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Docket Nos.: 50-321

NL-16-0315

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

Edwin I. Hatch Nuclear Plant  
Licensee Event Report 2016-002-00  
Performance of Operations with the Potential to Drain the Reactor Vessel  
(OPDRV) Without Secondary Containment

Ladies and Gentlemen:

In accordance with the requirements of 10 CFR 50.73(a)(2)(i)(B) Southern Nuclear Operating Company hereby submits the enclosed Licensee Event Report. This letter contains no NRC commitments. If you have any questions, please contact Greg Johnson at (912) 537-5874.

Respectfully submitted,

C. R. Pierce  
Regulatory Affairs Director

CRP/cdp

Enclosure: LER 2016-002-00

cc: Southern Nuclear Operating Company

Mr. S. E. Kuczynski, Chairman, President & CEO

Mr. D. G. Bost, Executive Vice President & Chief Nuclear Officer

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U. S. Nuclear Regulatory Commission

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Mr. D. H. Hardage, Senior Resident Inspector – Hatch

**Edwin I. Hatch Nuclear Plant Unit 1**

**Licensee Event Report 2016-002-00**

**Performance of Operations with the Potential to Drain the Reactor Vessel  
(OPDRV) Without Secondary Containment**



## LICENSEE EVENT REPORT (LER)

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.

## 1. FACILITY NAME

Edwin I. Hatch Nuclear Plant Unit 1

## 2. DOCKET NUMBER

05000 321

## 3. PAGE

1 OF 3

## 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	13	2016	2016	- 002 -	00	04	11	2016	FACILITY NAME	DOCKET NUMBER

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	<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

Edwin I. Hatch / Carl James 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	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	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 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.

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, no cause determination was necessary. A licensee amendment request (LAR) will be submitted following NRC approval of the Technical Specification Task Force (TSTF) Traveler associated with generic resolution of this issue (TSTF-542).

NRC FORM 366A  
(02-2014)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104

EXPIRES: 1/31/2017

## 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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### NARRATIVE

#### PLANT AND SYSTEM IDENTIFICATION

General Electric- Boiling Water Reactor (BWR)  
Energy Industry Identification System codes appear in the text as (EIS Code XX)

#### DESCRIPTION OF EVENT

In February 2016, with Unit 1 at 0 percent rated thermal power due to a scheduled refueling outage, operations with the potential to drain the reactor vessel (OPDRV) activities were performed while 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 Technical Specifications. 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 until December 31, 2017 while the NRC staff and Boiling Water Reactor Owner's Group finalize a generic solution for TS changes. The required interim actions specified in the EGM were incorporated into plant procedure 31GO-OPS-025-0 "Operations With The Potential To Drain The Reactor Vessel". This procedure was utilized during the following three occasions during the 2016 Unit 1 Refueling Outage:

Table 1: Hatch Unit 1 OPDRVs Performed February 2016		
OPDRV Activity	Start	End
LPRM replacement activity	02/13/2016, 2130 EST	02/15/2016, 0149 EST
CRD push-pull activity	02/15/2016, 1213 EST	02/16/2016, 0740 EST
CRD insert / re-couple activity	02/17/2016, 1547 EST	02/18/2016, 1038 EST

#### CAUSE OF EVENT

Implementation of the required EGM 11-003, Revision 3 interim actions during the 2016 Unit 1 Refueling Outage was a planned activity. As such, no cause determination was performed for the events.

#### REPORT ABILITY AND SAFETY ASSESSMENT

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.

The OPDRVs discussed in this report performed during the Unit 2 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 or siphoning the reactor pressure vessel (RPV) water level below the top of the fuel. Hatch also met the requirements which specify the minimum makeup flow rate and water inventory based on OPDRV activities with long drain down times.

NRC FORM 366A (02-2014) <b>NRC FORM 366A</b> (02-2014)		<b>LICENSEE EVENT REPORT (LER)</b> <b>CONTINUATION SHEET</b>		<b>U.S. NUCLEAR REGULATORY COMMISSION</b>	
<b>1. FACILITY NAME</b>	<b>2. DOCKET</b>	<b>6. LER NUMBER</b>			<b>3. PAGE</b>
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<b>NARRATIVE</b>  <p>Furthermore, 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 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 OPDVR activities described in this report Based on this information, the performance of these OPDRV activities were determined to have a very low safety significance.</p>					
<b><u>CORRECTIVE ACTIONS</u></b>  <p>Consistent with the guidance given in EGM 11-003 Revision 3, Hatch will submit a licensee amendment request (LAR) following NRC approval of the Technical Specifications Task Force (TSTF) Traveler associated with generic resolution of this issue within the time restraints given in the EGM.</p>					
<b><u>ADDITIONAL INFORMATION</u></b>  <p>Other Systems Affected: None.</p> <p>Failed Components Information: None.</p> <p>Commitment Information: This report does not created any new licensing commitments.</p> <p>Previous Similar Events:</p> <p>LER 2015-002-00</p> <p>On February 16, 2015, February 20, February 18 through 19, 2015, and February 23 through 24, 2015, OPDRV activities were performed while Unit 2 was in Refueling Mode (Mode 5) without an operable secondary containment. These activities are prohibited by Technical Specifications (TS) 3.6.4.1. However, NRC guidance provided in Regulatory Issue Summary (RIS) 2012-11 and in Enforcement Guidance Memorandum (EGM) 11-003, Revision 2 allowed the implementation of interim actions as an alternative to full compliance. An adequate defended 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 the movement of irradiated fuel with the spent fuel storage pool gates removed in Mode 5. The associated Technical Specification Task Force (TSTF) Traveler is not yet available as a Technical Specification consolidated line item improvement process (CLIP) for use by licensees. For that reason, the corrective actions from this event would not be expected to have prevented the condition reported in this LER.</p>					