NRC Form 366 (9-83)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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

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)
Excessive Leakage of Containment Spray Valve, HV-51-1F016A

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)
1 2	1 8	8 5	8 5	— 1 0 2	— 0 0	0 1	2 1	8 6		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 7 0	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)	X 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, 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
X	B 0	L S V	L 2 0 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X YES (If yes, complete EXPECTED SUBMISSION DATE)	NO		0 7	1 5	8 6

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

Abstract: 85-102

On December 18, 1985, with Unit No. 1 at power operation and at 69.9 percent power, while performing local leak rate testing, containment spray header outboard isolation valve HV-51-1F016A, was identified as not being fully closed as evidenced by having excessive leakage. While pressurizing between the inboard and the outboard motor operated isolation valves, the test pressure could not be achieved until the HV-51-1F016A valve was manually closed using its handwheel. The valve was declared inoperable and administratively secured in the fully closed position. The cause of this event was believed to be either improper operation of the valve operator or excessive internal valve friction. Further investigation will be performed.

IE22 1/1

Unit Condition Prior to the Event:

Mode 1 (Power Operation)
Reactor Power 69.9%
Power Ascension Testing

Description of the Event:

On December 18, 1985, while performing local leak rate testing, drywell spray header outboard isolation valve, HV-51-1F016A, was identified as having excessive leakage. While pressurizing between the inboard motor operated isolation valve, HV-51-1F021A, and the outboard motor operated isolation valve, HV-51-1F016A, the test pressure of 44 psig (peak accident pressure) could not be achieved until the HV-51-1F016A valve was manually closed using its handwheel. The HV-51-1F016A valve was declared inoperable and the local leak rate test was completed successfully with the valve in its manually closed position. Plant operation is continuing with the HV-51-1F016A valve secured in a closed position per Technical Specification requirements.

The EIIS code for the affected system is BO; for the affected component is ISV.

Consequences of the Event:

Since the local leak rate test results were acceptable with the 16A valve in the manually closed position, primary containment integrity was maintained with the HV-51-1F021A. The HV-51-1F016A and HV-51-1F021A valves are normally closed and the previous local leak rate test results of the containment penetration were acceptable. In the case of high drywell pressure as would be experienced in a Loss of Coolant Accident, the HV-51-1F016A and HV-51-1F021A valves could be opened to provide containment spray along with the redundant "B" loop of containment spray through the HV-51-1F016B and HV-51-1F021B valves.

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 5	— 1 0 2	— 0 0	0 3 OF 0 3

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

Cause of the Event:

The cause of this event is either improper operation of the Limitorque operator causing the motor to stop due to torque prior to full closure of the valve or high internal valve friction. Troubleshooting has revealed that excessive grease in the torque sensing mechanism of the Limitorque operator is possibly causing improper functioning of the valve. Further investigation will be performed to resolve this problem.

Corrective Actions:

A supervisory block was applied to the hand switch in the control room, the motor control center and the manual handwheel for the HV-51-1F016A valve to secure it in the full closed position and de-energized during plant operation. The valve in this state is considered manual and will not be unblocked or considered an operable motor operated valve until successful completion of the local leak rate test. During the next plant shutdown of sufficient duration, maintenance will be performed on the valve operator which will include cutting a slot in the torque limit sleeve of the spring pack used to sense motor torque. This will allow the release of any excess grease and prevent possible improper valve operation. At that time, a local leak rate test will be performed to verify no further problems.

Previous Similar Occurrences

None.

PHILADELPHIA ELECTRIC COMPANY

2301 MARKET STREET

P.O. BOX 8699

PHILADELPHIA, PA. 19101

(215) 841-4000

January 21, 1986

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 deals with excessive leakage identified during local leak rate testing of the drywell spray outboard isolation valve, HV-51-1F016A.

Reference:	Docket No. 50-352
Report Number:	85-102
Revision Number:	00
Event Date:	December 18, 1985
Report Date:	January 21, 1986
Facility:	Limerick Generating Station P.O. Box A, Sanatoga, PA 19464

This LER is being voluntarily submitted based on the possible significance of the event.

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

IE22
1/1

cc: Troy B. Conner, Jr., Esq.
Ann P. Hodgdon, Esq.
Mr. Frank R. Romano
Mr. Robert L. Anthony
Ms. Phyllis Zitzer
Charles W. Elliott, Esq.
Zori G. Ferkin, Esq.
Mr. Thomas Gerusky
Director, Penna. Emergency Management Agency
Angus Love, Esq.
David Wersan, Esq.
Robert J. Sugarman, Esq.
Kathryn S. Lewis, Esq.
Spence W. Perry, Esq.
Jay M. Gutierrez, Esq.
Atomic Safety & Licensing Appeal Board
Atomic Safety & Licensing Board Panel
Docket & Service Section (3 Copies)
E. M. Kelly
Timothy R. S. Campbell

September, 1985