

September 6, 2006

Mr. L. William Pearce  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Perry Nuclear Power Plant  
P. O. Box 97, 10 Center Road, A290  
Perry, OH 44081-0097

SUBJECT: UPCOMING PERRY NUCLEAR POWER PLANT CONFIRMATORY  
ACTION LETTER (CAL) FOLLOWUP INSPECTION  
HUMAN PERFORMANCE ACTION ITEM EFFECTIVENESS REVIEW

Dear Mr. Pearce:

On October 23, 2006, the Nuclear Regulatory Commission (NRC) will begin a review of your actions to address issues related to human performance as part of our September 28, 2005, Confirmatory Action Letter followup inspection activities. In particular, this inspection will focus on determining whether your Commitments associated with the human performance program that were identified in your August 8 and 17, 2005, letters which responded to our IP 95003 supplemental inspection report, as well as selected completed actions prescribed in the Perry Phase 1 and Phase 2 Detailed Action and Monitoring Plan (DAMP) to improve human performance, were effective and whether any additional inspection beyond that prescribed by the ROP baseline inspection program is required.

As such, the inspection objectives are to: 1) determine whether human performance tools are adequately implemented through direct observation of plant evolutions; 2) determine whether personnel, such as first-line supervisors, are actively monitoring and re-enforcing the use of human performance tools during plant evolutions; and 3) determine whether human performance monitoring tools, such as Key Performance Indicators (KPIs), reflect a sustained improvement in human performance and whether corrective actions are identified and implemented, as required, based upon the KPI data that is collected.

In order to minimize the impact that the inspection has on the site and to ensure a productive inspection, we have enclosed a request for documents needed for the inspection. The documents should be ready for NRC review by October 10, 2006. To the extent practical, please provide electronic copies of the requested documents on five CDs, such that one complete set of documentation is on each CD. Provide paper copies only for those documents which can't readily be made available electronically. Please mail all five CDs and one copy of the paper documentation to Bob Hagar, U.S. Nuclear Regulatory Commission, 2112 Old Camden Road, Hartsville, SC, 29550. (Retain the other four copies of the paper documentation for NRC review when they arrive at the site.)

L. Pearce

-2-

If there are any questions about the material requested, or the inspection in general, please call Bob Hagar, who is the team leader for this inspection, at (843) 383-4571.

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).

Sincerely,

*/RA/*

Eric R. Duncan, Chief  
Branch 6  
Division of Reactor Projects

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

Enclosure:  
Request for Information Regarding CAL Followup Inspection -  
Human Performance Action Item Effectiveness Review

cc:  
G. Leidich, President and Chief Nuclear Officer - FENOC  
J. Hagan, Senior Vice President of Operations and Chief  
Operating Officer - FENOC  
D. Pace, Senior Vice President, Fleet Engineering - FENOC  
J. Rinckel, Vice President, Fleet Oversight  
Director, Site Operations  
Director, Regulatory Affairs  
Manager, Fleet Licensing  
Manager, Site Regulatory Compliance  
D. Jenkins, Attorney, FirstEnergy  
Public Utilities Commission of Ohio  
Ohio State Liaison Officer  
R. Owen, Ohio Department of Health

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Director, Regulatory Affairs  
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Manager, Site Regulatory Compliance  
D. Jenkins, Attorney, FirstEnergy  
Public Utilities Commission of Ohio  
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R. Owen, Ohio Department of Health

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## **Requested Information to Support**

### **CAL Followup Inspection - Human Performance Action Item Effectiveness Review**

#### Human Performance During Plant Evolution - Background

In the area of human performance, the IP 95003 inspection team determined that a number of self-revealed findings relating to procedure adherence occurred that had a strong human performance contribution. The IP 95003 inspection team reviewed the events that occurred during the IP 95003 inspection and identified that the procedure adherence problems had a number of common characteristics. In a number of cases, personnel failed to properly focus on the task at hand. Although pre-job briefings were held prior to many events, and procedures were adequate to accomplish the intended activity, personnel failed to sufficiently focus on the individual procedure step being accomplished and performed an action outside of that prescribed by the procedure. In some cases, the team determined that a lack of a questioning attitude contributed to the procedure problems that occurred. Although information was available to personnel that, if fully considered, could have prevented the procedure adherence issues that occurred, that information was not sought out or was not questioned. The presence of supervisors with the necessary standards to foster good procedure adherence could have acted as a significant barrier to prevent some of the problems that occurred. However, adequate supervisory oversight was not always available or used.

During this inspection, a determination of whether the actions implemented were effective is required. As such, the observation of plant evolutions such as surveillance and in-service testing, maintenance and post-maintenance testing, clearance hanging and removal, and plant configuration changes, is required to determine the level at which human performance and human performance error prevention tools such as self checking, peer checking, independent verification, concurrent verification, and three-way communication are being utilized.

#### Human Performance During Plant Evolutions - Documentation Request

To determine the effectiveness of the corrective actions to address the area of Human Performance During Plant Evolutions, please provide five copies of the following documents:

- The schedule for all activities associated with surveillance and in-service testing, maintenance and post-maintenance testing, clearance hanging and removal, and other control room activities involving plant configuration changes.
- Self-assessments, external assessments, and Quality Assurance audits completed after January 1, 2006, related to in-field observations of human performance and the use of human performance error prevention tools.

#### Human Performance Monitoring Tools - Background

During the IP 95003 inspection, the inspection team identified that available tools for assessing human and organizational performance had not been effectively used. To address this issue, the licensee implemented DAMP Item 1.3.11: "Conduct parallel observations with managers or other supporting supervisors to cross-calibrate each other on effective observation techniques.

Managers should conduct parallel observations with each of their direct report supervisors and through 4<sup>th</sup> quarter 2005. The intent of this corrective action is to improve supervisors' abilities to coach workers on expected behaviors - correcting inappropriate behaviors and reinforcing desired behaviors. The parallel observations should reinforce these coaching and observation skills." During the Human Performance Action Item Implementation CAL Followup Inspection, the team confirmed that DAMP Item 1.3.11 was implemented.

During this inspection, a determination of whether the implementation of actions to address the use of tools to assess human and organizational performance was effective is required.

#### Human Performance Monitoring Tools - Documentation Request

To determine the effectiveness of the corrective actions to address the area of Human Performance Monitoring Tools, please provide five copies of the following documents:

- Schedules for supervisory oversight of in-field observation of plant activities.
- Procedures, guidance, and other material, such as score cards, used by supervisors who monitor and re-enforce expectations for the use of human performance error prevention tools.
- A list of activities that have been observed and assessed by supervisors within the last 6 months.
- All condition reports generated within the previous 6 months related to human performance that were identified as a result of a supervisor-observed in-field plant activity.
- Self-assessments, external assessments, and Quality Assurance audits completed after January 1, 2006, related to in-field observations of supervisors monitoring human performance and re-enforcing the use of human performance error prevention tools.

#### Human Performance Key Performance Indicators (KPIs) - Background

During the IP 95003 inspection, the inspection team identified that available tools for assessing human and organizational performance had not been effectively used. To address this issue, the licensee developed KPIs to measure the success of Human Performance improvement initiatives. In particular, the licensee implemented DAMP Item 2.2.1: "Refine metrics for monitoring station and section human performance." During the Human Performance Action Item Implementation CAL Followup Inspection, the team confirmed that DAMP Item 2.2.1 had been implemented and that the Human Performance KPIs were adequate.

During this inspection, a determination of 1) whether the KPIs are being effectively utilized to monitor human performance, and 2) whether the KPIs reflect a sufficient level of improvement in human performance, is required.

## Human Performance Key Performance Indicators (KPIs) - Documentation Request

To determine the effectiveness of the corrective actions to address the area of Human Performance KPIs, please provide five copies of the following documents:

- Results of human performance KPIs from their inception up until the most recently available results.
- All condition reports associated with events related to human performance since January 1, 2006.
- All condition reports based upon the results of KPI data that have been generated after January 1, 2006.
- Self-assessments, external assessments, and Quality Assurance audits completed after January 1, 2006, related to human performance, particularly as associated with the effectiveness of human performance KPIs in the assessment of human performance, and the identification and resolution of human performance issues.