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)
LaSalle County Station Unit 2	0 5 0 0 0 3 7 4	1 OF 0 3

TITLE (4)
Reactor Water Cleanup High Differential Flow Isolation

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)
									NA	0 5 0 0 0
0 5	1 5	8 4	8 4	0 2 1	0 1	0 9	1 3	8 4		0 5 0 0 0

OPERATING MODE (9): 1

POWER LEVEL (10): 0 2 4

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

20.402(b)	20.405(c)	X 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)	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
JoAnn Shields, extension 330	AREA CODE 8 1 5 — 3 5 7 - 6 7 6 1

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	C E	V	M 4 3 0	N							

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

On May 15, 1984, at 2026 hours, the Reactor Water Cleanup System (CE) isolated on high differential flow. The 2C Filter Demineralizer Post Strainer Section of the system was being taken out of service for repairs. The air to the filter outlet valve had been isolated, and the post strainer piping was being drained. After a short time, the outlet valve opened, allowing water to back flow into the post strainer and drain to radwaste. The system then isolated on high differential flow. The system operated per design. Safe plant operations were maintained at all times. An investigation as to why this valve opened instead of closed was conducted, but no problems with the valve were identified.

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(1)

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
LaSalle County Station Unit 2	0 5 0 0 0 3 7 4	8 4	— 0 2 1	— 0 1	0 2 OF 0 3

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

I. EVENT DESCRIPTION

With Unit 2 in Run Mode (Operational Condition 1) and at 24% power, the Reactor Water Cleanup System (CE) isolated on high differential flow (JM) at 2026 hours on May 15, 1984. An Equipment Attendant (Non-licensed Operator) was taking the 2C Filter Demineralizer Post Strainer Section of the system out of service at the time of the isolation. After instrument air was isolated to the vessel outlet valve, 2G33-Z001-66C, the valve opened, resulting in the high differential flow isolation. The isolation occurred according to system design.

II. CAUSE

"A" and "B" Reactor Water Cleanup Filter Demineralizers were on line prior to the isolation. To permit Maintenance to repair valve 2G33-319C, the "C" vessel post strainer differential pressure inlet instrument root stop, an Equipment Attendant was taking the "C" post strainer section of the system out of service. The instrument air supply to the "C" vessel outlet valve, 2G33-Z001-66C, located downstream of the post strainer, was isolated as part of the outage. The lines in the post strainer section of the system were then drained by the Equipment Attendant. When the Equipment Attendant had finished hanging the outage, he went to the Reactor Water Cleanup panel to verify status. He observed that both Filters "A" and "B" were now in HOLD, and the system was isolated. He also noted that valve 2G33-Z001-66C had dual indication (valve in the mid position). The Equipment Attendant then inspected the valve and found it open. After talking with his supervisors, the instrument air was returned to 2G33-Z001-66C and the valve then closed.

The last step of the Equipment Attendant's out of service procedure was to drain the isolated lines through the normal piping to the phase separator. But when valve 2G33-Z001-66C opened, it provided a pathway for "A" and "B" filter effluent to flow through 2G33-Z001-66C, backflushing the post strainer, and draining to the phase separator. About 150 gallons of water drained to the phase separator.

III. PROBABLE CONSEQUENCES OF THE EVENT

The event was of minimal significance. The system isolated per design. The event would not have been different under different plant conditions.

IV. CORRECTIVE ACTION

1. The instrument air to 2G33-Z001-66C was restored and the outage revised to reflect this change.

2. A work request was written to inspect the valve positioner. No abnormalities were found, and the positioner was found to be operating properly. For the investigation, the instrument air supply to the valve was closed. After approximately 10 minutes, the valve was observed to still be shut, never having moved from its closed seat. In an attempt to duplicate the valve failing open, the positioner was physically manipulated to simulate an open air signal to the valve. Again, the valve remained closed.

3. A work request was written to inspect the valve actuator for damage which might have lessened the closing force of the air-to-open/spring-to-close valve. The actuator spring was operating properly. The "O" rings looked a little worn and were replaced, but they were not sufficiently worn to allow failure of the valve in the open direction.

4. All attempts to duplicate the failure have been unsuccessful. It is not known why the valve failed in the open position.

V. PREVIOUS OCCURRENCES

None.

VI. NAME AND TELEPHONE NUMBER OF PREPARER

JoAnn Shields, 815/357-6761, extension 330.

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

September 13, 1984

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

Dear Sir:

Reportable Occurrence Report #84-021-01, Docket #050-374 is being submitted to your office to supercede previously submitted Reportable Occurrence Report 84-021-00.

G. J. Diederich 9/13/84
G. J. Diederich
Superintendent
LaSalle County Station

GJD/MLD/kg

Enclosure

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

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