



David R. Vineyard  
Vice President – Plant Hatch

Hatch Nuclear Plant  
11028 Hatch Parkway North  
Baxley, GA 31513  
912 537 5859 tel  
912 366 2077 fax

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Docket Nos.: 50-321

NL-18-0351

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555-0001

Edwin I. Hatch Nuclear Plant Unit 1  
Operations with the Potential to Drain the Reactor Vessel (OPDRVs) Without Secondary  
Containment

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.73(a)(2)(i)(B), Southern Nuclear Operating Company (SNC) hereby submits the enclosed Licensee Event Report (LER).

This letter contains no NRC commitments. If you have any questions, please contact Keith Long at (912) 537-5874.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "D. R. Vineyard", written over a horizontal line.

D. R. Vineyard  
Vice President – Hatch

DRV/jcb

Enclosure: LER 2018-002-00

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Cc: Regional Administrator, Region II  
NRR Project Manager – Hatch  
Senior Resident Inspector – Hatch  
RTYPE: CHA02.004



## 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 FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to [Infocollections.Resource@nrc.gov](mailto: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 Edwin I. Hatch Unit 1	2. DOCKET NUMBER 05000321	3. PAGE 1 OF 3
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## 4. TITLE

Performance of Operations with the 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
02	09	2018	2018	- 002	- 00	03	21	2018	FACILITY NAME	DOCKET NUMBER

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)(i)
	<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)(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

Edwin I. Hatch / Jimmy Collins – Licensing Supervisor

## TELEPHONE NUMBER (Include Area Code)

912-537-2342

## 13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

## 14. SUPPLEMENTAL REPORT EXPECTED

☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE)☒ NO

## 15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

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

On February 9 through February 13, 2018, planned operations with the potential to drain the reactor vessel (OPDRV) activities were performed while Unit 1 remained in Refueling Mode (Mode 5) without an operable secondary containment. These activities are prohibited per Technical Specifications (TS) 3.6.4.1. However, recent NRC guidance provided in Enforcement Guidance Memorandum (EGM) 11-003, Revision 3 and in Regulatory Issue Summary (RIS) 2012-11 allowed the implementation of interim actions as an alternative to full compliance. These actions are contained in the operating procedure for the OPDRV activities performed during the 2018 Hatch Unit 1 Refueling Outage in February.

The performance of OPDRV activities were planned activities that were completed under the guidance of plant procedures and confirmed to have low safety significance based on interim actions taken. Since these actions were deliberate, a cause determination was not necessary. A license amendment request (LAR) has been submitted for the associated NRC-approved Technical Specifications Task Force (TSTF) Traveler 542, "Reactor Pressure Vessel Water Inventory Control."



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

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**NARRATIVE****Event Description**

In February 2018, with Unit 1 at 0 percent rated thermal power due to a scheduled refueling outage, planned operations with the potential to drain the reactor vessel (OPDRV) activities were performed without secondary containment intact in Mode 5 (Refueling Mode) contrary to Technical Specification (TS) 3.6.4.1. The NRC recognizes that such activities need to be performed during refueling outages. Activities are underway to formulate acceptable generic changes to BWR TS. NRC Regulatory Issue Summary (RIS) 2012-11 communicated this guidance to the industry. Enforcement Guidance Memorandum (EGM) 11-003, Revision 3 currently provides enforcement discretion for licensee noncompliance with TS containment requirements during OPDRV activities. The required interim actions specified in the EGM were incorporated into plant procedure 31GO-OPS-025 "Operations with the Potential To Drain the Reactor Vessel." This procedure was utilized during the following three occasions during the 2018 Unit 1 Refueling Outage:

Table 1: Hatch Unit 1 OPDRVs Performed February 2018

OPDRV Activity	Start	End
LPRM Removal and Replacement	02/09/2018	02/10/2018
CRD Push-Pull	02/10/2018	02/12/2018
HCU Vent	02/12/2018	02/13/2018

This event is reportable per 10 CFR 50.73(a)(2)(i)(B) as an operation or condition prohibited by Technical Specifications (TS) 3.6.4.1.C.3, which prohibits performing activities identified as OPDRVs in Mode 5 while secondary containment is inoperable.

**Event Cause Analysis**

Implementation of the required EGM 11-003, Revision 3 interim actions during the 2018 Unit 1 Refueling Outage was a planned activity. As such, no cause determination was performed for the events.

**Safety Assessment**

The OPDRVs discussed in this report performed during the Unit 1 Refueling Outage were accomplished using interim actions provided by the NRC in EGM 11-003, Revision 3. Hatch adhered to the NRC plain language meaning of OPDRV activities that could potentially result in draining of siphoning the reactor pressure vessel (RPV) water level below the top of the fuel. Hatch also met the requirements which specify the minimum 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 Technical Specifications requirements for OPDRV activities were followed. Since these compensatory measures were properly implemented, an adequate level of safety was provided during the performance of the OPDRV activities described in this report. Based on the information,



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the performance of these OPDRV activities was determined to have a very low safety significance.

**Corrective Actions**

Consistent with the guidance given in EGM 11-003 Revision 3, Hatch has submitted a license amendment request for the associated NRC-approved Technical Specifications Task Force (TSTF) Traveler 542, "Reactor Pressure Vessel Water Inventory Control."

**Previous Similar Events****LER 2017-001-00**

On February 10 through February 13, 2017, planned operations with the potential to drain the reactor vessel (OPDRV) activities were performed while Unit 2 remained in Refueling Mode (Mode 5) without an operable secondary containment. These activities are prohibited by Technical Specifications (TS) 3.6.4.1. However, recent NRC guidance provided in Enforcement Guidance Memorandum (EGM) 11-003, Revision 3 and in Regulatory Issue Summary (RIS) 2012-11 allowed the implementation of interim actions as an alternative to full compliance. These actions are contained in the operating procedure for the OPDRV activities performed during the 2017 Hatch Unit 2 Refueling Outage in February.

**LER 2016-002-00**

On February 13 through 15, 2016, February 15 through 16, 2016, and February 17 through 18, 2016 operations with the potential to drain the reactor vessel (OPDRV) activities were performed while Unit 1 remained in Refueling Mode (Mode 5) without an operable secondary containment. These activities are prohibited by Technical Specifications (TS) 3.6.4.1. However, recent NRC guidance provided in Enforcement Guidance Memorandum (EGM) 11-003, Revision 3 and in Regulatory Issue Summary (RIS) 2012-11 allowed the implementation of interim actions as an alternative to full compliance. These actions are compiled in the operating procedure for the OPDRV activities performed during the 2016 Hatch Unit 1 Refueling Outage in February.

**LER 2015-002-00**

On February 16, 2015, February 18 through 19, 2015, and February 23 through 24, 2015 operations with the potential to drain the reactor vessel (OPDRV) activities were performed while Unit 2 remained in Refueling Mode (Mode 5) without an operable secondary containment. These activities are prohibited by Technical Specifications (TS) 3.6.4.1. However, recent NRC guidance provided in Enforcement Guidance Memorandum (EGM) 11-003, Revision 2 and in Regulatory Issue Summary (RIS) 2012-11 allowed the implementation of interim actions as an alternative to full compliance. These actions are compiled in the operating procedure for the OPDRV activities performed during the 2015 Hatch Unit 2 Refueling Outage in February.