Brad Berryman
Site Vice President

Susquehanna Nuclear, LLC
769 Salem Boulevard
Berwick, PA 18603
Tel. 570.542.2904 Fax 570.542.1504
robert.franssen@talenenergy.com

TALEN ENERGY

APR 1 2 2017

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

10 CFR 50.73

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 50-387(388)/2017-002-00
UNIT 1 LICENSE NO. NPF-14 **Docket No. 50-387**
UNIT 2 LICENSE NO. NPF-22 **50-388**
PLA-7581

Attached is Licensee Event Report (LER) 50-387(388)/2017-002-00. This LER reports an event involving Secondary Containment being declared inoperable on February 17, 2017 due to both doors of an airlock being open at the same time. This LER is being submitted pursuant to the requirements of 10 CFR 50.73(a)(2)(v)(C) as a condition that could have prevented fulfilment of a safety function.

Should you have any questions regarding this submittal, please contact Mr. Jason Jennings, Manager – Nuclear Regulatory Affairs at (570) 542-3155.

There were no actual consequences to the health and safety of the public as a result of this event.

This letter contains no new regulatory commitments.

B. Berryman

Attachment: LER 50-387(388)/2017-002-00

Copy: NRC Region I
Ms. T. E. Hood, NRC Project Manager
Ms. L. Micewski, NRC Sr. Resident Inspector
Mr. M. Shields, PA DEP/BRP

NRC FORM 366 (06-2016) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2018

LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)

(See NUREG-1022, R.3 for instruction and guidance for completing this form http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/)

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 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.

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
Susquehanna Steam Electric Station Unit 1	05000387	1 OF 3

4. TITLE

Secondary Containment Breach due to Simultaneous Opening of Airlock Doors

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
									Susquehanna Steam Electric Station Unit 2	05000388
02	17	2017	2017	- 002	- 00	04	12	2017	FACILITY NAME	DOCKET NUMBER 05000

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)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
	☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
	☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
10. POWER LEVEL	☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
097	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
	☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☒ 50.73(a)(2)(v)(C)	☐ 73.77(a)(1)
	☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(D)	☐ 73.77(a)(2)(i)
	☐ 20.2203(a)(2)(vi)	☐ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(vii)	☐ 73.77(a)(2)(ii)
		☐ 50.73(a)(2)(i)(C)	☐ OTHER Specify in Abstract below or in NRC Form 366A	

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT	TELEPHONE NUMBER (Include Area Code)
Nicole Pagliaro, Licensing Specialist – Nuclear Regulatory Affairs	570-542-6578

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 February 17, 2017, three technicians were walking through the 818' Airlock doors. The lead (first) technician observed the green light, swiped their badge and entered into the airlock. The two additional technicians then swiped their badges and walked into the airlock. The lead technician observed the first door closing and turned to open the second airlock door. As the first technician opened the second door the Airlock Door alarm sounded briefly as the first door was not completely closed and latched. This caused an alarm for a momentary breach of Secondary Containment. When they heard the alarm, both workers shut the doors. This airlock serves as a secondary containment boundary; as such, having both doors open at the same time results in failure to meet Technical Specification 3.6.4.1 as a result of not satisfying Surveillance Requirement 3.6.4.1.3.

The condition is being reported in accordance with 10 CFR 50.73(a)(2)(v)(C).

The cause of the event was less than adequate situational awareness.

Corrective actions included documented coaching of the worker.

There were no actual consequences to the health and safety of the public as a result of this event.

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Susquehanna Steam Electric Station, Unit 1	05000-387	2017	- 002	- 00

NARRATIVE

CONDITIONS PRIOR TO EVENT

Unit 1 – Mode 1, approximately 097 percent Rated Thermal Power
Unit 2 – Mode 1, approximately 092 percent Rated Thermal Power
There were no structures, systems, or components that were inoperable at the start of the event that contributed to the event. Unit 2 was in coast down prior to the refueling outage.

EVENT DESCRIPTION

On February 17, 2017 at approximately 1040, three maintenance workers entered the Refuel Floor Air Lock [EIIS: AL]. The first worker entered the airlock followed by the second and third workers and began to open the second door [EIIS: DR] before the third individual closed the first door. This caused an alarm [EIIS: ALM] for a momentary breach of Secondary Containment [EIIS: VA]. When they heard the alarm, both workers shut the doors. This airlock serves as a secondary containment boundary; as such, having both doors open at the same time results in failure to meet Technical Specification 3.6.4.1 as a result of not satisfying Surveillance Requirement 3.6.4.1.3.

CAUSE OF THE EVENT

The cause of the event was less than adequate situational awareness.

ANALYSIS/ SAFETY SIGNIFICANCE

Technical Specification 3.6.4.1 Surveillance Requirement 3.6.4.1.3 requires that one secondary containment access door in each access opening is closed. This event is being reported pursuant to 10 CFR 50.73(a)(2)(v)(C) as having both Secondary Containment airlock doors momentarily open simultaneously resulting in a condition that could have prevented fulfillment of a safety function to mitigate the consequences of an accident by controlling the release of radioactive material.

There was no actual safety consequence as a result of this event. Engineering analysis of this event has determined that secondary containment could have performed its safety function of isolating, as assumed in the accident analysis, and also of re-establishing 0.25 in w.g. vacuum (drawdown) within the assumed accident analysis time (10 minutes). This event will not be counted as a safety system functional failure (SSFF) for the NRC performance indicator.

CORRECTIVE ACTIONS

Corrective actions completed included coaching of the individual who opened the second airlock door.

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Susquehanna Steam Electric Station, Unit 1	05000-387	2017	- 002	- 00

PREVIOUS SIMILAR EVENTS

LER 50-387(388)/2017-001-00, "Secondary Containment Breach Due to Simultaneous Opening of Airlock Doors," dated March 8, 2017 (PLA-7576).

LER 50-387(388)/2016-025-00, "Secondary Containment Breach Due to Simultaneous Opening of Airlock Doors," dated January 26, 2017 (PLA-7569).

LER 50-387(388)/2016-023-00, "Secondary Containment Declared Inoperable Due to Airlock Doors Open Due to a Human Performance Error," dated November 21, 2016 (PLA-7547).

LER 50-387(388)/2016-022-00, "Secondary Containment Breach Due to Simultaneous Opening of Airlock Doors," dated December 1, 2016 (PLA-7544).

LER 50-387(388)/2016-021-00, "Secondary Containment Declared Inoperable Due to Airlock Doors Open Due to a Human Performance Error," dated August 17, 2016 (PLA-7515).

LER 50-387(388)/2016-015-00, "Secondary Containment Declared Inoperable Due to Airlock Doors Open Due to a Human Performance Error," dated June 15, 2016 (PLA-7493).

LER 50-387(388)/2016-014-00, "Secondary Containment Declared Inoperable Due to Airlock Doors Open Due to a Human Performance Error," dated June 9, 2016 (PLA-7492).

LER 50-387(388)/2016-013-00, "Unit 1 Secondary Containment Airlock Doors on 676' opened at same time due to personnel error," dated June 9, 2016 (PLA-7492).

LER 50-387(388)/2016-005-00, "Secondary Containment Declared Inoperable Due to Airlock Doors Open Due to Human Performance Error," dated May 16, 2016 (PLA-7466).

LER 50-387(388)/2016-004-00, "Momentary Loss of Secondary Containment due to Both Airlock Doors on Elevation 779 of the Unit 2 Reactor Building being Opened at the Same Time," dated May 10, 2016 (PLA-7467).

LER 50-387(388)/2015-011-00, "Secondary Containment Declared Inoperable Due to an Airlock Door that Had Not Been Properly Latched," dated January 29, 2016 (PLA-7432).

LER 50-388(387)/2015-006-00, "Secondary Containment Declared Inoperable Due to Secondary Containment Boundary Door 104-R Breached," dated September 18, 2015 (PLA-7383).

LER 50-387/2015-004-00, "Secondary Containment Inoperable due Secondary Containment Boundary Door Found Ajar," dated June 25, 2015 (PLA-7353).

LER 50-388/2015-002-00, "Secondary Containment Inoperability Due Failure to Meet Technical Specification Surveillance Requirement 3.6.4.1.1," dated May 11, 2015 (PLA-7329).