



**Exelon** Generation®

**Dresden Generating Station**

6500 North Dresden Road

Morris, IL 60450

www.exeloncorp.com

10 CFR 50.73

SVPLTR # 17-0001

January 9, 2017

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

Dresden Nuclear Power Station, Unit 2  
Renewed Facility Operating License Nos. DPR-19  
NRC Docket No. 50-237

Subject: Licensee Event Report 237/2016-004-00, Reactor Building Differential Pressure  
Less than Technical Specification Requirement

Enclosed is Licensee Event Report 237/2016-004-00, "Reactor Building Differential Pressure  
Less than Technical Specification Requirement." This report describes events which are being  
reported in accordance with 10 CFR 50.73(a)(2)(v)(C), "Any event or condition that could have  
prevented the fulfillment of the safety function of structures or systems that are needed to  
control the release of radioactive material."

There are no regulatory commitments contained in this submittal.

Should you have any questions concerning this letter, please contact Mr. Bruce Franzen  
at (815) 416-2800.

Respectfully,

Peter J Karaba  
Site Vice President  
Dresden Nuclear Power Station

Enclosure Licensee Event Report 237/2016-004-00

cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – Dresden Nuclear Power Station

IEZZ  
NRR



**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 [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.

<b>1. FACILITY NAME</b> Dresden Nuclear Power Station, Unit 2	<b>2. DOCKET NUMBER</b> 05000237	<b>3. PAGE</b> 1 OF 3
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**4. TITLE**  
Reactor Building Differential Pressure Less than Technical Specification Requirement

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
11	08	2016	2016	- 004	- 00	01	09	17	FACILITY NAME	DOCKET NUMBER
										05000
										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  100	<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 checked="" 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 type="checkbox"/> OTHER	Specify in Abstract below or in NRC Form 366A

**12. LICENSEE CONTACT FOR THIS LER**

LICENSEE CONTACT Bruce Franzen – Regulatory Assurance Manager	TELEPHONE NUMBER (Include Area Code) 815-416-2800
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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
E	VA	DR		Y					

**14. SUPPLEMENTAL REPORT EXPECTED**      **15. EXPECTED SUBMISSION DATE**

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

MONTH	DAY	YEAR

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

On 11/8/16 at 0510 CST, during Under Voltage surveillance testing Bus 33-1 was secured causing Standby Gas Treatment (SBGT) [BH] to start, and the Reactor Building (RB) Ventilation system [VA] automatically isolated. During the evolution RB pressure relative to outside was less than 0.25 inches water column (in WC) vacuum which is required by Technical Specifications (TSs). TS Limiting Condition for Operation (LCO) 3.6.4.1, "Secondary Containment", Condition A was entered. At 0532 CST, the Unit 2 RB Equipment Access Inner door was closed and RB differential pressure was observed to increase above 0.25 in WC vacuum, and Condition A was exited.

TS LCO 3.6.4.1 was not applicable to Unit 3 which was in Mode 5 with no recently irradiated fuel moves or any operations with a potential for draining the reactor vessel (OPDRVs) in progress.

This event is reportable under 10 CFR 50.73(a)(2)(v)(C), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material."

NRC FORM 366A  
(11-2015)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104

EXPIRES: 10/31/2018



## 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, 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.
Dresden Nuclear Power Station, Unit 2	05000-237	2016	- 004	- 00

### NARRATIVE

#### PLANT AND SYSTEM IDENTIFICATION

Dresden Nuclear Power Station (DNPS), Unit 2, is a General Electric Company Boiling Water Reactor with a licensed maximum power level of 2957 megawatts thermal. The Energy Industry Identification System codes used in the text are identified as [XX].

#### A. Plant Conditions Prior to Event:

Unit: 02                      Event Date: 11/08/16                      Event Time: 0510 CST  
Reactor Mode: 1            Mode Name: Power Operation                      Power Level: 100 percent

#### B. Description of Event:

On 11/8/16 at 0510 CST, during Under Voltage surveillance testing Bus 33-1 was secured causing Standby Gas Treatment (SBGT) [BH] to start, and the Reactor Building (RB) Ventilation system [VA] automatically isolated. This plant response was expected, but during the evolution RB pressure relative to outside was less than 0.25 inches water column (in WC) vacuum which is required by Technical Specifications (TSs). TS Limiting Condition for Operation (LCO) 3.6.4.1, "Secondary Containment", Condition A was entered. At 0532 CST, the Unit 2 RB Equipment Access Inner door was closed and RB differential pressure was observed to increase above 0.25 in WC vacuum, and Condition A was exited. At the time of the event, the Unit 2 RB Equipment Access Outer door was the boundary for secondary containment.

It should be noted that on 11/7/16 at 2200 CST, during another part of the Under Voltage surveillance testing SBGT was started with RB Ventilation isolated and differential pressure was successfully maintained.

TS LCO 3.6.4.1 was not applicable to Unit 3 which was in Mode 5 with no recently irradiated fuel moves or any operations with a potential for draining the reactor vessel (OPDRVs) in progress.

This event is reportable under 10 CFR 50.73(a)(2)(v)(C), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material."

#### C. Cause of Event:

The Apparent Cause was degraded sealing surface on the Unit 2 RB Equipment Access Outer door coincident with RB Ventilation isolation which resulted in excessive in-leakage. The SBGT system did not have the capacity required to maintain the differential pressure in this condition. A Contributing Cause was a lapse in procedure use and adherence which requires communication of degraded seal conditions. An additional Contributing Cause was the lack of prioritization of repairs due to improper risk perception associated with addressing longstanding issues with the seals.

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(11-2015)

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Dresden Nuclear Power Station, Unit 2	05000-237	2016	- 004	- 00

### NARRATIVE

#### D. Safety Analysis:

The safety significance of this event was low as it did not adversely impact the health and safety of the public. During the evolution, the differential pressure of the RB remained negative relative to the outside at all times. Additionally, there was no release, or potential for release, of radioactive material during the 22 minutes in TS LCO 3.6.4.1 Condition A.

#### E. Corrective Actions:

The Unit 2 RB Equipment Access Outer door seals were replaced, and work has been scheduled to improve door operation. This issue will be reviewed to determine if changes to the surveillance testing procedures are appropriate given the potential impact of the open interlock door. Additionally, procedures will be revised to require communication of seal inspection results for documentation in Operator Logs.

#### F. Previous Occurrences:

On 12/15/15, Operations secured RB Ventilation for Unit 2 and RB differential pressure degraded rapidly due to the 3C exhaust fan vortex damper failing to open as expected which impacted secondary containment.

On 9/5/15, a failure of the latches on an access hatch resulted in reduction of RB Ventilation exhaust flow and subsequent loss of secondary containment.

#### G. Component Failure Data:

Manufacturer	Model	S/N	Type
N/A	N/A	N/A	Door