

# LICENSEE EVENT REPORT (LER)

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) 2B Diesel Generator Cooling Water Pump Failure to Auto Start																	
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	0   2	8   8	8   8	0   0   1	0   0	0   3	3   1	8   8					0   5   0   0   0   1   1				
OPERATING MODE (9) 1			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)														
POWER LEVEL (10) 0   9   7			20.402(b)			20.405(c)			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)			X 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) Voluntary					

## LICENSEE CONTACT FOR THIS LER (12)

Name Paul Sampson, Technical Staff Engineer, Ext. 704										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	MANUFACTURER	REPORTABLE TO NPD		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPD	
X	E   K	R   L   Y	G   O   B   O	Y							

## SUPPLEMENTAL REPORT EXPECTED (14)

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

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

On March 2, 1988 at 1615 hours, with LaSalle Unit 2 operating at 97 percent power, the 2B Diesel Generator (DG) Cooling Water Pump failed to auto start after the 2B DG was started per LaSalle Operating Surveillance LOS-DG-SR4 "2B Diesel Generator Action Statement Operability Test." The 2B DG was declared inoperable at 1615 hours. LOS-DG-SR4 was being performed due to the 0 DG being declared inoperable for planned maintenance.

When the 2B DG was started, an Operator noticed that cooling water pump 2E22-C002 did not automatically start per design. The cooling water pump was then manually started using the control switch and the 2B DG was shutdown. At approximately 1626 hours the 2B DG was restarted and the cooling water pump automatically started per design. A Work Request was written to determine the cause of the failure and repair as necessary.

Troubleshooting by the Electrical Maintenance Department revealed that contact (5-6) of relay 2E22-K18 was pitted and out of alignment.

The pitted and misaligned contacts on relay 2E22-K18 were cleaned, burnished and realigned. At 2130 hours and again at 2140 hours LOS-DG-SR4 was satisfactorily performed to verify operability of the 2B DG, including the cooling water pump. The 2B DG was declared operable at approximately 2230 hours.

The safety consequences of this event were minimal. The DG cooling water pump was able to be started manually using the handswitch.

This event is being submitted as a Voluntary Licensee Event Report because of the 2B DG and the 0 DG being inoperable at the same time. Technical Specification 3.8.1.1 requirements were met during this event.

2E22  
1/1

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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	8   8	-	0   0   1	-	0   0	0   2	OF	0   4	

TEXT

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: 03-02-88                      Event Time: 1615 hours  
 Reactor Mode(s): 1                      Mode(s) Name: Run                      Power Level(s): 97.2%

B. DESCRIPTION OF EVENT

On March 2, 1988 at 1615 hours, with LaSalle Unit 2 operating at approximately 97.2 percent power, the 2B High Pressure Core Spray (HPCS) [BG] Diesel Generator [EK] (DG) Cooling Water Pump 2E22-C002 failed to auto start after the 2B DG was started per LaSalle Operating Surveillance LOS-DG-SR4 "2B Diesel Generator Action Statement Operability Test." The 2B DG was immediately declared inoperable at approximately 1615 hours.

At the time of the event the "0" DG was out of service and declared inoperable on a 72 hour time clock for planned maintenance. The 2B DG was started to verify operability of AC power sources in accordance with Technical Specification 3.8.1.1. After the 2B DG was started, it was noticed that cooling water pump 2E22-C002 did not automatically start per design. The 2B DG was manually shutdown. The cooling water pump was then manually started using the control switch. At approximately 1626 hours the 2B DG was restarted and the cooling water pump automatically started per design. Work Request L76421 was written by the Operating Department to the Electrical Maintenance Department to determine the cause of the failure and repair as necessary. The Technical Staff was asked to assist in the troubleshooting efforts and prepare a preliminary report.

This event is being submitted as a Voluntary Licensee Event Report because of the "2B" DG and the "0" DG being inoperable at the same time.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

TEXT

C. APPARENT CAUSE OF EVENT

The 2B DG cooling water pump is automatically started upon a permissive that the Diesel is operating at greater than 150 RPM. The DG speed switch energizes General Electric HFA Relay 2E22-K18, which provides permissives to several DG parameters including the automatic start of DG cooling water pump 2E22-C002. An investigation into the alarms received at the time of the failure revealed that the alarm controlled by the 2E22-K18 HFA relay did properly respond, thereby eliminating the potential that the failure was in the 2B DG speed switch circuitry. The troubleshooting efforts were concentrated on the auto start contacts of the cooling water pump handswitch as well as the contact on the 2E22-K18 relay that provides the permissive to the circuit. Troubleshooting by the Electrical Maintenance Department under work request L76421 revealed that contact (5-6) of relay 2E22-K18 was pitted and out of alignment. The contacts on the handswitch were found to be in good condition.

D. SAFETY ANALYSIS OF EVENT

The safety consequences of this event were minimal. The 2B DG cooling water pump was able to be started manually using the handswitch. All Emergency Core Cooling Systems on Division II and Reactor Core Isolation Cooling (BN) (RI) were operable at the time of this event. Technical Specification 3.8.1.1 requirements were met during this event. The 2B DG was inoperable for approximately 6 hours and 15 minutes.

E. CORRECTIVE ACTIONS

The 2B DG was declared inoperable at approximately 1615 hours. Work Request L76421 was written by the Operating Department to the Electrical Maintenance Department to investigate the failure of the 2B DG Cooling Water Pump to automatically start, and repair as necessary. Troubleshooting by the Electrical Maintenance Department revealed that contact (5-6) of relay 2E22-K18 was pitted out of alignment. The contacts were cleaned, burnished and realigned. At 2130 hours and again at 2140 hours L-S-DG-SR4 was satisfactorily reperformed to verify operability of the 2B DG, including cooling water pump 2E22-C002. The 2B DG was declared operable at approximately 2230 hours on March 2, 1988.

The 0 DG was declared operable on March 3, 1988 at 0550 hours after maintenance was completed.

F. PREVIOUS EVENTS

None

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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	8   8	-	0   0   1	-	0   0	0   4	Of	0   4

TEXT

G. COMPONENT FAILURE DATA

Manufacturer	Nomenclature	Model Number	MFG Part Number
General Electric	125VDC Relay		12HFA51A42H



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

March 31, 1988

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

Dear Sir:

Licensee Event Report #88-001-00, Docket #050-374 is being submitted to your office as a Voluntary Report due to having 2 Diesel Generators inoperable at the same time.

*W R Diederich*  
G. J. Diederich  
for Station Manager  
LaSalle County Station

GJD/PSS/sga

Enclosure

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

IER2  
11