Jon A. Franke
Site Vice President

Susquehanna Nuclear, LLC
769 Salem Boulevard
Berwick, PA 18603
Tel. 570.542.2904 Fax 570.542.1504
Jon.Franke@TalenEnergy.com

TALEN ENERGY

JUN 0 9 2016

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)/2016-014-00
UNIT 1 LICENSE NO. NPF-14
UNIT 2 LICENSE NO. NPF-22
PLA-7489

Docket No. 50-387
50-388

Attached is Licensee Event Report (LER) 50-387(388)/2016-014-00. The LER reports an event involving Secondary Containment being declared inoperable due to both doors of an airlock being open at the same time. This event was determined to be reportable in accordance with 10 CFR 50.73(a)(2)(v)(C) as a condition that could have prevented fulfilment of a safety function.

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.

M. T. Krausser for J. A. Franke

J. A. Franke

Attachment: LER 50-387(388)/2016-014-00

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

NRC FORM 366 (11-2015) U.S. NUCLEAR REGULATORY COMMISSION

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

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)

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

4. TITLE

Secondary Containment Declared Inoperable Due to Airlock Doors Open Due to a Human Performance Error

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
04	13	2016	2016	- 014	- 00	6	09	2016	FACILITY NAME	DOCKET NUMBER 05000

9. OPERATING MODE	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*			
5	☐ 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)
	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
000	☐ 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 NUMER *(Include Area Code)*
C. E. Manges, Jr., Senior Engineer - Nuclear Regulatory Affairs	(570) 542-3089

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 April 13, 2016 at approximately 21:15, a supplemental Radiation Protection Technician (RPT) attempting to enter the Unit 1 Reactor Building (RB1) opened the inner (RB1 side) airlock door without ensuring the outer door from the Unit 1 Turbine Building (TB1) was closed behind him. 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 requires a Licensee Event Report (LER) in accordance with 10 CFR 50.73(a)(2)(v)(C).

The direct cause of the event was a lack of situational awareness that led to the failure of the RPT to notice the work crew entering the airlock behind him, as well as his failure to ensure the outer airlock door was fully closed prior to opening the inner door.

Corrective actions included coaching the RPT and reinforcing expectations for passing through airlocks during RP shift crew briefings.

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

NRC FORM 366A (11-2015) U.S. NUCLEAR REGULATORY COMMISSION

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

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) CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Susquehanna Steam Electric Station, Unit 1	05000387	2016	- 014	- 00

NARRATIVE

CONDITIONS PRIOR TO EVENT

Unit 1 – Mode 5, 0 percent Rated Thermal Power

Unit 2 – Mode 1, approximately 100 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.

EVENT DESCRIPTION

On April 13, 2016 at approximately 21:15, a supplemental Radiation Protection Technician (RPT) attempting to enter the Unit 1 Reactor Building (RB1) [EIIS System Identifier: NG] opened the inner (RB1 side) airlock [EIIS Component Identifier: AL] door [EIIS Component Identifier: DR] without ensuring the outer door from the Unit 1 Turbine Building (TB1) [EIIS System Identifier: NM] was closed behind him. This airlock serves as a secondary containment boundary [EIIS System Identifier: NG]; 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 following is a time line of the event that occurred on April 13, 2016:

21:15 A supplemental RPT returning to his work location in the Unit 1 Reactor Building entered the airlock from the Turbine Building. A contractor scaffold crew entered the airlock behind him. The RPT proceeded to swipe his security keycard through the security card reader and opened the inner (RB1 side) door without noticing that the contractor crew was still entering the airlock and did not ensure that the outer (TB1 side) door was closed. The airlock alarm [EIIS Component Identifier: ALM] sounded as soon as the RPT opened the inner door. The RPT shut the door as soon as the alarm sounded.

The RPT stated that the cause of the alarm was his failure to notice the work crew entering the airlock behind him and his failure to verify that the outer (TB1 side) door was closed prior to opening the inner (RB1 side) door.

The condition requires a Licensee Event Report (LER) in accordance with 10 CFR 50.73(a)(2)(v)(C).

CAUSE OF EVENT

The direct cause of the event was a lack of situational awareness that led to the failure of the RPT to notice the work crew entering the airlock behind him, as well as his failure to ensure the outer (TB1 side) airlock door was fully closed prior to opening the inner (RB1 side) door.

ANALYSIS/SAFETY SIGNIFICANCE

An engineering evaluation was performed and concluded that secondary containment could have performed its safety function of isolating, as assumed in the accident analysis, and also of re-establishing 0.25 inches vacuum (drawdown) within the assumed accident analysis time (10 minutes). Therefore, the subject event did not cause a loss of safety function. This event will not be counted as a safety system functional failure (SSFF) for the NRC performance indicator based on the engineering analysis that shows there was no loss of ability to fulfill the safety function.

NRC FORM 366A (11-2015) U.S. NUCLEAR REGULATORY COMMISSION

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

LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Susquehanna Steam Electric Station, Unit 1	05000387	2016	- 014	- 00

NARRATIVE

CORRECTIVE ACTIONS

Corrective actions included the following:

1. The RPT was coached on situational awareness and proper airlock use.
2. Expectations for passing through airlocks were reinforced during Radiation Protection shift crew briefings.

PREVIOUS SIMILAR EVENTS

The following are recent LERs involving loss of secondary containment due to door issues:

LER 50-388(387)/2016-002-00, "Secondary Containment Breach due to Simultaneous Opening of Airlock Doors Due to Degraded Latch Mechanism," dated May 26, 2016.

LER 50-388(387)/2016-001-00, "Secondary Containment Breach due to Simultaneous Opening of Airlock Doors Due to Degraded Latch Mechanism," dated May 24, 2016.

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.

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.

LER 50-387(388)/2016-002-00, "Secondary Containment Declared Inoperable Due to an Airlock Doors Open Due to Random Occurrence," dated April 18, 2016.

LER 50-387(388)/2016-001-00, "Secondary Containment Declared Inoperable Due to an Airlock Doors Open Due to Random Occurrence," dated April 18, 2016.

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.

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

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

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.

LER 50-388(387)/2014-001-00, "Both Doors of a Secondary Containment Airlock Momentarily Open Due to a Personnel Error Resulting in Entry into Secondary Containment Technical Specification Limiting Condition for Operation," dated December 31, 2014.

LER 50-387(388)/2014-002-00, "Secondary Containment Door Found Ajar," dated April 9, 2014.