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AUG 17 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)/2016-021-00**  
**UNIT 1 LICENSE NO. NPF-14**  
**UNIT 2 LICENSE NO. NPF-22**  
**PLA-7515**

**Docket No. 50-387**  
**50-388**

Attached is Licensee Event Report (LER) 50-387(388)/2016-021-00. 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 fulfillment 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.



J. A. Franke

Attachment: LER 50-387(388)/2016-021-00

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

**LICENSEE EVENT REPORT (LER)**(See Page 2 for required number of  
digits/characters for each block)

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.

<b>1. FACILITY NAME</b> Susquehanna Steam Electric Station Unit 1	<b>2. DOCKET NUMBER</b> 05000387	<b>3. PAGE</b> 1 of 3
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<b>4. TITLE</b> Secondary Containment Declared Inoperable Due to Airlock Doors Open Due to a Human Performance Error
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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
06	22	2016	2016	- 021	- 00	08	17	2016	Susquehanna Steam Electric Station Unit 2	05000388
									FACILITY NAME	DOCKET NUMBER
										05000

<b>9. OPERATING MODE</b>  4	<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</b>								
	<input type="checkbox"/> 20.2201(b)		<input type="checkbox"/> 20.2203(a)(3)(i)		<input type="checkbox"/> 50.73(a)(2)(ii)(A)		<input type="checkbox"/> 50.73(a)(2)(viii)(A)		
	<input type="checkbox"/> 20.2201(d)		<input type="checkbox"/> 20.2203(a)(3)(ii)		<input type="checkbox"/> 50.73(a)(2)(ii)(B)		<input type="checkbox"/> 50.73(a)(2)(vii)(B)		
	<input type="checkbox"/> 20.2203(a)(1)		<input type="checkbox"/> 20.2203(a)(4)		<input type="checkbox"/> 50.73(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(ix)(A)		
	<input type="checkbox"/> 20.2203(a)(2)(i)		<input type="checkbox"/> 50.36(c)(1)(i)(A)		<input type="checkbox"/> 50.73(a)(2)(iv)(A)		<input type="checkbox"/> 50.73(a)(2)(x)		
<b>10. POWER LEVEL</b>  000	<input type="checkbox"/> 20.2203(a)(2)(ii)		<input type="checkbox"/> 50.36(c)(1)(ii)(A)		<input type="checkbox"/> 50.73(a)(2)(v)(A)		<input type="checkbox"/> 73.71(a)(4)		
	<input type="checkbox"/> 20.2203(a)(2)(iii)		<input type="checkbox"/> 50.36(c)(2)		<input type="checkbox"/> 50.73(a)(2)(v)(B)		<input type="checkbox"/> 73.71(a)(5)		
	<input type="checkbox"/> 20.2203(a)(2)(iv)		<input type="checkbox"/> 50.46(a)(3)(ii)		<input checked="" type="checkbox"/> 50.73(a)(2)(v)(C)		<input type="checkbox"/> 73.77(a)(1)		
	<input type="checkbox"/> 20.2203(a)(2)(v)		<input type="checkbox"/> 50.73(a)(2)(i)(A)		<input type="checkbox"/> 50.73(a)(2)(v)(D)		<input type="checkbox"/> 73.77(a)(2)(i)		
	<input type="checkbox"/> 20.2203(a)(2)(vi)		<input type="checkbox"/> 50.73(a)(2)(i)(B)		<input type="checkbox"/> 50.73(a)(2)(vii)		<input type="checkbox"/> 73.77(a)(2)(ii)		
		<input type="checkbox"/> 50.73(a)(2)(i)(C)		<input type="checkbox"/> OTHER		Specify in Abstract below or in NRC Form 366A			

**12. LICENSEE CONTACT FOR THIS LER**

<b>LICENSEE CONTACT</b> R. B. Genovese - Nuclear Regulatory Affairs	<b>TELEPHONE NUMBER (Include Area Code)</b> (570) 542-2980
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**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

<b>14. SUPPLEMENTAL REPORT EXPECTED</b> <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	<b>15. EXPECTED SUBMISSION DATE</b>	MONTH	DAY	YEAR

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

On June 22, 2016 at approximately 15:01, an engineer passing through a Unit 1 Reactor Building airlock inadvertently unlatched an outside airlock door, resulting in an airlock alarm indicating both doors were open simultaneously. 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 cause of the event was the individual inadvertently utilized their key card for the wrong door and when opening the intended door, differential pressure caused a momentary violation of secondary containment.

Corrective actions included coaching the engineer and reinforcing to all Engineering personnel the expectations for passing through airlocks.

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



## LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

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.

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
Susquehanna Steam Electric Station, Unit 1	05000387	YEAR	SEQUENTIAL NUMBER	REV NO.
		2016	- 021	- 00

### NARRATIVE

#### CONDITIONS PRIOR TO EVENT

Unit 1 – Mode 4, 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 June 22, 2016 at approximately 15:01, an engineer working with a team was passing through a Unit 1 Reactor Building [EIS System Code: NG] airlock [EIS Component Code: AL] to access the Unit 1 train bay. Once inside the airlock, the individual inadvertently unlatched the Reactor Building airlock door [EIS Component Code: DR], resulting in an airlock alarm [EIS Component Code: ALM], indicating both Reactor Building and train bay doors were open simultaneously. This airlock serves as a secondary containment [EIS System Code: VA] 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 following is a time line of the event that occurred on June 22, 2016:


- 14:55 Engineering personnel arrived at Unit 1 Reactor Building airlock with the intent of passing through to the Unit 1 train bay. Individuals ensured they were in the correct location and discussed expectations for traversing through airlock.
- 14:59 Engineering personnel proceeded to key-card into the airlock through the Reactor Building door.
- 15:00 Once inside the airlock, one individual used the card reader inside the airlock, incorrectly assuming the card reader operated the train bay door. This unlatched the Reactor Building door; personnel were unaware the Reactor Building door had been unlatched
- 15:01 When the inner door was opened, differential pressure cause the unlatched Reactor Building door to open, resulting in an airlock alarm. The train bay door was then immediately closed.

The individual self-identified that they had inadvertently assumed the need to key-card through the inner door to access the Unit 1 train bay. Upon receiving the airlock alarm, the train bay door was immediately closed.

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

#### CAUSE OF EVENT

The cause of the event was the individual inadvertently utilized their key card for the wrong door and when opening the intended door, differential pressure caused a momentary violation of secondary containment.

<b>NRC FORM 366A</b> (11-2015)	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>	<b>APPROVED BY OMB: NO. 3150-0104</b>	<b>EXPIRES: 10/31/2018</b>
 <b>LICENSEE EVENT REPORT (LER)</b> <b>CONTINUATION SHEET</b>		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.	

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
Susquehanna Steam Electric Station, Unit 1	05000387	YEAR	SEQUENTIAL NUMBER	REV NO.
		2016	- 021	- 00

**NARRATIVE****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 results 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). 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 supporting the system's ability to fulfill the safety function.

**CORRECTIVE ACTIONS**

Corrective actions completed include coaching of the engineer on situational awareness and proper airlock use as well as reinforcement during Engineering briefings of expectations for passing through airlocks.

**PREVIOUS SIMILAR EVENTS**

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

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)/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.