

Brad Berryman
Site Vice President

Susquehanna Nuclear, LLC
769 Salem Boulevard
Berwick, PA 18603
Tel. 570.542.2904 Fax 570.542.1504
Brad.Berryman@TalenEnergy.com



MAY 24 2018

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

10 CFR 50.73

**SUSQUEHANNA STEAM ELECTRIC STATION
LICENSEE EVENT REPORT 50-387/2018-001-00
UNIT 1 LICENSE NO. NPF-14
PLA-7705**

Docket No. 50-387

Attached is Licensee Event Report (LER) 50-387/2018-001-00. The condition reported by this LER was expected as a result of planned activities in support of a routine refueling outage. As described in the LER, the United States (U.S.) Nuclear Regulatory Commission (NRC) provided enforcement discretion guidance, applicable to Boiling Water Reactor licensees, that allows the reported condition. Although this allowance is provided by the NRC's enforcement guidance, the activities are still considered reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications (TS). Specifically, operations with the potential for draining the reactor vessel (OPDRVs) were performed while in Mode 5 without secondary containment being operable, as expected and allowed by the enforcement guidance. The provisions contained in the NRC enforcement guidance memorandum (EGM) 11-003, Revision 3, "Dispositioning Boiling Water Reactor Licensee Noncompliance with Technical Specification Containment Requirements during Operations with a Potential for Draining the Reactor Vessel," were used during performance of the specified OPDRV activities.

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.

Should you have any questions regarding this submittal, please contact Mr. Jason Jennings, Manager – Nuclear Regulatory Affairs at (570) 542-3155.


B. Berryman

Attachment: LER 50-387/2018-001-00

Copy: NRC Region I
Ms. T. E. Hood, NRC Project Manager
Ms. L. H. Micewski, NRC Sr. Resident Inspector
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-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by 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 Susquehanna Steam Electric Station Unit 1	2. Docket Number 05000387	3. Page 1 OF 3
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4. Title: Implementation of Enforcement Guidance Memorandum (EGM) 11-003, Revision 3, during Unit 1 Refueling

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	2018	2018	- 001	- 00	05	24	2018	N/A	05000
									Facility Name	Docket Number
									N/A	05000

9. Operating Mode 5	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 000	<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)	<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)(ii)							
	<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"/> 73.77(a)(2)(iii)							
<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 Katie Brown, Senior Engineer - Nuclear Regulatory Affairs	Telephone Number (Include Area Code) (570) 542-3407
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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 <input type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date) <input checked="" type="checkbox"/> No	15. Expected Submission Date	Month	Day	Year

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

The condition reported by this Licensee Event Report (LER) was an expected condition, which was the result of planned activities in support of a routine refueling outage. As described in the LER, the United States (U.S.) Nuclear Regulatory Commission (NRC) provided enforcement guidance, applicable to boiling water reactor licensees, that allows the reported condition. Although this allowance is provided by the NRC's enforcement guidance, the planned activities are still considered reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications (TS).

Between 04/02/2018 and 04/24/2018, Susquehanna Steam Electric Station (SSES) performed Operations with the Potential for Draining the Reactor Vessel (OPDRV) activities on Unit 1 while in Mode 5 without an operable secondary containment, as expected and allowed by the enforcement guidance. Although NRC Enforcement Guidance Memorandum (EGM) 11-003, Revision 3 allows the implementation of interim actions as an alternative to full compliance, this condition is still considered a condition prohibited by TS 3.6.4.1, Secondary Containment. The OPDRV activities were planned activities that were completed under the guidance of plant procedures and are considered to have low safety significance based on interim actions taken. Since these actions were deliberate, no cause determination was necessary.

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
<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-2 F43), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by 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		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Susquehanna Steam Electric Station Unit 1	05000-387	2018	001	00

NARRATIVE

CONDITIONS PRIOR TO EVENT

Unit 1 – Mode 5, 0 percent Rated Thermal Power

EVENT DESCRIPTION

While in Mode 5, Refueling, Operations with the Potential for Draining the Reactor Vessel (OPDRV) activities were performed as part of the Unit 1 20th Refueling and Inspection Outage (U1 20 RIO) without an operable secondary containment [EIIS Code: NG]. The event timeline for these activities is as follows:

04/02/2018, 14:15 – Operations entered Unit 1 Limiting Condition for Operations (LCO) 3.6.4.1 due to Zone I Secondary Containment being isolated from the Recirculation Plenum and relaxed in support of outage activities.

04/02/2018, 19:20 to 04/24/2018, 19:50 – Station performed OPDRV activities under the provisions of EGM 11-003, Revision 3, in support of U1 20 RIO.

04/25/2018, 22:23 – Operations cleared Unit 1 LCO 3.6.4.1 as Zone I was re-established and un-isolated from the recirculation plenum.

The station used the provisions of EGM 11-003, Revision 3 to perform the following outage activities:

- Recirculation system [EIIS Code: AD] maintenance and pump replacement
- Reactor Water Cleanup (RWCU) [EIIS Code: CE] system flushes and maintenance
- Residual Heat Removal (RHR) system [EIIS Code: BO] maintenance
- Hydraulic Control Unit (HCU) and Control Rod Drive (CRD) system [EIIS Code: AA] maintenance
- Local Power Range Monitor (LPRM) [EIIS Code: IG] replacements, including Intermediate Range Monitor 1E Dry Tube replacement
- Control Rod Drive (CRD) Mechanism [EIIS Code: AA] replacements
- Core Spray [EIIS Code: BM] instrument line flush

CAUSE OF EVENT

Implementation of EGM 11-003, Revision 3, interim actions during the U1 20 RIO was a planned activity. As such, no cause determination was performed on the events.



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

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Susquehanna Steam Electric Station Unit 1	05000-387	2018	001	00

ANALYSIS/SAFETY SIGNIFICANCE

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by SSES Unit 1 TS 3.6.4.1, which prohibits activities identified as OPDRVs while secondary containment is inoperable.

The OPDRV activities described in this report were accomplished using the interim actions provided by the NRC in EGM 11-003, Revision 3. In accordance with station procedures controlling OPDRVs, SSES adhered to the NRC plain language meaning of OPDRV activities that could potentially result in draining or siphoning the Reactor Pressure Vessel (RPV) water level below the top of the fuel. This included evolutions involving aligning and realigning plant systems prior to achieving steady-state water level control, without taking credit for mitigating measures. SSES also met the requirements which specify the minimum makeup flow rate and water inventory available. This ensures an adequate defense in depth was maintained to minimize the potential for the release of fission products with secondary containment not operable. Since these compensatory measures were implemented, an adequate level of safety was provided during the performance of the OPDRV activities described in this report. There were no actual consequences to the health and safety of the public as a result of the OPDRV activities.

CORRECTIVE ACTIONS

SSES submitted a license amendment request to adopt Technical Specifications Task Force Traveler 542 (TSTF-542), Reactor Pressure Vessel Water Inventory Control on September 20, 2017 (ML17265A434). The NRC completed acceptance review of the license amendment request on October 16, 2017 (ML17290A024). No regulatory commitments are associated with this report.

PREVIOUS SIMILAR EVENTS

- LER 50-388/2017-002-00 (PLA-7589): "Implementation of Enforcement Guidance Memorandum (EGM) 11-003, Revision 3 during Unit 2 Refueling," dated May 05, 2017.
- LER 50-387/2016-006-00 (PLA-7461): "Implementation of Enforcement Guidance Memorandum (EGM) 11-003, Revision 3," dated May 10, 2016.
- LER 50-388/2015-005-00 (PLA-7340): "Condition Prohibited by Technical Specification Due to Implementation of Enforcement Guidance Memorandum (EGM) 11 -003," dated June 10, 2015.
- LER 50-387/2014-006-00 (PLA-7185): "Implementation of Enforcement Guidance Memorandum (EGM) 11 -003, Revision 2," dated June 12, 2014.
- LER 50-388/2013-001 -00 (PLA-7018): "Implementation of Enforcement Guidance Memorandum (EGM) 11-003, Revision 1," dated June 14, 2013.