(7-77)

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | 1 L L S C 1 (2) | 0 0 - 0 0 0 0 0 - 0 0 (3) | 4 1 10 10 10 (4) | (5)

LICENSEE CODE (9–14) | LICENSE NUMBER (15–25) | LICENSE TYPE (26–30) | CAT (57–58)

CONT 0 1 | REPORT SOURCE L (6) | 0 5 0 0 0 3 7 3 (7) | 0 6 1 7 8 3 (8) | 0 7 1 5 8 3 (9)

DOCKET NUMBER (60–68) | EVENT DATE (69–74) | REPORT DATE (75–80)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | On June 17, 1983 during the performance of LaSalle Quarterly Operating Surveillance,

0 3 | LOS-HP-Q1, the High Pressure Core Spray (HPCS) Testable Check Bypass Valve 1E22-F354

0 4 | failed to indicate closed after being cycled. The HPCS system was declared inoperable

0 5 | and taken out of service in compliance with Technical Specificatio. 3.6.3 Action

0 6 | Item a.1.b. because Division 1, Div. 2 ECCS were operable and RCIC operable, adequate

0 7 | shutdown capability was maintained. Safety of the plant was not affected.

0 8 | (7–8, 9–80)

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9 (7–8)	S F (11) (9–10)	E (12) (11)	B (13) (12)	V A I V O P (14) (13–18)	C (15) (19)	Z (16) (20)

	LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
(17)		8 3 (21–22)	— (23)	0 6 7 (24–26)	/ (27)	0 3 (28–29)	L (30)	— (31)	0 (32)

	ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
	E (18) (33)	Z (19) (34)	Z (20) (35)	Z (21) (36)	0 0 0 0 (37–40)	Y (23) (41)	N (24) (42)	Z (25) (43)	Z 9 9 9 (26) (44–47)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The cause of the failure of the 1E22-F354 valve to close was due to insufficient

1 1 | spring tension of the actuator assembly to close the valve. Work Request (L25428)

1 2 | was generated and finally completed on July 3, 1983. Spring Tension to the rack and

1 3 | gear assembly was increased. A revision in the In-Service Test (IST) for pumps and valves

1 4 | once implemented should eliminate the problem. Valves are made by W-K-M Division of

ALF Ind. (7–8, 9–80)

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5 (7–8)	B (28) (9)	0 4 8 (29) (10–12)	NA (13–44)	B (31) (45)	LOS-HP-01 (46–80)

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6 (7–8)	Z (33) (9)	Z (34) (10)	NA (11–44)	NA (45–80)

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7 (7–8)	0 0 0 (37) (9–11)	Z (38) (12)	NA (13–80)

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8 (7–8)	0 0 0 (40) (9–11)	NA (12–80)

LOSS OF OR DAMAGE TO FACILITY (42)

	TYPE	DESCRIPTION
1 9 (7–8)	Z (42) (9)	NA (10–80)

PUBLICITY

	ISSUED	DESCRIPTION (45)
2 0 (7–8)	N (44) (9)	(10–68)

8307220201 830715
PDR ADOCK 05000373
S PDR

NRC USE ONLY (69–80)

NAME OF PREPARER V. V. Masterson PHONE: 357-6761

GPO 811-928

I. LER NUMBER: 83-067/03L-0

II. LASALLE COUNTY STATION: Unit 1

III. DOCKET NUMBER: 050-373

IV. EVENT DESCRIPTION:

On June 17, 1983, during the performance of LaSalle Quarterly Operating Surveillance LOS-HP-Q1, the High Pressure Core Spray (HPCS) Testable Check Bypass Valve 1E22-F354 failed to indicate closed after being tested open. The HPCS System was declared inoperable. The HPCS Injection Valve was closed and taken out of service in compliance with Technical Specification 3.6.3, Action Item a.1.b.

V. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

At the time of the Occurrence, the reactor was critical with Reactor Power at 48%. The Division 1, Division 2 Emergency Core Cooling Systems (ECCS) and Reactor Core Isolation Cooling (RCIC) remained operable during the occurrence satisfying Technical Specification 3.5.1, Action Item C.1. Adequate shutdown capability was maintained at all times. Safety of the plant and the general public was not affected.

VI. CAUSE:

The cause for the HPCS Testable Check Bypass Valve 1E22-F354 failing to close after completion of the cycled open operation during the performance of LOS-HP-Q1 appears to be due to insufficient spring tension.

The Bypass Valve incorporates the use of a diaphragm actuator assembly on top of a globe valve. The valve is designed for flow control use. To perform an opening sequence, a remote handswitch is positioned energizing a solenoid and it's associated valve to open. This allows instrument air to be supplied to the underside of the diaphragm assembly pushing the diaphragm up against spring tension. The diaphragm, when compressing the spring, also moves the valve off it's seat as the valve stem and spring are integral. Upon positioning the handswitch to close, the solenoid valve closes, securing instrument air to the diaphragm actuator assembly. The spring integral,with the valve stem, now overcomes the diaphragm as instrument air is secured. The bypass can now shut. What happened on July 17, 1983, was that the spring tension was insufficient to return the bypass valve to a fully closed position. This has occurred previously as documented in LER 82-115.

VII. CORRECTIVE ACTION:

Work Request (L25428) was written to investigate and correct the failure of the testable check bypass valve to close. During shutdown of the plant, the bypass valve closed unassisted as reactor temperature and pressure decreased. The actuator assembly and valve were examined and spring tension increased approximately 7 full turns by an adjusting NVT to ensure sufficient spring tension for closing. The valve was cycled repeatedly and operated properly each time. The Work Request (L25428) was completed on July 3, 1983.

A concern has existed earlier that the HPCS Testable Check Valve 1E22-F005 and HPCS Testable Check Bypass Valve 1E22-F354 have a tendency if tested hot, to remain partially open after being cycled. Because of this concern, Revision 1 to the In-Service Test (IST) of pumps and valves, was submitted to test certain valves in cold shutdown. Although the HPCS Testable Check Bypass Valve is not included in the report, the HPCS Testable Check Valve 1E22-F005 of which it is operated in conjunction with is. The revision is currently awaiting approval from the Nuclear Regulatory Commission. Once the revision becomes effective, further recurrences should be

eliminated.

The valve is made by the W-K-M valve division of ACF Industries.

Prepared by Vincent Masterson

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

July 15, 1983

James G. Keppler
Regional Administrator
Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Dear Sir:

Reportable Occurrence Report #83-067/03L-0 Docket #050-373 is being submitted to your office in accordance with LaSalle County Nuclear Power Station Technical Specification 6.6.2.(b), conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.

C E Dargent
for G. J. Diederich
Superintendent
LaSalle County Station

GJD/GW/sjc

Enclosure

cc: Director of Inspection & Enforcement
Director of Management Information & Program Control
U. S. NRC Document Management Branch
Inpo-Records Center
File/NRC