

Exelon Generation Company, LLC      www.exeloncorp.com  
Byron Station  
4450 North German Church Road  
Byron, IL 61010-9794

March 23, 2009

LTR:      BYRON 2009-0033  
File:      2.01.0700  
            1.10.0101

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Byron Station, Unit 1 and Unit 2  
Facility Operating License Nos. NPF- 37 and NPF-66  
NRC Docket Nos. STN 50-454 and STN 50-455

Subject:      Response to NRC Annual Assessment Letter

References:(1)      Letter from Cynthia D. Pederson (U.S. NRC) to Charles G. Pardee (Exelon Generation Company, LLC), "Annual Assessment Letter – Byron Station, Units 1 and 2, 05000454/2010001 and 05000455/2010001," dated March 4, 2009

The NRC in the reference letter noted a substantive cross-cutting issue with a theme of decision making in the area of human performance. This issue was originally identified during the 2008 Mid-Cycle Assessment and remains a concern through the 2008 End-Of-Cycle (EOC) Assessment. It was requested that a response be provided describing progress that has been made to improve human performance at Byron Station. The following describes the station's actions that have been taken and the progress achieved to date.

Exelon Generation Company, LLC, (EGC) acknowledges that Human Performance (i.e., HU) events have occurred at Byron Station, and as a result of these self and externally identified human performance issues, several long-term corrective actions have been identified.

Two formal assessments were conducted in 2008 to address human performance at Byron Station. The first was a self identified comprehensive Common Cause Analysis that was completed in the first quarter of 2008. This investigation reviewed Corrective Action Program (CAP) data from January 1, 2007, to December 31, 2007, to identify any common human performance issues related to assumptions and the potential impact on decision-making. The second was a Root Cause Report (RCR) performed in advance of the NRC identified substantive cross-cutting issue received in the third quarter of 2008. The RCR reviewed from the cross-cutting related violations for the previous four quarters, including those which resulted in the substantive cross-cutting human performance issue. In response to the RCR, the Site Human Performance Improvement Plan (HPIP) was updated. The HPIP focuses on the fundamentals of human performance that establish the framework for continuous improvement. The HPIP is a living document that is updated with new, as well as existing, Station initiatives and actions from individual departmental human performance improvement plans that are applied throughout the site.

We have since improved on the HPIP to align its focus on human performance and technical human performance to better meet the organizational change needs. These plans are formalized and are now referred to as the Site Performance Improvement Excellence Plan (SPIEP). This plan undergoes updates with additional actions to resolve newly identified gaps as the organization moves forward.

The station actions to improve performance include:

- Senior Management Weekly Human Performance Plan of the Day (HU POD) to monitor status, communicate progress and provide course corrections as needed;
- 2009 first quarter Leadership training to communicate First Line Supervisors (FLSs) impact and details of Cross-Cutting issues is being provided to the First Line Supervisors (FLSs) and above;
- Department HPIPs are being used to reinforce expectations and improve human performance;
- Institute of Nuclear Power (INPO) led Technical Human Performance (THU) Training for Engineering personnel;
- Engineering personnel received Kepner Tregoe (KT) Training;
- Engineering implemented an At-The-Desk observation program;
- Job shadowing policy implemented across the site;
- THU Training conducted first quarter and continuing second quarter 2009;

The station's performance metrics are currently demonstrating improvement in the area of human performance. Byron Station Total Error Rate per 10,000 person hours, as well as Departmental Clock resets have both decreased (improved) coming into 2009. The station recently accomplished several major activities that were executed error free. Although the station performance has steadily improved, the recent corrective actions implementation continues to increase organizational alignment and the rate of performance improvement.

As a result of our actions, the number of NRC findings related to personnel human performance has steadily decreased over the last half of 2008. There were 14 NRC finding associated with personnel human performance in the first half of 2008 as compared to 5 in the last half of 2008. The H.1.b events have decreased from 4 in the first half of 2008 to 1 in the second half of 2008.

Ongoing assessment of the station's performance is conducted during the weekly HU POD meetings. The performance improvement is also discussed/monitored at the Human Performance Steering Committee meetings, Site Vice Presidents Weekly Staff meeting and the monthly Performance Improvement meetings. This monitoring will maintain management attention and engagement as well as early detection of performance gaps and avoidance of future declining performance such that course corrections can be taken through updating the SPIEP.

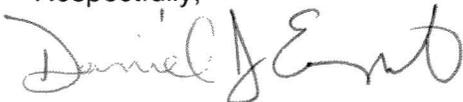
Improvement plans, communication of issues and expectations continue to be driven throughout the organization by management at every level through:

- Corporate executive communication to the site Senior Manager's through Byron Performance Improvement meetings;
- Site Vice President communication to the station through All-Hands meetings;
- Plant Manager communications to the Department Heads through weekly Human Performance Plan of the Day meetings;
- Senior Team communication through FLS Leadership Training and FLS and above meetings and,
- Department Managers/FLS communication to individuals through routine Alignment meetings.

As performance continues to improve, based on the actions implemented, we expect to be able to close this issue at the mid-cycle assessment. To further enhance communications, we will pursue an opportunity to present our progress, in this area, to the NRC, prior to the mid-cycle assessment.

There are no regulatory commitments contained in this letter. Should you have any questions about this letter, please contact Mr. David Gudger at (815) 406-2800.

Respectfully,



Daniel J. Enright  
Site Vice President  
Byron Station

DJE/DG/cy

cc: Regional Administrator – NRC Region III  
Branch Chief – NRC Region III  
NRC Senior Resident Inspector – Byron Station  
Director, Office of Enforcement