

LICENSEE EVENT REPORT (LER)

FACILITY NAME: LaSalle County Station Unit 1
 DOCKET NUMBER: 050000373 1 OF 013

TITLE: Failure of High Pressure Core Spray Waterleg Pump Check Valves

EVENT DATE (8)			LFR NUMBER (8)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER
07	02	84	84	04	4	00	07	27	84		050000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)

OPERATING MODE (9): 1	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.406(e)	<input type="checkbox"/> 60.73(a)(2)(iv)	<input type="checkbox"/> 72.71(a)
POWER LEVEL (10): 0917	<input type="checkbox"/> 20.406(a)(1)(i)	<input checked="" type="checkbox"/> 60.36(a)(1)	<input type="checkbox"/> 60.73(a)(2)(iv)	<input type="checkbox"/> 72.71(e)
	<input type="checkbox"/> 20.406(a)(1)(ii)	<input type="checkbox"/> 60.36(a)(2)	<input type="checkbox"/> 60.73(a)(2)(iv)(A)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	<input type="checkbox"/> 20.406(a)(1)(iii)	<input type="checkbox"/> 60.73(a)(2)(i)	<input type="checkbox"/> 60.73(a)(2)(iv)(B)	
	<input type="checkbox"/> 20.406(a)(1)(iv)	<input type="checkbox"/> 60.73(a)(2)(ii)	<input type="checkbox"/> 60.73(a)(2)(ix)	
	<input type="checkbox"/> 20.406(a)(1)(v)	<input type="checkbox"/> 60.73(a)(2)(iii)		

LICENSEE CONTACT FOR THIS LER (12): Vincent Masterson, E.A., extension 499
 TELEPHONE NUMBER: 8115 3157-1671611

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
X	BIG	VI	A 4115	Y					

SUPPLEMENTAL REPORT EXPECTED (14): YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15): MONTH DAY YEAR

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

On July 2, 1984 during the performance of LOS-HP-Q1, the High Pressure Core Spray System (HPCS) Quarterly Inservice Test Check Valve 1E22-F006 and Stop Check Valve 1E22-F007 failed to prevent reverse flow. These check valves provide isolation of the HPCS Waterleg Pump 1E22-C003 from the discharge pressure of the HPCS Pump 1E22-C001. The HPCS System was subsequently taken out of service to repair the check valves. After two attempts at correcting the problem the applicable portions of surveillance LOS-HP-Q1 were performed at 2100 on July 4, 1984 with satisfactory results. The cause for the check valves failing appears to be due to scoring of the disc seats. The valves were lapped and this corrected the problem. The occurrence was not significant as Division I and Division II Emergency Core Cooling Systems were available the entire time.

There have been no previous occurrences to date. This appears to be an isolated case. The valves are made by Anderson, Greenwood Co.

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LICENSEE EVENT REPORT (EPR) TEST CONDITIONS

FACILITY NAME (1)	DOCKET NUMBER (2)	LIC. NUMBER (3)			PAGE (4)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
LaSalle County Station Unit 1	05000373	84	044	00	2 OF 13

TEXT (If more space is required, use additional NRC Form 305A's) (17)

I. EVENT DESCRIPTION

At 0830 on July 2, 1984 during the performance of surveillance LOS-HP-Q1, the High Pressure Core Spray System (BG, HPCS) Quarterly Inservice Test, Check Valves 1E22-F007 and 1E22-F006 failed to prevent reverse flow from the HPCS Pump 1E22-C001. This failure by the check valves resulted in HPCS pump pressure being felt on the HPCS Waterleg Pump. The surveillance criteria of ASME Section XI was exceeded in this case. The HPCS Waterleg Pump (1E22-C003) discharge check valves were subsequently entered in the Degraded Equipment Log at 1005 on July 2, 1984.

II. CAUSE

The cause for the failure of Check Valve 1E22-F006 and Stop Check Valve 1E22-F007 is due to scoring of the check valve seating surfaces. This scoring was most likely caused by small particles or foreign matter entering the system briefly and lodging between the seat and disc surfaces of the check valves. It is highly unlikely that both valves failed at the same time; it is more probable that one valve failed earlier placing the burden on the remaining check valve. This check valve eventually failed which resulted in the HPCS pump pressure being felt on the HPCS Waterleg Pump.

There have been no previous occurrences to date. This appears to be an isolated case.

III. PROBABLE CONSEQUENCES OF THE OCCURRENCE

At the time of the occurrence the plant was at 97% power. The HPCS system would have performed its intended function if called upon prior to its being taken out of service for repair maintenance. During the entire time, the Division I and Division II Emergency Core Cooling Systems (ECCS) were fully operational, ready to respond to a system challenge.

This occurrence had no significant effect on safe plant operation.

IV. CORRECTIVE ACTION

Work Request (L38481) was written to investigate and repair Check Valve 1E22-F006 and Stop Check Valve 1E22-F007.

The High Pressure Core Spray System was taken out of service at 2030 on July 2, 1984. Check Valve 1E22-F006 was inspected, cleaned, re-installed and returned to service at 0530 on July 3, 1984. A retest of the check valves failed.

LaSalle County Station Unit 1	DOCKET NUMBER (2)						LER NUMBER (8)			PAGE (3)									
							YEAR	SEQUENTIAL NUMBER	REVISION NUMBER										
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TEXT IF MORE SPACE IS REQUIRED USE ADDITIONAL NRC Form 1004a (17)

IV. CORRECTIVE ACTION (CONTINUED)

At 1550 on July 3, 1984 the HPCS System was once again taken out of service. Maintenance consisted of lapping the disc seats of Check Valve 1E22-F006 and Stop Check Valve 1E22-F007. Those applicable portions of surveillance LOS-HP-Q1 were again performed at 2100 on July 4, 1984. The results were satisfactory.

Work Request (L38481) was completed on July 4, 1984 and the HPCS System returned to full operation at 0545 on July 5, 1984.

The valves are made by the Anderson, Greenwood Co.

V. PREVIOUS OCCURRENCES

None

VI. NAME AND TELEPHONE NUMBER OF PREPARER

Vincent Masterson, E.A., 815-357-6761, ext. 499.



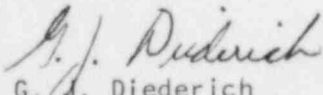
Commonwealth Edison
LaSalle County Nuclear Station
Rural Route #1, Box 220
Marseilles, Illinois 61341
Telephone 815/357-6761

July 27, 1984

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

Dear Sir:

Reportable Occurrence Report #84-044-00, Docket #050-373 is being submitted to your office in accordance with 10 CFR 50.73.


G. J. Diederich
Superintendent
LaSalle County Station

GJD/MLD/kg

Enclosure

xc: NRC, Regional Director
INPO-Records Center
File/NRC

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