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10 CFR 50.73

RA15-004

February 10, 2015

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Subject: Licensee Event Report 2015-002-00 Valve Control Power Breaker-Fuse Coordination Issue Results in Unanalyzed Condition

In accordance with 10 CFR 50.73(a)(2)(ii)(B), Exelon Generation Company (EGC), LLC, is submitting Licensee Event Report Number 2015-002-00 for LaSalle County Station Units 1 and 2.

There are no regulatory commitments in this letter. Should you have any questions concerning this report, please contact Mr. Guy V. Ford, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,

Harold T. Vinyard
Plant Manager
LaSalle County Station

Enclosure: Licensee Event Report

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

NRC FORM 366 (02-2014) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 01/31/2017

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an 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 Page 2 for required number of digits/characters for each block)

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4. TITLE

Valve Control Power Breaker-Fuse Coordination Issue Results in Unanalyzed Condition

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
12	12	2014	2015	002	00	02	10	2015	LaSalle County Station Unit 2	05000374
									FACILITY NAME: N/A	DOCKET NUMBER: N/A

9. OPERATING MODE	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*			
1	☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
	☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☒ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
	☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
10. POWER LEVEL	☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
100	☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
	☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(C)	☐ OTHER
	☐ 20.2203(a)(2)(vi)	☐ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT	TELEPHONE NUMBER *(Include Area Code)*
Richard Meyer, Design Engineering Manager Electrical	815-415-2514

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 15. EXPECTED SUBMISSION DATE)* ☒ NO				

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

On December 12, 2014, both Units 1 and 2 were in Mode 1 at 100% power with an NRC Triennial Fire Protection Inspection in progress. During the inspection, breaker-fuse coordination evaluations were conducted for the 250 VDC control power supplies to Reactor Core Isolation Cooling (RCIC) valves that are required to be operated from the Remote Shutdown Panel (RSP) in the event of a fire in the Main Control Room (MCR). The evaluation identified that the power supply breakers to two RCIC valves might trip before the fuses, requiring the breakers to be reset before they could be operated from the RSP. The plant current licensing basis does not identify the contingency actions required to reset the breakers prior to operation from the RSP. RCIC operation from the RSP is the method credited for reactor vessel inventory makeup in the event of a fire in the MCR. This condition is common to both Units.

Documented breaker-fuse analyses were not required by engineering standards in place during original construction. Corrective actions were to implement compensatory measures as identified in Information Notice 97-48, "Inadequate or Inappropriate Interim Fire Protection Compensatory Measures," including communicating the issue to the operating crews and providing direction to the Safe Shutdown Equipment Operator in the event of a fire in the MCR. Measures to reset the breakers will be added to the appropriate procedures until the breakers and/or trip settings are appropriately modified.

LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

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NARRATIVE

LaSalle County Station Units 1 and 2 are General Electric Company Boiling Water Reactors with 3546 Megawatts Rated Core Thermal Power.

A. CONDITION PRIOR TO EVENT:

Unit(s): 1/2 Event Date: December 12, 2014 Event Time: 1500 CST
Reactor Mode(s): 1/1 Mode(s) Name: Power Operation Power Level: 100%/100%

B. DESCRIPTION OF EVENT:

On December 12, 2014, both Units 1 and 2 were in Mode 1 at 100% power with an NRC Triennial Fire Protection Inspection in progress. During the inspection, it was identified that there were no documented breaker-fuse coordination analyses for the 250 VDC control power supplies to Reactor Core Isolation Cooling (RCIC)[BN] valves that are required to be operated from the Remote Shutdown Panel (RSP)[JL] in the event of a fire in the Main Control Room (MCR). Breaker-fuse coordination evaluations were conducted, and found that the power supply breakers to two RCIC valves might trip before the fuses, requiring the breakers to be reset before they could be operated from the RSP. The plant current licensing basis does not identify the contingency actions required to reset the breakers prior to operation from the RSP. RCIC operation from the RSP is the method credited for reactor vessel inventory makeup in the event of a fire in the MCR. This condition is common to both Units.

The affected valves are 1(2) E51-F031, the RCIC suppression pool suction valves, and 1(2) E51-F046, which supply lubricating oil cooling for the RCIC turbine. If the control power supply breakers for these valves tripped, they could not be operated from the RSP without locally resetting the breakers.

This occurrence is reportable under 10 CFR 50.73(b)(2)(ii)(B) as an event or condition that resulted in the plant being in an unanalyzed condition that significantly degraded plant safety. An ENS report was made to the NRC (EN# 50675) at 2115 ET on December 12, 2014, pursuant to 10 CFR 50.72(b)(3)(ii)(B).

C. CAUSE OF EVENT:

This condition has existed since original construction. Documented breaker-fuse analyses were not required by engineering standards in place at that time.

D. SAFETY ANALYSIS:

The safety significance of this event was minimal. The Technical Specification 3.5.3 operability of RCIC was not affected by this condition.

In the event of a fire in the MCR, RCIC would be available from the RSP to maintain vessel inventory for sufficient time for the valve failure(s) to be identified and diagnosed, and for operators to reset the breakers and open the valves. The normally closed 1(2) E51-F031 valve is not required to establish suction from the suppression pool until low water level in the Condensate Storage Tank is reached, which takes approximately

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NARRATIVE

four hours based on station blackout coping studies. Additionally, evaluation has shown that the RCIC turbine can run for approximately three hours without lube oil cooling in the event that the 1(2)E51-046 valve does not open.

E. CORRECTIVE ACTIONS:

- Information Notice 97-48, "Inadequate or Inappropriate Interim Fire Protection Compensatory Measures," was reviewed and compensatory measures implemented, including the issuance of a Standing Order communicating the issue to the operating crews and directing the Safe Shutdown Equipment Operator to report to the respective 250 VDC switchgear to reset any tripped breakers in the event of a fire in the MCR.
- Contingency measures to reset the breakers as needed in the event of a fire in the MCR once control has been transferred to the RSP will be added to the appropriate procedures.
- The breakers and/or trip settings will be modified for the affected RCIC valves as required.

F. PREVIOUS OCCURRENCES:

A search of LaSalle LERs over the last 10 years did not identify any previous events related to breaker-fuse coordination issues.

G. COMPONENT FAILURE DATA:

No component failures occurred during this event.