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

April 21, 1992

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

Dear Sir:

Licensee Event Report #92-003-00, Docket #050-374 is being submitted to your office in accordance with 10CFR 50.73(a)(2)(iv).

G. J. Diederich
Station Manager
LaSalle County Station

GJD/JEB/mkl

Enclosure

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

LICENSEE EVENT REPORT (LER) Form Rev 2.0

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

Title (4)

Engineered Safety Feature Actuation During Excess Flow Check Valve Testing Due To Unknown Reasons

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 5 0 0 0
0 3	2 2	9 2	9 2	0 0 3	0 0	0 4	2 1	9 2		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)			
	4	___ 20.402(b)	___ 20.405(c)	X 50.73(a)(2)(iv)	___ 73.71(b)
POWER LEVEL (10)	0 0	___ 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 in Abstract below and in Text)
		___ 20.405(a)(1)(iii)	___ 50.73(a)(2)(i)	___ 50.73(a)(2)(viii)(A)	
		___ 20.405(a)(1)(iv)	___ 50.73(a)(2)(ii)	___ 50.73(a)(2)(viii)(B)	
		___ 20.405(a)(1)(v)	___ 50.73(a)(2)(iii)	___ 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER
	AREA CODE
Jeffrey E. Bryant, Technical Staff Engineer, Extension 2319	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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
X	B G			No					

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 23, 1992 at 1051 hours with Unit 2 at zero percent power in Operational Condition 4 (cold shutdown) a spurious Division 3 Engineered Safety Feature Systems Actuation was received.

The actuation took place during LaSalle Instrument Surveillance LIS-NB-215 "Unit 2 High Pressure Excess Flow Check Valve Operability Test". During the performance of the test it was determined that Excess Flow Check Valve (EFCV) 2B21-F370 located in instrument sensing line 2NB19C would not come off its seat after the testing was completed. Per the procedure the EFCV was then manually unseated by applying pressure to the instrument sensing line. As this was done High Pressure Core Spray (HPCS) Reactor Water Level 2 Transmitters 2B21-N406B and 2B21-N406D located on this sensing line actuated their trip units on low reactor water level.

The cause of this event is unknown. The transmitter was isolated properly from the instrument sensing line during the performance of the test. Attempts at simulating the event failed.

The 2B (HPCS) Diesel Generator automatically started as expected. The High Pressure Core Spray System was out of service at the time. No injection took place.

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: 3/22/92 Event Time: 1051 Hours

Reactor Mode(s): 4 Mode(s) Name: Cold Shutdown Power Level(s): 0%

B. DESCRIPTION OF EVENT

On March 3, 1992 Unit 2 was in Operating Condition 4, (Cold Shutdown) at 0% power. At 1051 hours an Engineered Safety Features Actuation took place when the 2B High Pressure Core Spray (HPCS, HP) [BG] Diesel Generator automatically started during the performance of LaSalle Surveillance LIS-NB-215 "Unit 2 High Pressure Excess Flow Check Valve Refuel Operability Test". The Instrument Maintenance Department was testing Excess Flow Check Valve (EFCV) 2B21-F370 located in instrument sensing line 2NB19C when it was discovered that the check valve would not unseat itself. To test for operability a high flow condition is induced in the sensing line by opening the sensing line drain valves. The EFCV sees increased flow and closes limiting flow to approximately .5 gpm. The drain valves are closed removing the high flow condition and the line repressurizes. The proper closure of EFCV 2B21-F370 was verified. The sensing line drain valves were closed but the instrument sensing line would not repressurize, indicating a clogged EFCV. In accordance with the procedure the Instrument Mechanic proceeded to manually unseat the check valve. A temporary pressure source was installed at the sensing line drain valve and pressure was applied to the line. As this happened, HPCS [BG] Level 2 Initiation Transmitters 2B21-N406B and 2B21-N406D located in the instrument reference leg actuated their trip units on low level causing the 2B (HPCS) Diesel Generator [EK] to automatically start on a Reactor Vessel Low Water Level 2 (-50" water level) signal.

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.

C. APPARENT CAUSE OF EVENT

The apparent cause of the event has not been determined. The transmitters were isolated in accordance with LIS-NB-215. The low side instrument stop valves were closed and the equalizing valves were opened. This is the correct method for isolating these transmitters in this situation. With the low side closed and the equalizing valve open, no differential pressure should exist across the transmitter.

C. APPARENT CAUSE OF EVENT (CONTINUED)

Nuclear Work Request (WR) L14461 was written to try and simulate the event. Pressure transmitters were connected to 2B21-N406B and 2B21-N406D to record any pressure transients that the level transmitters may have been subject to. The event could not be simulated and nothing unusual could be seen. The instrument low side stop valves were slightly opened to insure that if they were improperly closed there would be no adverse affects on the level transmitters. The test was again performed but again no trip could be caused.

D. SAFETY ANALYSIS OF EVENT

The safety consequences of this event were minimal. All ECCS systems actuated as designed given the actuation signals present. The 2B (HPCS) Diesel Generator automatically started as expected. The HPCS [BG] System received an automatic initiation signal but it was out-of-service during this event and no automatic initiation took place. The pump did not start and no automatic valve movement took place.

The correct method of isolating the transmitters from the process lines was performed. Other instrumentation located on the same instrument sensing line was not affected by the testing.

This type of work is not usually performed when the plant is in Operational Condition 1 (Run), 2 (Startup), or 3 (Hot Shutdown). Had this occurred in one of these conditions no immediate operator action would not have been required.

E. CORRECTIVE ACTIONS

Under Work Request L14461 an attempt was made to simulate the events that took place to determine if there were any pressure transients on the level transmitters and to determine if improper closure of the instrument stop valves could affect the test. After the line was depressurized the line again failed to repressurize. A temporary pressure source was applied to the line but this time there was no automatic start of the 2B Diesel Generator. No unusual pressure transients were observed in the level transmitters. The simulation of leaking instrument low side stop valves did not affect the test. The cause of the event could not be determined. Work Request L14516 was written to have the Mechanical Maintenance Department repair or replace Excess Flow Check Valve 2B21-F370. Action Item Record (AIR) 374-180-92-03301 will track completion of this work.

F. PREVIOUS EVENTS

No previous events could be found.

G. COMPONENT FAILURE DATA

None.