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7/01/2020

Attn: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

10 CFR 50.73

SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 50-387/2020-001-00
UNIT 1 LICENSE NO. NPF-14
PLA-7874

Docket No. 50-387

Attached is Licensee Event Report (LER) 50-387/2020-001-00. The LER reports an event involving an automatic scram due to a main turbine trip. The condition is being reported in accordance with 10 CFR 50.73(a)(2)(iv)(A) as an event that resulted in an automatic actuation of the Reactor Protection System (including a reactor scram).

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

This letter contains no new or revised regulatory commitments.

A handwritten signature in black ink, appearing to read "K. Cimorelli", written over a horizontal line.

K. Cimorelli

Attachment: LER 50-387/2020-001-00

Copy: NRC Region I
Mr. M. Rossi, NRC Resident Inspector
Ms. S. Goetz, 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)

(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

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 Information Services Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; email: oir_submission@omb.eop.gov. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

1. Facility Name Susquehanna Steam Electric Station Unit 1	2. Docket Number 05000387	3. Page 1 OF 3
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4. Title
Automatic Reactor Scram Due to Main Turbine Trip

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
05	03	2020	2020	001	00	7	01	2020		05000
									Facility Name	Docket Number
										05000

9. Operating Mode 1	11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)			
	<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)
	<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)
10. Power Level 076	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input checked="" 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 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 C. E. Manges, Jr, Senior Engineer – Nuclear Regulatory Affairs	Telephone Number (Include Area Code) (570) 542-3089
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13. Complete One Line for each Component Failure Described in this Report

Cause	System	Component	Manufacturer	Reportable To ICES	Cause	System	Component	Manufacturer	Reportable To ICES

14. Supplemental Report Expected

15. Expected Submission Date

☒ Yes (If yes, complete 15. Expected Submission Date) ☐ No

Month	Day	Year
08	07	2020

Abstract (Limit to 1400 spaces, i.e., approximately 14 single-spaced typewritten lines)

On May 3, 2020 at approximately 08:21, Susquehanna Steam Electric Station Unit 1 reactor automatically scrambled due to a main turbine trip. Both divisions of the Reactor Protection System (RPS) actuated and all control rods inserted. This event was reported by Event Notification 54691 in accordance with 10 CFR 50.72(b)(2)(iv)(B) and (b)(3)(iv)(A). This event is also reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A) as an event that resulted in an automatic actuation of the RPS (including reactor scram), as well as associated isolation and actuation of other systems listed in 10 CFR 50.73(a)(2)(iv)(B).

A cause evaluation is in progress. A supplement will be issued to provide information regarding the cause of the condition and corrective actions.

There were no actual safety consequences associated with the condition.

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

(See NUREG-1022, R.3 for instruction and guidance for completing this form
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1. FACILITY NAME		2. DOCKET NUMBER	3. LER NUMBER		
Susquehanna Steam Electric Station Unit 1		05000-387	YEAR	SEQUENTIAL NUMBER	REV NO.
			2020	001	00

NARRATIVE**CONDITIONS PRIOR TO EVENT**

Unit 1 – Mode 1, approximately 76 percent Rated Thermal Power

Unit 2 – Mode 1, approximately 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 May 3, 2020 at approximately 08:21, Susquehanna Steam Electric Station Unit 1 reactor automatically scrammed due to a main turbine [EIS System/Component Code: TA/TRB] trip. The Unit 1 Control Room received indication of a main turbine trip with both divisions of the Reactor Protection System (RPS) [EIS System Code: JC] actuated and all control rods inserted. The Reactor Recirculation Pumps [EIS System/Component Code: AD/P] tripped on End of Cycle Recirculation Pump Trip. Operators subsequently maintained reactor water level at the normal operating band using the Reactor Feed Water system [EIS System Code: SJ].

This event was reported by Event Notification 54691 in accordance with 10 CFR 50.72(b)(2)(iv)(B) and (b)(3)(iv)(A). This event is also reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A) as an event that resulted in an automatic actuation of the RPS (including reactor scram), as well as associated isolation and actuation of other systems listed in 10 CFR 50.73(a)(2)(iv)(B).

CAUSE OF EVENT

A cause evaluation is in progress. A supplement will be issued to provide information regarding the cause of the condition.

ANALYSIS/SAFETY SIGNIFICANCE

Safety significance information will be provided in the supplement to this LER.

CORRECTIVE ACTIONS

Corrective actions will be provided in the supplement to this LER.



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

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1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
Susquehanna Steam Electric Station Unit 1	05000-387	YEAR 2020	SEQUENTIAL NUMBER 001	REV NO. 00

COMPONENT FAILURE INFORMATION

Component failure information, as applicable, will be provided in the supplement to this LER.

PREVIOUS OCCURRENCES

Previous occurrences, as applicable, will be provided in the supplement to this LER.