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June 1, 2022

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

10 CFR 50.73

**SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 50-387/2022-001-00
UNIT 1 LICENSE NO. NPF-14
PLA-8002**

Docket No. 50-387

Attached is Licensee Event Report (LER) 50-387/2022-001-00. The LER reports an event involving inoperability of a Main Steam Line Isolation Valve (MSIV) that 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 or revised regulatory commitments.

A handwritten signature in black ink, appearing to read "Kevin Cimorelli". The signature is stylized and cursive.

K. Cimorelli

Attachment: LER 50-387/2022-001-00

Copy: NRC Region I
Mr. C. Highley, NRC Senior Resident Inspector
Ms. A. Klett, NRC Project Manager
Mr. M. Shields, PA DEP/BRP



LICENSEE EVENT REPORT (LER)

(See Page 3 for required number of digits/characters for each block)
(See NUREG-1022, R.3 for instruction and guidance for completing this form <https://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 FOIA, Library, and Information Collections Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollcts.Resource@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk all: 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 2
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4. Title
Main Steam Isolation Valve Leakage

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	02	2022	2022	- 001 -	00	06	01	2022	Facility Name	Docket Number
										05000
										05000

9. Operating Mode 5 **10. Power Level** 0

11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)

10 CFR Part 20	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	10 CFR Part 73
<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.69(g)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(4)
<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> 73.71(a)(5)
<input type="checkbox"/> 20.2203(a)(2)(i)	10 CFR Part 21	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/> 73.77(a)(1)(i)
<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 21.2(c)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 73.77(a)(2)(i)
<input type="checkbox"/> 20.2203(a)(2)(iii)	10 CFR Part 50	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 73.77(a)(2)(ii)
<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)	

Other (Specify here, in Abstract, or in NRC 366A).

12. Licensee Contact for this LER

Licensee Contact Peggy Kramer, Regulatory Affairs Engineer	Phone Number (Include Area Code) (570) 542-3131
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13. Complete One Line for each Component Failure Described in this Report

Cause	System	Component	Manufacturer	Reportable to IRIS	Cause	System	Component	Manufacturer	Reportable to IRIS

14. Supplemental Report Expected **15. Expected Submission Date**

<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date)	Month	Day	Year
		07	08	2022

16. Abstract (Limit to 1560 spaces, i.e., approximately 15 single-spaced typewritten lines)

On April 02, 2022, during Local Leak Rate Testing (LLRT) conducted during the Unit 1 refueling outage, as-found leakage through the inboard Main Steam Isolation Valve (MSIV) (HV141F022B) was 107,133 standard cubic centimeters per minute (sccm) which exceeded the Technical Specification (TS) 3.6.1.3 limit of 100 standard cubic feet per hour (47,194 sccm) for individual valve leakage.

Based on preliminary information, there is evidence that the condition existed during the last operating cycle for longer than allowed by TS 3.6.1.3. The condition is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications.

The cause of the event is under investigation and will be provided in a supplement to this report. Repairs to the valve resulted in an acceptable as-left LLRT value. Additional corrective actions, as applicable, will be reported in the supplement. There were no actual consequences to the health and safety of the public as a result of this event.



**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		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Susquehanna Steam Electric Station, Unit 1	05000-387	2022	- 001 -	00

NARRATIVE

CONDITIONS PRIOR TO EVENT

Unit 1 – Mode 5, approximately 0 percent Rated Thermal Power (RTP)
Unit 2 – Mode 1, approximately 100 percent RTP

EVENT DESCRIPTION

On April 02, 2022, during Local Leak Rate Testing (LLRT) conducted during the Unit 1 refueling outage, as-found leakage through the inboard Main Steam Isolation Valve (MSIV) (HV141F022B) [EISS System/Component Code: SB/ISV] was 107,133 standard cubic centimeters per minute (sccm) which exceeded the Technical Specification (TS) 3.6.1.3 limit of 100 standard cubic feet per hour (47,194 sccm) for individual valve leakage.

HV141F022B was repaired resulting in an as-left individual valve LLRT value of 39,750 sccm.

Based on preliminary information, there is evidence that the condition existed during the last operating cycle for longer than allowed by TS 3.6.1.3. The condition is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications.

CAUSE OF EVENT

The cause of the event is under investigation and will be provided in a supplement to this LER.

ANALYSIS/SAFETY SIGNIFICANCE

Analysis/Safety significance will be provided in a supplement to this LER.

CORRECTIVE ACTIONS

HV141F022B was repaired resulting in a leak rate within TS 3.6.1.3 allowable value. Any additional corrective actions will be provided in a supplement to this LER.

COMPONENT FAILURE INFORMATION

Component Identification – HV141F022B
Component Name – Unit 1 Main Steam Line ‘B’ Inboard Isolation Valve
Valve Manufacturer – Atwood & Morrill Co.
Valve Type – Wye Globe
Valve Size – 26”
Actuator Manufacturer – S&P
Actuator Type – Tandem Cylinder

PREVIOUS OCCURRENCES

Previous occurrences, if any, will be provided in a supplement to this LER.