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 4

TITLE (4) Failure to Stroke Test Valve Following Maintenance Work Results in Failure to Take Technical Specification Action Statement Due to Personnel Error

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(S)
0 6	2 3	8 8	8 8	0 2 4	0 0	0 7	2 5	8 8		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 8 5	20.402(b)	20.405(c)	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)	X 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
Charles A. Mengers, Senior Engineer, Licensing Section	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	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		0 8	2 3	8 8

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

Abstract:

On June 23, 1988 it was discovered that a Technical Specification Action Statement was not completed. Technical Specification 3.6.3 states in part that each Primary Containment Isolation Valve (PCIV) shall be operable with an isolation time less than or equal to the time specified in Technical Specification Table 3.6.3.1. The Action Statement of Technical Specification 3.6.3 requires that Single Isolation PCIVs be shown operable or the plant be in Hot Shutdown within 12 hours. Preventive maintenance was performed on the motor control center (MCC) breakers of two PCIVs. The valves were returned to service without performing the required surveillance. The cause of this event was personnel error in that Operations Personnel incorrectly determined that the work performed did not constitute maintenance, repair or replacement work as defined in Technical Specifications. Upon discovering that the required surveillance was not performed, the two valves were demonstrated operable. The individuals involved were counseled and a memo was issued to all other responsible Operations shift personnel to make them aware of the significance of this event and the importance of being fully aware of all work performed when determining the post work testing required. Additionally, a Human Performance Evaluation is being conducted to determine if personnel error was the only cause of this event and if additional programmatic controls are warranted.

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Unit Conditions Prior to the Event:

Operating Mode - 1 (Power)

Reactor Power - 85%

Description of the Event:

On June 23, 1988 two 1 1/2 inch Primary Containment Isolation Valves (PCIVs) associated with different penetrations, were discovered out of compliance with Technical Specification (TS) 3.6.3 which requires that the primary containment isolation valves shall be OPERABLE with isolation times less than or equal to those specified in Table 3.6.3-1. The Action statement of T.S. 3.6.3 requires that single isolation valves be shown operable or the plant be in Hot Shutdown within 12 hours. It was determined that the two PCIVs were returned to service following maintenance work on the associated motor control center without performing the required surveillance tests.

Valve HV-061-132 is located on the drywell equipment drain tank and valve HV-061-112 on the drywell floor drain sump level instrument lines. They were blocked to accommodate preventive maintenance activities performed on their motor control center (MCC) breakers (D144-R-G1-05 for valve HV-061-132 and D144-R-G1-06 for valve HV-061-112). The work that was performed included examination, cleaning and some disassembly of the MCC breaker. After completion of the work, the valves were stroked open to return them to their normal position; however, they were not stroked and timed to their "closed" isolation position to demonstrate operability as required by TS 4.6.3.1.

The event was discovered on June 23, 1988 at approximately 0930 when the Shift Technical Advisor (STA) determined that the required Technical Specification surveillance had not been performed (consequently valve operability was not demonstrated) and that the Action statement of TS 3.6.3 was not completed. As a result of the noncompliance with the surveillance requirement of TS 4.6.3.1 PCIVs HV-061-132 and HV-061-112 were inoperable for 41.5 hours and 17 hours respectively.

Consequences of the Event:

Following the discovery the valves were satisfactorily stroke timed, without adjustment and found OPERABLE.

The potential consequences of this event were minimized by the system design/function discussed below:

The lines do not automatically isolate during an accident. The drywell floor drain sump and drywell equipment drain tank level instrument line PCIVs are normally open during post accident conditions. The lines are fitted with a restricting orifice to limit flow should a line break outside containment occur. The valves can be closed remotely from the Main Control Room or manually in the reactor enclosure. The lines are Q-listed Seismic Category I and designed to withstand the containment pressure and temperature of post-accident conditions.

Cause of the Event:

The cause of this event was cognitive personnel error. Operations personnel failed to conduct the required TS surveillance after maintenance activities were completed on the valve MCC breakers. The work description section of the Maintenance Request Form stated that preventative maintenance, testing and calibration were performed in accordance with the applicable procedures. The Shift Technical Advisor (STA), however, incorrectly determined that the preventive maintenance work performed did not constitute work that required post work surveillance testing and also that the work performed only involved examination and cleaning of the MCC breaker components. The Shift Supervisor (SSV) also failed to recognize that post work testing was required and concurred with the STA's determination.

Corrective Actions:

Subsequent to determining that the required TS surveillance testing was not performed, the two valves were demonstrated operable by cycling them through a complete cycle and verifying

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

that their isolation stroke times were less than the maximum allowable TS isolation times.

Actions Taken to Prevent Recurrence:

The individuals involved were counseled about the importance of being fully aware of the extent of all work performed when determining the post work testing required. Operations supervision discussed, with each STA, examples of the various requirements for operational verification testing with emphasis placed on the importance of knowing the extent of all completed work when determining the post work testing to be performed. A memo was issued to Shift Supervision and all STAs to make them aware of the significance of this event through written correspondence.

Additionally, a Human Performance Evaluation is being conducted to determine if personnel error was the only cause of this event and if additional programmatic controls are warranted.

The results of this evaluation shall be submitted in a revision to this LER by August 23, 1988.

EIIS Codes:

TK - Tank
V - Valve
BKR - Breaker
ISV - Isolation Valve

Previous Similar Occurrences:

None

PECo Tracking Codes:

A9 - Personnel Error - Failure to Properly Interpret Information/Results

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E. P. FOGARTY
MANAGER
NUCLEAR SUPPORT DIVISION

10 CFR 50.73

July 25, 1988
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 reports operation in a condition prohibited by Technical Specifications when it was determined that two Primary Containment Isolation Valves were not stroke tested following maintenance work. The cause of this event was personnel error.

Reference:	Docket No. 50-352
Report Number:	88-024
Revision Number:	00
Event Date:	June 23, 1988
Report Date:	July 25, 1988
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)(b).

Very truly yours,

E. P. Fogarty

E. P. Fogarty
Manager
Nuclear Support Division

cc: W. T. Russell, Administrator, Region I, USNRC
T. J. Kenny, NRC Senior Resident Inspector
INPO Records Center

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