

## LICENSEE EVENT REPORT (LER)

APPROVED ONS NO. 3180-010N  
EXPIRES 6/31/85

FACILITY NAME (1)

Limerick Generating Station - Unit 1

DOCKET NUMBER (2)

0 5 0 0 0 3 5 2 1 OF 0 3

PAGE (3)

TITLE (4)

Inadequate Alternate Shutdown Cooling

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 NAMES		DOCKET NUMBER (9)
07	24	85	85	064	000	08	13	85			0 5 0 0 0 1 1
OPERATING MODE (10)			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 43.44 (Check one or more of the following) (11)								
4											
POWER LEVEL (10)			OTHER (Specify in Attachment below and in Title, NRC Form 204A)								
0100											

LICENSEE CONTACT FOR THIS LER (12)

NAME

John C. Nagle, Engineer - Special Projects

TELEPHONE NUMBER

AREA CODE 215841-5184

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
				N					

SUPPLEMENTAL REPORT EXPECTED (14)

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

ABSTRACT (Limit to 1000 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

Abstract: 85-064

On July 24, 1985 at 0050 hours, while in cold shutdown, Unit 1 entered a condition of noncompliance with Technical Specifications paragraph 3.4.9.2. Technical Specification 3.4.9.2a requires that an alternate method capable of decay heat removal be demonstrated operable for each inoperable RHR loop within one hour. The "B" Reactor Water Cleanup (RWC) Pump tripped at 2350 hours on July 23, 1985 with both Residual Heat Removal (RHR) Shutdown Cooling loops out-of-service for testing and maintenance purposes. The RWC system was operating as an alternate method of decay heat removal. Following the "B" RWC Pump trip, the RWC system was vented and the "B" RWC Pump was returned to service at 0223 hours on July 24, 1985. Since the reactor had not operated since April 17, 1985 and minimal decay heat existed, there were no adverse consequences of this event.

Investigation revealed that the RWC suction piping had become airborne during valving realignment following a local leak rate test of the RHR Shutdown Cooling suction valves. It was determined that the section of this local leak rate test procedure concerning valving realignment, following completion of the test was inadequate. This procedure will be revised and other local leak rate test procedures will be reviewed for similar problems.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 6/31/86

FACILITY NAME (1)  Limerick Generating Station Unit 1	DOCKET NUMBER (2)  0 5 0 0 0 3 5 2 8 5	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		85	064	0	02	OF	03

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

Description of the Event:

On July 24, 1985 at 0050 hours, while in cold shutdown, Unit 1 entered a condition of noncompliance with Technical Specifications paragraph 3.4.9.2 which requires demonstration of the operability of alternate methods of decay heat removal within one hour.

With both Residual Heat Removal (RHR) Shutdown Cooling loops out-of-service for testing and maintenance purposes, the "B" Reactor Water Cleanup (RWCU) Pump tripped at 2350 hours on July 23, 1985. The RWCU system was operating as an alternate method of decay heat removal. The other alternate method of decay heat removal was the Drywell Cooling System (ambient losses from the reactor pressure vessel).

Investigation revealed that the RWCU suction piping had become airbound during valving realignment following a local leak rate test (ST-1-LLR-121-1) of the RHR Shutdown Cooling suction valves. The RWCU and RHR Shutdown Cooling systems both take suction from the "B" Reactor Recirculation Pump suction line. Following the "B" RWCU Pump trip, the RWCU system was vented and the "B" RWCU Pump was returned to service at 0223 hours on July 24, 1985. Therefore, on July 24 from 0050 to 0223, Unit 1 was in noncompliance with Technical Specifications paragraph 3.4.9.2, which requires demonstration of the operability of an alternate method capable of decay heat removal for each inoperable RHR loop within one hour.

Consequences of the Event:

There was minimal decay heat in the core because the reactor had not been critical since April 17, 1985 and had never operated at greater than five percent rated power. The reactor coolant temperature remained stable during the event. Furthermore, if significant decay heat had been present, the "B" RHR loop could have been returned to service by removing a maintenance permit on the heat exchanger outlet valve, which was scheduled for maintenance the next day. For these reasons, the significance of this event is minimal.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Limerick Generating Station  
Unit 1

YEAR

SEQUENTIAL  
NUMBERREVISION  
NUMBER

0 5 0 0 0 3 5 2 8 5 - 0 6 4 - 0 0 0 3 OF 0 3

TEXT (If more space is required, use additional NRC Form 365A's) (17)

Cause of the Event:

The "B" RWCU Pump tripped on low suction flow when its suction piping became airbound. This occurred after personnel opened the RHR Shutdown Cooling suction valve, 51-1F077, following the completion of local leak rate surveillance test, ST-1-LLR-121-1. Prior to opening the 51-1F077 valve; the test volume had not been backfilled and vented. Thus, the air in the test volume was allowed to flow past the 51-1F077 valve to the RWCU system. Surveillance test ST-1-LLR-121-1 did not require that the test volume be backfilled and vented prior to opening the 51-1F077 valve.

Corrective Actions:

To prevent recurrence of this event, surveillance test ST-1-LLR-121-1 will be revised to require backfilling and venting the test volume prior to opening the 51-1F077 valve. In addition, other local leak rate test procedures will be reviewed for similar problems before the first refueling outage.

Previous Similar Occurrences

None.

PHILADELPHIA ELECTRIC COMPANY

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August 13, 1985

Docket No. 50-352

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Washington, DC 20555

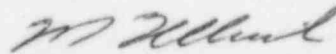
SUBJECT: Licensee Event Report  
Limerick Generating Station - Unit 1

This LER concerns noncompliance with Technical Specifications paragraph 3.4.9.2 dealing with shutdown cooling.

Reference:	Docket No. 50-352
Report Number:	85-064
Revision Number:	00
Event Date:	July 24, 1985
Report Date:	August 13, 1985
Facility:	Limerick Generating Station P.O. Box A, Sanatoga, PA 19464

This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(i).

Very truly yours,



W. T. Ullrich  
Superintendent  
Nuclear Generation Division

cc: Dr. Thomas E. Murley, Administrator, Region I, USNRC  
E. M. Kelly, Senior Resident Site Inspector  
See Service List

LE22  
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