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JUN 12 2014

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-001

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 50-387(388)/2014-005-00
UNIT 1 LICENSE NO. NPF-14
UNIT 2 LICENSE NO. NPF-22 **Docket No 50-387**
PLA-7177 **50-388**

Attached is Licensee Event Report (LER) 50-387(388)/2014-005-00. The LER reports a loss of secondary containment differential pressure that occurred during preparation for a routine surveillance test. The condition was determined to be reportable in accordance with 10 CFR 50.73(a)(2)(v) as an event that could have prevented the fulfillment of a safety function.

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

This letter contains no new or revised regulatory commitments.

J. A. Franke

Attachment: LER 50-387(388)/2014-005-00

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

NRC FORM 366 (01-2014) 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)

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

4. TITLE Loss of Secondary Containment Due to Differential Pressure Not Meeting Technical Specification 3.6.4.1

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, Unit 2	**05000388**
04	17	2014	2014	- 005	- 00	06	12	2014	FACILITY NAME	DOCKET NUMBER **05000**

9. OEPRATING 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)(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)
10. POWER LEVEL	☐ 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)
000	☐ 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)
	☐ 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 NUMER *(Include Area Code)*
T. A. Case Jr., Senior Engineer – Nuclear Regulatory Affairs	5705423606

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
E	VA	DMP	A124	Y					

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 17, 2014 at 0335, secondary containment Zone III differential pressure went to 0.15 inch of vacuum water gauge after the planned shutdown of the Unit 1 portion of Zone III ventilation. As a result, Zone III differential pressure did not meet the criteria (vacuum ≥ 0.25 inch of vacuum water gauge) of Surveillance Requirement (SR) 3.6.4.1.1 and Limiting Condition for Operation (LCO) 3.6.4.1 was entered for both Unit 1 and Unit 2. Zone II ventilation remained in service and stable during the events. Zone I ventilation remained isolated with secondary containment relaxed for a refueling outage on Unit 1. Unit 1 Zone III ventilation was subsequently restored, Zone III differential pressure was restored, and LCO 3.6.4.1 was exited at 0420.

The direct cause of the event was misalignment between the upper and lower set of damper blades on a manual outside air damper causing an excessive opening in the upper set of blades. This prevented sufficient restriction of supply air flow into Zone III secondary containment during the change in the ventilation line up. The apparent cause of the damper misalignment was an inadequate preventative maintenance frequency. Corrective actions include cleaning, adjusting, and lubricating the affected damper and increasing the frequency of its preventative maintenance activity.

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

CONDITIONS PRIOR TO THE EVENT

Unit 1 - Mode 5, 0 percent Rated Thermal Power
Unit 2 - Mode 1, 100 percent Rated Thermal Power

Zone I ventilation was isolated with secondary containment relaxed for a refueling outage on Unit 1. An operation with a potential for draining the reactor vessel (OPDRV) was in progress on Unit 1 using the provisions of NRC enforcement guidance memorandum (EGM) 11-003.

There were no systems, structures, or components that were inoperable at the start of the event and contributed to the event.

EVENT DESCRIPTION

On April 17, 2014 at 0335 hours, operators performed a planned shutdown of the Unit 1 portion of secondary containment (EIIS Code: NG) Zone III ventilation system (EIIS Code: VA) in preparation for a routine surveillance test. As a result of the ventilation change, secondary containment Zone III differential pressure went to 0.15 inch of vacuum water gauge. At this vacuum, Zone III differential pressure did not meet the criteria (vacuum ≥ 0.25 inch of vacuum water gauge) of Surveillance Requirement (SR) 3.6.4.1.1 and Limiting Condition for Operation (LCO) 3.6.4.1 was entered for both Unit 1 and Unit 2 at 0335 hours. The secondary containment Zone II ventilation remained in service and stable during the event. The secondary containment Zone I ventilation remained isolated with secondary containment relaxed for a refueling outage on Unit 1. The Unit I Zone III ventilation was subsequently restored, secondary containment Zone III differential pressure was restored, and LCO 3.6.4.1 was exited at 0420.

Using the guidance provided in NUREG-1022, an 8-hour Emergency Notification System (ENS) report (EN#50040) was made to the NRC on April 17, 2014 in accordance with 10 CFR 50.72(b)(3)(v)(C) for an event or condition that at the time of discovery, could have prevented the fulfillment of the safety function of secondary containment. As such, this LER is submitted in accordance with 10 CFR 50.73(a)(2)(v)(C) for an event or condition that could have prevented fulfillment of a safety function.

CAUSE OF THE EVENT

The direct cause of the event was misalignment between the upper and lower set of damper blades on a manual outside air damper causing an excessive opening in the upper set of blades. This prevented sufficient restriction of supply air flow into Zone III secondary containment during the change in the ventilation line up. The apparent cause of the damper misalignment was an inadequate preventative maintenance frequency.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Susquehanna Steam Electric Station, Unit 1	05000387	2014	-005	-00	3 OF 3

NARRATIVE

ANALYSIS / SAFETY SIGNIFICANCE

There were no actual or potential consequences to the health and safety of the public as a result of this event. This failure only affected normal Reactor Building ventilation and at no time was the safety-related function of the secondary containment boundary or standby gas treatment system impacted. This event will not be counted as a Safety System Functional Failure for the NRC performance indicator since no loss of safety function occurred.

CORRECTIVE ACTIONS

Corrective actions include cleaning, adjusting, and lubricating the affected damper and increasing the frequency of its preventative maintenance activity from every four years to every two years.

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)/2013-008-00, Loss of Secondary Containment due to Failed Solenoid Valve in the Reactor Building Zone I Ventilation Exhaust System

LER 50-387(388)/2014-002-00, Secondary Containment Door Found Ajar

LER 50-387(388)/2014-004-00, Loss of Secondary Containment Pressure Due to Fan Trip