



**Ernest J. Kapopoulos, Jr.**  
H. B. Robinson Steam  
Electric Plant, Unit 2  
Site Vice President

**Duke Energy**  
3581 West Entrance Road  
Hartsville, SC 29550

O: 843 951 1701  
F: 843 951 1319

*Ernie.Kapopoulos@duke-energy.com*

10 CFR 50.73

Serial: RNP-RA/17-0077

**DEC 14 2017**

United States Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-261/RENEWED LICENSE NO. DPR-23

LICENSEE EVENT REPORT NO. 2017-002-00:  
PLANT VITAL AREA SECURITY VULNERABILITY DISCOVERED WITHOUT COMPENSATORY MEASURES

Ladies and Gentlemen:

Pursuant to 10 CFR 73.71(d), which refers to Appendix G, "Reportable Safeguards Events," Section I(c), Duke Energy is submitting the attached Licensee Event Report. Please direct any questions regarding this submittal to Mr. Tony Pilo, Manager – Nuclear Regulatory Affairs at (843) 951-1409.

This document contains no new regulatory commitments.

Sincerely,

Ernest J. Kapopoulos, Jr.  
Site Vice President

EJK/jmw

Attachment

c: Region Administrator, NRC, Region II  
NRC Resident Inspector, HBRSEP  
D. Galvin, NRR

United States Nuclear Regulatory Commission  
Attachment to Serial: RNP-RA/17-0077  
4 Pages (including this page)

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2**

**PLANT VITAL AREA SECURITY VULNERABILITY DISCOVERED WITHOUT  
COMPENSATORY MEASURES**

**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 [Infocollcts.Resource@nrc.gov](mailto:Infocollcts.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**

H. B. Robinson Steam Electric Plant, Unit No. 2

**2. DOCKET NUMBER**

05000 261

**3. PAGE**

1 OF 3

**4. TITLE**

Plant Vital Area Security Vulnerability Discovered Without Compensatory Security Measures

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
10	24	2017	2017	- 002 -	00	12	14	2017	FACILITY NAME	DOCKET NUMBER
										05000

  

9. OPERATING MODE	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
1	<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)
	<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)
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)(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 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 checked="" type="checkbox"/> OTHER	Specify in Abstract below or in NRC Form 366A	

**12. LICENSEE CONTACT FOR THIS LER**

## LICENSEE CONTACT

T. Pilo, Manager, Nuclear Regulatory Affairs

## TELEPHONE NUMBER (Include Area Code)

(843) 951-1409

**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
		*WALL							

**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 October 24, 2017 at 1350 EDT, with the plant in Mode 1 at 100 percent power, H. B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP2), discovered an uncompensated security vulnerability that could have allowed unauthorized or undetected access to a vital area (VA) of the plant. Compensatory measures were promptly established and an immediate investigation was conducted, which did not reveal any evidence of unauthorized entry or tampering.

The cause of this event is attributed to the absence of work instructions to contact security to establish compensatory measures prior to beginning work activities high on a VA barrier wall. The vulnerability was the result of authorized work. All workers involved were validated to have proper permissions to access the area. No unauthorized access to the VA occurred during the time period that the vulnerability existed. This event did not have any nuclear or personal safety implications.

This report is being submitted in accordance with the requirements of 10 CFR 73.71(d), which refers to Appendix G, "Reportable Safeguards Events," Section I(c).

**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](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		2. DOCKET NUMBER	3. LER NUMBER		
H. B. Robinson Steam Electric Plant, Unit No. 2		05000-	YEAR 2017	SEQUENTIAL NUMBER 002	REV NO. 00

**NARRATIVE****BACKGROUND**

Pursuant to the provisions of 10 CFR 73.71(b)(1), licensees shall report the discovery of uncompensated vulnerability in a safeguard system that could allow unauthorized or undetected access to a vital area within one hour of discovery. This report is being submitted in accordance with the requirements of 10 CFR 73.71(d), which refers to Appendix G, "Reportable Safeguards Events," Section I(c), requiring a written report to be submitted within 60 days. The event described below meets this reporting criteria.

**EVENT DESCRIPTION**

On October 24, 2017, with H. B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP2) in Mode 1 at 100 percent power, a security officer conducting security rounds discovered a breach in the south wall of the 4kV switchgear room, a vital area (VA). This breach exceeded the threshold for requiring compensatory security measures to be implemented. No compensatory security measures were in place for the breach at the time of discovery. The officer immediately contacted security supervision and all work was stopped. Compensatory security measures were promptly implemented. At approximately 1350 EDT on October 24, 2017, it was determined that a breach in a VA boundary existed due to the size of the opening, which could have potentially allowed undetected access in the area. An immediate (1 hour) notification to the NRC (EN No. 53034) was made on October 24, 2017.

On April 27, 2017 an Engineering Change (EC) related to the Transmission Upgrade Project was approved. This EC contains eight sub-ECs; particularly, a sub-EC to install structural supports [SPT] for the electrical bus duct [BDUC] and raceways [TY] from the 4kV disconnect [DISC] switches to the new switchgear building 469. Security performed a review of the main EC but not the sub-EC that called for the opening to be cut, which did not indicate a need for additional security measures. This sub-EC was not required by the EC process to be reviewed by other organizations; including Security.

On October 20, 2017, workers began cutting the opening in the south wall of the 4kV switchgear room with no compensatory security measures in place. The opening was then shielded with a metal cover plate and sealed to prevent water intrusion. On October 24, 2017, the shield was removed prior to installing the support through the opening. When the cover was removed, a security officer conducting security rounds discovered the breach in the south wall at the ceiling near the top of the erected scaffolding. The officer notified security supervision immediately. Work was stopped, a new shield was installed over the opening, and security supervision implemented required compensatory measures.

**CAUSAL FACTORS**

The cause of the event was determined to be the removal of the requirement for planners to include instruction for the craft to contact security when breaching the VA, including the threshold for breach size that requires additional security compensatory measures.

**CORRECTIVE ACTIONS****Immediate**

Upon discovery of the breach by security, work was immediately stopped and compensatory measures were promptly implemented. A search of the area was conducted by security, which revealed no evidence of unauthorized materials or workers in the area.





## 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](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	2. DOCKET NUMBER	3. LER NUMBER		
H. B. Robinson Steam Electric Plant, Unit No. 2	05000- 261	YEAR 2017	SEQUENTIAL NUMBER 002	REV NO. 00

### NARRATIVE

#### CORRECTIVE ACTIONS (continued)

Completed

1. Current work order tasks were reviewed to ensure the work planning group requires craft workers to contact security for any required compensatory measures related to barrier work.

2. Guidance was added to the work-planning procedure to notify security prior to creating openings of any size in structures or barriers into the owner-controlled area, protected area, or VA.

#### SAFETY ANALYSIS

There were no safety consequences from this event in that unauthorized intrusion into the 4kV switchgear room VA did not occur. During the period without compensatory security measures in place, no evidence of contraband or sabotage was found within the 4kV switchgear room. This event has low safety significance because there was no undetected access to the VA nor was there any evidence of contraband, tampering or sabotage in the VA. In the event that the equipment in the 4kV switchgear room was compromised, the plant could still be safely shut down via power from Emergency Buses [BU] E-1 and E-2.

#### ADDITIONAL INFORMATION

Additional information required for security events. (Item number from Regulatory Guide 5.62, "Reporting of Safeguard Events," provided below):

- 5. Type of Security Force Onsite: Proprietary
- 6. Number and Type of Personnel Involved: One Security Officer
- 7. Method of Discovery: Security Officer Observation
- 8. Procedural Errors Involved: None
- 11. Local, State, or Federal law enforcement agencies contacted: None
- 12. Description of media interest and press release: None
- 13. Similar Events: None

Energy Industry Identification System (EIIIS) codes are identified in the Text within brackets [ ].