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JUN 2 1 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 50-387/2016-018-00 UNIT 1 LICENSE NO. NPF-14 PLA-7497

**Docket No. 50-387** 

Attached is Licensee Event Report (LER) 50-387/2016-018-00. The LER reports an event involving inoperability of Reactor Core Isolation Cooling (RCIC). 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.

Cht Thansse For J. A. Franke

J. A. Franke

Attachment: LER 50-387/2016-018-00

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

EXPIRES: 10/31/2018



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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

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	-	-		7	5 single-spaced											
On Ap	ril 16	, 2016 d	uring o	verspe	ed testing	g of the	e Read	ctor C	Core	e Isc	olation Cool	ing (RCIC	) system	, a s	sma	

amount of leakage from the RCIC Turbine Lube Oil Filter, 1F212B, was identified while Reactor Pressure Vessel pressure was below 150 psig. Tightness was checked and the leak appeared to stop during the overspeed testing. On April 22, 2016 at approximately 11:25, Unit 1 entered Mode 1. On April 22, 2016 at approximately 14:00, a one to two drop per second leak from the filter was identified which was subsequently determined to make RCIC inoperable.

Based on the leakage identified on April 16, 2016 and the subsequent leakage identified on April 22, 2016 that was sufficient to require declaring RCIC inoperable, RCIC is considered to have been inoperable prior to the transition to Mode 1. As a result, the condition is considered to be a violation of Technical Specification (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 information will be provided in the supplement to this LER. As an initial corrective action, the oil leak was repaired.

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



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

APPROVED BY OMB: NO. 3150-0104

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported

EXPIRES: 10/31/2018

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	0500007	YEAR	SEQUENTIAL NUMBER	REV NO.	
Susquenanna Steam Electric Station, Offic 1	05000387	2016	- 018	- 00	

#### **NARRATIVE**

# CONDITIONS PRIOR TO EVENT

Unit 1 - Mode 1, approximately 10 percent Rated Thermal Power

Unit 2 - Mode 1, 100 percent Rated Thermal Power

## **EVENT DESCRIPTION**

On April 16, 2016 during overspeed testing of RCIC, a small amount of leakage from 1F212B, RCIC Turbine Lube Oil Filter [EIIS Component Identifier: FLT], was identified. Tightness was checked and the leak stopped with the turbine in operation.

On April 21, 2016 at approximately 19:45, Technical Specification (TS) 3.5.3 was entered and the 24-Month RCIC Flow Verification was performed. There was no indication of an oil leak on 1F212B. The Reactor Pressure Vessel (RPV) pressure at this time was approximately 150 psig.

On April 21, 2016 at approximately 21:18, Technical Specification 3.5.3 was cleared with a Satisfactory Flow Verification Surveillance.

On April 22, 2016 at approximately 11:25, Unit 1 entered Mode 1.

On April 22, 2016 at approximately 12:09, Technical Specification 3.5.3 was entered and the RCIC Quarterly Flow Surveillance was performed with RPV pressure at approximately 930 psig.

On April 22, 2016 at approximately 14:00, a one to two drop per second leak on the 1F212B oil filter was identified.

On April 22, 2016 at approximately 16:01, the main turbine was tripped due to a seal oil leak on the collector end of the generator.

On April 22, 2016 at approximately 20:57, the reactor entered Mode 2.

On April 23, 2016 at approximately 00:46, the reactor entered Mode 3. RPV Pressure was below 150 psig at approximately 03:00.

On April 23, 2016 at approximately 03:55, an operability review concluded that RCIC was inoperable since there was no guarantee that RCIC would meet its mission time with the identified leak.

On April 23, 2016 at approximately 06:54, the reactor entered Mode 4.



# LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

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Susquenanna Steam Electric Station, Unit 1	05000387	2016	- 018	- 00	

#### NARRATIVE

Based on the leakage identified on April 16, 2016 and the subsequent leakage identified on April 22, 2016 that was sufficient to require declaring RCIC inoperable, RCIC is considered to have been inoperable prior to mode change. As a result, the condition is considered to be a violation of Technical Specification 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

Cause information will be provided in a supplement to this LER.

# ANALYSIS/SAFETY SIGNIFICANCE

Evaluation of the safety significance will be provided in the planned supplement to this LER.

# CORRECTIVE ACTIONS

Key corrective actions include the following:

1. The oil leak was repaired.

# COMPONENT FAILURE INFORMATION

Information will be provided in the supplement to this LER.

#### PREVIOUS SIMILAR EVENTS

Previous similar events will be provided in the supplement to this LER.