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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Subject: Response to Substantive Cross-Cutting Issue concerning Human Performance

Reference: NRC Annual Assessment Letter – LaSalle Nuclear Power Station, dated March 2, 2005

In the referenced letter, the NRC noted a substantive cross-cutting issue in the area of human performance, originally identified during the mid-cycle assessment that continued to be a concern during the end-of-cycle assessment. This issue was based on several inspection findings in which human performance was less than adequate.

Exelon Generation Company, (EGC) LLC, is aware and acknowledges that instances of inadequate human performance (HU) have occurred at LaSalle County Station (LSCS). Several long-term corrective actions have been initiated to resolve this concern as a result of previous internally and externally identified issues with human performance. The following actions have been taken to improve human performance at LSCS.

- An integrated evaluation of the human performance events was performed that resulted in a comprehensive Human Performance Improvement Plan (HPIP). The HPIP focuses on basic fundamentals of Human Performance that in combination establish the framework for continuous improvement. The HPIP is a dynamic tool that is updated with actions from applicable Corrective Action Program (CAP) products such as root cause investigations (RCI), apparent cause evaluations (ACE) and common cause analyses (CCA) for human performance issues. Based on the content of the NRC Mid-Cycle Assessment Letter, dated August 30, 2004, another review was performed to validate that the HPIP was properly focused in the following four strategic areas: Planning, Execution, Processes and Results.

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The four strategic areas and their attributes are described below.

- Planning - operating experience, walkdowns, pre-job interactive briefings, use of clearance orders, radiation work permits, scheduling (including appropriate sequencing of work), and work package preparation.

- Execution - the use of the correct human performance tools (e.g., self-check, peer check, first check, concurrent verification, and independent verification for the given task), procedural adherence, stopping work when uncertain, supervisory oversight, and conservative decision-making.

- Results - use of the information from the fundamentals management system (i.e., supervisory oversight observations), post-job critiques, performance indicators, and rewards and recognition.

- Process – training, fundamentals, risk analysis, corrective action program, self-assessment, work management, formal process for resolving plant issues, and long-term asset management.

While the implementation of the HPIP has resulted in overall improvement in the human performance of the station with respect to rate of occurrence of events, station management determined that an updated integrated evaluation of human performance needed to be performed, the results of which appear in the tables below.

Event Clock Reset Data

Department	2003	2004	2005 (YTD)
Station	5	3	1
Operations	9	6	3
Maintenance	12	5	2
Engineering	6	4	0
Radiation Protection	19	8	1
Chemistry	4	1	1

L1R10 vs. L2R10 Event Clock Reset Data

Department	L1R10	L2R10
Station	2	0
Operations	2	2
Maintenance	2	0
Engineering	1	0
Radiation Protection	2	0
Chemistry	1	1

The scope of the above evaluation included CAP data, those human performance issues identified in NRC integrated inspection reports and the 2005 human performance issues identified by the NRC Resident Staff. The purpose of the evaluation was to determine if the focus of the HPIP continued to be appropriate, the effectiveness of completed actions, and if additional actions are required based on the underlying causes. Additionally, a root cause investigation was performed on procedural adherence in October of 2003. In accordance with the CAP, an effectiveness review of the corrective actions to prevent recurrence is in progress.

The evaluation concluded that the strategic areas are correct, but that additional reinforcement of standards and expectations with respect to compliance with procedures (i.e., written instructions) and supervisory oversight are necessary. The HPIP was heavily focused on radiation (Rad) worker practices and the corrective actions taken in response to this issue were highly successful.

Rad Worker Practices

	2004	2005 (YTD)
High Rad Events	4 (3 in L1R10)	1 (1 in L2R10)
Personnel Contamination Events	467 in L1R10	108 in L2R10
RAM Events	2 in L1R10	0 in L2R10
Rad Worker Adherence Rate (Events/10,000 RWP hours)	~ 0.90 in L1R10	~ 0.68 in L2R10

Some of the improvements can be attributed to the following specific actions.

- Dynamic Learning Activity associated with Industrial and Radiation Safety.

- During L2R10 an observation program was lead by the Human Performance Coordinator to ensure observations were performed from individuals from the Outage Control Center (OCC). As a result, there was a substantial increase in both the number and depth of Issue Reports (IRs) categorized as Management Observations (i.e., 21 in the LaSalle Unit 1 Refueling Outage 10 (L1R10) to 138 in the LaSalle Unit 2 Refueling Outage 10 (L2R10)).

  The information gained from these observations was analyzed and communicated throughout the site as 100, 240 and 480-hour outage updates focused on Human Performance, Safety, Work Practices and Operating Experience that was relevant to near-term work. This information also was communicated through formal shift briefs. Based on an analysis of the observations, behaviors were positively impacted through communication and feedback.

  Examples of the success of the observation program include, but are not limited to:

  - consistency of Radiation Protection briefs at the North and South Service Buildings
  - use of safety ropes
  - properly wearing personnel anti-contamination clothing (PCs)

  Although improvement was noted, there still is a gap in the frequency and effectiveness of supervisory oversight. An action has been added to the HPIP to evaluate providing training to the LaSalle Station supervisors and above on performance observations and providing feedback to workers.

- During non-outage periods, communication of Human Performance is ongoing through the reports from the Departments on the department and crew clock resets. A six month trend summary is performed focusing on department and crew clock resets. Specific fundamentals that are in variance are addressed during the morning "Plan of the Day" meeting. These trend summaries are then included in the weekly communications package to be reviewed at formal departmental communication meetings.

- Implementation of the new CAP process in combination with line ownership, self-assessment and collegial reviews of IRs has resulted in an increased rate of identification of issues by the line organization and improved coding to identify HU issues. The table below illustrates a noticeable increase in identification of issues at a precursor level. The actions taken by the departments in addressing these issues has resulted in a reduction in the percentage of Significant Level 3 HU IRs.

Human Performance Related IRs

	L1R10 (2004)	L2R10 (2005)	Percent Change
Total IRs Level 2 – 4	408	1128	+ 235
Level 2 – 4 HU IRs	105	451	+ 429
Percent Level 3 HU IRs	12.4	6.0	- 6.4

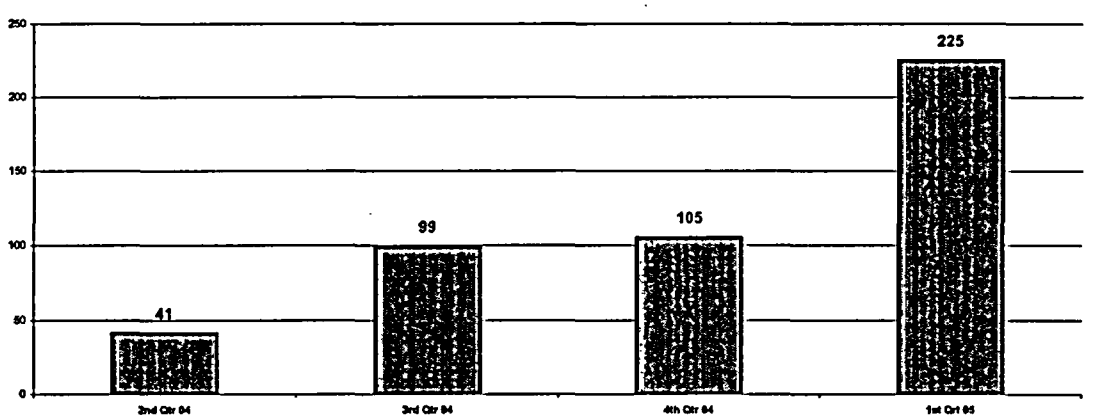
- Implementation of HU-AA-1212, Technical Task Risk/Rigor Assessment, Pre-Job Brief, Independent Third Party Review, and Post Job Brief, and HU-AA-102, Technical Human Performance Practices, has resulted in the following:
  - A significant improvement in Engineering human performance based on the strict enforcement of these procedures by Engineering Management.

Engineering HU Performance

	1st Qtr 2004	1st Qtr 2005
Number of CRs coded as engineering fundamental HU issues	47	31
CRs Technical Rigor	18	4
CRs Procedural Adherence	13	6
Significant Revisions to Mods.	7 (L1R10)	2 (L2R10)

  - A review of the CAP data indicates that personnel are embracing procedure quality and adherence as a fundamental by the number of IRs being written to revise, clarify, or enhance procedures (i.e., Procedure Change Request Action (PCRA)) as a precursor activity rather than as a result of a breakthrough event.

PCRA's generated from CRs by Quarter



Additional corrective actions planned to address the Human Performance Cross-Cutting issue included the following:

A review of CAP data of the first quarter of 2005, identified several human performance-related issues. A Common Cause Analyses (CCA) will be completed to determine additional actions that should be included in the HPIP. The CCAs include

- Electrical Maintenance Department technical human performance (questioning attitude)
- Refuel floor foreign material exclusion practices
- Operations configuration control
- GE IVVI HU outage performance
- EQR2 (i.e., maintenance indicator capturing rework)

The effectiveness review of the corrective actions associated with the procedure adherence root cause investigation is in progress and any additional actions will added to the HPIP.

The process of including corrective actions from CAP products such as root cause reports, apparent cause evaluations and common cause evaluations reviewed by the Management Review Committee in the HPIP is being institutionalized.

EGC is committed to continued improvement at LSCS. If you have any questions concerning this letter, please contact Mr. Terrence W. Simpkin, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,

Susan R. Landahl

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Site Vice President
LaSalle County Station

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector – LaSalle County Station