

Dominion Energy Kewaunee, Inc.
N490 Hwy 42, Kewaunee, WI 54216
Web Address: www.dom.com



February 11, 2011

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

Serial No. 11-081
LIC/NW/R0
Docket No.: 50-305
License No.: DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
LICENSEE EVENT REPORT LER 2011-001-00

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/LER 2011-001-00

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

If you have any further questions, please contact Mr. Richard Repshas at (920) 388-8217.

Very truly yours,

A handwritten signature in cursive script that reads "Stephen E. Scace".

Stephen E. Scace
Site Vice President, Kewaunee Power Station

Attachment(s)

Commitments made by this letter: NONE

IEZZ
NRR

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

Mr. K. D. Feintuch
Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North, Mail Stop O8-H4A
11555 Rockville Pike
Rockville, MD 20852-2738

NRC Senior Resident Inspector
Kewaunee Power Station

LICENSEE EVENT REPORT (LER)
(See reverse for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Service (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), 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.

1. FACILITY NAME Kewaunee Power Station	2. DOCKET NUMBER 05000305	3. PAGE 1 OF 4
---------------------------------------------------	-------------------------------------	--------------------------

4. TITLE
Auxiliary Building Special Ventilation Inoperability Results in Prohibited Technical Specification Condition

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
12	13	2010	2011	-- 001 --	00	02	11	2011	FACILITY NAME	05000
									FACILITY NAME	05000

9. OPERATING MODE N	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)										
	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)							
10. POWER LEVEL 100	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)							
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)							
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)							
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)							
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)							
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)							
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER							
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A							

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME Brian O'Connell	TELEPHONE NUMBER (include Area Code) (920) 388-8174
----------------------------------	--------------------------------------------------------

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On December 13, 2010 with the Station at 100% power, charcoal laboratory radioiodine test results were found to be below the acceptance criteria for Auxiliary Building Special Ventilation Train A, which caused the train to be inoperable for a period that exceeded the Technical Specification allowed outage time. This occurred because the elapsed time, from removal of the sample to the time the vendor analysis was obtained, plus the time required for corrective actions to be completed to address the condition, exceeded the seven day Technical Specification allowance for one train being inoperable.

Although the charcoal test results were below the minimum charcoal adsorber efficiency required for surveillance test acceptance, the efficiency assumed in the design basis accident analysis continued to be met. Therefore, the system remained capable of performing its specified safety function. Additionally, there are two trains of Auxiliary Building Special Ventilation and Train B passed its surveillance test. Therefore, there is no safety significance associated with this event.

This event is being reported pursuant to 10 CFR 50.73(a)(2)(i)(B), for any operation or condition which was prohibited by the plant's Technical Specifications.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Kewaunee Power Station	05000305	YEAR	SEQUENTIAL NUMBER	REV NO.	2 OF 4
		2011	-- 001	- 00	

NARRATIVE

Event Description:

On December 13, 2010 with the Station at 100% power, charcoal laboratory radioiodine test results were found to be below the acceptance criteria for Auxiliary Building Special Ventilation Train A, which caused the train to be inoperable for a period that exceeded the Technical Specification (TS) allowed outage time. This occurred because the elapsed time, from removal of the sample to the time the vendor analysis was obtained, plus the time required for corrective actions to be completed to address the condition, exceeded the seven day TS allowance for one train being inoperable by eight days.

Technical Specifications Section 4.0 required periodic testing of the Auxiliary Building Special Ventilation System [BD] which included the following:

"The laboratory tests for activated carbon in the charcoal filters shall be performed (1) at least once per 18 months for filters in a standby status or after 720 hours of filter operation, and (2) following painting, fire, or chemical release in any ventilation zone communicating with the system."

Charcoal samples from filter [FLT] banks were removed from the Auxiliary Building Special Ventilation Train A on December 1, 2010. The removed individual charcoal adsorber filter was replaced in the ventilation train with a new filter. The samples were then shipped to a vendor for analysis. On December 13, 2010, the charcoal laboratory radioiodine test results indicated a removal efficiency of 96.589% for the Auxiliary Building Special Ventilation Train A. This was below the TS allowable value of greater than or equal to 97.5%. The TS basis stated that if the iodine removal efficiency test results are unacceptable, all adsorbant [ADS] should be replaced. The remainder of the charcoal adsorber filters were replaced and Auxiliary Building Special Ventilation Train A was returned to an operable status on December 16, 2010.

For the Auxiliary Building Special Ventilation System, TS 3.6, CONTAINMENT SYSTEM, stated the following:

3.6.c. 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, 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 is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding 7 days.
2. Both trains of the Auxiliary Building Ventilation System, including filters, shall be OPERABLE or the reactor shall be shut down within 12 hours, except that when one of the two trains of the Auxiliary Building Special Ventilation System is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding 7 days.

At the time the filter was removed on December 1, 2010, there was no indication that the Auxiliary Building Special Ventilation Train A was inoperable. The sample analysis failure identified on December 13th constituted discovery that the Auxiliary Building Special Ventilation Train A exceeded the TS surveillance requirement for charcoal adsorber efficiency. With the charcoal adsorber filter replacement completed on December 16th, there was a 15 day period where the Auxiliary Building Ventilation Train A was considered to not satisfy the surveillance requirement, even though the filters were replaced within the time allowed by TS

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Kewaunee Power Station	05000305	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 4
		2011	- 001	- 00	

(from time of discovery). The surveillance criteria were determined to not be met for 15 days thus exceeding the allowed outage time of 7 days.

Therefore, this was a condition prohibited by the plant's TS since the definition of OPERABLE-OPERABILITY was not met. OPERABLE-OPERABILITY stated (in part):

"A system or component is OPERABLE or has OPERABILITY when it is capable of performing its intended function within the required range. The system or component shall be considered to have this capability when: (1) it satisfies the LIMITING CONDITIONS FOR OPERATION defined in TS 3.0, and (2) it has been tested periodically in accordance with TS 4.0 and has met its performance requirements."

Because the surveillance criteria were not met, the LCO was considered not met. With the LCO not satisfied, the TS definition of operability was not met for longer than the 7 day period allowed by TS.

This event is being reported pursuant to 10 CFR 50.73(a)(2)(i)(B), for any operation or condition which was prohibited by the plant's Technical Specifications.

On February 2, 2011, NRC approved Improved Technical Specifications for Kewaunee Power Station. This License Amendment revised the TS definition of OPERABILITY consistent with NUREG 1431. The new (current) definition does not base operability on satisfying the LCO. Therefore, this system would now have been appropriately considered OPERABLE under the given conditions because it remained capable of fulfilling its specified safety function.

Event and Safety Consequence Analysis:

The TS 3.6.c ventilation systems support the containment system. Proper functioning of the Auxiliary Building Special Ventilation System is necessary to preclude possible unfiltered leakage through Shield Building penetrations that enter the Special Ventilation Zone (Zone SV). The 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.

The charcoal adsorbers are installed to reduce the potential radioiodine release to the atmosphere. The laboratory carbon sample test results indicate a radioactive methyl iodine removal efficiency under test conditions which are more severe than accident conditions.

Accident analysis assumes a charcoal adsorber efficiency of 95%. To ensure the charcoal adsorbers maintain that efficiency throughout the operating cycle, a safety factor of 2 is used. Therefore, if accident analysis assumes a charcoal adsorber efficiency of 95%, this equates to a methyl iodide penetration of 5%. If a safety factor of two is assumed, the methyl iodide penetration is reduced to 2.5%. Thus, the acceptance criteria of 97.5% efficient is used for the charcoal adsorbers.

The charcoal adsorber test results were at a 96.589% efficiency for Auxiliary Building Special Ventilation Train A. The Train A maintained its safety function since the measured value for efficiency was greater than the accident assumed value of 95.0%.

Therefore, there were no safety consequences associated with this event.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Kewaunee Power Station	05000305	YEAR	SEQUENTIAL NUMBER	REV NO.	4 OF 4
		2011	- 001	- 00	

Cause:

The cause of this event was unplanned inoperability of the Auxiliary Building Ventilation Train A due to a decrease in efficiency of the charcoal adsorbers. The direct cause of the decrease in charcoal efficiency was charcoal filter end of life. This was as a result of the inability of trending to adequately identify charcoal filter banks that are degrading prior to failure. The filter testing program accounts for the inexactness in predicting end of life by using a safety factor of 2 (as previously discussed).

Corrective Actions:

The charcoal filter banks were replaced and in-place testing was completed for the Auxiliary Building Ventilation System Train A.

Activities are being created to periodically replace the Auxiliary Building Ventilation System charcoal filter banks and other ventilation systems that contain charcoal adsorber filters.

Similar Events:

A review of Licensee Event Reports covering the last three years identified no similar events.