NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Limerick Generating Station - Unit 1	0 5 0 0 0 3 5 2	1 OF 0 3

TITLE (4)

Automatic Isolation of the Reactor Water Cleanup System

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER(S)
12	15	84	84	— 012	— 00	01	14	85		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	4	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	000	20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
John C. Nagle, Engineer - Special Projects	AREA CODE 2 1 5 8 4 1 - 5 1 8 4

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
B	C E	T D S	R 2 7 8	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

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

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

Abstract: 84-012

On December 15, 1984, prior to initial criticality, the reactor water cleanup (RWCU) outboard isolation valve closed during surveillance testing of the RWCU Differential Temperature Switches. Isolation of this system constitutes an actuation of an engineered safety feature (ESF). The isolation signal was cleared and the RWCU system returned to service.

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FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Limerick Generating Station Unit 1	0 5 0 0 0 3 5 2	8 4	0 1 2	0 0	0 2 OF 0 3

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

Description of the Event:

On December 15, 1984, at approximately 1405, while performing a surveillance test of the reactor water cleanup differential temperature switches, outboard isolation valve HV-44-1F004, which isolates on a high differential temperature signal, closed to the isolation position when the control power to the isolation valve was returned. After the high differential temperature isolation signal was cleared, the reactor water cleanup system was returned to normal operation. This was accomplished within one hour.

Consequences of the Event:

The reactor water cleanup system isolated properly upon receiving the high differential temperature signal. There were no adverse consequences. In addition, reactor water chemistry, because of the short duration of the isolation, was not adversely affected.

Cause of the Event:

As a result of the surveillance test, it has been postulated that placing the Temperature Differential Transmitter Switches to the "READ" position during the surveillance test (which occurs immediately after resetting the isolation) caused a spurious isolation signal. A defect in the temperature differential transmitter switch is believed to be responsible for the spurious isolation signal.

Corrective Actions:

Information Tags have been placed on the inboard and outboard RWCU ambient temperature indicating panels in the Auxiliary Equipment Room, stating that prior to operating the differential temperature switches, the main control room must be notified that a RWCU isolation may occur. A modification is being pursued to the "READ" circuit which will prevent inadvertent trips when using the "READ" switch on the temperature switch.

Similar Occurrence:

LER 84-034

cc: Judge Helen F. Hoyt
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January 14, 1985

Docket No. 50-352

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

SUBJECT: Licensee Event Report
Limerick Generating Station - Unit 1

This LER concerns an automatic isolation of the reactor water cleanup system. This event occurred prior to initial criticality.

Reference:	Docket No. 50-352
Report Number:	84-012
Revision Number:	00
Event Date:	December 15, 1984
Report Date:	January 14, 1985
Facility:	Limerick Generating Station P.O. Box A, Sanatoga, PA 19464

This LER is submitted pursuant to the requirements of 10CFR50.73 (a)(2)(iv).

Very truly yours,

W. T. Ullrich
Superintendent
Nuclear Generation Division

cc: Dr. Thomas E. Murley, Administrator, Region I, USNRC
J. T. Wiggins, Senior Site Inspector
See Service List

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