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ComEd

March 27, 1997

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Licensee Event Report #97-007-00, Docket #050-373 is being submitted to your office in accordance with 10 CFR 50.73(a)(2)(i).

Respectfully,

Fred Dacimo
Plant General Manager
LaSalle County Station

Enclosure

cc: A. B. Beach, NRC Region III Administrator
M. P. Huber, NRC Senior Resident Inspector - LaSalle
C. H. Mathews, IDNS Resident Inspector - LaSalle
F. Niziolek, IDNS Senior Reactor Analyst
INPO - Records Center

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

LICENSEE EVENT REPORT (LER)

APPROVED BY OMB NO. 3150-0104
EXPIRES 05/31/95

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.

FACILITY NAME (1):	DOCKET NUMBER (2)	PAGE (3)
LaSalle County Station Unit One	05000373	1 of 5

TITLE (4)
Missed Technical Specification Surveillance on the High and Low Discharge Pressure Switches for the 1A RHR Pump Due to procedural and Human Performance Errors.

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
									None	
02	25	97	97	007	00	03	27	97	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9): 4
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)	20.2003(a)(3)(ii)	50.73(a)(2)(iv)	73.71(c)
20.2203(a)(2)(i)	20.2003(a)(4)	50.73(a)(2)(v)	OTHER
20.2203(a)(2)(ii)	50.36(c)(1)	50.73(a)(2)(vii)	
20.2203(a)(2)(iii)	50.36(c)(2)	50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
20.2203(a)(2)(iv)	☒ 50.73(a)(2)(i)	50.73(a)(2)(viii)(B)	
20.2003(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)
Jack Leider, Operating Staff	(815) 357-6761 Extension 3026

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)

	YES (If yes, complete EXPECTED SUBMISSION DATE)	☒	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

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

On February 25, 1997, the functional test of pressure switches on the Unit 1A Residual Heat Removal (RHR) pump discharge line was identified as past due. This test is required by Technical Specification 4.5.1.a.2.a. and was due to be completed per surveillance LIS-RH-316A by February 4, 1997. The surveillance had been rescheduled when a conflict occurred on the due date. An error in the instrument surveillance program indicated the test was not required with Unit 1 in Operating Condition 4. Controls in place to ensure management review of rescheduled surveillances failed to identify that this test delay would result in non-compliance with Technical Specification requirements. This resulted from a management deficiency in not establishing suitable accountability for tracking surveillances and human error in not adhering to review requirements.

The safety significance of this event is minimal since shutdown cooling remained available to the reactor from the 1A RHR system and the Low Pressure Core Spray (LPCS) system. Two additional backup systems were also maintained as available. Corrective actions have been taken to correct the surveillance program and improve the administration and oversight for the plant's surveillance program.

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): 1/2 Event Date: 02/25/97 Event Time: 1730 Hours
Reactor Mode(s): 4/N Mode(s) Name: Cold Shutdown/Defueled Power Level(s): 0%/0%

B. DESCRIPTION OF EVENT

On February 25, 1997, it was identified that a Technical Specification surveillance, LIS-RH-316A, had not been performed on Unit 1 as required and had become past due on February 4. This surveillance is performed to demonstrate that the required ECCS are operable in accordance with Technical Specification 4.5.2.1 with the Unit in Operating Condition 4 - cold shutdown. The surveillance is normally performed at least once per 31 days and had been performed last on December 28, 1996. LIS-RH-316A provides a channel functional test of the 1A Residual Heat Removal Pump discharge line "keep filled" pressure alarm instrumentation which actuates alarms in the Main Control Room for sensed high or low pressure in the line. This functional test is specified in Technical Specification 4.5.1.a. 2.a.

Upon notification of this deficient condition, at 1730 hours, the Shift Manager (SRO) determined that the Limiting Condition for Operation section 3.5.2 of the specifications was no longer being met since LPCI subsystem "A" of the RHR System (RH) [BO] could not be considered operable. At the time, the low pressure core spray (LPCS) [BM] was operable but LPCI [BO] subsystems "B" and "C" of the RHR System (RH) [BO] and the high pressure core spray (HPCS) [BG] system were inoperable due to normal maintenance during shutdown. Action statement 3.5.2.a. was entered and LIS-RH-316A was started immediately. The surveillance was successfully completed at 1915 hours on February 25 allowing LPCI subsystem "A" to again be declared operable. The Action statement was exited at this time.

LIS-RH-316A had been scheduled to be performed on January 28, 1997. The Unit 1 1B RHR system (LPCI subsystems "B" and "C") had been removed from service previously for maintenance and remained unavailable on that date. Therefore, unnecessary work was being restricted on the in service 1A RHR system. During a review of instrument surveillances coming due, the work scheduler reviewed the instrument surveillance program information and incorrectly determined that LIS-RH-316A was not required with Unit 1 in Condition 4. The surveillance was pushed back in the schedule prior to being assigned to an instrument maintenance technician to a date corresponding to the 1B RHR system return to service. When the return of the 1B RHR train continued to be delayed, the surveillance eventually went beyond it's critical due date of February 4. On February 25, 1B RHR was returned to service and LIS-RH-316A was scheduled to be performed. It was then that the noncompliance with the Technical Specification surveillance requirement was identified.

LIS-RH-316A was incorrectly rescheduled because of an error in the surveillance program used by the Instrument Maintenance Department. The General Surveillance Instrument program (GSIN) listed this surveillance as being required in Conditions 1, 2, 3 and 7 but not in Condition 4 or 5 as also required by the Technical Specifications. In addition, administrative controls established to ensure that surveillances which could not be completed by the critical due date received further review to prevent non-compliance's with requirements, were not completed. LaSalle Administrative Procedure, LAP 300-6, LaSalle Instrument Surveillance Program, requires that an Instrument Maintenance Degraded Equipment Log (IM DEL) be initiated to track each surveillance that will not be completed by the due date. The IM DEL is then reviewed and approved by the Master Instrument Mechanic, a senior licensed operator (SRO) and the System Engineering Supervisor. The IM DEL was prepared on February 8 after the critical date for this surveillance had past and had not been reviewed as required. Timely preparation and review of the DEL would have identified that LIS-RH-316A could not be rescheduled past the critical date and actions could have been taken to complete the surveillance by the due date.

Although LIS-RH-316A was not performed by the critical due date, 1A RHR system (LPCI subsystem "A") remained available to transfer water to the reactor vessel throughout this period. The failure to meet the Technical Specification surveillance requirements is reportable pursuant to 10 CFR 50.73(a)(2)(i)(B).

C. CAUSE OF EVENT

The instrument work scheduler made decisions to delay the performance of surveillance LIS-RH-316A until the 1B RHR system became available. The scheduler works in the Work Control Department, not the Instrument Department and is not familiar with the specific instrument surveillance procedures or applicable Technical Specification requirements. As such, he relied on the information in GSIN for his decision to delay LIS-RH-316A. The GSIN data for this surveillance was incorrect in that it did not list LIS-RH-316A as being required with Unit 1 in Operating Condition 4 or 5. This difference in requirements between the GSIN program and the Technical Specifications occurred previously during development of the database. The error was not identified due to an inadequate validation and verification of the instrument surveillance program due to management deficiency.

Following the decision of the work scheduler to delay the performance of LIS-RH-316A, the surveillance coordinator did not prepare an IM DEL for the Instrument Department supervisor to review until February 8 because of distractions from other work assignments. After the DEL was prepared, it did not receive management review as required to verify that changes to the surveillance schedule would not result in a non-conformance with the Technical Specifications. These discrepancies occurred due to (1) management deficiency in not establishing adequate methods and accountability to ensure that Technical Specification surveillance requirements were completed as required or tracked to completion and, (2) human performance errors in not adhering to procedural requirements to initiate and review an IM DEL prior to the date surveillance LIS-RH-316A was due.

D. ASSESSMENT OF SAFETY CONSEQUENCES

The event is of minimal safety significance. Unit 1 had been shutdown since September 22, 1996 and decay heat loads were low. The 1A RHR Pump remained in service throughout the period where the surveillance was past due providing shutdown cooling for the reactor vessel. The missed surveillance was identified on February 25 when the 1B RHR Pump was returned to service and was also available to provide shutdown cooling. In addition, the LPCS pump was maintained as operable or available and two alternative shutdown cooling flow paths were maintained available when the 1B RHR system was unavailable. These alternate paths were capable of transferring water from the main condenser hotwell or the suppression pool to the reactor vessel through the condensate/feedwater system or reactor water cleanup system. Each path was verified to be available daily.

In the event that the 1A RHR system 'keep filled' pressure alarm instrumentation had failed and not been detected, the effects of these failures would be mitigated due to the reactor coolant system conditions with the Unit in cold shutdown. An alarm from the high pressure instrument, 1E12-N022, provides indication that either (1) the RHR minimum flow valve has failed and RHR pump discharge pressure has risen to shutoff head (deadhead) or, (2) that isolation valves which prevent inleakage of high pressure reactor coolant into the RHR system have failed. Loss of the alarm function could result in these component failures not being immediately identified by the operator in the Main Control Room. However, for the first case, in the cold shutdown condition with the RHR pump providing shutdown cooling, pump flow is maintained high above the flow where the minimum flow valve is required to open to prevent a high discharge pressure condition. The pump discharge pressure would not increase to the high pressure alarm set point unless the flow path to the reactor vessel was isolated and the minimum flow valve also failed. The RHR discharge flow path is administratively controlled to prevent such an inadvertent isolation. For the second case, the reactor coolant system is maintained at low pressure in cold shutdown and back leakage into the RHR system is not possible.

An alarm from the low pressure instrument, 1E12-N512A, provides indication that the RHR pump discharge line has depressurized due to a line break. Since RHR system flow and reactor vessel level are recorded and monitored each shift by the control room operator and low reactor vessel level is alarmed, a line break would be quickly detected even if the low pressure RHR discharge line alarm failed. Operator actions would be taken to isolate the break and provide shutdown cooling through one of the two available alternate shutdown cooling paths that were maintained available.

E. CORRECTIVE ACTIONS

1. The GSIN program data has been corrected to correctly list surveillance LIS-RH-316A as required in Operating Condition 1,2,3,4,5 and 7.

2. Personnel involved in the event have been counseled by senior station management on the need for strict procedural adherence in preparing and reviewing the IM DEL.

3. The GSIN database will be validated and consolidated into the plant's Electronic Work Control System to provide a single program for the administration of all Technical Specification surveillance testing. Use of the GSIN database will then be discontinued.

4. The tracking and scheduling of all LaSalle Station Technical Specification surveillances will be assigned to a qualified test coordinator to provide a single point of accountability.

5. Station administrative procedures which control the performance of Technical Specification surveillances will be revised and consolidated to ensure that the requirements are consistent and that each working department with responsibilities for these surveillances understands the requirements.

6. The methods used by the various station departments with responsibilities for reviewing Technical Specification surveillances that will not be performed by the due date will be revised to ensure that the surveillances are properly dispositioned. The present procedures or practices will be consolidated into a single administrative procedure.

7. The Site Quality Verification group will perform a common cause analysis of previous events to identify the reason previous corrective actions have not prevented recurrence.

F. PREVIOUS OCCURRENCES

LER NUMBER	TITLE
373-95-007	Technical Specification Surveillances Were Not Performed on Unit 1 or Unit 2 Division III 125 VDC Batteries Due to Management Deficiency

The corrective action from this event included a line by line comparison of the surveillance requirements listed in the GRSV database compared to the EWCS database to ensure that when surveillance data was transferred from GSRV to EWCS, the transfer was complete and accurate. The GSIN database was not included in this review since this had been previously reviewed.

This previous review did not identify the deficiency with respect to the omission of Operating Conditions 4 and 5 for LIS-RH-316A since the GSIN data and EWCS data were in agreement. The error in GSIN was a pre-existing error apparently from development of this database. It had not resulted in previous events of missed surveillance since LIS-RH-316A is performed monthly whenever the A RHR system is available regardless of Operating Condition. If there was a case where the surveillance had been delayed, preparation and review of the IM DEL would have identified the need to perform the surveillance.

G. COMPONENT FAILURE DATA

Since no component failure occurred, this section is not applicable.