



DEC 28 2006

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

Serial No. 06-1009  
KPS/LIC/RS: RO  
Docket No. 50-305  
License No. DPR-43

**DOMINION ENERGY KEWAUNEE, INC.**  
**KEWAUNEE POWER STATION**  
**LICENSEE EVENT REPORT 2006-004-01**

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. 50-305/2006-004-01

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. Richard Sattler at (920) 388-8121.

Very truly yours,

*Kevin Davison*  
Kevin Davison for

Leslie N. Hartz  
Site Vice President, Kewaunee Power Station

Attachment

Commitments made by this letter: NONE

*IE22*

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

Mr. L. Raghavan  
Project Manager  
U.S. Nuclear Regulatory Commission  
Mail Stop 8 H4A  
Washington, D. C. 20555

NRC Senior Resident Inspector  
Kewaunee Power Station

<b>NRC FORM 366</b> <b>U.S. NUCLEAR REGULATORY COMMISSION</b> (6-2004)	<b>APPROVED BY OMB NO. 3150-0104</b>	<b>EXPIRES 6-30-2007</b>
<b>LICENSEE EVENT REPORT (LER)</b>  (See reverse for required number of digits/characters for each block)		
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.		

<b>FACILITY NAME (1)</b> <b>Kewaunee Power Station</b>	<b>DOCKET NUMBER (2)</b> <b>05000305</b>	<b>PAGE (3)</b> <b>1 of 3</b>
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**TITLE (4)**  
**Incorrect Assumption Regarding De-Rating of EDGs During Loaded Operation**

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER	
05	19	2006	2006	004	01	12	28	2006	FACILITY NAME	DOCKET NUMBER	
<b>OPERATING MODE (9)</b>		<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR : (Check all that apply) (11)</b>									
		20.2201(b)			20.2203(a)(3)(ii)			50.73(a)(2)(ii)(B)		50.73(a)(2)(ix)(A)	
<b>POWER LEVEL (10)</b>		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)			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)			X 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)			

LICENSEE CONTACT FOR THIS LER (12)	
<b>NAME</b> <b>Richard Sattler</b>	<b>TELEPHONE NUMBER (Include Area Code)</b> <b>(920) 388-8121</b>

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
<b>YES</b> (If yes, complete EXPECTED SUBMISSION DATE).				<b>X NO</b>				

**ABSTRACT**

LER 2006-004-00 reported a preliminary determination that Kewaunee Power Station Train A Emergency Diesel Generator would periodically not have been able to meet its post-accident loading due to high ambient temperatures, sometimes coincident with inoperable Train B engineered safety features. Subsequent analysis determined that Train A Emergency Diesel Generator would always have been able to meet its design loading requirement throughout the reporting period.

However, on 11/15/2006, in response to an NRC question, the station identified that both Emergency Diesel Generators would periodically not have been able to meet their 18 month load tests (Technical Specification Surveillance 4.6.a.5), due to elevated ambient temperatures. These surveillances are performed during refueling outages which generally occur in the Spring and Fall so ambient temperatures have never previously impeded the load test. EDG A passed this surveillance on 9/22/06, and EDG B passed it on 10/6/06. During the reporting period, ambient temperatures have periodically exceeded the limits that would prohibit performance of these tests.

Since periods existed where the surveillance would not have been able to be performed, this condition is being reported in accordance with 10CFR50.73(a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications."

During the three year reporting period, EDG A & B would have been able to meet their post-accident loading requirements. Therefore, periodic conditions that would have established a failure to meet TS Surveillance 4.6.a.5 have no safety significance.

**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
		2006	-- 004	-- 01	

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

**Event Description:**

At Kewaunee Power Station (KPS), both emergency diesel generators (EDGs) are required to exceed their continuous operating rating of 2600 kW during a loss of coolant accident (LOCA) concurrent with loss of off-site power (LOOP). Operation outside this continuous operating rating is acceptable provided the duration of the loading and the maximum combustion air temperatures are not exceeded.

In 2000, KPS evaluated and implemented EDG de-rating curves (which reduce the maximum allowed ratings as combustion air intake temperature increases).

At 21:54 on May 19, 2006, with the plant in Hot Shutdown, KPS determined that the de-rating curves for the EDGs were incorrectly applied. This resulted in the potential to operate the EDGs outside of the vendor recommended ratings during the initial diesel loading (from 0 to 1 hours per Kewaunee Updated Safety Analysis Report Table 8.2-1) following a design basis event.

A preliminary review in June of 2006 showed that seven times in the preceding three years, (for a total of 26.35 hrs) outdoor air temperatures exceeded the limit for EDG A which should have resulted in an inoperability determination for EDG A. At no time during those three years were the EDG B temperature limits exceeded.

At no time during the seven occurrences was EDG A operating. It was never operated when de-rating was required, and thus never operated outside the vendor recommended ratings.

On 10/25/2006, additional evaluation determined that EDG A would have successfully performed its mission if called upon over the preceding three years, including the seven instances discussed above.

On 11/15/2006, in response to an NRC question, the station identified that both EDGs would periodically not have been able to meet Technical Specification (TS) Surveillance 4.6.a.5 due to elevated ambient temperatures. TS Surveillance 4.6.a.5 states: Each diesel generator shall be loaded to 2950 kW (nominal) for 2 hours every operating cycle.

These surveillance tests are performed during refueling outages which generally occur in the Spring and Fall so ambient temperatures have never previously impeded the load test. EDG A passed this surveillance on 9/22/06, and EDG B passed it on 10/6/06. However, during the reporting period, ambient temperatures have periodically exceeded the limits that would prohibit performance of these tests.

**Event Analysis:**

The maximum load allowed for the EDGs is a function of combustion air temperature which, at KPS, is a function of outside air temperature. Current engineering evaluation states that the EDGs can be loaded to 2950 kW for 2 hours at an outside air temperature below approximately 80°F. Based on historic temperature profiles, it is projected that this outside air temperature will not be reached until June.

**LICENSEE EVENT REPORT (LER)**  
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		<b>2006</b>	<b>-- 004</b>	<b>-- 01</b>	

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

Per Technical Specification 4.0.a, "Failure to meet a surveillance requirement, whether such failure is experienced during the performance of the surveillance or between performances of the surveillance shall be failure to meet the OPERABILITY requirements for the LCO."

Since periods existed during the reporting period where the surveillance would not have been able to be performed, this event is being reported in accordance with 10CFR50.73(a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications."

**Safety Significance:**

During the three year reporting period, EDG A & B would have been able to meet their post-accident loading requirements. Therefore, periodic conditions that would have established a failure to meet TS Surveillance 4.6.a.5 have no safety significance.

**Cause:**

The cause of the event was a failure to properly apply the EDG derating curves after they were received from the vendor.

**Corrective Actions:**

Through enhanced interaction with the EDG vendor, the EDG derating curves are now being properly applied. This has resulted in the following conclusions and a requirement to take the following additional actions:

The EDGs can be loaded to 2950 kW for 2 hours at an outside air temperature below approximately 80°F. Based on historic temperature profiles, it is projected that this outside air temperature will not be reached until June of 2007. Prior to that date TS 4.6.a.5 will be modified as appropriate.

In addition, the EDG Margin Recovery Project has been initiated. This project consists of two phases; A design study to be completed by the end of 4th quarter 2006 and development and implementation of required Design Change Requests.

**Similar Events:**

LER 1978-002, Head Correction For The Pressurizer Pressure Transmitters Had Not Been Applied

LER 2005-010, Inadequate Engineering Analysis to Support Service Water Pump Operability