

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1): LaSalle County Station Unit 2												DOCKET NUMBER (2): 0 5 0 0 0 3 7 4 1 OF 0 2				PAGE (3): 1 OF 0 2			
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)						
0 7	2 8	8 4	8 4	0 4 1	0 0	0 8	1 5	8 4					0 5 0 0 0 0 0 0 0 0						
OPERATING MODE (9): 3		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11):																	
POWER LEVEL (10): 0 0 0		20.402(a)				20.406(a)				Y 80.73(a)(2)(iv)				73.71(a)					
		20.406(a)(1)(i)				80.36(a)(1)				80.73(a)(2)(v)				73.71(a)					
		20.406(a)(1)(ii)				80.36(a)(2)				80.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 306A)					
		20.406(a)(1)(iii)				80.73(a)(2)(ii)				80.73(a)(2)(vii)(A)									
		20.406(a)(1)(iv)				80.73(a)(2)(iii)				80.73(a)(2)(viii)(B)									
		20.406(a)(1)(v)				80.73(a)(2)(iv)				80.73(a)(2)(ix)									
LICENSEE CONTACT FOR THIS LER (12):																			
NAME: Kermit C. Wittenburg, Extension #772												TELEPHONE NUMBER:							
												AREA CODE: 8 1 5		3 5 7 1 - 6 7 6 1					
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	JM	Z 9 9 9	Z 9 9 9	N															
SUPPLEMENTAL REPORT EXPECTED (14):												EXPECTED SUBMISSION DATE (15):		MONTH		DAY		YEAR	
YES () or complete EXPECTED SUBMISSION DATE: X NO																			

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

On July 28, 1984, at 2206 hours with Unit 2 at 0% power and reactor pressure 507 psig, an isolation of Reactor Water Cleanup (RWCU) occurred due to high differential flow on Division 1 and 2. The high differential flow was due to a rapid reduction in reactor pressure and increase in feedwater flow following a planned manual scram on Unit 2.

The Reactor Water Cleanup System's isolation valves closed as required and placed the unit in a safe condition.

The isolation was reset when reactor pressure and level had stabilized, and RWCU was returned to service at 2230 hours.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMR NO. 3100-010M
EXPIRES 3/31/85

FACILITY NAME (1) LaSalle County Station Unit 2	DOCKET NUMBER (2) 05000374	LER NUMBER (3)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		84	041	00	02	OF 02

TEXT of entry appears as required, use additional NRC Form 206A (3/1/77)

I. EVENT DESCRIPTION

On July 28, 1984, at 2206 hours, the Unit 2 Reactor Water Cleanup (CE,RWCU) System High Differential Flow (JM) alarm came up. The Licensed Operator (NSO) acknowledged the alarm and noted that isolation valves 2G33-F001 and 2G33-F004 closed as required.

II. CAUSE

The high differential flow was due to a rapid reduction in reactor pressure and an increase in feedwater flow following a planned manual scram on Unit 2.

The cause of this occurrence was due to the design characteristics of the differential flow leak detection scheme. This logic involves three flow loops. One "sees" input to the system and two "see" outlets from the system. Due to the differences in water temperature in various points of the system, each flow loop is calibrated for a different temperature (density) of water. All of these calibrations are based on reactor water being at rated conditions under steady state conditions.

To allow for transients, a forty-five second time delay is built into the differential flow isolation trip. However, at other than rated conditions, such as those mentioned above, actuation of this trip logic can occur due to the instruments "seeing" other than design conditions.

III. PROBABLE CONSEQUENCES OF THE OCCURRENCE

The RWCU System shut down and placed the unit in a safe condition.

IV. CORRECTIVE ACTIONS

The RWCU System was returned to service as of 2230 hours on July 28, 1984.

Applicable procedures are being reviewed for possible revision to alert the operators that this type of event can occur during plant conditions other than rated conditions, and to give guidance on actions which can be taken to reduce the likelihood of isolations of RWCU occurring on differential flow (AIR 01-84-67091).

V. PREVIOUS OCCURRENCES

Previous occurrences of reactor pressure changes causing RWCU isolations are described in LER's 373/84-030-00, 84-033-00, 84-040-00, and 374/84-029-00.

VI. NAME AND TELEPHONE NUMBER OF THE PREPARER

Kernit C. Wittenburg, (815)357-6761, Extension 772.



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

RAN

August 15, 1984

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

Dear Sir:

Reportable Occurrence Report #84-041-00, Docket #050-374 is being submitted to your office in accordance with 10 CFR 50.73.

CE Sargent

G. J. Diederich
Superintendent
LaSalle County Station

GJD/MLD/kg

Enclosure

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

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LER	
LER #	<i>374-84041</i>
EVENT DATE	<i>840728</i>
REPORT DATE	<i>840829 RAN</i>

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