/2012	BI RP IP 71124.01	- RADIATION PROTECTION BASELINE INSPECTION Radiological Hazard Assessment and Exposure Controls	1

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Letter to M. Bezilla from S. West dated March 4, 2011.

SUBJECT: ANNUAL ASSESSMENT LETTER FOR PERRY NUCLEAR POWER PLANT,
UNIT 1 (REPORT 05000440/2011001)

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