



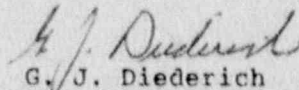
Commonwealth Edison
LaSalle County Nuclear Station
Rural Route #1, Box 220
Marseilles, Illinois 61341
Telephone 815/357-6761

May 10, 1990

Director of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D.C. 20555

Dear Sir:

Licensee Event Report #90-006-00, Docket #050-374 is being
submitted to your office in accordance with
10CFR50.73(a)(2)(iv).


G. J. Diederich
Station Manager
LaSalle County Station

GJD/TWW/msh

Enclosure

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

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) LaSalle County Station Unit 2 Docket Number (2) 0 5 0 0 0 3 7 4 Page (3) 1 of 0 4
 Title (4) Inadvertent Actuation of Group 2

Division I Isolation Logic due to Procedural Deficiency and Inadequate Out of Service

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	4	1	2	9	0	9	0	0	5	1	0	9	0

OPERATING MODE (9) THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)

POWER LEVEL (10)	0	0	0	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
				20.405(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(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 Terry W. Wiemholt, Technical Staff Engineer, Extension 2319 TELEPHONE NUMBER 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	MANUFAC-TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS
D				N					
E				N					

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15) Yes (If yes, complete EXPECTED SUBMISSION DATE) X NO

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

On April 12, 1990 at approximately 0331 hours with Unit 2 defueled at 0 percent power, while transferring "2B" Reactor Protection System (RPS) [EF] Bus from ALTERNATE to NORMAL, the "A" loop Primary Containment Chilled Water System (VP) [KM] inboard isolation valves and a Reactor Building Closed Cooling Water System (WR) [CC] inboard isolation valve went closed.

The apparent causes of this event were an inadequate procedure and deficiency in the preparation of an out-of-service (OOS).

RPS Bus Transfer procedures were revised to require that all PC isolation test switches be verified in the "NORMAL" position prior to an RPS bus transfer.

The appropriate operating department shift personnel will be informed on new good practices when writing OOS's. LaSalle Administrative Procedure LAP-900-4, "Equipment Out-Of-Service Procedure" will be revised to incorporate these practices.

This event is reportable to the NRC pursuant to the requirements of 10CFR50.73(a)(2)(iv) due to the actuation of an Engineered Safety Feature (ESF) System.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

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	9 0	-	0 0 6	-	0 0	0 2	OF	0 4		

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): 2 Event Date: 4/12/90 Event Time: 0331 Hours

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

B. DESCRIPTION OF EVENT

On April 12, 1990 at approximately 0331 hours with Unit 2 defueled at 0 percent power, while transferring "2B" Reactor Protection System (RPS) [EF] Bus from its ALTERNATE feed to its NORMAL feed, the "A" loop Primary Containment Chilled Water System (VP) [KM] inboard isolation valves, 2VP113A and 2VP114A, and a Reactor Building Closed Cooling Water System (WR) [CC] inboard isolation valve, 2WR179, went closed.

This occurred because a half trip was effectively inserted for Primary Containment Isolation System (PC) [JM] logic "C" Channel due to Group II Bypass switch, 2B21H-S80C, having its leads lifted per Out Of Service (OOS) 2-621-90. When the "2B" RPS Bus was transferred, it caused the "B" and "D" Channels to trip due to loss of RPS "B" power to the reactor low level (level 2) trip relays and the Primary Containment High Drywell Pressure relays. This resulted in a Primary Containment Isolation System (PC) [JM] Division II isolation signal to perform the following:

- Close the inboard isolation valves for Groups II, IV, and X.
- Initiate the Division II Post-LOCA H2-O2 monitor and both Standby Gas Treatment Systems.

Only the "A" loop VP inboard isolation valves, 2VP113A and 2VP114A, and a WR inboard isolation valve, 2WR179, went closed, because all of the other Group II and Group X valves were already closed or out of service. A Group IV isolation was not received due to Temporary System Change (TSC) 2-251-90 which overrode all Group IV isolations not requires for this plant condition.

The isolation logic was reset. The "A" VP loop was restarted and the drywell WR isolation valve was reopened.

This event is reportable to the NRC pursuant to the requirements of 10CFR50.73(a)(2)(iv) due to the actuation of an Engineered Safety Feature (ESF) System.

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C. APPARENT CAUSE OF EVENT

The apparent causes of this event were an inadequate procedure and a deficiency in the preparation of the OOS.

LaSalle Operating Procedure LOP-RP-04, "RPS Bus B Transfer" was inadequate in that it did not ensure that the PC test switches are in the "NORMAL" position prior to transferring the RPS bus. During this event, the PC test switches were in the "NORMAL" position however leads were lifted which simulated the switch being in the "TEST" position. If the procedure had required the switches to be in the "NORMAL" position prior to transfer, this event could still have occurred. However the OOS cards associated with these switches may have caused further investigation prior to the transfer.

OOS 2-621-90 was written in accordance with LaSalle Administrative Procedure LAP-900-4, "Equipment Out-Of-Service Procedure". The supervisor, who wrote the OOS Checklist correctly recognized that isolating the switch by lifting leads would effectively place the logic in a half trip condition. He chose to leave the logic in a half-trip condition and prevent the opening of the parallel circuit test switches by placing OOS tags on them in the "NORMAL" position first. While this correctly prevents the operation of the parallel circuit test switches, it failed to prevent operations or testing which could open other relay contacts in the parallel circuit. The OOS also failed to provide any measures to warn the operators that the 2B21H-S080C test switch position no longer provided accurate indication as to that channels condition.

D. SAFETY ANALYSIS OF EVENT

The power supplies for the PC system are arranged so that loss of one power supply cannot prevent automatic isolation when required. The PC system actuated as designed.

The consequences of this event were minimal since the two systems which isolated (VP and WR) are not safety related systems and were not required to be operating with Unit 2 defueled.

This type of work (lifting leads in the PC logic) is not normally done with the Unit in Operational Condition 1 (RUN), 2 (STARTUP), or 3 (HOT SHUTDOWN). Had this event occurred in one of these conditions all of the inboard isolation valves for Group II, IV, and X would have closed and Division II Post-LOCA H2-O2 monitor and both Standby Gas Treatment Systems would have initiated. These actuations, by themselves, would not have caused a scram or placed the Unit in an unsafe condition. However loss of these and other systems would have required immediate response by the operators to prevent a subsequent unit scram.

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E. CORRECTIVE ACTIONS

Procedures LOP-RP-04, "RPS Bus B Transfer" and LOP-RP-03, "RPS Bus A Transfer" were revised to require that all PC isolation test switches be verified in the "NORMAL" position prior to an RPS bus transfer.

Action Item Record (AIR) 374-200-90-02702 will be developed and issued to inform the appropriate operating department shift personnel on the following good practices:

1. When writing OOS's which place a logic system in a half-trip condition, appropriate measures should be included to eliminate the half-trip (i.e. a jumper around the switch's lifted leads) if Technical Specifications allow.
2. When writing OOS's which deactivate a component's function without obvious indication, provide a means to alert any observer of that components condition at the location where normal indication would be viewed (i.e. a caution card at the switch location).

LAP-900-4 "Equipment Out-Of-Service Procedure" will be revised to incorporate these practices. AIR 374-200-90-02701 will track completion of this revision.

F. PREVIOUS EVENTS

LER Number	Title
373/86-037-00	Spurious Group II and Group IV Isolation.
374/90-005-00	Inadvertent Division I Isolation due to loss of DC Power to Isolation Logic due to Procedural Error.

G. COMPONENT FAILURE DATA

There was no component failure.