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08/27/2020

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

10 CFR 50.73

**SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 50-387/2020-002-00  
UNIT 1 LICENSE NO. NPF-14  
PLA-7889**

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**Docket No. 50-387**

Attached is Licensee Event Report (LER) 50-387/2020-002-00. The LER reports an event involving failure of the Unit 1 "B" Residual Heat Removal Service Water pump to start 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 be "K. Cimorelli", written over a horizontal line.

K. Cimorelli

Attachment: LER 50-387/2020-002-00

Copy: NRC Region I  
Mr. M. Hardgrove, NRC (Acting) Senior Resident Inspector  
Ms. S. Goetz, NRC Project Manager  
Mr. M. Shields, PA DEP/BRP

NRC FORM 366 (08-2020)		U.S. NUCLEAR REGULATORY COMMISSION			APPROVED BY OMB: NO. 3150-0104		EXPIRES: 08/31/2023			
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p><b>LICENSEE EVENT REPORT (LER)</b></p> <p>(See Page 3 for required number of digits/characters for each block)</p> <p>(See NUREG-1022, R.3 for instruction and guidance for completing this form <a href="https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/">https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/</a>)</p> </div> <div style="font-size: small;"> <p>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 <a href="mailto:Infocollects.Resource@nrc.gov">Infocollects.Resource@nrc.gov</a>, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk all: <a href="mailto:oir-submission@omb.eop.gov">oir-submission@omb.eop.gov</a>. 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.</p> </div> </div>										
<b>1. Facility Name</b> Susquehanna Steam Electric Station Unit 1					<b>2. Docket Number</b> 05000387			<b>3. Page</b> 1 OF 3		
<b>4. Title</b> Inoperability of Unit 1 "B" Residual Heat Removal Service Water Pump										
<b>5. Event Date</b>			<b>6. LER Number</b>			<b>7. Report Date</b>			<b>8. Other Facilities Involved</b>	
Month	Day	Year	Year	Sequential Number	Rev No.	Month	Day	Year	Facility Name	Docket Number
07	01	2020	2020	- 002 -	00	08	27	2020	Facility Name	Docket Number
										05000
										05000
<b>9. Operating Mode</b> 1						<b>10. Power Level</b> 100				
<b>11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)</b>										
<b>10 CFR Part 20</b>		<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)		<b>10 CFR Part 73</b>		
<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)		<b>10 CFR Part 21</b>		<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)		<b>10 CFR Part 50</b>		<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)				
<input type="checkbox"/> Other (Specify here, in Abstract, or in NRC 366A).										
<b>12. Licensee Contact for this LER</b>										
Licensee Contact C. E. Manges, Jr, Senior Engineer – Nuclear Regulatory Affairs								Phone Number (Include Area Code) (570) 542-3089		
<b>13. Complete One Line for each Component Failure Described in this Report</b>										
Cause	System	Component	Manufacturer	Reportable To IRIS	Cause	System	Component	Manufacturer	Reportable To IRIS	
<b>14. Supplemental Report Expected</b>						<b>15. Expected Submission Date</b>		Month	Day	Year
<input type="checkbox"/> No						<input checked="" type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date)		10	09	2020
<b>16. Abstract</b> (Limit to 1560 spaces, i.e., approximately 15 single-spaced typewritten lines)										
<p>On July 1, 2020 at approximately 20:26, the Unit 1 "B" Residual Heat Removal Service Water (RHRSW) pump did not start when being placed into service for Spray Pond Cooling testing, resulting in the pump being declared inoperable. Upon the discovery of the condition, Susquehanna entered Technical Specification (TS) 3.7.1 Condition B for one RHRSW subsystem being inoperable. Investigation at the pump circuit breaker identified the closing springs did not recharge following the circuit breaker's last closing operation. Following maintenance, the spring charging motor operated as expected and the breaker was tested successfully. TS 3.7.1 Condition B was exited on July 2, 2020 at approximately 02:44.</p> <p>Based on information available, the condition is considered to have existed for longer than allowed by TS 3.7.1. The condition is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specification. The cause of the event is under investigation and will be provided under a supplement to this LER.</p> <p>There were no actual consequences to the health and safety of the public as a result of this event.</p>										

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

(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 [Infocollects.Resource@nrc.gov](mailto:Infocollects.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](mailto: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	2. DOCKET NUMBER	3. LER NUMBER		
Susquehanna Steam Electric Station Unit 1	05000-387	YEAR	SEQUENTIAL NUMBER	REV NO.
		2020	- 002	- 00

**NARRATIVE****CONDITIONS PRIOR TO EVENT**

Unit 1 – Mode 1, approximately 100 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 July 1, 2020 at approximately 20:26, the Unit 1 "B" Residual Heat Removal Service Water (RHRSW) pump (1P506B) [EIS System Code/Component Code: BI/P] did not start when being placed into service for Spray Pond Cooling testing, resulting in the pump being declared inoperable. Upon discovery of the condition, Susquehanna entered Technical Specification (TS) 3.7.1 Condition B for one RHRSW subsystem being inoperable.

On July 2, 2020, investigation at the pump circuit breaker (1A20408) [EIS Component Code: 72] identified the closing springs did not recharge following the circuit breaker's last closing operation on June 21, 2020 at approximately 07:35. Following maintenance, the spring charging motor operated as expected and the breaker was tested successfully. TS 3.7.1 Condition B was exited on July 2, 2020 at approximately 02:44.

Based on information available, the condition is considered to have existed for longer than allowed by TS 3.7.1. The condition is being reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specification.

**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**

During the period the 1B RHRSW pump was inoperable, the 1A RHRSW pump was verified to be operable. An engineering evaluation was completed to analyze having only the 1A RHRSW pump available with the 1B RHRSW pump inoperable. The engineering evaluation concluded that, with only the 1A RHRSW pump in operation, the accident analysis assumptions were met and the RHRSW system could perform its design function. Based on the engineering evaluation and verification that the 1A RHRSW pump was operable during the period the 1B RHRSW pump was inoperable, the condition described herein did not result in a safety system functional failure. Accordingly, this event will not be counted as a safety system functional failure in the Reactor Oversight Process Performance Indicators. There were no actual consequences to the health and safety of the public as a result of this event.

<b>NRC FORM 366A</b> (08-2020)	<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>  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 <a href="mailto:Infocollects.Resource@nrc.gov">Infocollects.Resource@nrc.gov</a> , and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk all: <a href="mailto:oir-submission@omb.eop.gov">oir-submission@omb.eop.gov</a> . 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.	<b>EXPIRES: 08/31/2023</b>
(See NUREG-1022, R.3 for instruction and guidance for completing this form <a href="https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/">https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/</a> )			
<b>1. FACILITY NAME</b>	<b>2. DOCKET NUMBER</b>	<b>3. LER NUMBER</b>	
Susquehanna Steam Electric Station Unit 1	05000-387	YEAR  2020	SEQUENTIAL NUMBER  - 002  REV NO.  - 00
<p><b>CORRECTIVE ACTIONS</b></p> <p>Corrective actions will be provided in the supplement to this LER.</p> <p><b>COMPONENT FAILURE INFORMATION</b></p> <p>Component failure information, as applicable, will be provided in the supplement to this LER.</p> <p><b>PREVIOUS OCCURRENCES</b></p> <p>Previous occurrences, as applicable, will be provided in the supplement to this LER.</p>			