



NOV 16 2007

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

Serial No. 07-0762
KPS/LIC/JG: RO
Docket No. 50-305
License No. DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
LICENSEE EVENT REPORT 2007-009-00

Dear Sirs:

Pursuant to 10 CFR 50.73, Dominion Energy Kewaunee, Inc., hereby submits the following Licensee Event Report applicable to Kewaunee Power Station.

Report No. 50-305/2007-009-00

This report has been reviewed by the Plant Operating Review Committee and will be forwarded to the Management Safety Review Committee for its review.

If you have any further questions, please contact Mr. Jack Gadzala at (920) 388-8604.

Very truly yours,

A handwritten signature in black ink, appearing to read "Stephen E. Scace".

Stephen E. Scace
Site Vice President, Kewaunee Power Station

Attachment

Commitments made by this letter: NONE

TE22
NRB

cc: Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
2443 Warrenville Road
Suite 210
Lisle, IL 60532-4352

Mr. P. D. Milano
Project Manager
U.S. Nuclear Regulatory Commission
Mail Stop O-8-H-4a
Washington, DC 20555-0001

NRC Senior Resident Inspector
Kewaunee Power Station

| NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION (6-2004) | | APPROVED BY OMB NO. 3150-0104 EXPIRES 6-30-2007 Estimated burden per response to comply with this mandatory collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0066), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FACILITY NAME (1) Kewaunee Power Station | | DOCKET NUMBER (2) 05000305 | PAGE (3) 1 of 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TITLE (4) Both Trains of Shield Building Ventilation Inoperable Due to Damper Controller Failure on One Train While Second Train Inoperable for Routine Maintenance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EVENT DATE (5) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:33%;">MO</th> <th style="width:33%;">DAY</th> <th style="width:33%;">YEAR</th> </tr> <tr> <td style="text-align: center;">09</td> <td style="text-align: center;">18</td> <td style="text-align: center;">2007</td> </tr> </table> | | MO | DAY | YEAR | 09 | 18 | 2007 | LER NUMBER (6) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:33%;">YEAR</th> <th style="width:33%;">SEQUENTIAL NUMBER</th> <th style="width:33%;">REV NO</th> </tr> <tr> <td style="text-align: center;">2007</td> <td style="text-align: center;">-- 009</td> <td style="text-align: center;">-- 00</td> </tr> </table> | YEAR | SEQUENTIAL NUMBER | REV NO | 2007 | -- 009 | -- 00 | REPORT DATE (7) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:33%;">MO</th> <th style="width:33%;">DAY</th> <th style="width:33%;">YEAR</th> </tr> <tr> <td style="text-align: center;">11</td> <td style="text-align: center;">16</td> <td style="text-align: center;">2007</td> </tr> </table> | MO | DAY | YEAR | 11 | 16 | 2007 | | | | | | | | | | | | | | | | | | | | |
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| 09 | 18 | 2007 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2007 | -- 009 | -- 00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 11 | 16 | 2007 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | OTHER FACILITIES INVOLVED (8) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%;">FACILITY NAME</th> <th style="width:50%;">DOCKET NUMBER</th> </tr> <tr> <td style="height: 20px;"> </td> <td> </td> </tr> </table> | | FACILITY NAME | DOCKET NUMBER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| OPERATING MODE (9) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"> </td> <td style="width:33%; text-align: center;">N</td> </tr> </table> | | | N | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR : (Check all that apply) (11) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POWER LEVEL (10) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"> </td> <td style="width:33%; text-align: center;">100</td> </tr> </table> | | | 100 | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;">20.2201(b)</td> <td style="width:33%;">20.2203(a)(3)(ii)</td> <td style="width:33%;">50.73(a)(2)(ii)(B)</td> <td style="width:33%;">50.73(a)(2)(ix)(A)</td> </tr> <tr> <td>20.2201(d)</td> <td>20.2203(a)(4)</td> <td>50.73(a)(2)(iii)</td> <td>50.73(a)(2)(x)</td> </tr> <tr> <td>20.2203(a)(1)</td> <td>50.36(c)(1)(i)(A)</td> <td>50.73(a)(2)(iv)(A)</td> <td>73.71(a)(4)</td> </tr> <tr> <td>20.2203(a)(2)(i)</td> <td>50.36(c)(1)(ii)(A)</td> <td>50.73(a)(2)(v)(A)</td> <td>73.71(a)(5)</td> </tr> <tr> <td>20.2203(a)(2)(ii)</td> <td>50.36(c)(2)</td> <td>50.73(a)(2)(v)(B)</td> <td rowspan="5"> OTHER Specify in Abstract below or in NRC Form 366A </td> </tr> <tr> <td>20.2203(a)(2)(iii)</td> <td>50.46(a)(3)(ii)</td> <td><input checked="" type="checkbox"/> 50.73(a)(2)(v)(C)</td> </tr> <tr> <td>20.2203(a)(2)(iv)</td> <td>50.73(a)(2)(i)(A)</td> <td>50.73(a)(2)(v)(D)</td> </tr> <tr> <td>20.2203(a)(2)(v)</td> <td>50.73(a)(2)(i)(B)</td> <td>50.73(a)(2)(vii)</td> </tr> <tr> <td>20.2203(a)(2)(vi)</td> <td>50.73(a)(2)(i)(C)</td> <td>50.73(a)(2)(viii)(A)</td> </tr> <tr> <td>20.2203(a)(3)(i)</td> <td>50.73(a)(2)(ii)(A)</td> <td>50.73(a)(2)(viii)(B)</td> <td> </td> </tr> </table> | | 20.2201(b) | 20.2203(a)(3)(ii) | 50.73(a)(2)(ii)(B) | 50.73(a)(2)(ix)(A) | 20.2201(d) | 20.2203(a)(4) | 50.73(a)(2)(iii) | 50.73(a)(2)(x) | 20.2203(a)(1) | 50.36(c)(1)(i)(A) | 50.73(a)(2)(iv)(A) | 73.71(a)(4) | 20.2203(a)(2)(i) | 50.36(c)(1)(ii)(A) | 50.73(a)(2)(v)(A) | 73.71(a)(5) | 20.2203(a)(2)(ii) | 50.36(c)(2) | 50.73(a)(2)(v)(B) | OTHER Specify in Abstract below or in NRC Form 366A | 20.2203(a)(2)(iii) | 50.46(a)(3)(ii) | <input checked="" type="checkbox"/> 50.73(a)(2)(v)(C) | 20.2203(a)(2)(iv) | 50.73(a)(2)(i)(A) | 50.73(a)(2)(v)(D) | 20.2203(a)(2)(v) | 50.73(a)(2)(i)(B) | 50.73(a)(2)(vii) | 20.2203(a)(2)(vi) | 50.73(a)(2)(i)(C) | 50.73(a)(2)(viii)(A) | 20.2203(a)(3)(i) | 50.73(a)(2)(ii)(A) | 50.73(a)(2)(viii)(B) | |
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| 20.2203(a)(2)(ii) | 50.36(c)(2) | 50.73(a)(2)(v)(B) | OTHER Specify in Abstract below or in NRC Form 366A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| LICENSEE CONTACT FOR THIS LER (12) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NAME Dale A. Patterson | | TELEPHONE NUMBER (Include Area Code) (920) 388-8759 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:15%;">CAUSE</th> <th style="width:15%;">SYSTEM</th> <th style="width:15%;">COMPONENT</th> <th style="width:15%;">MANU-FACTURER</th> <th style="width:15%;">REPORTABLE TO EPIX</th> </tr> <tr> <td style="text-align: center;">D</td> <td style="text-align: center;">VC</td> <td style="text-align: center;">CBD</td> <td style="text-align: center;">KEANE</td> <td style="text-align: center;">Y</td> </tr> </table> | CAUSE | SYSTEM | COMPONENT | MANU-FACTURER | REPORTABLE TO EPIX | D | VC | CBD | KEANE | Y | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:15%;">CAUSE</th> <th style="width:15%;">SYSTEM</th> <th style="width:15%;">COMPONENT</th> <th style="width:15%;">MANU-FACTURER</th> <th style="width:15%;">REPORTABLE TO EPIX</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> | | | CAUSE | SYSTEM | COMPONENT | MANU-FACTURER | REPORTABLE TO EPIX | | | | | | | | | | | | | | | | | | | | | | | |
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| D | VC | CBD | KEANE | Y | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| SUPPLEMENTAL REPORT EXPECTED (14) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"> YES (If yes, complete EXPECTED SUBMISSION DATE). </td> <td style="width:50%; text-align: center;"> <input checked="" type="checkbox"/> NO </td> </tr> </table> | | YES (If yes, complete EXPECTED SUBMISSION DATE). | <input checked="" type="checkbox"/> NO | EXPECTED SUBMISSION DATE (15) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:33%;">MONTH</th> <th style="width:33%;">DAY</th> <th style="width:33%;">YEAR</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table> | | MONTH | DAY | YEAR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| YES (If yes, complete EXPECTED SUBMISSION DATE). | <input checked="" type="checkbox"/> NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MONTH | DAY | YEAR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ABSTRACT <p>On September 18, 2007, at 12:00 pm CDT, Dominion Energy Kewaunee (DEK) identified a failure on the Shield Building Ventilation (SBV) Train A damper controller that rendered the train inoperable. Coincident with the Train A failure, Train B SBV was inoperable for routine maintenance. Consequently, both trains of SBV were inoperable simultaneously, rendering their associated safety function unavailable.</p> <p>Both trains of SBV being inoperable requires a reactor shutdown within 12 hours. Following discovery of this condition, the routine maintenance on SBV Train B was completed and the train was restored to operable status at 1331 CDT the same day, within the specified allowance. The 12-hour shutdown condition was then exited and the plant remained in a 7-day Action Statement for the other train of SBV (A) inoperable per TS 3.6.c.</p> <p>Two unrelated causes were responsible for both SBV trains being inoperable concurrently. SBV Train B was rendered inoperable for routine planned maintenance. Train A became inoperable due to a damper controller failure. The failed SBV Train A damper controller was not discovered until after the routine maintenance was in progress on the other SBV train.</p> <p>This event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(C), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material."</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

| FACILITY NAME (1) | DOCKET NUMBER (2) | LER NUMBER (6) | | | PAGE (3) |
|------------------------|-------------------|----------------|----------------------|--------------------|----------|
| Kewaunee Power Station | 05000305 | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | 2 of 3 |
| | | 2007 | - 009 | - 00 | |

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Event Description:

On September 18, 2007, at 12:00 pm CDT, Dominion Energy Kewaunee (DEK) identified a failure on the Shield Building Ventilation (SBV)[VC] Train A damper [CDMP] controller [CBD] that rendered the train inoperable. Coincident with the Train A failure, Train B SBV was inoperable for routine maintenance. Consequently, both trains of SBV were inoperable simultaneously, rendering their associated safety function unavailable.

Technical Specification TS 3.6.c states:

- a. All of the following conditions shall be satisfied whenever CONTAINMENT SYSTEM INTEGRITY, as defined by TS 1.0.g, is required:
 1. Both trains of the Shield Building Ventilation System, including filters and heaters shall be OPERABLE or the reactor shall be shut down within 12 hours, except that when one of the two trains of the Shield Building Ventilation System is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding 7 days.

Both trains of SBV being inoperable requires a reactor shutdown within 12 hours. Following discovery of this condition, the routine maintenance on SBV Train B was completed and the train was restored to operable status at 1331 CDT the same day, within the specified allowance. The 12-hour shutdown condition was then exited and the plant remained in a 7-day Action Statement for the other train of SBV (A) inoperable per TS 3.6.c.

The failed controller was subsequently repaired and the SBV system fully restored to operable status at 1215 CDT on September 20, 2007.

This event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(C), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material." A notification of this event was previously made in accordance with 10 CFR 50.72(b)(3)(v)(C) on September 18, 2007 (EN# 43651).

Event and Safety Consequence Analysis:

The Shield Building Ventilation (SBV) system is a system of fans and ducts for collecting the leakage from the Reactor Containment Vessel penetrations into the annulus of the Shield Building and discharging it through filters (particulate-absolute-charcoal) to the monitored Containment System Vent.

The Shield Building Ventilation System is designed to provide three functions. The first function is to produce a negative pressure within the annulus immediately following the loss-of-coolant accident. The second function is to ensure the mixing of any reactor containment vessel penetration leakage into a large portion of the Shield Building annulus, thereby avoiding potential direct streaming of the radioisotopes to the exhaust duct and hence increasing holdup within the annulus. The third function is to provide long-term cleanup of fission products from the annulus air by recirculation after the loss-of-coolant accident.

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

The control dampers in the SBV fan exhaust and recirculation flow paths modulate in response to a pre-set annulus negative pressure. After the initial drawdown of the annulus (i.e., the system has switched to recirculation mode of operation) the Shield Building Vent System controls will maintain a pre-set annulus negative pressure by modulating the exhaust and recirculation dampers so as to provide sufficient amount of exhaust to offset the Shield Building in-leakage.

The SBV System is designed to automatically start following a safety injection signal. Each of the two trains has 100% capacity. If one train is found to be inoperable, there is not an immediate threat to the containment system performance and reactor operation may continue while repairs are being made. If both trains of either system are inoperable, the plant is required to be brought to a condition where the air purification system would not be required.

Because one of the two inoperable SBV trains was quickly restored, coupled with the low probability of an event requiring SBV operation during the brief period when both trains were inoperable, the safety significance of this condition was minimal.

Cause:

Two unrelated causes were responsible for both SBV trains being inoperable concurrently. SBV Train B was rendered inoperable for routine planned maintenance. Train A became inoperable due to a damper controller failure. The specific failure was drift of the high output limit setpoint on a Keane Control Corp Model PD88084-202A servo board. The failed SBV Train A damper controller was not discovered until after the routine maintenance was in progress on the other SBV train.

The damper controller failure was attributed to aging/fatigue of a control board.

Corrective Actions:

An evaluation of the preventative maintenance frequency for these components, along with any associated component replacement actions, is being evaluated via the corrective action process.

Similar Events:

A review of Licensee Event Reports covering the past three years did not identify any similar events.