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**DOMINION ENERGY KEWAUNEE, INC.**  
**KEWAUNEE POWER STATION**  
**RESPONSE TO NRC MID-CYCLE PERFORMANCE LETTER**

By letter dated August 31, 2006, (Reference 1), the Nuclear Regulatory Commission (NRC) provided an assessment of the safety performance of Kewaunee Power Station during the first half of the calendar year 2006. The letter requested a written description of the actions that Dominion Energy Kewaunee, Inc. (DEK) will be taking to address the continuing substantive cross-cutting issue in problem identification and resolution (PI&R).

DEK has performed a root cause analysis to identify the causes of the PI&R cross-cutting issue and the organizational and programmatic issues involved. In addition, DEK has developed a set of corrective actions that we believe will restore and maintain the health of the KPS corrective action program. The attachment to this letter provides a description of these actions.

If you have questions or require additional information, please feel free to contact Mr. Tom Breene at 920-388-8599.

Very truly yours,



William R. Matthews  
Senior Vice President – Nuclear Operations

Reference:

1. Letter from J. L. Caldwell (NRC) to D. A. Christian (DEK), "Mid-cycle Performance Review and Inspection Plan – Kewaunee Power Station," dated August 31, 2006.

Attachment:

1. Response to Mid-cycle Performance and Inspection Plan

Commitments made by this letter: None

A001

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**ATTACHMENT 1**

**RESPONSE TO NRC MID-CYCLE PERFORMANCE LETTER**

**KEWAUNEE POWER STATION**

**DOMINION ENERGY KEWAUNEE, INC.**

## **RESPONSE TO NRC MID-CYCLE PERFORMANCE LETTER**

### **NRC Request:**

As stated in the 2006 NRC mid-cycle performance review letter (Reference 1), Kewaunee Power Station (KPS) currently has an open substantive cross-cutting issue in the area of problem identification and resolution (PI&R). This substantive cross-cutting issue was first opened in the NRC annual assessment letter for KPS dated March 2, 2005 (Reference 2). In the 2006 mid-cycle performance review letter, the NRC staff considered eight findings in the PI&R area with the same aspect of inadequate problem evaluation in their determination to continue the PI&R substantive cross-cutting issue.

Because of the recurring substantive cross-cutting issue in PI&R, the NRC staff requested a written description of the actions that Dominion Energy Kewaunee, Inc. (DEK) will be taking to address the persistent performance problems in this area. A description of these actions is provided below.

### **DEK's Response:**

After receipt of the NRC annual assessment letter (Reference 3) in March 2006, which identified that the PI&R cross-cutting issue remained open, a root cause evaluation was performed. The root cause evaluation was focused on determining the causes of the cross-cutting issue, the actions required to return the KPS corrective action program to health, and the actions required to prevent a recurrence of this problem in the future. The root cause evaluation identified the following causes:

- a. Station culture did not consider the corrective action program (CAP) core business.
- b. There was a failure to apply adequate resources for corrective action program implementation and event investigation.
- c. There was less than adequate management enforcement of corrective action program expectations.
- d. Issues identified by internal and external agents in letters, reports, and audits were not consistently captured in the KPS corrective action program.
- e. The training program for root cause evaluators was not developed in accordance with rigorous standards.
- f. There was not a formal, consistent, initial and continuing effort to educate site personnel (workers and management) on corrective action program requirements.

I. Completed Actions for the Above Causes

- a. Increased accountability has been placed on line organizations for implementation of the corrective action program. A periodic meeting was established to review corrective action program indicators for timeliness and discuss performance of line management in implementing the corrective action program. These meetings are designed to raise accountability of the line organizations in effectively implementing the corrective action program. After three months following implementation of this periodic meeting, the average age of all causal evaluations for the site decreased from 35 days to 21 days. The last 20 apparent cause evaluations (ACEs) initiated in 2005 averaged 190 days to close, the last 20 closed in the third quarter of 2006 averaged 18 days.

A new grading process for root cause and apparent cause evaluations is in place. Using resources outside of Kewaunee, direct feedback and coaching is provided to each analyst to improve the quality of his evaluations. We have seen a significant improvement in the quality scores as a result of this feedback.

- b. An experienced Organizational Effectiveness (OR) Manager has recently been put in place, and a new Human Performance Supervisor has been hired and will join the staff shortly. Two individuals have accepted Technical Specialist positions within the OR department, and six experienced contractors with INPO, engineering, and root cause expertise are assisting Operations, Maintenance, Engineering, and the OR department. The contractors are assisting with reducing our backlogs, and mentoring station personnel. As the backlogs are reduced, the contractors will transition to more of an oversight and review role as the contract positions are systematically reduced.
- c. A "probation" status has been established for departments not meeting standards on timeliness of evaluation, corrective action implementation quality, or documentation quality. Development and application of specific criteria as a trigger for placing a department on, and removing a department from, probation has been completed. The criteria were weighted toward safety significant work. Because of recent improvements in meeting these standards, there are no departments currently on probation. However, if performance declines at the department level, the KPS Corrective Action Program Monthly Report will identify any department meeting the criteria to be placed on probation.

- d. A "When In Doubt Fill It Out" campaign and increased management attention and ownership of the corrective action program have resulted in a significant increase in the number of issues entered into the corrective action program. Based on the current trend, the number of condition reports generated in 2006 will be approximately 9,000. The historical average is about 4,600 condition reports per year. We have instituted an end of meeting expectation to ask if there are any condition reports required to be generated as a result of this meeting.
- e. Procedures have been changed to identify if CAPs are generated as a result of internal questioning or are the result of influence from an outside agency.
- f. To improve root cause quality and consistency, DEK has reduced the number of individuals qualified to lead root cause evaluations (RCEs) from over 100 to approximately 15. The Corrective Action Review Board (CARB) reviews causal evaluations using a common set of standards. The CARB rejection rate of causal evaluations is decreasing due to improved quality of the products presented for review.

## II. Planned Actions for the Above Causes

- a. Improved training focused on improving our analysis skills has been developed and is being scheduled for root cause evaluators. This training will begin after the current refueling outage.
- b. Improved training on analysis skills has been developed and is being scheduled for all apparent cause evaluation evaluators, CARB members, and the management team. The training will also focus on how to develop and review corrective action documents. This training will begin after the current refueling outage.

## III. Other Actions

DEK has taken additional programmatic corrective actions based on lessons learned during NRC's recent supplemental inspection pursuant to NRC Inspection Procedure 95002 (Reference 4). DEK has significantly improved monitoring and review of issues during the development and implementation of corrective actions for root cause evaluations.

Effectiveness reviews are now required to be performed in two steps. The first step evaluates specific deliverables, such as a procedure revision, to ensure that the deliverables achieve the desired results. The second step evaluates if the desired behaviors are in place.

References:

1. Letter from J. L. Caldwell (NRC) to D. A. Christian (DEK), "Mid-Cycle Performance Review And Inspection Plan – Kewaunee Power Station," dated August 31, 2006.
2. Letter from M. A. Satorius (NRC) to C. Lambert (NMC), "Annual Assessment Letter – Kewaunee Nuclear Power Plant (Report 05000305/2005001)," dated March 2, 2005.
3. Letter from J. L. Caldwell (NRC) to D. A. Christian (DEK), "Annual Assessment Letter – Kewaunee Power Station (Report 05000305/2006001)," dated March 2, 2006.
4. Letter from C. D. Pederson (NRC) to D. A. Christian (DEK), "Kewaunee Power Station – NRC Supplemental Inspection Report 05000305/2006015 (DRS)," dated September 22, 2006.