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FPL Energy.

Duane Arnold Energy Center

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U.S. Nuclear Regulatory Commission
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Duane Arnold Energy Center
Docket 50-331
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Response to Annual Assessment Letter – Substantive Cross Cutting Issue

On March 2, 2006, in the Duane Arnold Annual Assessment Letter, the Staff requested a written response within 30 days of date of the letter regarding actions taken to address the Human Performance Cross Cutting Issue that was originally identified in Duane Arnold's Mid-Cycle Assessment Letter. The purpose of this letter is to provide our response.

If you have any questions, please call Steve Catron, Licensing Manager at (319) 851-7234.

This letter contains no new commitments.

Gary D. Van Middlesworth
Site Vice President, Duane Arnold Energy Center
FPL Energy Duane Arnold

Enclosure

cc: Region III
D. Spalding (NRC-NRR)
NRC Resident Office

...the purpose of this letter is to provide our response...
...to address the Human Performance...
...written response within 30 days...
...the Duane Arnold Annual Assessment Letter...
...the Staff

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**FPL Energy Duane Arnold
Response to Annual Assessment Letter
Human Performance Substantive Cross Cutting Issue**

Corrective Actions Taken

As result of the identification of the Substantive Cross Cutting Issue in the area of Human Performance, a comprehensive Root Cause Evaluation (RCE) was completed. This RCE was completed using an industry expert in the area of Human Performance and NRC Inspection Procedure 95001.

The specific areas investigated by the RCE included:

- Organization and process drivers related to human performance.
- Identification of Barriers in the DAEC Picture of Excellence that have failed or need to be strengthened.
- Organizational response to the individual findings/violations as they were issued by NRC.

The RCE identified the following root causes:

- The implementation of the human performance program occurred without conducting either a formal needs analysis or an assessment of the station's understanding and skills regarding human performance principles, tools and behaviors.
- The site response to a previous identified trend on human performance failed to establish an adequate path to success and a change in site understanding or behaviors.

Relevant contributing factors included:

- Human performance was not elevated to an appropriate level of importance or priority to ensure behaviors improved
- Performance indicators did not accurately reflect the trend in human performance.

In response to the identified root causes, corrective actions are being taken, including the following:

- Designated the Plant Manager as the single driver from senior leadership to establish and promote a common vision of human performance excellence. (Complete)

- Revised the Site Human Performance Improvement Plan based on industry benchmarking to ensure the common vision, actions and effectiveness reviews from this root cause are included. (Complete)
- Based on a needs analysis conducted by personnel knowledgeable in industry standards, knowledge, and performance, training is being performed for all site personnel that include human performance principles (triggers and traps recognition), tools, and behaviors. (Completion due 5/26/06)
- Created an observation card specifically targeting areas of the training related to error trap recognition, and human performance tool usage. (Complete)

Actions taken to address the contributing causes included:

- Developed low-level site and department performance indicators for error precursors based on industry benchmarking. (Complete)

Effectiveness of Implemented Corrective Actions

There has been an improvement in the more significant Human Performance errors as seen by a decrease in the rate of Site Human Performance Clock Resets. The number of Department Human Performance Clock Resets has remained consistent with historical norms due to a lower threshold for the identification of Human Performance issues and a desire to elevate these issues to a level of departmental visibility.

The site will continue to monitor the effectiveness of corrective actions taken by:

- Continuously monitoring performance through observations conducted by managers and first line supervisors, including reinforcement of human performance standards.
- Monitoring of the corrective action program.
- Use of the new Daily Quality Summary (DQS).
- Performance of ongoing Assessments.
- Performing a Focused Self Assessment in June 2006, of the human performance program. This self assessment will be used as the effectiveness review for the RCE performed.

Conclusion:

DAEC has taken tangible steps to improve human performance. The success of these steps is demonstrated by both a decrease in station Human Performance Clock resets, and an improved awareness of human performance at the departmental level. Completion of the remaining corrective actions and a

subsequent effectiveness evaluation are the remaining steps necessary to finalize our improvement program and permit resolution of the cross-cutting issue.