

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
LaSalle County Station Unit 1

DOCKET NUMBER (2)

0 5 0 0 0 3 7 8

PAGE

1 OF 0 3

TITLE (4)

Reactor Scram

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)
08	17	85	85	058	00	08	30	85			0 5 0 0 0
											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	<table border="1"><tr><td>20.402(a)</td><td>20.406(a)</td><td>X</td><td>30.73(a)(2)(i)</td><td>73.71(b)</td></tr><tr><td>20.406(a)(1)(i)</td><td>30.36(a)(1)</td><td></td><td>30.73(a)(2)(iv)</td><td>73.71(a)</td></tr><tr><td>20.406(a)(1)(ii)</td><td>30.36(a)(2)</td><td></td><td>30.73(a)(2)(v)</td><td></td></tr><tr><td>20.406(a)(1)(iii)</td><td>30.73(a)(2)(i)</td><td></td><td>30.73(a)(2)(vi)(A)</td><td>OTHER (Specify in Abstract below and in Text, NRC Form 306A)</td></tr><tr><td>20.406(a)(1)(iv)</td><td>30.73(a)(2)(ii)</td><td></td><td>30.73(a)(2)(vi)(B)</td><td></td></tr><tr><td>20.406(a)(1)(v)</td><td>30.73(a)(2)(iii)</td><td></td><td>30.73(a)(2)(ix)</td><td></td></tr></table>	20.402(a)	20.406(a)	X	30.73(a)(2)(i)	73.71(b)	20.406(a)(1)(i)	30.36(a)(1)		30.73(a)(2)(iv)	73.71(a)	20.406(a)(1)(ii)	30.36(a)(2)		30.73(a)(2)(v)		20.406(a)(1)(iii)	30.73(a)(2)(i)		30.73(a)(2)(vi)(A)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)	20.406(a)(1)(iv)	30.73(a)(2)(ii)		30.73(a)(2)(vi)(B)		20.406(a)(1)(v)	30.73(a)(2)(iii)		30.73(a)(2)(ix)	
20.402(a)	20.406(a)	X	30.73(a)(2)(i)	73.71(b)																											
20.406(a)(1)(i)	30.36(a)(1)		30.73(a)(2)(iv)	73.71(a)																											
20.406(a)(1)(ii)	30.36(a)(2)		30.73(a)(2)(v)																												
20.406(a)(1)(iii)	30.73(a)(2)(i)		30.73(a)(2)(vi)(A)	OTHER (Specify in Abstract below and in Text, NRC Form 306A)																											
20.406(a)(1)(iv)	30.73(a)(2)(ii)		30.73(a)(2)(vi)(B)																												
20.406(a)(1)(v)	30.73(a)(2)(iii)		30.73(a)(2)(ix)																												

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Paul S. Sampson, extension 319	AREA CODE: 815, NUMBER: 357-1671

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
A	J/E	Z/Z/Z/Z	Z/Z/Z/Z	N					

SUPPLEMENTAL REPORT EXPECTED (14)

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

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

On August 17, 1985, an Instrument Mechanic was in the process of returning a differential pressure switch, 1B21-N037DA, to service, following a functional test of that instrument. The instrument is used to measure reactor water level for the Automatic Depressurization (SB) system and the Residual Heat Removal (BO) system. With the instrument volume drained at atmospheric pressure, the Instrument Mechanic valved in the differential pressure switch instrument reference line which was at reactor pressure. This caused a pressure transient in the instrument reference line, which initially simulated a high reactor water level, to trip channel B of the Feedwater Control (SJ, FW) system. Approximately one second later a low reactor water level was simulated on the same instrument reference line and tripped the Reactor Recirculation (AD, RR) pumps and increased the feedwater (SJ, FW) pumps flow rate. Within two seconds the feedwater (SJ, FW) control system channel C logic tripped on high reactor water level. With two channels, B and C tripped, the Main Turbine (TA) tripped, followed by a full reactor scram.

This error was discussed with Instrument Maintenance personnel. Disciplinary action has been taken with respect to the individual involved.

8509110290 850830
PDR ADOCK 05000373
S PDR

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

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

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

I. EVENT DESCRIPTION

On August 17, 1985, at 1614 hours with LaSalle Unit 1 at 93% power, several instruments on 1H22-P027 instrument rack (JL) actuated when Instrument Maintenance personnel were testing Differential Pressure Switch (DPS) 1B21-N037DA (JM), while performing LIS-NB-304, "Reactor Vessel Low Low Water Level RCIC Initiation, Low Low Water Level LPCS/RHR Initiation and ADS Permissive Functional Test". The instruments that actuated caused the Reactor Recirculation (AD, RR) pumps 1A and 1B to trip, Feedwater (SJ, FW) pumps to pump at a high flow rate and eventually trip the Main Turbine (TA) on high reactor water level. This in turn tripped all of the Reactor Protection system (JC, RPS) Channels A1, A2, B1, B2 simultaneously to cause a full reactor scram.

II. CAUSE

At the time of the occurrence, an Instrument Mechanic was in the process of returning Differential Pressure Switch (DPS) 1B21-N037DA (JM) to service. LIS-NB-304 requires the Instrument Mechanic to fill and prepressurize the instrument before valving in the sensing instrument line. With the instrument volume drained at atmospheric pressure and the sensing line at reactor pressure, the Instrument Mechanic opened the sensing line stop valve, causing a large pressure transient in the sensing line. Initially, due to a sudden pressure drop in the sensing line, Channel B of the Feedwater (SJ, FW) Control system tripped on high reactor water level through Feedwater (SJ, FW) Level Transmitter, 1C34-N004B (JM). Approximately one second after the high reactor water level trip, due to the rapid filling of Differential Pressure Switch, 1B21-N037DA, the sensing line experienced a sharp pressure increase. This simulated low reactor water level at Reactor Recirculation (AD, RR) Level Transmitters, 1B21-N036C and 1B21-N036D (JM), which are also on the same sensing line. This caused the Reactor Recirculation (AD, RR) system pumps 1A and 1B to trip. This simulated low reactor water level signal increased the feedwater (SJ, FW) pumps flow rate.

The root cause of this event was personnel error. The failure of the Instrument Mechanic to fill and prepressurize the instrument resulted in the instrument line transient. Within two seconds of the Reactor Recirculation (AD, RR) pump 1A and 1B trips, the reactor water level rose to 55.5 inches, which is the trip setpoint for Feedwater (SJ, FW) Level Transmitters, 1C34-N004B and 1C34-N004C (JM).

These Feedwater Level Transmitters are respectively connected to Channels B and C logic of the Feedwater Control system. With Channel B and C logic both tripped on high reactor water level, the Main Turbine (TA) tripped, causing all the Main Turbine Control and Stop Valves to rapidly close. With all Main Turbine Stop Valves closed, all Reactor Protection system (JC, RPS) Channels A1, A2, B1, B2 tripped and caused a full reactor scram.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (8)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
LaSalle County Station Unit 1	0500037385	05	8	00	03	OF	03

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

III. PROBABLE CONSEQUENCES OF THE OCCURRENCE

All instruments actuated and trips occurred as expected to both low and high level conditions. Plant shutdown occurred as expected. This event was of minimal safety significance.

IV. CORRECTIVE ACTION

This error has been discussed with Instrument Maintenance Department personnel. Disciplinary action was taken with respect to the individual involved.

V. PREVIOUS OCCURRENCES

A similar event occurred on June 6, 1984, on LaSalle Unit 2. Instrument Maintenance personnel were testing a Level Indicating Transmitter Switch and vented the variable side of the instrument, simulating a low reactor water level followed by a full reactor scram. LER 374/84-025-00

VI. NAME AND TELEPHONE NUMBER OF PREPARER

Paul S. Sampson, 815/357-6761, extension 319.



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

August 30, 1985

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

Dear Sir:

Reportable Occurrence Report #85-058-00, Docket #050-373 is being submitted to your office in accordance with 10CFR 50.73.

C E Sargent

for G. J. Diederich
Station Manager
LaSalle County Station

GJD/DRR/kg

Enclosure

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

IE22
11