



10CFR50.73

LR-N15-0121

**JUN 10 2015**

United States Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-001

Hope Creek Generating Station Unit 1  
Renewed Facility Operating License No. NPF-57  
Docket No. 50-354

Subject: Licensee Event Report 2015-002-00

In accordance with the requirements of 10 CFR 50.73(a)(2)(i)(B), PSEG Nuclear LLC is submitting the enclosed Licensee Event Report (LER) Number 2015-002-00, "Operations with a Potential to Drain the Vessel (OPDRV) Without Secondary Containment."

If you have any questions or require additional information, please contact Mr. Tom MacEwen at (856) 339-1097.

There are no regulatory commitments contained in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric S. Carr", with a long horizontal flourish extending to the right.

Eric S. Carr  
Plant Manager  
Hope Creek Generating Station

ttm

Attachment: Licensee Event Report 2015-002-00

cc: Mr. Daniel Dorman, Regional Administrator – Region I, NRC

Ms. Carleen Sanders-Parker, Project Manager - US NRC

Justin Hawkins, NRC Senior Resident Inspector – Hope Creek (X24)

Mr. Patrick Mulligan, Manager IV  
Bureau of Nuclear Engineering  
New Jersey Department of Environmental Protection  
PO Box 420  
Trenton, NJ 08625

Mr. Thomas MacEwen, Hope Creek Commitment Tracking Coordinator (H02)

Mr. Lee Marabella - Corporate Commitment Tracking Coordinator (N21)



## LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of  
digits/characters for each block)

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 Infocollections.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 Hope Creek Generating Station	2. DOCKET NUMBER 05000354	3. PAGE 1 OF 3
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## 4. TITLE Operations With A Potential To Drain The Reactor Vessel (OPDRV) Without Secondary Containment

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	14	2015	2015	- 002	- 00	06	10	2015	FACILITY NAME	DOCKET NUMBER 05000

9. OPERATING MODE		11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
5	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)	
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<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)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)	
10. POWER LEVEL  0%	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(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)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)	
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)	
	<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)(C)	<input type="checkbox"/> OTHER	
	<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)(v)(D)	Specify in Abstract below or in NRC Form 366A	

## 12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT Thomas MacEwen, Principal Nuclear Engineer	TELEPHONE NUMBER (Include Area Code) 856-339-1097
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## 13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
-	-	-	-	-					

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO			

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On April 14, April 15, April 17, April 20, April 27, and April 29, 2015, with Hope Creek Generating Station (HCGS) in a planned refueling outage and the reactor cavity flooded in OPCI 5, HCGS performed operations with a potential to drain the reactor vessel (OPDRV) without an operable secondary containment. These operations are prohibited by Technical Specification (TS) 3.6.5.1; however, recent NRC guidance provided in Enforcement Guidance Memorandum (EGM) 11-003, Revision 2, allowed the implementation of interim actions as an alternative to full compliance. These actions were compiled in a plant procedure for the OPDRV activities performed at HCGS during Refueling Outage (H1R19) in April 2015.

These OPDRV activities were planned activities that were completed under the guidance of plant procedures and confirmed to have low safety significance based on the interim actions taken. Since these actions were deliberate, no cause determination was necessary. Consistent with the guidance provided in EGM 11-003, Revision 2, HCGS will submit a license amendment request to adopt a Technical Specifications Task Force (TSTF) traveler associated with generic resolution of this issue within four months after the issuance of the Notice of Availability of the TSTF traveler.

These conditions are being reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by TS.

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

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](mailto: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.

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Hope Creek Generating Station	05000354	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
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**NARRATIVE****PLANT AND SYSTEM IDENTIFICATION**

General Electric — Boiling Water Reactor (BWR/4)\*

Reactor Pressure Vessel (AC) — EIS Identifier {AC/RPV}

Secondary Containment (NG) — EIS Identifier {NG}

\*Energy Industry Identification System {EIS} codes and component function identifier codes appear as {SS/CCC}

**IDENTIFICATION OF OCCURRENCE**

Event Dates: April 14, April 15, April 17, April 20, April 27, and April 29, 2015

Discovery Dates: April 14, April 15, April 17, April 20, April 27, and April 29, 2015

**CONDITIONS PRIOR TO OCCURRENCE**

Hope Creek was shut down for Refueling Outage H1R19 in Operational Condition (OPCON) 5 – Refueling Operations.

**DESCRIPTION OF OCCURRENCE**

On April 14, April 15, April 17, April 20, April 27, and April 29, 2015, with Hope Creek Generating Station (HCGS) in a planned refueling outage and the reactor cavity flooded up in OPCON 5, HCGS performed operations with a potential to drain the reactor vessel (OPDRV) without an operable secondary containment {NG}. These operations are prohibited by Technical Specification (TS) 3.6.5.1, "Secondary Containment Integrity." The NRC recognized that such activities may need to be performed during refueling outages while activities were underway with the Boiling Water Reactor Owners Group (BWROG) to formulate acceptable generic changes to the BWR Technical Specifications (TS). NRC guidance provided in Enforcement Guidance Memorandum (EGM) 11-003, Revision 2, "Enforcement Guidance Memorandum on Dispositioning Boiling Water Reactor Licensee Noncompliance with Technical Specification Containment Requirements During Operations With a Potential for Draining the Reactor Vessel," dated December 13, 2013, allowed the implementation of specific interim actions, as an alternative to full compliance with TS, while the improvements in the TS are under development with the BWROG. The required interim actions specified in the EGM were incorporated into plant procedure OP-HC-108-102, "Management of Operations with the Potential to Drain the Reactor Vessel." This procedure was then utilized on these occasions as listed in Table 1, during Refueling Outage (H1R19) in April 2015.

**Table 1 — HCGS OPDRVs Performed April 2015**

Activity / Duration	Start	End
Removal of Scram Air Header from Service / 3 hours, 15 minutes	April 14, 2015 at 14:00 EDT	April 14, 2015 at 17:15 EDT
Replace the B Reactor Recirculation Pump seal / 8 days, 22 hours, 19 minutes	April 15, 2015 at 04:36 EDT	April 24, 2015 at 02:55 EDT
Replacement of Control Rod Drive mechanisms / 2 days, 22 hours, 45 minutes	April 17, 2015 at 14:17 EDT	April 20, 2015 at 13:02 EDT
Replacement of Local Power Range Monitors / 3 days, 3 hours, 27 minutes	April 20, 2015 at 03:13 EDT	April 23, 2015 at 06:40 EDT
Expanding the tagged boundary for the Scram Discharge Volume / 12 minutes	April 27, 2015 at 13:14 EDT	April 27, 2015 at 13:26 EDT
Fill and Vent of the B Reactor Recirculation Pump seal / 10 hours, 4 minutes	April 29, 2015 at 20:41 EDT	April 30, 2015 at 06:45 EDT

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**CAUSE OF EVENT**

Implementation of EGM 11-003, Revision 2, interim actions during the HCGS refueling outage (H1R19) was a planned activity. As such, no cause determination was performed for the event.

**SAFETY CONSEQUENCES AND IMPLICATIONS**

The OPDRVs discussed in this report were performed during the HCGS refueling outage (H1R19) and were accomplished using the interim actions provided by the NRC in EGM 11-003, Revision 2. For these events, HCGS adhered to the NRC plain language meaning of OPDRV activities that could potentially result in draining or siphoning the RPV water level below the top of fuel. This included evolutions involving aligning and realigning plant systems prior to achieving steady-state water level control, without taking credit for mitigating measures. HCGS also met the requirements that specify the minimum makeup flow rate and water inventory based on OPDRV activities with long drain down times. Further, an adequate defense-in-depth was maintained to minimize the potential for the release of fission products with secondary containment not operable by (a) monitoring RPV level to identify the onset of a loss of inventory event; (b) maintaining the capability to isolate the potential leakage paths; (c) prohibiting Mode 4 (cold shutdown) OPDRV activities; and (d) prohibiting movement of irradiated fuel with the spent fuel storage pool gates removed in Mode 5. All other Mode 5 TS requirements for activities were followed. Since these compensatory measures were properly implemented, an adequate level of safety was provided during the OPDRV activities described in this report. Based on this information, the performance of these OPDRV activities were determined to have a low safety significance.

**PREVIOUS EVENTS**

A review of Licensee Event Reports and the corrective action program for the past three years identified the following previous similar occurrences:

- LER 2012-003-00, dated May 5, 2012, reported an OPDRV activity during the 2012 refueling outage (H1R17). Interim actions in accordance with Revision 0 of the EGM were applied. No corrective actions were stated.
- LER 2013-004-00, dated December 10, 2013, reported OPDRV activities during the 2013 refueling outage (H1R18). Interim actions in accordance with Revision 1 of the EGM were applied. No corrective actions were stated.

**CORRECTIVE ACTIONS**

HCGS will submit a license amendment request to adopt a Technical Specification Task Force (TSTF) traveler associated with generic resolution of this issue, within four months after the issuance of the Notice of Availability of the TSTF traveler.

**COMMITMENTS**

This LER contains no regulatory commitments.