



MAR 12 2007

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

Serial No. 07-0176
KPS/LIC/RS: RO
Docket No. 50-305
License No. DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
LICENSEE EVENT REPORT 2007-01

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. 50-305/2007-01

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,

A handwritten signature in black ink, appearing to read "L. Hartz", written over the typed name.

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. R. F. Kuntz
Project Manager
U.S. Nuclear Regulatory Commission
Mail Stop O 7D1A
Washington, D. C. 20555

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
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TITLE (4)
Reactor Trip During Turbine Trip Mechanism Testing

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
1	12	2007	2007	-- 001 --	00	03	12	2007	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR .: (Check all that apply) (11)							
POWER LEVEL (10)	93.7%	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)	<input checked="" type="checkbox"/> 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)	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 Richard Sattler	TELEPHONE NUMBER (Include Area Code) (920) 388- 8121

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

At 10:39 on 1/12/2007, with the reactor at 1660MWt (93.7%), while performing a turbine mechanical trip test, the turbine and reactor tripped due to low auto stop oil pressure. MS-201B1, Reheat Steam to MSR B1, failed to close, which resulted in additional RCS cooldown to 536 degrees F. Per contingency procedures, action was taken to isolate the reheat steam, which halted the cooldown, and Tave was restored to 547 degrees F. The additional cooldown resulted in letdown isolation on low pressurizer level. Feedwater isolated and auxiliary feedwater initiated, as designed, due to low-low level in the steam generators. No other safeguards systems actuated during the transient.

The direct cause was the loss of auto stop oil pressure to the interface valve that resulted in a turbine-reactor trip. No root cause could be conclusively identified. Foreign material on a valve-seating surface was identified as a probable cause.

This event is being reported under 10 CFR 50.73(a)(2)(iv)(A) as an event or condition that resulted in automatic actuation of the reactor protection system and the auxiliary feedwater system.

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TEXT CONTINUATION

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

Event Description:

Kewaunee Power Station (KPS) was operating at approximately 93.7% steady state power. At 10:15, station operators began performance of SP-54-063, Turbine Trip Mechanism Tests, at the main turbine [TRB] pedestal. During performance of this task auto stop oil pressure was lost resulting in a turbine-reactor trip at 10:39. Both reactor trip breakers [BKR] opened.

Following the trip, MS-201B1, Reheat Steam to MSR B1, [ISV] did not close, (a repeat valve failure), which resulted in additional cooldown to 536 degrees F RCS Tave. The additional cooldown resulted in letdown isolation due to low pressurizer level. Feedwater [SJ] isolated and auxiliary feedwater [BA] initiated, as designed, due to low-low level in the steam generators. No other safeguards systems actuated during the transient.

Per contingency procedures, manual action was taken to isolate the reheat steam [SB], which halted the cooldown, and Tave was restored to 547 degrees F. Charging [CB] was taken to manual to restore pressurizer level and letdown flow. LD-10 was taken to manual during the restoration of letdown flow.

Event Analysis:

This event is being reported under 10 CFR 50.73(a)(2)(iv)(A) as an event or condition that resulted in automatic actuation of the reactor protection system and the auxiliary feedwater system.

In the Main Turbine [TA] steam admission system, any steam path has two valves in series which are controlled by independent systems. The high-pressure oil [TG] system that actuates the steam valves is completely independent of the low-pressure lubrication oil [TD]. Any loss of oil pressure or power supply causes closure of the steam valves [V]. The auto-stop oil is dumped to drain when any one of the protective trip devices is actuated. Independent reactor trip signals [JC] will actuate the solenoid trip in the emergency trip device and dump auto-stop oil to drain.

MS-201B1 failed to close following this trip. It had also failed to close following the reactor trips on 10/30/2006 and 11/10/2006. This valve is not a safety-related component and has no safety-related support functions.

Following the 10/30 trip, the cause of MS-201B1 failing to close was determined to be a galled valve plug, showing the bottom bonnet was not installed squarely. The valve stem was replaced, the valve plug was polished, and the packing was replaced.

Following the 11/10 trip, the cause of MS-201B1 failing to close was determined to be replacement bushings which eliminated the recessed area of the bushing and extended its length from 1.5 inches to 2 inches. MS-201B1 was reassembled with the old style bushings.

During troubleshooting following this trip, AOV diagnostics testing was performed on MS-201B1 (and MS-201A1 for comparison), but the results were inconclusive. Maintenance was performed to shorten the stroke length of MS-201B1 by 1/4 inch. Several other courses of action were considered, but, after comparing the AOV diagnostic testing of MS-201A1 and MS-201B1, a determination was made to forgo any additional

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maintenance on MS-201B1 during the forced outage. The issue was made into an Operator Work Around and procedure changes were made to address the possibility of MS-201B1 not closing on future trips.

A post-trip event review was performed and, following troubleshooting, the plant was restarted at 17:36 on 1/14/07.

The direct cause of the trip was determined to be the loss of auto stop oil pressure to the interface valve that resulted in a turbine-reactor trip. No root cause could be conclusively identified. Foreign material on a valve-seating surface was identified as a probable cause.

Safety Significance

This event did not create any plant safety issues or personnel injury/safety issues. The control room operating crew responded appropriately to the plant trip addressing all unexpected plant responses to the transient. Although MS-201B1 failed to close when required, compensatory actions were taken and the plant was successfully shut down.

Cause:

No root cause could be conclusively identified. Foreign material on a valve-seating surface was identified as a probable cause.

Corrective Actions:

The control room operating crew responded appropriately to the plant trip addressing all unexpected plant responses. Immediately following the trip, the DNAP-2000 Troubleshooting Plan was initiated for the auto stop oil problem. The stroke length of MS-201B1 was shortened by 1/4 inch.

Since no root causes were identified for the trip, no root cause corrective actions exist. For the foreign material probable cause, the following corrective actions are being implemented in accordance with a Change Management Plan:

- Fleet FME procedure MA-AA-102 "Dominion Foreign Material Process"
- Fleet procedure MA-AA-1001 "Dominion Supplemental Personnel Process" (to enhance supplemental worker standards on FME)
- Training and qualifications requirements of MA-AA-102 "Dominion Foreign Material Process"

Similar Events:

LER 84-009-01, Turbine and Reactor Trip Due to Improperly Wired Switch