

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) LaSalle County Station Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 3 7 4 1				PAGE 15 OF 03		
TITLE (4) Spurious Division I Isolation of Shutdown Cooling																
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)			
04	09	85	85	014	00	04	25	85					0 5 0 0 0			
OPERATING MODE (9) 4			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)													
POWER LEVEL (10) 000		20.402(a)				20.406(c)				X 80.73(a)(2)(iv)				73.71(b)		
		20.406(a)(1)(i)				80.36(a)(1)				80.73(a)(2)(v)				73.71(c)		
		20.406(a)(1)(ii)				80.36(c)(2)				80.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)		
		20.406(a)(1)(iii)				80.73(a)(2)(i)				80.73(a)(2)(viii)(A)						
		20.406(a)(1)(iv)				80.73(a)(2)(ii)				80.73(a)(2)(vii)(B)						
		20.406(a)(1)(v)				80.73(a)(2)(iii)				80.73(a)(2)(ix)						
LICENSEE CONTACT FOR THIS LER (12)																
NAME Kenneth J. Kalmon, extension 325										TELEPHONE NUMBER 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 NPD		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD						
X	JM	Z Z Z Z	Z Z Z Z	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)																
<p>At 0847 hours on April 9, 1985, with LaSalle Unit 2 in Cold Shutdown, a Residual Heat Removal (RHR, BO) Shutdown Cooling isolation occurred during the installation of Environmental Qualification Modification M-1-2-84-117.</p> <p>Two Control Room alarm typers were available at the time of the occurrence and both indicated that no instruments designed to sense isolation conditions actuated. The isolation occurred due to a momentary loss of power to relay 2B21H-K74. The installation of a new relay 2B33-N018AX under M-1-2-84-117 required breaking the circuit to relay 2B21H-K74. Temporary trip bypasses were not adequate enough to allow for the installation of 2B33-N018AX.</p> <p>A walkdown of the RHR Shutdown Cooling loop revealed no leaks or system problems. RHR Shutdown Cooling was returned to operation at 0912 hours on April 9, 1985.</p> <p>Work on the Group 6 Division 1 isolation logic under M-1-2-84-117 was completed on April 14, 1985.</p>																
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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
LaSalle County Station Unit 2	05000374	85	014	00	02	OF	03

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

I. EVENT DESCRIPTION

At 0847 hours on April 9, 1985, with LaSalle Unit 2 in Cold Shutdown, a Residual Heat Removal (RHR, BO) Shutdown Cooling isolation occurred. The RHR Suction Outboard Isolation Valve, 2E12-F008, and the RHR Shutdown Cooling Return Outboard Isolation Valve, 2E12-F053A, closed on an apparent Group 6 Division 1 Primary Containment Isolation system (PCIS) signal. The operating RHR pump, 2E12-C002A, tripped as required on the closure of valve 2E12-F008. There were no annunciators or other indication that would point to the cause of the isolation.

A walkdown of the "A" RHR Shutdown Cooling loop was made and no leaks or system problems were found. The RHR loop was returned to operation at 0912 hours on April 9, 1985.

Further investigation found construction personnel working on Environmental Qualification Modifications at instrument panel 2H22-P018. A number of RHR Shutdown Cooling isolation switches are mounted at panel 2H22-P018.

II. CAUSE

Two Control Room alarm typers were available at the time of the April 9, 1985 isolation. The sequential events typer (Hathaway) shows the 2A RHR pump trip at 0847 hours with no previous alarms to indicate the cause of the trip. The Process Computer alarm typer shows valve 2E12-F008 going closed and the 2A RHR pump trip with no previous alarms to indicate the cause of the 2E12-F008 valve closure.

There are a number of instruments that can cause the 2E12-F008 and 2E12-F053A valves to isolate. There are alarms associated with these instruments. None of these instruments actuated according to the alarms received.

The isolation occurred due to a momentary loss of power to relay 2B21H-K74. Discussion with construction personnel revealed that work on Environmental Qualification Modification M-1-2-84-117 was in progress at the time of the 4/9/85 occurrence. There were two crews working on the project. One crew was at the 2H22-P018 panel and the other crew was at the 2H13-P623 panel. The precise stage of work completion at either of the panels at the time of the occurrence could not be determined. According to out of service and Temporary System Change documentation all actuations originating from the 2H22-P018 panel were bypassed at the time to allow for work going on at the panel. It is therefore highly probable that the actuation originated at the 2H13-P623 panel. Although the precise point in the work progression that caused the isolation cannot and will never be determined, it is very likely that the de-energization of relay 2B21H-K74 during the installation of new relay 2B33-N018AX. Contacts 4 and 8 of relay 2B33-N018AX are in series with the coil of relay 2B21H-K74. The circuit had to be broken to connect contacts 4 and 8 of 2B33-N018AX. The circuit bypasses present would not have prevented the break in the power to relay 2B21H-K74.

The RHR Shutdown Cooling isolation that occurred on April 9, 1985 was caused by work being performed under Modification M-1-2-85-41.

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		8 5	- 0 1 4	- 0 0	0 3	OF	0 3

TEXT (If more space is required, use additional NRC Form 205A's) (17)

III. PROBABLE CONSEQUENCES OF THE OCCURRENCE

The probable consequences of this occurrence are minimal because the RHR Shutdown Cooling loop was returned to service 25 minutes after the isolation. Review of RHR heat exchanger inlet temperatures before the isolation and just after the restoration of RHR Shutdown Cooling loop "A" revealed no significant change in reactor coolant temperature.

IV. CORRECTIVE ACTIONS

Abnormal procedure, LOA-RH-01, Loss of Shutdown Cooling, was performed following the isolation. No cause was found. A walkdown of the "A" RHR Shutdown Cooling loop was completed and no leaks or system problems were found. The RHR Shutdown Cooling loop was returned to operation at 0912 hours on April 9, 1985.

Work on the Group 6 Division 1 PCIS logic was completed under Environmental Qualification Modification M-1-2-84-117 on April 14, 1985. This work is a one-time thing and Group 6 Division 1 isolations due to M-1-2-84-117 are not expected to be repeated.

V. PREVIOUS OCCURRENCES

This was the first time an RHR Shutdown Cooling isolation occurred during the installation of the Environmental Qualification Modifications at LaSalle County Station.

VI. NAME AND TELEPHONE NUMBER OF PREPARER

Kenneth J. Kalmon, 815/357-6761, extension 325.



**Commonwealth Edison**  
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April 25, 1985

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

Dear Sir:

Reportable Occurrence Report #85-014-00, Docket #050-374 is being submitted to your office in accordance with 10CFR 50.73.

*for R. D. Bishop*  
G. J. Diederich  
Station Superintendent  
LaSalle County Station

GJD/MLD/kg

Enclosure

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

*IE22*  
*1/1*