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LaSalle Generating Station
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ComEd

May 8, 1995

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

Licensee Event Report #95-007-00, Docket #050-374 is being submitted to your office in accordance with 10CFR50.73(a)(2)(iv).

Sincerely,

D. J. Ray
Station Manager
LaSalle County Station

DJR/MJE/lja

Enclosure

cc: NRC Region III Administrator
NRC Senior Resident Inspector
INPO - Records Center
IDNS Resident Inspector
IDNS Senior Reactor Analyst
Nuclear Licensing Administrator
Nuclear Safety Review

IE22
1/1

NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
LaSalle County Station Unit 2	05000374	1 OF 5

TITLE (4)
Division 2 ESF Actuation Due to Instrument Reference Line Pressure Spike

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 NAME	DOCKET NUMBER
04	11	95	95	-- 007 --	00	05	08	95	None	
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	5
POWER LEVEL (10)	000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

	20.2201(b)		20.2203(a)(3)(i)		50.73(a)(2)(iii)		73.71(b)
	20.2203(a)(1)		20.2203(a)(3)(ii)	X	50.73(a)(2)(iv)		73.71(c)
	20.2203(a)(2)(i)		20.2203(a)(4)		50.73(a)(2)(v)		OTHER
	20.2203(a)(2)(ii)		50.36(c)(1)		50.73(a)(2)(vii)		(Specify in Abstract below and in Text, NRC Form 366A)
	20.2203(a)(2)(iii)		50.36(c)(2)		50.73(a)(2)(viii)(A)		
	20.2203(a)(2)(iv)		50.73(a)(2)(i)		50.73(a)(2)(viii)(B)		
	20.2203(a)(2)(v)		50.73(a)(2)(ii)		50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
M. J. Ellsworth, Instrument Maintenance Staff, Extension 2278	(815) 357-6761

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

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On April 11, 1995 at 2113 hours, with Unit 2 in Operational Condition 5 (refuel), a Division 2 Emergency Core Cooling System (ECCS) initiation signal occurred, resulting in the auto-start of 2A Diesel Generator (DG) and opening of 2C Residual Heat Removal (RHR) Injection Valve (2E12-F042C). The initiation occurred while Instrument Maintenance (IM) Technicians were performing LaSalle Instrument Surveillance, LIS-NB-418B, "Unit 2 Reactor Vessel Low Pressure and Injection Line Low Pressure RHR B/C (LPCI) Injection Valve Open Permissive Monthly Functional Test". The IM Technicians were in the process of valving out pressure switch 2B21-N413B, when a pressure spike in a common sensing line/reference leg caused a low reactor vessel water level initiation signal for Division 2 ECCS to occur.

At the time of the event, Division 2 was inoperable and Division 1 was operable for shutdown risk consideration. There was no injection of water into the Reactor Pressure Vessel (RPV). Operations verified that the Division 2 initiation was inadvertent and restored the affected systems to desired conditions.

This report is being written per 10CFR50.73(a)(2)(iv) due to an automatic actuation of an Engineered Safety Feature.

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: 4/11/95 Event Time: 2113 Hours

Reactor Mode(s): 5 Modes(s) Name: Refuel Power Level(s): 0%

B. DESCRIPTION OF EVENT

On April 11, 1995, at 2113 hours with Unit 2 in Operational Condition 5 (Refuel), a Division 2 Emergency Core Cooling System (ECCS) low water level initiation signal was received. B/C Residual Heat Removal (RHR, RH)[BO] Pumps did not start due to being out of service. 2A Diesel Generator (DG)[EK] automatically started and 2C RHR Injection Valve 2E12-F042C opened. 2B RHR Injection Valve 2E12-F042B did not open due to pressure switch 2E12-N413B being above the injection line interlock pressure set point. The Division 2 initiation signal occurred while the Instrument Maintenance (IM) Technicians were performing LaSalle Instrument Surveillance LIS-NB-413B, "Unit 2 Reactor Vessel Low Pressure and Injection Line Low Pressure RHR B/ RHR C (LPCI) Injection Valve Open Permissive Monthly Functional Test". The Reactor Operators verified the actuation was spurious, immediately closed Injection Valve 2E12-F042C, and secured the 2A DG. There was no actual injection of water into the Reactor Pressure Vessel (RPV).

Procedure LIS-NB-413B is a functional test that is performed monthly on pressure switches 2E12-N413B, 2E12-N413C, 2B21-N413B, and 2B21-N413D. This surveillance test verifies the reactor pressure permissive logic for the low pressure ECCS Injection Valves. The IM Technicians had isolated and vented 2E12-N413C. Next, the IM Technicians isolated, vented, and pressurized 2E12-N413B to 1000 psig. The next part of the surveillance required the isolation, venting, and pressurization of 2B21-N413B to 1000 psig. The IM Technician was in the process of verifying "as found" instrument valve position. The Technician tried to move the instrument stop valve handle in the closed direction. The valve could not be

B. DESCRIPTION OF EVENT (Continued)

moved, thus it was assumed to be already closed. The Instrument Supervisor was called at this time regarding the finding of the instrument stop valve already closed. The Supervisor explained that the stop valves were replaced on 2B21-N413B and D by Mechanical Maintenance during the outage and may have been left that way pending Post Maintenance Testing (PMT). The performance of Procedure LIS-NB-N413B was part of the PMT for these valve replacement work requests. The Technician proceeded to the next part of the surveillance which was to vent pressure switch 2B21-N413B. The venting of this switch with an open stop valve caused the pressure spike to the local instrument rack resulting in the ESF actuation. The vent valve was immediately reclosed. Work was stopped pending preliminary investigation.

The technician and his supervisor applied more force to the valve, and the valve could be closed with extreme difficulty. The stop valve to 2B21-N413D was found to be in a similar condition.

This event is reportable pursuant to 10CFR50.73(a)(2)(iv) due to an automatic actuation of an Engineered Safety Feature.

C. CAUSE OF EVENT

Previous events have shown this instrument sensing line/reference leg to be sensitive to minor perturbations and the associated instruments vulnerable to spurious actuation. This valve replacement work was due to an event on December 14, 1994 involving a leaking stop valve on 2B21-N413D. The subsequent investigation concluded that all similar stop valves on sensitive instrument lines would be replaced. The stop valves for 2B21-N413B and 2B21-N413D were replaced as part of the corrective action.

The two work requests which replaced the valves were collected for review of work performed and adequacy of testing. There was a Post Maintenance Verification (PMV) to cycle valve manually to verify smooth movement. The PMV did not contain details as to whether the cycling of the valve required pre-test conditions or whether any precautions were to be taken. The valves were adjusted to an intermediate position prior to welding into the system to preclude stresses during heating. The valves were then checked for smooth movement. The valve

C. CAUSE OF EVENT (Continued)

packing nuts were adjusted 2 flats due to concern for potential leaking valve stems. The Lead Mechanic checked the valves one last time for smooth movement. The valves were a little tighter, but still operated smoothly in his judgement. He also added that the valves were still quite warm. This work was completed on 3/23/95. The valves were left back seated for over 2 weeks until the IM Department started their functional test surveillance which was part of the PMT of the two work requests.

The apparent root cause of this event was the inappropriate valve packing adjustment on a hot valve. A spare valve was obtained from Stores and was subjected to a similar sequence of activities. The results confirmed that packing adjustments to a hot instrument valve require special precautions, or extremely difficult valve movement will result later on.

D. SAFETY ANALYSIS

The safety consequences of this event were minimal. There was no injection of water into the reactor. Division 1 ECCS was operable at all times during this event. The automatic actions which were initiated functioned correctly for the plant conditions at the time of the event.

E. CORRECTIVE ACTIONS

Immediate corrective actions were to close the Injection Valve 2E12-F042C and secure the 2A DG. Work was then stopped to evaluate the event. Work on the stop valves was allowed only after Operations was convinced that it could be done in a safe manner. The stop valve packing was loosened and valve stems were lubricated. Once the valve packing was loosened and stem lubricated, the surveillance was completed with no further problems.

Corrective actions were taken to assure that PMVs and PMTs produce desired results:

1. Mechanical Maintenance was tailgated on 4/21/95 using the valve from the hot valve experiment as a visual aid.

E. CORRECTIVE ACTIONS (Continued)

2. A Training Identification Form (TIF) was initiated and sent to the Training Department for inclusion in Mechanical Maintenance initial and/or continuing training. The valve packing lesson plan for Mechanical Maintenance is being revised to reflect lessons learned from the event.

3. Maintenance Work Analysts will devise process improvements to assure that PMVs and PMTs for instrument valves produce desired results.

4. The previous corrective action of instrument line damping (Reference LER 374/94-010) is being reviewed in order to take further corrective measures if necessary.

F. PREVIOUS OCCURRENCES

LER Number	Title
373/92-008-00	Spurious Instrument Spike Resulting in a RCIC Injection and Half Scram
374/92-013-00	Spurious Initiation of RCIC While Performing LIS-LC-403
374/94-010-00	Division 2 ECCS and RCIC Initiation Due to Leaking Instrument Stop Valve

G. COMPONENT FAILURE DATA

None.