

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



MAY 05 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 50-388(387)/2015-015-00
UNIT 1 LICENSE NO. NPF-14
UNIT 2 LICENSE NO. NPF-22
PLA-7468**

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

Attached is Licensee Event Report (LER) 50-388(387)/2015-015-00. On October 3, 2014, the Susquehanna Steam Electric Station (SSES) experienced a loss of safety function of the Control Room Emergency Outside Air Supply (CREOAS) System due to the inoperability of both divisions of CREOAS during the performance of surveillance testing.

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.

A handwritten signature in black ink, appearing to be "J. A. Franke", written over a horizontal line.

J. A. Franke

Attachment: LER 50-388(387)/2015-015-00

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				
 LICENSEE EVENT REPORT (LER) (See Page 2 for required number of digits/characters for each block)											
1. FACILITY NAME Susquehanna Steam Electric Station Unit 2					2. DOCKET NUMBER 05000388		3. PAGE 1 OF 4				
4. TITLE Loss of Safety Function due to Inoperability of Both Trains of the Control Room Emergency Outside Air Supply (CREOAS) System											
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	
10	03	2014	2015	015	00	05	05	2016	Susquehanna SES – Unit 1	05000387	
									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)(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)(viii)(B)	
10. POWER LEVEL 100		<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)	
		<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											
LICENSEE CONTACT Brenda W. O'Rourke – Senior Engineer, Nuclear Regulatory Affairs								TELEPHONE NUMBER (Include Area Code) (570) 542-1791			
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
<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>This Licensee Event Report (LER) is being submitted to the Nuclear Regulatory Commission (NRC) for an event that occurred on October 3, 2014. On October 2, 2014, the 'B' Control Structure Chiller and the 'B' Control Room Emergency Outside Air Supply (CREOAS) system were declared inoperable for the performance of surveillance test SO-030-B03 (Quarterly Control Structure Chilled Water Flow Verification Loop 'B'). The Action Statement for Unit 2 TS 3.7.3, Condition A, was entered at 1445 hours for one CREOAS subsystem inoperable. The surveillance was completed and the TS Action Statement was exited at 1608 hours. During a closure review of the completed surveillance test on October 2, 2014, it was identified that the results of the test were found to be outside of the test acceptance criteria. Since the Unit 2 TS Action Statement for TS 3.7.3, Condition A had been previously exited at 1608 hours, Operations personnel re-entered the TS Action Statement from the original time of inoperability (1445 hours) until the surveillance test could be re-performed. On October 3, 2014, at 1530 hours, the test was successfully re-performed and the TS 3.7.3 Action Statement was exited. Earlier on October 3, 2014 at 0937 hours, surveillance test SI-280-306 (24 Month Calibration of RWCU PCIS Secondary Containment Isolation and CREOAS System Initiation of Reactor Vessel Water Level 2 and MSIV Isolation on Reactor Vessel Water Level 1 for Changes LITS-B21-2N026A&C) was commenced. As part of the test, the Unit 2 Reactor Vessel Water Level Low-Low, Level 2 instrumentation (LITS-B21-2N026A) was isolated. This resulted in the 'A' train of the CREOAS system also being inoperable because in accordance with TS 3.0.6, the reactor vessel water level instrumentation is a support system for the 'A' train of the CREOAS system. In accordance with 10 CFR 50.73(a)(2)(v)(C), this LER is being submitted for an event or condition that could have prevented the fulfillment of the safety function of the CREOAS system to control the release of radioactive material. Cause: A loss of safety function of the CREOAS system was not recognized or mitigated when TS surveillance test SO-030-B03 carried over into the next day while the planned inoperability of the opposite division of CREOAS occurred during the performance of TS surveillance SI-280-306. Key planned corrective action: Revise station procedure to direct performance of a LOSF review prior to releasing any RPS, ECCS initiation, PCIS or SCIS related surveillance activities. There were no actual consequences to the health and safety of the public as a result of this event.</p>											

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 2	05000388	YEAR	SEQUENTIAL NUMBER	REV NO.
		2015	- 015	- 00

NARRATIVE

CONDITIONS PRIOR TO THE EVENT

Unit 1 – Mode 1, approximately 99.9 percent Rated Thermal Power

Unit 2 – Mode 1, approximately 99.9 percent Rated Thermal Power

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

EVENT DESCRIPTION

This Licensee Event Report (LER) is being submitted to the Nuclear Regulatory Commission (NRC) for an event that occurred on October 3, 2014. On November 24, 2015, the NRC resident inspectors identified a Loss of Safety Function (LOSF) event while performing an extent of condition review of LER 387(388)/2015-06-00, which was submitted to the NRC on November 25, 2015. Susquehanna Steam Electric Station personnel did not recognize the October 3, 2014 event to be reportable as a LOSF at the time the event occurred in 2014.

On October 2, 2014, the 'B' Control Structure Chiller and the 'B' Control Room Emergency Outside Air Supply (CREOAS) system were declared inoperable for the performance of surveillance test SO-030-B03 (Quarterly Control Structure Chilled Water Flow Verification Loop 'B') [EIS: KM, BI]. The Action Statement for Unit 2 Technical Specification (TS) 3.7.3, Condition A, was entered at 1445 hours for one CREOAS subsystem inoperable. The surveillance was completed and the TS Action Statement for TS 3.7.3, Condition A was exited at 1608 hours.

During a closure review of the completed surveillance test on October 2, 2014, it was identified that the results of the test were found to be outside of the test acceptance criteria. Because the Unit 2 TS Action Statement for TS 3.7.3, Condition A had been previously exited at 1608 hours as per the surveillance procedure, Operations personnel re-entered the TS Action Statement from the original time of inoperability (1445 hours) until the TS surveillance test (SO-303-B03) could be re-performed. On October 3, 2014, at 1530 hours, the surveillance test was successfully re-performed and the Action Statement for TS 3.7.3 was exited.

Earlier on October 3, 2014 at 0937 hours, surveillance testing commenced in accordance with SI-280-306 (24-Month Calibration of RWCU PCIS Secondary Containment Isolation and CREOAS System Initiation of Reactor Vessel Water Level 2 and MSIV Isolation on Reactor Vessel Water Level 1 for Changes LITS-B21-2N026A&C). As part of the test, the Unit 2 Reactor Vessel Water Level Low-Low, Level 2 instrumentation (LITS-B21-2N026A) was isolated. This resulted in the 'A' train of the CREOAS system being rendered inoperable because in accordance with TS 3.0.6, the reactor vessel water level instrumentation is a support system for the 'A' train of the CREOAS system.

REPORTABILITY

In accordance with 10 CFR 50.73(a)(2)(v)(C), this LER is being submitted for an event or condition that could have prevented the fulfillment of the safety function of the CREOAS system to control the release of radioactive material.

NRC FORM 366A
(11-2015)

U.S. NUCLEAR REGULATORY COMMISSION

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LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

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		2015	-015	-00

Extent of Condition

An Extent of Condition review was performed to identify any previous similar LOSF events that may have occurred over the past 3 years. The review identified no additional instances where a LOSF occurred as a result of one safety system division becoming inoperable due to a support system being inoperable for surveillance, concurrent with planned inoperability of the opposite division for performance of a separate surveillance.

CAUSE OF THE EVENT

A loss of safety function of the CREOAS system was not recognized or mitigated when TS surveillance test SO-030-B03 carried over into the next day while the planned inoperability of the opposite division of CREOAS occurred during the performance of TS surveillance SI-280-306.

ANALYSIS / SAFETY SIGNIFICANCE

The actual consequences of this event was a missed 8-hour Event Notification in accordance with 10 CFR 50.72(b)(3)(v)(c), for any event or condition that could have prevented the fulfillment of a safety function of the CREOAS system. Additionally, an LER was not submitted in accordance with 10 CFR 50.73(a)(2)(v)(C) within 60 days of the event as required by 10 CFR 50.73(a)(1).

This event will not be counted as a safety system functional failure (SSFF) for the NRC performance indicator. Based on engineering analysis, there was no loss of ability of the CREOAS system to fulfill its safety function.

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

CORRECTIVE ACTIONS

Completed -

- Issued an Operations directive to perform a LOSF review prior to releasing a PCIS or Secondary Containment Isolation System instrument for testing.

Planned -

- Revise I&C surveillance procedures for instrumentation involved with the RPS, ECCS initiation, PCIS and the Secondary Containment Isolation System (SCIS) to be performed divisionally.
- Revise station procedure NDAP-QA-0312, "Control of LCOs TROs and Safety Function Determination Program," to direct performance of a LOSF review prior to releasing any RPS, ECCS initiation, PCIS or SCIS related surveillance activities.

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		2015	-015	-00

PREVIOUSLY SIMILAR EVENTS

LER 387(388)/2015-06-01: "Loss of Safety Function due to Inoperability of Both Trains of the Standby Gas Treatment System and a Loss of Safety Function of the Control Room Emergency Outside Air Supply System due to Air Flow Controller found in Manual," dated March 30, 2016.