



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

April 18, 1991

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

Dear Sir:

Licensee Event Report #91-003-00, Docket #050-373 is being
submitted to your office in accordance with
10CFR50.73(a)(2)(iv).

for

G. J. Diederich
Station Manager
LaSalle County Station

GJD/HTV/mk1

Enclosure

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

FE22
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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

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

Loss Of Engineered Safety Feature Bus 143 During Surveillance Testing Caused By Deficient Procedure & Personal Error

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 3	1 9	9 1	9 1	0 0 3	0 0	0 4	1 8	9 1		0 5 0 0 0 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 Harold T. Vinyard, Technical Staff Engineer, Extension 2499 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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
A	E B			N					
D	E B			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)

On March 19, 1991 at 1323 hours, with Unit 1 defueled, Operational Analysis Department (OAD) personnel were performing 1B Diesel Generator (DG) protective relay calibrations in accordance with an approved station procedure when the normal feedbreaker to Engineered Safety Feature (ESF) bus 143 tripped. The 1B DG, which provides emergency power to ESF bus 143, was out of service at the time of this event and did not start; consequently ESF bus 143 remained deenergized. Review of the breaker tripping scheme indicated that the relay that OAD personnel had just tested (1B DG overcurrent with voltage restraint relay K35A) would trip the breaker.

The causes of this event were an inadequate procedure, and personnel error in identifying all trips to be defeated. Although the procedure used identifies the need for disabling trips, the procedure does not give any specific direction on which trips are required to be disabled.

The safety consequences of this event were minimal. Unit 1 was in cold shutdown and defueled during this event. The High Pressure Core Spray (HPCS) system was already inoperable due to scheduled maintenance at the time of this event. No Emergency Core Cooling Systems (ECCS) are required operable with the unit defueled. Once the cause for the trip was determined, ESF bus 143 was reenergized at 1352 hours on March 19, 1991.

Short term corrective actions will be to train all OAD personnel on this event. Long term corrective actions are to implement new procedures which identify all isolation points and required actions prior to performing the necessary calibrations or functional checks.

This event is being reported pursuant to the requirements of 10CFR50.73(a)(2)(iv) due to the actuation of an ESF system logic.

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 1	0 5 0 0 0 3 7 3	9 1	-	0 0 3	-	0 0	0 2	OF	0 3				
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: 03/19/91 Event Time: 1323 Hours

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

B. DESCRIPTION OF EVENT

On March 19, 1991 at 1323 hours, Operational Analysis Department (OAD) personnel were performing 1B Diesel Generator (DG) [EK] protective relay calibrations in accordance with LaSalle Electrical Surveillance LES-GM-129, "Unit 1 Southern Division OAD Periodic Protective Relay Calibrations", when the normal feedbreaker to Engineered Safety Feature (ESF) bus 143 tripped. The 1B DG, which provides emergency power to ESF bus 143, was out of service at the time of this event and did not start; consequently ESF bus 143 remained deenergized. Review of the breaker tripping scheme indicated that the relay OAD personnel had just tested (1B DG overcurrent with voltage restraint relay K35A) would trip the breaker. At the time of this event the High Pressure Core Spray System (HPCS) [BG], which is powered from ESF bus 143, was already inoperable due to scheduled maintenance. Unit 1 was shutdown and defueled during this event and Unit 2 was not affected by this event.

C. APPARENT CAUSE OF EVENT

OAD personnel, after reviewing the tripping scheme, did not recognize that ESF bus 143 supply feedbreaker would trip following actuation of relay K35A. LES-GM-129, the procedure being used, identifies that unwanted trips be defeated as required prior to performing relay functional tests. This procedure requirement was understood by OAD personnel; however, the breaker trip interlock had been overlooked during their review. This procedure had been previously performed with success by different OAD crews, but this was the initial performance of the surveillance by this crew.

The causes of this event are an inadequate procedure and personnel error in identifying all trips to be defeated. Although LES-GM-129 identifies the need for disabling trips that may occur during testing, the procedure does not give any specific direction on which trips are required to be disabled. LES-GM-129 is a "general" procedure which only provides guidelines for testing protective relays, i.e. it is not a "step by step" procedure with all required actions pre-determined and pre-approved.

D. SAFETY ANALYSIS OF EVENT

The safety consequences of this event were minimal due to the fact that this procedure is only performed during unit outages. Unit 1 was in cold shutdown and defueled during this event. The HPCS system was already inoperable due to scheduled maintenance at the time of this event. No Emergency Core Cooling Systems (ECCS) are required operable with the unit defueled.

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							Year	///	Sequential Number	///	Revision Number													
LaSalle County Station Unit 1			0	5	0	0	0	3	7	3	9	1	-	0	0	3	-	0	0	0	3	OF	0	3
TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]																								

E. CORRECTIVE ACTIONS

Once the cause for the trip was determined, ESF bus 143 was reenergized at 1352 hours on March 19, 1991.

Short term corrective actions will be to train all OAD personnel on this event emphasizing the fact that when general procedures such as LES-GM-129 are used, care must be taken to ensure all circuit isolation points are identified prior to performing the action required. Action Item Record (AIR)

373-200-91-03901 will track this action.

Long term corrective actions are to implement new procedures which identify all isolation points and required actions prior to performing the necessary calibrations or functional checks. AIR

373-200-91-03902 will track this action.

F. PREVIOUS EVENTS

LER Number	Title
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373/86-013-00	Loss Of Bus 141Y And Auto Start Of Diesel ODG01K Due to Personnel Error.
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G. COMPONENT FAILURE DATA

No component failed during this event.