Dominion Energy Kewaunee, Inc.
N490 Highway 42, Kewaunee, WI 54216-9511

Dominion®

NOV 2 0 2007

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

Serial No. 07-0763
KPS/LIC/JG: RO
Docket No. 50-305
License No. DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
LICENSEE EVENT REPORT 2007-010-00

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. 50-305/2007-010-00

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,

Tom Webb

Stephen E. Scace for
Site Vice President, Kewaunee Power Station

Attachment

Commitments made by this letter: NONE

IE22

NRR

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 (6-2004) U.S. NUCLEAR REGULATORY COMMISSION

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.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Kewaunee Power Station	05000305	1 of 4

TITLE (4)

Allowed Outage Time of the Function for Automatic Initiation of the Control Room Post-Accident Recirculation System on a High Radiation Signal Not Met

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
09	21	2007	2007	-- 010 --	00	11	20	2007	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	N
POWER LEVEL (10)	100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR : (Check all that apply) (11)

	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
	20.2203(a)(2)(iii)		50.46(a)(3)(ii)		50.73(a)(2)(v)(C)		Specify in Abstract below or in NRC Form 366A
	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)

NAME	TELEPHONE NUMBER (Include Area Code)
Joseph A Ruttar	(920) 388-8654

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

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

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

ABSTRACT

On September 21, 2007, during performance of an evaluation of the control room radiation monitor (R-23) failure mode, Dominion Energy Kewaunee (DEK) staff identified that the 12-hour shutdown requirement in Technical Specification (TS) 3.12, "Control Room Post-Accident Recirculation System", had been exceeded on previous occasions during performance of R-23 troubleshooting. R-23 provides a signal for automatic initiation of control room recirculation on high radiation.

This event occurred during past performances of corrective maintenance on R-23 when the monitor's trip function was disabled in excess of 12 hours with the reactor critical. Under conditions when R-23 is isolated from the system, the control room post-accident recirculation system cannot meet its surveillance requirement specified in TS 4.17. Kewaunee Power Station (KPS) Technical Specifications require that such a condition constitutes failure to meet the operability requirements for the associated limiting condition for operation (LCO). Therefore, TS 3.12 is not met under such conditions, even if the control room post-accident recirculation system is placed in operation to meet its safety function.

This event is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications."

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Kewaunee Power Station	05000305	2007	- 010 -	00	2 of 4

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

Event Description:

On September 21, 2007, during performance of an evaluation of the control room radiation monitor (R-23) failure mode, Dominion Energy Kewaunee (DEK) staff identified that the 12-hour shutdown requirement in Technical Specification (TS) 3.12, "Control Room Post-Accident Recirculation System", had been exceeded on previous occasions during performance of R-23 troubleshooting. R-23 provides a signal for automatic initiation of control room recirculation on high radiation.

This event occurred during past performances of corrective maintenance on R-23 when the monitor's trip function was disabled in excess of 12 hours with the reactor critical. Under conditions when R-23 is isolated from the system, the control room post-accident recirculation system cannot meet its surveillance requirement specified in TS 4.17. Kewaunee Power Station (KPS) Technical Specifications require that such a condition constitutes failure to meet the operability requirements for the associated limiting condition for operation (LCO). Therefore, TS 3.12 is not met under such conditions, even if the control room post-accident recirculation system is placed in operation to meet its safety function.

TS 4.0 states:

> Failure to meet a surveillance requirement, whether such failure is experienced during the performance of the surveillance or between performances of the surveillances, shall be failure to meet the OPERABILITY requirements for the LCO.

TS 4.17 states:

> Applies to testing and surveillance requirements for the Control Room Post-accident Recirculation System in TS 3.12.
>
> ...the following conditions shall be demonstrated: ...Automatic initiation of the system on a high radiation signal... .

These two TSs, taken together, necessitate that when the capability for automatic initiation of control room post-accident recirculation on a high radiation signal cannot be demonstrated (by R-23 or an equivalent component), then the surveillance requirement is not met; and therefore, TS 3.12 is not met (per TS by definition). When TS 3.12 is not met, a 12-hour shutdown requirement comes into effect.

A review of this condition identified that two partial performances of Procedure SP-45-050.23, "RMS Channel R-23 Control Room Ventilation Radiation Monitor Calibration", were conducted during November 2006 to troubleshoot and repair R-23 while the reactor was critical. Jumpers were installed, per procedure, to disable R-23 trip functions. Installation of jumpers across R-23, as prescribed in Procedure SP-45-050.23, disables the R-23 trip function and places the system in a condition where the surveillance requirement of TS 4.17 is not met.

On two occasions between November 19 and November 30, 2006, jumpers were installed across R-23 for longer than 12 hours. The lengths of time that these jumpers were installed on these two occasions were approximately 57 hours, and 191 hours. The reactor remained critical throughout these occurrences.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Kewaunee Power Station	05000305	2007	- 010 -	00	3 of 4

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

The jumpers were subsequently removed and the system restored to operable status.

This event is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications."

Event and Safety Consequence Analysis:

The Control Room Post-Accident Recirculation System is designed to filter the Control Room atmosphere during Control Room isolation conditions. It is part of the Control Room Air Conditioning System and is normally not in operation. Following a postulated accident, the Control Room Post-Accident Recirculation System is designed to automatically start upon safety injection or high radiation signal. R-23 is the radiation monitor at the outlet of the air conditioning unit and serves to automatically provide an initiation signal on high radiation.

If the system is found to be inoperable, there is no immediate threat to the Control Room and reactor operation may continue for a limited period of time while repairs are being made. If one of the two trains of the system cannot be repaired within 7 days, the reactor is placed in hot standby until the repairs are made. If both trains are inoperable, the reactor shall be shut down within 12 hours.

When the Control Room Post-Accident Recirculation System is in operation, the safety function of R-23, to start the system, is fulfilled. During the periods referenced above when R-23 was isolated from the system in excess of 12 hours, the Control Room Post-Accident Recirculation System had been placed in operation to meet its safety function (prior to initiation of the work activity). Therefore, the Control Room Post-Accident Recirculation System itself was operating (and fulfilling its safety function) as intended by the TS.

Although the safety function of R-23 was met, the KPS TS are not properly structured to recognize this condition and provide the appropriate allowances. This incongruity was introduced when the rules of usage in TS 4.0 were revised by License Amendment 163 in September 2002. This amendment added the requirement that failure to meet a surveillance requirement, whether such failure is experienced during the performance of the surveillance or between performances of the surveillances, shall be failure to meet the operability requirements for the LCO.

Prior to implementation of License Amendment 163, operators relied on a backup radiation monitor, if R-23 was inoperable, to provide indication of high radiation so that manual initiation of the Control Room Post-Accident Recirculation System could be accomplished if needed. This compensatory measure was based on NRC acceptance of manual initiation of this system, as discussed in the NRC's letter dated July 7, 1983. Operators would also place the Control Room Post-Accident Recirculation System in a condition where the high radiation initiation signal was fulfilled (i.e., the system was placed in operation). This condition thus satisfied the operability requirements of TS 3.12, allowing the plant to continue power operation. This practice continued following implementation of License Amendment 163 because the effect of the revised rules of usage upon TS 3.12 was not recognized. Although the safety function of the Control Room Post-Accident Recirculation System continued to be fulfilled, the revised TS 4.0 nevertheless states that the operability requirements for the LCO are not met. As such, the 12-hour shutdown requirement is invoked.

There were no events or conditions that could have prevented the fulfillment of the safety function of the Control Room Post-Accident Recirculation System. Since the system was in operation and fulfilling its safety

function during the periods of R-23 inoperability, there was minimal safety significance associated with this event.

Cause:

The cause of this condition was a lack of recognition, during implementation of License Amendment 163, that the revised TS 4.0 could render the operability requirements for the LCO in TS 3.12 not met, even when the Control Room Post-Accident Recirculation System was operating and fulfilling its safety function.

Corrective Actions:

Administrative controls were implemented to ensure appropriate TS requirements are met during any inoperability of the automatic initiation function of R-23.

A license amendment request was submitted to the NRC on September 14, 2007, which proposed a revision to the KPS TS to address the initiation function of the Control Room Post-Accident Recirculation System, consistent with NUREG-1431, Standard Technical Specifications.

Similar Events:

A review of Licensee Event Reports covering the past three years identified the following similar events.

LER 2006-007-00, RCS RTD Cross Calibration Procedure Has The Potential To Exceed The TS LCO Allowed Time Limit
LER 2005-015-00, Both Component Cooling Pumps Inoperable When Shifting Running Equipment
LER 2005-014-00, Technical Specification LCO Not Entered for Diesel Generators Inoperable While in Refueling Shutdown
LER 2004-005-00, Safety Injection Accumulator Isolation Valve Position During Heatup Violates Technical Specifications - Procedure Deficiency
LER 2004-004-00, Procedural Deficiency Results in Automatic Containment Ventilation Isolation Being Disabled Contrary to Technical Specifications
LER 2004-002-00, Missed Technical Specification Surveillance for Leak Testing In-Core Detectors Prior to Use or Transfer, Due to Inadequate Procedural Guidance