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**JUN 28 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 50-387/2016-016-00  
UNIT 1 LICENSE NO. NPF-14  
PLA-7494**

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**Docket No. 50-387**

Attached is Licensee Event Report (LER) 50-387/2016-016-00. The LER reports an event involving the inoperability of the Unit 1 Reactor Core Isolation Cooling System (RCIC) during a mode change. This event was determined to be reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications.

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 50-387/2016-016-00

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](mailto:Infocollects.Resource@nrc.gov), and to the Desk Officer, Office of Information and Regulatory Affairs, NEOF-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

Susquehanna Steam Electric Station Unit 1

## 2. DOCKET NUMBER

05000387

## 3. PAGE

1 of 3

## 4. TITLE

Reactor Core Isolation Cooling System Inoperable During Unit 1 Reactor Mode Change

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
04	15	2016	2016	- 016	- 00	06	28	16	FACILITY NAME	DOCKET NUMBER
9. OPERATING MODE										
11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)										
4			<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"/> 20.2201(d)			<input type="checkbox"/> 20.2203(a)(3)(ii)			<input type="checkbox"/> 50.73(a)(2)(ii)(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"/> 20.2203(a)(2)(i)			<input type="checkbox"/> 50.36(c)(1)(i)(A)			<input type="checkbox"/> 50.73(a)(2)(iv)(A)	
10. POWER LEVEL			<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"/> 20.2203(a)(2)(iii)			<input type="checkbox"/> 50.36(c)(2)			<input type="checkbox"/> 50.73(a)(2)(v)(B)	
			<input type="checkbox"/> 20.2203(a)(2)(iv)			<input type="checkbox"/> 50.46(a)(3)(ii)			<input type="checkbox"/> 50.73(a)(2)(v)(C)	
			<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"/> 20.2203(a)(2)(vi)			<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)			<input type="checkbox"/> 50.73(a)(2)(vii)	
			<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

Brittany Sprung, Nuclear Regulatory Affairs Engineer

## TELEPHONE NUMER (Include Area Code)

(570) 542-3407

## 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

☒ YES (If yes, complete 15. EXPECTED SUBMISSION DATE)☐ NO15. EXPECTED  
SUBMISSION  
DATE

MONTH	DAY	YEAR
07	29	2016

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

On April 15, 2016, a lube oil sample was taken from the Unit 1 Reactor Core Isolation Cooling (RCIC) system. Analysis of the sample received on April 29, 2016 revealed the sample contained an elevated particle count that exceeded the EPRI recommended value. The Unit 1 RCIC system was subsequently declared inoperable. Since the Unit 1 reactor entered Modes of applicability for Technical Specification (TS) 3.5.3 during the time period in question, TS 3.0.4 was not met.

The condition requires a Licensee Event Report (LER) in accordance with 10 CFR 50.73(a)(2)(i)(B), as a condition prohibited by Technical Specifications. The direct cause of the condition was determined to be loose debris on the filter in the lube oil system. The apparent cause has not yet been determined and will be provided in a supplement to this LER.

There were no actual consequences to the health and safety of the public and no loss of any safety function(s) occurred as a result of this event.



## 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, NEOF-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	-016	- 00

### NARRATIVE

### CONDITIONS PRIOR TO EVENT

Unit 1 – Mode 4, 0 percent Rated Thermal Power

Unit 2 – Mode 1, 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 15, 2016, a lube oil sample was taken from the Unit 1 Reactor Core Isolation Cooling (RCIC) system. Analysis of the sample received on April 29, 2016 revealed the sample contained an elevated particle count that exceeded the EPRI recommended value. The Unit 1 RCIC system was subsequently declared inoperable. Since the Unit 1 reactor entered Modes of applicability for TS 3.5.3 during the time period in question, TS 3.0.4 was not met.

Based on the sample results received on April 29, 2016, RCIC is considered to have been inoperable prior to entry into the applicability of TS 3.5.3. As a result, the condition is considered to be a violation of TS 3.0.4 and reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications.


### CAUSE OF EVENT

The direct cause of the condition was determined to be loose debris on the filter installed in the lube oil system. The apparent cause will be provided in a supplement to this report.

### ANALYSIS/SAFETY SIGNIFICANCE

The safety significance of this event will be provided in a supplement to this report, after the CR evaluation has been completed.



<b>NRC FORM 366A</b> (11-2015)	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>    <b>LICENSEE EVENT REPORT (LER)</b> <b>CONTINUATION SHEET</b>	<b>APPROVED BY OMB: NO. 3150-0104</b> <b>EXPIRES: 10/31/2018</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.									
<b>1. FACILITY NAME</b>  Susquehanna Steam Electric Station, Unit 1	<b>2. DOCKET NUMBER</b>  05000387	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: left; padding: 2px;"><b>3. LER NUMBER</b></th> </tr> <tr> <th style="width: 33%; text-align: center; padding: 2px;">YEAR</th> <th style="width: 33%; text-align: center; padding: 2px;">SEQUENTIAL NUMBER</th> <th style="width: 33%; text-align: center; padding: 2px;">REV NO.</th> </tr> <tr> <td style="text-align: center; padding: 2px;">2016</td> <td style="text-align: center; padding: 2px;">- 016</td> <td style="text-align: center; padding: 2px;">- 00</td> </tr> </table>	<b>3. LER NUMBER</b>			YEAR	SEQUENTIAL NUMBER	REV NO.	2016	- 016	- 00
<b>3. LER NUMBER</b>											
YEAR	SEQUENTIAL NUMBER	REV NO.									
2016	- 016	- 00									
<p><b>NARRATIVE</b></p> <p><b>CORRECTIVE ACTIONS</b></p> <p>On 05/01/2016, the RCIC Turbine lube oil and filter system was flushed and cleaned. The oil and filters were replaced with new. The filters were properly cleaned prior to installation. Final corrective actions will be included in a supplement to this LER.</p> <p><b>PREVIOUS SIMILAR EVENTS</b></p> <p>LER-2016-018-00, Inoperability of RCIC Due to an Oil Leak, submitted 06/21/2016</p>											