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LaSalle County Station
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Exelon SM
Nuclear

June 16, 2003

10 CFR 50.73

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

LaSalle County Station, Unit 1
Facility Operating License No. NPF-11
NRC Docket No. 50-373

Subject: Licensee Event Report

In accordance with 10 CFR 50.73(a)(2)(v)(D), Exelon Generation Company, (EGC), LLC, is submitting Licensee Event Report Number 03-002-00, Docket No. 050-373.

Should you have any questions concerning this letter, please contact Mr. Glen Kaegi, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,

Susan Landahl

Susan Landahl
Plant Manager
LaSalle County Station

Attachment: Licensee Event Report

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - LaSalle County Station

IE22

NRC FORM 366 (7-2001) | U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and by internet e:mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NOEB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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4. TITLE 1A and 0 Diesel Generators Inoperable Simultaneously Due to Inadvertent Partial CO2 Actuation

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
									LaSalle County Station, Unit 2	05000374
4	23	2003	2003	- 002	- 00	06	16	03	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE	1
10. POWER LEVEL	100

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)

☐ 20.2201(b)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(ix)(A)
☐ 20.2201(d)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(x)
☐ 20.2203(a)(1)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 73.71(a)(4)
☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(5)
☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(B)	☐ OTHER
☐ 20.2203(a)(2)(iii)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(C)	Specify in Abstract below or in NRC From 366A
☐ 20.2203(a)(2)(iv)	☐ 50.73(a)(2)(i)(A)	☒ 50.73(a)(2)(v)(D)	
☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(vii)	
☐ 20.2203(a)(2)(vi)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(viii)(A)	
☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(B)	

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Rodney Vickers, Plant Engineering	(815) 415-2445

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX		CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

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

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

At 1848 hours on April 23, 2003, while the 1A Diesel Generator (DG) was inoperable for surveillance testing, a partial CO2 suppression system actuation occurred for the 0 DG room when a non-licensed operator attempted to blow some dust off of a circuit board in the local CO2 fire suppression cabinet. The partial actuation closed several dampers in the 0 DG ventilation support system, which rendered the 0 DG inoperable. No CO2 was discharged.

Technical Specification 3.8.1 allows two DGs to be inoperable on the same unit for two hours. If operability cannot be restored, the unit must be placed in Mode 3 in 12 hours and in Mode 4 in 36 hours. The 1A DG was restored to operability at 1923 hours. The 0 and 1A DGs were simultaneously inoperable for 29 minutes.

The safety significance of the event was minimal, because normal AC power was available to ESF loads throughout the event, and the 0 DG would have started and loaded on a loss of offsite power. The cause of the event was foreign material on the horizontal surface of the Zone 1 circuit board in the suppression cabinet. Corrective actions include revising the appropriate procedures to remove foreign material from the cabinet during periodic surveillances.

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17. NARRATIVE (If more space is required, use additional copies of NRC Form 366A)

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor, 3489 Megawatts Thermal Rated Core Power

A. CONDITION PRIOR TO EVENT

Unit(s): 1 Event Date: 4/23/03 Event Time: 1848
Reactor Mode(s): 1 Power Level(s): 100
Mode(s) Name: Run

B. DESCRIPTION OF EVENT

At approximately 1700 hours on 4/23/2003, the Unit 1 non-licensed rounds operator observed an intermittent trouble alarm at the Unit 1 Main Fire Panel (1FP04JA) in the Auxiliary Electric Equipment Room (AEER). The alarm was associated with the 0 Diesel Generator (DG) [EK] Carbon Dioxide (CO_2) [KQ] suppression system. The rounds operator informed the Field Supervisor of this condition and continued with his rounds.

At 1815 hours, the 1A DG control switch was placed in MAINTENANCE in preparation for performing a 24-hour run surveillance per surveillance procedure LOS-DG-R1A. With the 1A DG control switch in MAINTENANCE, the 1A DG was declared inoperable and the applicable Technical Specification (TS) 3.8.1 time clocks were entered.

In the meantime, the Unit 1 rounds operator had continued with his rounds and at 1830 hours was in the vicinity of the 0 DG room. He decided to inspect the local CO_2 fire suppression cabinet to determine if it could be the cause of the intermittent 0 DG CO_2 suppression system alarm.

The rounds operator inspected the outside of the control panel and found no unusual indications. He then opened the control panel door to visually inspect the interior of the panel. The operator observed no discoloration on any circuit boards, no loose or broken connections, but he did observe a small amount of dust on the horizontally mounted Zone 1 Circuit Board. At 1848 hours, he attempted to remove the dust by blowing on the circuit board, and a 0 DG CO_2 suppression system fire alarm and a partial CO_2 suppression system actuation occurred immediately.

A fire alarm was received in the control room for CO_2 actuation in the 0 DG Room and LOA-FP-101, "Unit 1 Fire Protection System Abnormal" was entered. The fire brigade was dispatched to the scene and confirmed that there was no fire. No CO_2 was discharged.

A walkdown identified that several dampers in the 0 DG ventilation support system had closed as a result of the actuation. This made the 0 DG ventilation support system and the 0 DG inoperable. The 0 DG was declared inoperable at 1923 hours, which made both the Division 1 and 2 DGs inoperable at the same time. TS 3.8.1 Condition F allows two required Division 1, 2, or 3 DGs to be inoperable for two hours. If operability cannot be restored, then Required Action G.1 requires the unit to be in Mode 3 in 12 hours and Required Action G.2 requires the unit to be in Mode 4 in 36 hours.

Once it was confirmed that there was no CO2 in the DG Rooms, the non-licensed operators entered the 1A DG Room and placed the DG control switch in STANDBY. The 1A DG was restored to an operable status at 1952. The 0 and the 1A DG were inoperable simultaneously for a total of 64 minutes.

This event was determined to be reportable under 10 CFR 50.72(b)(3)(v)(D) and 10 CFR 50.73(a)(2)(v)(D) as an event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident. An ENS phone call was made at 0025 on 4/24/03 (EN# 39789).

C. CAUSE OF EVENT

The cause of the event was that dust/foreign material was present on the horizontally mounted Zone 1 Circuit Board, which was disrupted when the operator blew on it. The foreign material shorted across energized points on the Zone 1 Circuit Board, resulting in a partial system actuation and closure of the 0 DG ventilation dampers. The surveillances that are performed annually to verify proper operation of the CO2 systems do not include steps to remove accumulated dust or other foreign materials inside the panel, as the vendor suggests.

Troubleshooting was performed on the 0 DG CO2 suppression system to determine the reason for the intermittent alarms that caused the operator to open the local CO2 fire suppression cabinet. Troubleshooting revealed low voltage on the standby (back-up) batteries, which caused the alarms. The batteries were replaced. The standby batteries are replaced every two years, and were scheduled to be replaced in July 2003.

D. SAFETY ANALYSIS

The safety significance of this event was minimal. Normal AC power was available to Division 1 and 2 loads throughout the event. Had a loss of offsite power occurred, the 0 DG would have started and loaded, and the 1A diesel could have been quickly made operable.

At the time of the event, outside air temperature was approximately 61 degrees F, 0 DG room temperature was approximately 75 degrees F, and 0 DG cooling water was fully operable with lake temperatures of approximately 69 degrees F. Of these parameters, cooling water temperature is the most critical to diesel operation. Given these initial conditions, the 0 DG would have carried its design load long enough for the 1A DG to be returned to an operable status.

This was not a Safety System Functional Failure.

E. CORRECTIVE ACTIONS

1. The Zone 1 Circuit Board was replaced with a new one as a precaution. No problems were found with the original board. Complete.

2. Surveillance procedures for the Diesel Generator Room CO2 System Channel Functional Test will be revised to add steps to inspect and remove any accumulation of dust or foreign material from the horizontally mounted circuit boards inside the CO2 control panels (AT# 155441-18).

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17. NARRATIVE (If more space is required, use additional copies of NRC Form 366A)

3. Instrument and Electrical Maintenance personnel will be trained to inspect for and remove foreign material from horizontally mounted circuit boards when performing maintenance inside panels (AT# 155441-19/20).

F. PREVIOUS OCCURRENCES

A review of Licensee Event Reports over the previous three years found no previous or similar occurrences.

G. COMPONENT FAILURE DATA

This section is not applicable, since no components failed in this event.