



Kewaunee Nuclear Power Plant
Operated by Nuclear Management Company, LLC

May 27, 2005

NRC-05-068
10 CFR 50.73

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

Kewaunee Nuclear Power Plant
Docket 50-305
License No. DPR-43

Reportable Occurrence 2005-007-00

In accordance with the requirements of 10 CFR 50.73, "Licensee Event Report System," the enclosed Licensee Event Report (LER) for reportable occurrence 2005-007-00 is being submitted.

This letter contains no new commitments and no revisions to existing commitments.

Michael G. Gaffney
Site Vice President, Kewaunee Nuclear Power Plant
Nuclear Management Company, LLC

Enclosure (1)

cc: Administrator, Region III, USNRC
Project Manager, Kewaunee, USNRC
Resident Inspector, Kewaunee, USNRC
INPO Records Center

JE22

ENCLOSURE 1
LICENSEE EVENT REPORT (LER)
2005-007-00

2 pages follow

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION (6-2004)	APPROVED BY OMB NO. 3150-0104	EXPIRES 6-30-2007
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: 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.		

FACILITY NAME (1) Kewaunee Nuclear Power Plant	DOCKET NUMBER (2) 05000305	PAGE (3) 1 of 2
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TITLE (4)
Unanalyzed Condition: Design Deficiency - Component Cooling Water System Inoperable Due to Pump "Run Out" Conditions

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	
03	28	2005	2005	-- 007 --	00	05	27	2005	FACILITY NAME	DOCKET NUMBER	
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR .: (Check all that apply) (11)									
N		20.2201(b)			20.2203(a)(3)(ii)			X 50.73(a)(2)(ii)(B)		50.73(a)(2)(ix)(A)	
POWER LEVEL (10)		000									
		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)			X 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 Mary Jo Merholz	TELEPHONE NUMBER (Include Area Code) 920-388-8277
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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)		
YES (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>	NO		MONTH	DAY	YEAR

ABSTRACT

On March 28, 2005 with the plant in Refueling Shutdown Mode, a past operability concern was identified with the plant's Component Cooling Water System. Specifically, on January 23, 2002, plant personnel identified a potential "run out" concern with the Component Cooling Water pumps. The condition assumed Component Cooling Water being aligned to both Residual Heat Removal heat exchangers and both Component Cooling Water pumps running. If a loss of power caused the loss of one Component Cooling Water train and the associated train's isolation valve to the Residual Heat Removal heat exchanger could not be closed, there would be a potential concern with pump "run out" and pump damage for the Component Cooling Water pump that continued to run. The plant's original design did not preclude the Component Cooling Water pump "run out" condition. There were no safety significant issues involved with this event. Plant design changes were implemented to alleviate the Component Cooling Water pump "run out" concern. No further corrective actions are necessary. This report involves a safety system functional failure.

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

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Kewaunee Nuclear Power Plant	05000305	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 of 2
		2005	-- 007	-- 00	

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

DESCRIPTION

On March 28, 2005 with the plant in Refueling Shutdown Mode, a past operability concern was identified with the plant's Component Cooling Water (CCW) [CC] System. Specifically, on January 23, 2002, plant personnel identified a potential "run out" concern with the CCW pumps [P]. The condition assumed CCW being aligned to both Residual Heat Removal (RHR) heat exchangers [HX] and both CCW pumps running. If a loss of power caused the loss of one CCW train and the associated train's isolation valve to the RHR heat exchanger could not be closed, there would be a potential concern with pump "run out" and pump damage for the CCW pump that continued to run.

The pump "run-out" concern was determined to be an original plant design issue and was initially resolved by isolating the non-safeguards loads on the CCW system and installing a valve position limiter on a non-critical CCW system flow control valve. Isolation of the non-safeguards loads on the CCW system and the installation of the valve position limiter on a non-critical CCW system flow control valve were completed approximately 49.75 hours from the time the potential concern was identified. The valve position limiter that was installed was proven effective upon the completion of special operating procedures which verified by testing that a single CCW pump would not experience "run-out" flow conditions when all CCW safeguards loads, including both trains of RHR heat exchangers were supplied by a single CCW pump.

CAUSE OF THE EVENT

The plant's original design did not preclude the CCW pump "run out" condition.

EVENT ANALYSIS AND SAFETY SIGNIFICANCE

This event is being reported under 10CFR50.73(a)(2)(ii)(B), any event or condition that resulted in the plant being in an unanalyzed condition that significantly degraded plant safety, and 10CFR50.73(a)(2)(v)(A), any event or condition that could have prevented the fulfillment of the safety function of structures or system that are needed to shut down the reactor and maintain it in a safe shutdown condition.

This event was initially reported on March 28, 2005 as a 10CFR50.72 non-emergency event under criterion (b)(3)(ii)(B), any event or condition that resulted in the plant being in an unanalyzed condition that significantly degraded plant safety (reference Event Notification EN# 41539).

This report involves a safety system functional failure.

CORRECTIVE ACTIONS

Plant design changes have been implemented to alleviate the CCW pump "run out" concern. These design changes installed valve travel limiting devices on non-safeguards CCW system flow control air operated valves. These modifications limit total CCW flow to prevent CCW pump "run out" under the specified conditions described in this Licensee Event Report.

PREVIOUS SIMILAR EVENTS

None.