



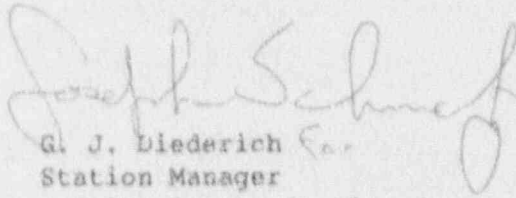
Commonwealth Edison
LaSalle County Nuclear Station
2601 N. 21st Rd.
Marseilles, Illinois 61341
Telephone 815/357-6761

December 31, 1992

Director of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Station PL-137
Washington, D.C. 20555

Dear Sir:

Licensee Event Report #92-016-00, Docket #050-373 is being submitted to your office in accordance with 10CFR50.73(a)(2)(iv) an automatic ESF actuation.


G. J. Diederich
Station Manager
LaSalle County Station

GJD/LMS/mkl

Enclosure

cc: Nuclear Licensing Administrator
NRC Resident Inspector
NRC Region III Administrator
INPO - Records Center
IDNS Resident Inspector

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) LaSalle County Station Unit 1
 Title (4) Unplanned ESF Actuation During Reactor Protection System (RPS) Bus Transfer Due to Personnel Error

Docket Number (2) 0151010131713
 Page (3) 1 of 05

Event Date (5) 1/2/01 3/9/2 9/2
 LER Number (6) 0116
 Report Date (7) 1/2/01 3/1/9/2
 Other Facilities Involved (8) 0151010131713

Operating Mode (9) 0
 THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR
 (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)(vi) Other (Specify
 20.405(a)(1)(iii) 50.73(a)(2)(i) 50.73(a)(2)(vii)(A) in Abstract
 20.405(a)(1)(iv) 50.73(a)(2)(ii) 50.73(a)(2)(viii)(b) below and in
 20.405(a)(1)(v) 50.73(a)(2)(iii) 50.73(a)(2)(x) Text

LICENSEE CONTACT FOR THIS LER (12)

Name Linda M. Shearer, Extension 2703
 Telephone Number 815 351 7161

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	JIC			N					

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15) X NO

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

On December 3, 1992 Unit 1 was defueled for Refuel Outage L1R05. At 1253 hours, while performing LaSalle Operating Procedure LOP-RF-04, "RPS Bus B Transfer", an unplanned Engineered Safety Feature (ESF) actuation occurred. Automatic closure of Drywell Floor Drain Inboard Isolation Valve 1RF012 and Drywell Equipment Drain Inboard Isolation Valve 1RE024 occurred when the Reactor Protection System (RPS) [JC] (RPS) B's B Power Supply was switched from ALT B to NORM because the hand switches for the two valves had not been turned to the closed position as indicated by the procedure.

Several steps of the procedure had been performed out of sequence, at the direction of the Shift Control Room Engineer (SCRE). Tags were placed on the two pages where steps had been skipped. When Operating was ready to complete the two last steps, the Unit Nuclear Station Operator (NSO) asked the Center Desk (CD) NSO to place Unit 2 Standby Gas Treatment (SBGT) in pull to lock (PTL). The Unit NSO removed both tags while walking to 1PM16J panel, with the intent of closing valves 1RF012 and 1RE024. He was interrupted by a call to cycle a Reactor Core Isolation Cooling Valve (RCIC), and forgot to go back and close the 1RF012 and 1RE024 Valves. When the CD NSO reported that Unit 2 SBGT was in PTL, the Unit NSO signed off that step and the steps for closing 1RF012 and 1RE024, incorrectly thinking he had closed them earlier. When the 'B' RPS Bus Power Transfer was made a few moments later, the still open 1RF012 and 1RE024 Valves automatically closed. After the RPS Bus transfer, the SCRE noticed that even though the 1RF012 and 1RE024 Valve Position Lamps indicated closed, the control switches were still open.

The 1RF012 and 1RE024 Valves were reset and reopened to their normal position. The appropriate notifications were made, including the NRC.

This event is reportable to the NRC pursuant to 10CFR50.73(a)(2)(iv) due to unplanned closure of 1RF012 and 1RE024 valves, an unplanned ESF actuation.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION										Form Rev 2.0	
FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (5)				Page (3)					
		Year	///	Sequential Number	///	Revision Number					
LaSalle County Station Unit 1	01510101013713	912	-	0116	-	010	012	OF	015		
TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]											

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

A. CONDITION PRIOR TO EVENT

Unit(s): 1 Event Date: 12/03/92 Event Time: 1253 Hours

Reactor Mode(s): Defuel Mode(s) Name: Defuel Power Level(s): 0%

B. DESCRIPTION OF EVENT

On December 3, 1992, Unit 1 was defueled for the fifth refueling outage (LR05). Unit 1 was undergoing activities getting ready for fuel reload into the Reactor. The Control Room activities required two extra Nuclear Station Operators (NSOs) (RO) be assigned to Unit 1. One extra NSO was wearing headphones, supporting Control Rod Drive (CRD) venting and the other extra NSO was supporting Motor Operated Valve (MOV) testing.

At approximately 1100 hours the Operating Engineer (OE) authorized the B RPS bus transfer.

A copy of LaSalle Operating procedure LOP-RP-04, "RPS Bus B Transfer", was given to the Unit NSO. The SCRE told the Unit 1 NSO not to close the Drywell Floor Drain Inboard (1RF012) and Drywell Equipment Drain Inboard (1RE024) Isolation Valves or place Unit 2 Standby Gas Treatment (SBGT) in pull-to-lock (PTL) yet. The SCRE wanted to leave the 1RF012 and 1RE024 Valves open as long as possible to allow a flow path for any water that might be coming into the drywell sumps. The SCRE wanted to be certain Unit 1 Standby Gas Treatment was still operable before placing the Unit 2 SBGT in PTL for LOP-RP-04.

At approximately 1145 hours, the extra NSO that was supporting MOV testing left the Control Room to attend a meeting. The Unit NSO assumed responsibility for answering the phone, since the other extra NSO was still using headphones for CRD work.

The Unit NSO verified jumpers were still in place from a previous incomplete performance of LOP-RP-04. He walked down the panels and performed those steps that could be done at that time. The Unit NSO placed a tag on page 17 of LOP-RP-04 to remind himself to close the 1RF012 and 1RE024 Valves later. He continued on in the procedure. A tag was also placed on page 13 for reminding himself to place Unit 2 SBGT in PTL.

The Unit NSO gave the procedure to the SCRE for review. The SCRE noted the two tags on the two incomplete items. At about 1200 hours the Unit NSO and SCRE discussed that these two steps were all that were left in preparation for the actual bus transfer.

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LaSalle County Station Unit 1	0 5 0 0 0 3 7 3	9 2	-	0 1 1 6	-	0 0	0 3	OF	0 5			
TEXT Energy Industry Identification System (EIIIS) codes are identified in the text as [XX]												

B. DESCRIPTION OF EVENT CONTINUED

At approximately 1250 hours, CRD work was stopped in preparation of the RPS bus transfer and the Unit NSO asked the Center Desk NSO to place Unit 2 SBT in PTL.

The Unit NSO pulled the tags off page 13 and page 17 as he was walking toward panel 1PM16J, where the two control switches for Valves 1RF012 and 1RE024 were located. Before he got to the control switches, a phone rang, and the Unit NSO changed course and went to panel 1H13-P601. He cycled a RCIC valve (1ES1-F076) several times. The Unit NSO then verified Unit 2 SBT was in PTL and signed off the applicable procedure step. The Unit NSO also signed off the steps on page 17 for closing 1RF012 and 1RE024, incorrectly thinking he had closed the two valves, since he had walked to panel 1PM16J earlier to perform that step.

The Unit NSO gave the extra NSO the procedure to perform step F.11.a.4, the RPS Bus transfer of feed from ALT B to NORM.

The SCRE assisted by going to the back panels to hold relay 1B21H-K35B blocked in the energized position, as required by procedure.

At 1253 the extra NSO turned the 'B' RPS Switch, and the unplanned closure of 1RF012 and 1RE024 occurred.

After the bus transfer was made, the SCRE walked over to panel 1PM016J and checked on the 1RF012 and 1RE024 valves, remembering that they had been left incomplete earlier. The SCRE noticed the 1RF012 and 1RE024 Valve Position Lamps indicated closure, however, the control switches were still open.

The SCRE talked with the Unit NSO. The 1RF012 and 1RE024 valves were reset and reopened.

The SE made appropriate notifications to Operating Management and the NRC. An investigation was immediately started.

C. APPARENT CAUSE OF EVENT

Investigation determined the cause to be personnel error. The NSO believed he had closed 1RF012 and 1RE024 Valves. By removing the tag and signing off the steps for 1RF012 and 1RE024 being closed before actually performing the steps, the NSO probably unconsciously crossed off the need for any other actions to be performed before the bus transfer occurred. He fully intended to perform the steps, but allowed himself to get distracted by the phone call to cycle the RCIC Valve.

LOP-RP-04 was not followed step-by-step in sequence, as required by LaSalle Administrative Procedure LAP-100-40 (procedure use and adherence). The SCRE decided to keep the 1RF012 and 1RE024 Valves open as long as possible to allow a path for Drywell Sump Water.

Habit contributed to the error. The NSO reported that he was used to skipping around in the bus transfer procedures (successfully), rather than waiting for plant conditions to be just right to complete the step, and rather than being asked to prepare jumper/lead lift Temporary System Changes for 1RF012 and 1RE024.

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LaSalle County Station Unit 1	0151010131713	912	-	01116	-	010	014	DF	015		
TEXT Energy Industry Identification System (EIS) codes are identified in the text as: [XX]											

C. APPARENT CAUSE OF EVENT CONTINUED

Overconfidence may have contributed to the error by the Unit NSO. He had been an NSO for about seven years. He had performed RPS bus transfers before. He just let himself get distracted.

Manpower and job assignment methods could have been handled differently. Even though there were two extra NSOs in the Control Room in the morning, one of the extra NSOs was required to attend a station meeting. Another NSO was not called in to relieve him, so the work was turned over to the Unit NSO. This meant that the Unit NSO answered the phone when it rang. The SCRE expected that the Unit NSO would perform LOP-RP-04 in its entirety, but did not object when the unit NSO asked the CD and extra NSO to perform parts of the procedure. It may have been better to insist on a dedicated NSO to complete the whole bus transfer, and use the CD and extra NSOs for the other ongoing work.

D. SAFETY ANALYSIS OF EVENT

The plant responded as designed during the transfer of RPS Bus B from ALT B to NORM, and the unplanned closure of the 1RF012 and 1RE024 Valves had no safety significant effect upon the plant.

E. CORRECTIVE ACTIONS

The immediate corrective actions implemented were to ensure that the plant was restored to normal conditions by resetting and reopening the 1RF012 and 1RE024 valves.

Appropriate management and NRC notifications were made.

An investigation was conducted.

The Assistant Superintendent of Operating counseled the NSO and the SCRE involved about the need for:

1. Following procedures in the order they are written, unless the procedure specifically allows otherwise. (Review LAP-100-40).
2. Emphasize that the proper use of procedure sign off lines is to perform a step, then sign it off before conducting the next step. Performing several steps at a time, then initialing several steps in a row is not acceptable. Initialing a step before completing the action that one intends to perform is not acceptable either. A review of LAP-100-28 (personnel responsibility when signing plant records) is needed to emphasize that both person's initials are required for a step performed by a different person than the one recording the completion in the procedure.
3. Reiterate the self-checking techniques. The self-checking may have prevented the event.
4. Emphasize that if the NSO believes he is overloaded, he should make it clear to management. Management has a responsibility to make decisions regarding the work load and proper manning levels.

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TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]											

E. CORRECTIVE ACTIONS CONTINUED

LAP-100-40 will be evaluated for the addition of the following changes to enhance proper use of the procedure format as useful tools to avoid mistakes. State the purpose of the individual step signature/initial blanks contained in many procedures. Refer to LAP-100-28. Action Item Record (AIR) 373-180-92-01601 will track completion of this evaluation.

On December 11, 1992 a LaSalle County Station "Stand Down" occurred. The purpose of the "Stand Down" was to highlight to every person on site that there had been a recent upturn in personnel performance related events and that this trend could not be tolerated. The program was presented by Department Heads or their designees with information exchange opportunities for all subordinates. Subordinates were encouraged to state what they believed were reasons for personnel errors that had occurred and what could be done to prevent them in the future.

F. PREVIOUS EVENTS

LER Number	Title
373/84-074-00	RWCU Hi Diff Flow Isolation/IH's Doing Surv Skipped Step

G. COMPONENT FAILURE DATA

None

EVENT SUMMARY AND CAUSE CODES

 DVR Number
 01-L-92-097

<input type="checkbox"/> Lost generation	<input type="checkbox"/> Reactor trip	<input type="checkbox"/> NRC violation, level...
<input type="checkbox"/> Cost > \$25,000	<input checked="" type="checkbox"/> ESF actuation	<input type="checkbox"/> GSEP event, class...
<input type="checkbox"/> Hazard or Spill	<input type="checkbox"/> NRC reportable	<input type="checkbox"/> Tech Spec LCO
<input type="checkbox"/> Personnel injury	<input checked="" type="checkbox"/> LER	<input type="checkbox"/> Potential or future loss
<input type="checkbox"/> Component type	<input type="checkbox"/> PSE	<input type="checkbox"/> SALP functional area...
	<input type="checkbox"/> Failure mode	

Department									
X									
X									
X									

Licensed? L or blank				Type		Detail code	
Level							
Department							
A	L	W	OP	I	4		
A	L	W	OP	F	5		
A							

Type		Detail Code		Department	
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Type		Detail code	
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Type of deficiency			
Detail code		Procedure type	
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Type		Detail code		Department	
E					
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