



PECO ENERGY

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10CFR 50.73

June 27, 1994
Docket No. 50-352
License No. NPF-39

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

SUBJECT: Licensee Event Report
Limerick Generating Station - Unit 1

This LER concerns an Engineered Safety Feature actuation after a Secondary Containment barrier block valve automatically closed due to personnel error during performance of a surveillance test. The barrier block valve is utilized to provide a water seal which prevents fission products from being released to the environment during an accident condition.

Reference:	Docket No. 50-352
Report Number:	1-94-008
Revision Number:	00
Event Date:	May 30, 1994
Report Date:	June 27, 1994
Facility:	Limerick Generating Station P.O. Box 2300, Sanatoga, PA 19464-2300

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

Very truly yours,

L A Hopkins for RWB

DMS:cah

cc: T. T. Martin, Administrator Region I, USNRC
N. S. Perry, USNRC Senior Resident Inspector, LGS

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Limerick Generating Station, Unit 1										NUMBER (2) 0 5 0 0 0 3 5 1 2				PAGE (3) 1 OF 0 4	
TITLE (4) ESF actuation after a Secondary Containment barrier block valve closed due to personnel error during performance of a surveillance test.															
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 5	3 0	9 4	9 4	0 0 8	0 0	0 6	2 7	9 4					0 5 0 0 0		
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)													
1		20.402(b)				20.405(c)				<input checked="" type="checkbox"/> 50.73(a)(2)(iv)				73.71(b)	
POWER LEVEL (10)		20.405(a)(1)(i)				50.36(a)(1)				50.73(a)(2)(v)				73.71(c)	
1 0 0		20.405(a)(1)(ii)				50.36(a)(2)				50.73(a)(2)(vi)				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)(ix)					
LICENSEE CONTACT FOR THIS LER (12)															
NAME J. L. Kantner, Manager - Experience Assessment										TELEPHONE NUMBER AREA CODE 6 1 1 0 3 1 2 7 1 - 1 1 2 1 0 1 0					
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					
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR	
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO					

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

On 05/30/94, Instrumentation and Controls (I&C) technicians were performing procedure ST-2-026-624-1. At 1934 hours the reactor recirculation pump seal purge block valve, HV-046-127, automatically closed, constituting an Engineered Safety Feature actuation. The Secondary Containment valve HV-046-127 provides a water seal during an accident condition to prevent fission products from being potentially released to the environment. Following the event, an I&C technician identified that a step in the ST procedure had been inadvertently omitted. The procedural step ensures an isolation signal is reset to prevent closure of HV-046-127. At 1940 hours Operations personnel re-opened HV-046-127 after resetting the isolation signal. The consequences of this event were minimal. After HV-046-127 closed, the recirculation pump seals were automatically serviced by reactor vessel water, and no problems or abnormalities were identified during this period. The cause of this event was personnel error. The I&C technician who erred was counselled, an I&C group all-hands meeting was conducted, and each I&C Supervisor is scheduled to hold a one hour meeting with their groups to reiterate the importance of self check principles.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
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TEXT (If more space is required, use additional NRC Form 365A's) (17)

Unit Conditions Prior to the Event:

Unit 1 was in Operational Condition 1 (Power Operation) at 100% power level. There were no structures, systems, or components out of service that contributed to this event.

Description of the Event:

On May 30, 1994, Instrumentation and Controls (I&C) technicians were performing Surveillance Test (ST), procedure ST-2-026-624-1, "NSSSS - Refueling Area Ventilation Exhaust Duct Radiation - High; Division IIA, Channel C Functional Test (RISH-26-1K610C)." At 1934 hours on May 30, 1994, the reactor recirculation pump seal purge block valve, HV-046-127, automatically closed, thereby constituting an Engineered Safety Feature (ESF) actuation. The Secondary Containment valve HV-046-127 is utilized to provide a water seal which prevents fission products from being released to the environment during an accident condition.

Immediately following the event, an I&C technician stationed in the Main Control Room (MCR) notified Operations personnel of the isolation after identifying that a step in the ST procedure had been inadvertently omitted. The procedural step instructs the I&C technician to notify the MCR Operations personnel to reset an isolation signal generated through the performance of the ST procedure. Initiation of this isolation signal causes valve HV-046-127 to close. At 1940 hours on May 30, 1994, Operations personnel re-opened valve HV-046-127, after the isolation signal was reset. The ST procedure was then satisfactorily completed by the I&C technicians.

A four hour notification was made to the NRC at 2020 hours on May 30, 1994, in accordance with the requirements of 10CFR50.72(b)(2)(ii), since this event resulted in an automatic ESF actuation. This report is being submitted in accordance with the requirements of 10CFR50.73(a)(2)(iv).

Analysis of the Event:

The actual consequences of this event were minimal, and there was no release of radioactive material to the environment as a result of this event. The affected valve, HV-046-127, repositioned and functioned as designed in response to the isolation signal. MCR Operations personnel expeditiously reset and restored valve HV-046-127 to its pre-transient condition, thereby preventing any adverse impact on plant systems.

Valve HV-046-127 is located in series with a second block valve HV-

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

046-128. In the event of a Loss of Coolant Accident (LOCA) condition, both block valves receive an automatic primary containment isolation signal to close. The closure of these block valves provides a water seal which prevents bypass leakage from the primary containment isolation valves. During a LOCA condition the water seal is utilized to prevent fission products from potentially entering the condensate storage tank and being released to the environment.

During this event, the control rod drive water supply to the 'A' and 'B' recirculation pump seals was isolated for approximately six minutes. Following the closure of valve HV-046-127, the recirculation pump seals were automatically serviced and cooled by reactor vessel water. Operations personnel identified no problems or abnormalities during the six minute time period in which the recirculation pump seals were being serviced by the reactor coolant.

Cause of the Event:

The cause of this event was personnel error due to a lack of attention to detail. The I&C technician failed to perform a step in procedure ST-2-026-624-1 to ensure Operations personnel reset an isolation signal that was generated through the performance of the ST procedure. The I&C technician did not adequately self check the ST procedure to ensure all procedural steps were reviewed and complied with prior to preceding with the next step. The initiation of this isolation signal caused valve HV-046-127 to close.

Corrective Actions:

1. Procedure ST-2-026-624-1, having a quarterly frequency, has been performed successfully many times and the I&C technician who erred has been counselled regarding the importance of attention to detail and self check principles.
2. An I&C group "All-Hands" meeting was conducted which discussed this event and re-emphasized to the I&C technicians the importance of attention to detail and the application of self check principles.
3. Each I&C Supervisor is scheduled to hold a one-hour "stand down" meeting with their groups to review and reiterate the importance of self check principles, and the STAR (Stop, Think, Act, Review) Program currently in place at the Limerick Generating Station. This item is expected to be completed by July 1, 1994.

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

1 Previous Similar Occurrences:

LERs 1-86-025, 1-87-019, 1-89-038, and 2-90-013 reported inadvertent isolations due to the omittance of a procedural step during the performance of an ST procedure. The corrective actions for these previous events involved the counseling of the individuals, and all-hands meetings emphasizing the need for attention to detail and self check principles. Each of these previous events and this event being reported involved a different ST procedure and individual. The low occurrence rate of events due to these causes and improvements made in the self check program indicate that the ongoing corrective actions are effective.