



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

September 1, 2010

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: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN –
PERRY NUCLEAR POWER PLANT**

Dear Mr. Bezilla:

On August 4, 2010, the NRC staff completed its mid-cycle performance review of the Perry Nuclear Power Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from July 1, 2009, through June 30, 2010. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only - Security Information" will include the Security Cornerstone review and resultant inspection plan.

Overall, Perry Nuclear Power Plant operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

In our 2009 annual assessment letter, dated March 3, 2010 [ADAMS Ref. ML100610281], we advised you of a substantive cross-cutting issue in the area of Human Performance with cross-cutting themes in the areas of work planning (H.3(a)), human error prevention techniques (H.4(a)), and work oversight (H.4(c)).

Although the total number of findings with documented cross-cutting aspects in human performance decreased from 19 to 14, a cross-cutting theme in the human performance area was once again identified, based on four findings with a cross-cutting aspect of work planning (H.3(a)). We remain concerned about whether the development of causal evaluations and implementation of corrective actions can be effective in demonstrating sustainable performance in this area. The NRC has a continuing concern with your scope of efforts and progress in addressing this cross-cutting area. Based on the identification of a human performance cross-cutting theme, and because of continued NRC concerns with your performance issues in

the human performance area, the human performance substantive cross-cutting issue will remain open. It will remain open until your corrective actions have demonstrated positive, sustainable improvements in the area and have resulted in a reduction in the number of findings in the area. As part of our continuing review of this issue, a Problem Identification & Resolution (PI&R) follow-up inspection item will be performed in accordance with IP 71152, "Identification and Resolution of Problems," Section 03.02, "Selected Issue Follow-up Inspection," during the upcoming assessment period.

During this assessment period, the number of findings with cross-cutting aspects of human error prevention techniques (H.4(a)) and work oversight (H.4(c)) were reduced to below the threshold for a cross-cutting theme. We have reviewed your corrective actions to address these cross-cutting themes and believe that they have resulted in positive improvement and, if properly implemented, can provide sustained, improved performance. While we will continue to monitor the human performance area as a whole, the H.4(a) and H.4(c) cross-cutting themes are closed.

This mid-cycle assessment letter is the sixth consecutive assessment letter identifying a substantive cross-cutting issue in the human performance area, which was initially opened in our March 3, 2008, end-of-cycle assessment letter [ADAMS Ref. 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 will be reviewed during our biennial PI&R inspection in November 2010. We will await the outcome of our inspection in November to determine whether additional actions not covered by the Action Matrix, as prescribed in Inspection Manual Chapter 0305, are necessary.

Our 2009 annual assessment letter also advised you of our request that you have an independent assessment of safety culture performed at your site. This assessment was intended to help improve your understanding of how the overall safety culture at your site may be impacting your ability to achieve sustained results in the human performance area. We requested that this assessment be completed in time to be reviewed during the NRC biennial PI&R inspection scheduled for November 2010. We understand that the assessment was completed in May 2010; however, we have not yet reviewed this safety culture assessment. Further progress in this area will be evaluated in accordance with our schedule for the biennial PI&R Inspection.

In our 2009 annual assessment letter we also advised you of a substantive cross-cutting issue in the area of PI&R with a cross-cutting theme in the area of corrective action program evaluation/extent of condition (P.1(c)). Our mid-cycle assessment noted positive sustainable improvement in the PI&R area. For this assessment period, we identified one finding with a cross-cutting aspect in the PI&R area and no findings with a cross-cutting aspect of P.1(c). Based on the actions you have taken to decrease the number of findings in the P.1(c) aspect, and because no cross-cutting theme was identified in the PI&R cross-cutting area, the PI&R substantive cross-cutting issue is closed.

The enclosed inspection plan details the inspections, less those related to security, scheduled through December 31, 2011. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last 9 months of the inspection plan are tentative and may be revised at the end-of-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Jamnes Cameron at 630-829-9833 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA by Gary L. Shear for/

Steven West, Director
Division of Reactor Projects

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

Enclosure: Perry Inspection/Activity Plan

cc w/encl: Distribution via ListServ

Perry
Inspection / Activity Plan
09/01/2010 - 12/31/2011

Planned Dates		Inspection Activity	Title	No. of Staff on Site
Start	End			
		ISFSI - ISFSI INSPECTION		2
07/01/2010	09/30/2010	IP 60854.1	Preoperational Testing of Independent Spent Fuel Storage Facility Installation at Operating Plants	
09/01/2010	12/31/2010	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
		BI EP - EP EXERCISE INSPECTION / PI VERIFICATION		3
09/27/2010	10/01/2010	IP 7111401	Exercise Evaluation	
09/27/2010	10/01/2010	IP 71151-EP01	Drill/Exercise Performance	
09/27/2010	10/01/2010	IP 71151-EP02	ERO Drill Participation	
09/27/2010	10/01/2010	IP 71151-EP03	Alert & Notification System	
		BI PI&R - BIENNIAL PI&R INSPECTION		4
11/01/2010	11/19/2010	IP 71152B	Identification and Resolution of Problems	
		BI OL - BIENNIAL REQUAL PROGRAM INSPECTION		2
11/29/2010	12/03/2010	IP 7111111B	Licensed Operator Requalification Program	
		BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
01/24/2011	01/28/2011	IP 71124.05	Radiation Monitoring Instrumentation	
01/24/2011	01/28/2011	IP 71151-BI01	Reactor Coolant System Activity	
01/24/2011	01/28/2011	IP 71151-OR01	Occupational Exposure Control Effectiveness	
01/24/2011	01/28/2011	IP 71151-PR01	RETS/ODCM Radiological Effluent	
		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 71124.02	Occupational ALARA Planning and Controls	
		ISFSI - ISFSI INSPECTION - SCHEDULE DEPENDENT		2
06/01/2011	06/30/2011	IP 60856	Review of 10 CFR 72.212(b) Evaluations	
		BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
06/27/2011	07/01/2011	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
		BI EP - EP ROUTINE INSPECTION / PI VERIFICATION		2
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-EP01	Drill/Exercise Performance	
09/12/2011	09/16/2011	IP 71151-EP02	ERO Drill Participation	

Perry
Inspection / Activity Plan
09/01/2010 - 12/31/2011

Planned Dates		Inspection Activity	Title	No. of Staff on Site
Start	End			
		BI EP - EP ROUTINE INSPECTION / PI VERIFICATION		2
09/12/2011	09/16/2011	IP 71151-EP03	Alert & Notification System	
		BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
09/12/2011	09/16/2011	IP 71124.02	Occupational ALARA Planning and Controls	
09/12/2011	09/16/2011	IP 71124.07	Radiological Environmental Monitoring Program	
		BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
10/17/2011	10/21/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
		BI ENG - COMPONENT DESIGN BASIS INSPECTION		5
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	
		OL PREP - PERRY INIT EXAM - 01/2011		3
12/19/2011	12/23/2011	W90232	OL - INITIAL EXAM - JAN 2011 - PERR	

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Letter to M. Bezilla from S. West dated September 1, 2010.

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN –
PERRY NUCLEAR PLANT

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