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**APR 09 2014**

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

**SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 50-387(388)/2014-002-00  
UNIT 1 LICENSE NO. NPF-14  
UNIT 2 LICENSE NO. NPF-22  
PLA-7155**

**Docket Nos. 50-387  
50-388**

Attached is Licensee Event Report (LER) 50-387(388)/2014-002-00. The LER reports a secondary containment door that was found ajar. The condition was determined to be reportable in accordance with 10CFR50.73(a)(2)(v) as an event that could have prevented the fulfillment of the safety function.

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

This letter contains no new regulatory commitments.

  
J. A. Franke

Attachment: LER 387(388)/2014-002-00

Copy: NRC Region I  
Mr. J. Greives, NRC Sr. Resident Inspector  
Mr. J. Whited, NRC Project Manager  
Mr. L. Winker, PA DEP/BRP

NRC FORM 366 (01-2014)		U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB: NO. 3150-0104		EXPIRES: 01/31/2017				
 <b>LICENSEE EVENT REPORT (LER)</b> (See Page 2 for required number of digits/characters for each block)											
1. FACILITY NAME Susquehanna Steam Electric Station Unit 1					2. DOCKET NUMBER 05000387		3. PAGE 1 OF 4				
4. TITLE Secondary Containment Door Found Ajar											
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	
02	12	2014	2014	002	00	04	09	14	Susquehanna Steam Electric Station Unit 2	05000388	
									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		<input type="checkbox"/> 20.2201(b)			<input type="checkbox"/> 20.2203(a)(3)(i)			<input type="checkbox"/> 50.73(a)(2)(i)(C)		<input type="checkbox"/> 50.73(a)(2)(vii)	
		<input type="checkbox"/> 20.2201(d)			<input type="checkbox"/> 20.2203(a)(3)(ii)			<input type="checkbox"/> 50.73(a)(2)(ii)(A)		<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
10. POWER LEVEL  99%		<input type="checkbox"/> 20.2203(a)(1)			<input type="checkbox"/> 20.2203(a)(4)			<input type="checkbox"/> 50.73(a)(2)(ii)(B)		<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
		<input type="checkbox"/> 20.2203(a)(2)(i)			<input type="checkbox"/> 50.36(c)(1)(i)(A)			<input type="checkbox"/> 50.73(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(ix)(A)	
		<input type="checkbox"/> 20.2203(a)(2)(ii)			<input type="checkbox"/> 50.36(c)(1)(ii)(A)			<input type="checkbox"/> 50.73(a)(2)(iv)(A)		<input type="checkbox"/> 50.73(a)(2)(x)	
		<input type="checkbox"/> 20.2203(a)(2)(iii)			<input type="checkbox"/> 50.36(c)(2)			<input type="checkbox"/> 50.73(a)(2)(v)(A)		<input type="checkbox"/> 73.71(a)(4)	
		<input type="checkbox"/> 20.2203(a)(2)(iv)			<input type="checkbox"/> 50.46(a)(3)(ii)			<input type="checkbox"/> 50.73(a)(2)(v)(B)		<input type="checkbox"/> 73.71(a)(5)	
		<input type="checkbox"/> 20.2203(a)(2)(v)			<input type="checkbox"/> 50.73(a)(2)(i)(A)			<input checked="" type="checkbox"/> 50.73(a)(2)(v)(C)		<input type="checkbox"/> OTHER	
		<input type="checkbox"/> 20.2203(a)(2)(vi)			<input type="checkbox"/> 50.73(a)(2)(i)(B)			<input type="checkbox"/> 50.73(a)(2)(v)(D)		Specify in Abstract below or in NRC Form 366A	
12. LICENSEE CONTACT FOR THIS LER											
FACILITY NAME C. E. Manges, Jr.								TELEPHONE NUMBER (Include Area Code) (570) 542-3089			
13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT											
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX		
B	NG	DR	Victor E. Muncy	Yes							
14. SUPPLEMENTAL REPORT EXPECTED					15. EXPECTED SUBMISSION DATE		MONTH	DAY	YEAR		
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO											
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)											
<p>On February, 12, 2014 at approximately 0711 hours, while performing shift rounds, a security officer found Door-612 wedged open with the Secondary Containment Boundary Door sign between the door and frame (hinge side). Door-612 provides access from the HVAC room to the Central Railroad Bay. The security officer immediately contacted the Central Alarm Station (CAS), and CAS contacted the Control Room. Prior to departing the Door-612 area, the security officer closed the door and re-positioned the sign. The action of closing the door restored the required configuration and secondary containment integrity. Operations performed a status walk down to ensure no other secondary containment door was in this condition. Secondary Containment differential pressure was maintained throughout the period that Door-612 was open.</p> <p>In accordance with 10CFR50.72(b)(3)(v)(C), an 8-hour ENS notification (# 49821) was made to the NRC for an event or condition that at the time of discovery, could have prevented the fulfillment of the safety function.</p> <p>The most probable causes were: 1) Door-612 was not sufficiently challenged and 2) the latching device is not sufficient to ensure proper closure of the door.</p> <p>Key corrective actions include: 1) Issuing a Site Communication to define expectations to site personnel on requirements when closing Secondary Containment doors, 2) Replacing Door-612, 613, 721, and 718 to include a three-point latching device, and 3) Until new latch design is installed, require Operations to inspect Door-612 every 2 hours when secondary containment is aligned in a refuel floor hatch removal configuration.</p> <p>There were no actual consequences to the health and safety of the public as a result of this event.</p>											



**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	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Susquehanna Steam Electric Station Unit 1	05000387	2014	- 002	- 00	2 OF 4

**NARRATIVE****EVENT DESCRIPTION****Initial Plant Conditions/Status of Structures, Systems, and Components**

At 0105 hours on February 12, 2014, secondary containment alignment for removal of the refuel floor hatch was completed to support moving fuel bundles from the railroad bay to the refuel floor.

The event being reported in this LER involved a secondary containment door that was discovered ajar. There was no other equipment inoperable at the start of the event that contributed to the event.

Unit 1 – Mode 1, 99 percent Rated Thermal Power

Unit 2 – Mode 1, 99 percent Rated Thermal Power

**Description of the Event**

On February, 12, 2014 at approximately 0711 hours, while performing shift rounds, a security officer found Door-612 wedged open. Door-612 provides access from the HVAC room to the Central Railroad Bay. With secondary containment aligned with the refuel floor hatch open, this door must be in the closed position with a sign posted on both sides of the door reading: "Secondary Containment Boundary, Emergency Use Only, Notify Control Room to Evaluate LCO if Door is Opened." The door was wedged open as the Secondary Containment Boundary Door sign was between the door and frame (hinge side). The security officer immediately contacted the Central Alarm Station (CAS) with his findings. At approximately 0712 hours, the CAS contacted the Control Room. Prior to departing the Door-612 area, the security officer closed the door and re-positioned the sign. The action of closing the door restored the required configuration and secondary containment integrity. Nuclear Operations performed a status walkdown to ensure no other secondary containment door was found in this condition. Secondary Containment differential pressure was maintained throughout the period that Door-612 was open.

**Reporting Criteria**

The event was reported under 10CFR50.72(b)(3)(v) as an event that, at the time of discovery, could have prevented the fulfillment of the safety function (EN 49821). This event is also reportable as an LER in accordance with 10CFR50.73(a)(2)(v) as an event that could have prevented the fulfillment of the safety function.

**Investigation**

Normal differential pressure against door requires force to be exerted to close and latch door.

The operators who were the last personnel to utilize Door-612 were interviewed. Based on the interviews, the operators noted no abnormalities with Door-612 and challenged the door latch to confirm that it was in a latched condition prior to leaving area.

Plant personnel, including Engineering and Operations personnel, inspected Door-612 on the day of the event and found no apparent issues. The door opened and closed properly and all seals and hardware were found to be in satisfactory condition. Tests were conducted on Door-612 and determined that, with the door confirmed closed and latched, the door could not be pulled open. Engineering concluded that the Door-612 latch was not degraded and, for Door-612 to have come open, the latch could not have been fully engaged.

# **LICENSEE EVENT REPORT (LER) CONTINUATION SHEET**

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**NARRATIVE****CAUSE OF THE EVENT**

Direct Cause – The Door-612 latching system was not fully engaged

The investigation did not decipher a definitive cause for the latching system not being fully engaged; however, the following are the most probable causes:

Apparent Cause – It was not Apparent that Door-612 was sufficiently challenged therefore, it did not close properly.

Casual Factor -The latching device on Door- 612 is not sufficient to ensure proper closure of the door.

**ANALYSIS/SAFETY SIGNIFICANCE****Actual Consequences:**

There were no actual safety consequences as a result of the condition. The condition resulted in inoperability of Secondary Containment and entry into the LCO without knowledge for up to six hours.

**Potential Consequences:**

When Refuel Floor Hatch Alignment is in effect, Door-612 provides a Secondary Containment Boundary. The potential consequences of having this door open could result in a failure to maintain/establish secondary containment during accident conditions.

**CORRECTIVE ACTIONS**

Key corrective actions include:

1. Issue a Site Communication to define expectations to site personnel on requirements when closing Secondary Containment doors.
2. Replace Door-612, 613, 721, and 718 to include a three-point latching device.
3. Until the new latch design is installed, require Operations to inspect Door-612 every 2 hours when secondary containment is aligned in a refuel floor hatch removal configuration.

Only Door-612 is required to be checked every 2 hours. The other three related doors are not being required to be checked based on the following:

- Door-721 is not subject to the high differential pressures to which Door-612 is subject.
- Door-613 and Door-718 crosstie Zone 2 to no zones and thus cannot be open unless a secondary containment LCO is entered. Thus these doors are not routinely operated for personnel access.



(01-2014)

**LICENSEE EVENT REPORT (LER)  
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**NARRATIVE****PREVIOUS SIMILAR EVENTS**

LER 50-387(388)/2013-004-00: Loss of Secondary Containment Due to Differential Pressure Not Meeting Technical Specification 3.6.4.1

LER 50-387(388)/2013-005-00: Loss of Secondary Containment

LER 50-387(388)/2013-006-00: Loss of Secondary Containment due to Differential Pressure not Meeting Technical Specification 3.6.4.1

LER 50-387(388)/2013-007-00: Loss of Secondary Containment due to Drawdown Test Failure

LER 50-387(388)/2013-008-00: Loss of Secondary Containment due to Failed Solenoid Valve in the Reactor Building Zone I Ventilation Exhaust System

Condition Report 544951 involving a similar event with Door-718 on January 30, 2004