



SVPLTR # 16-0013

April 8, 2016

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

Dresden Nuclear Power Station, Unit 2 and 3  
Renewed Facility Operating License Nos. DPR-19 and DPR-25  
NRC Docket No. 50-237 and 50-249

Subject: Licensee Event Report 237/2016-001-00, Secondary Containment Differential Pressure Transient

Enclosed is Licensee Event Report 237/2016-001-00, "Secondary Containment Differential Pressure Transient". 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 ... 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 237/2016-001-00

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

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NRK



**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 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**  
Secondary Containment Differential Pressure Transient

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	2016	2016	001	00	04	08	16	Dresden Unit 3	05000249
									FACILITY NAME	DOCKET NUMBER
										05000

<b>9. OPERATING MODE</b>	<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</b>			
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)
<b>10. POWER LEVEL</b>  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	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
B	VA	PDC	J073	Y					

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

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

On 2/9/16 at 19:00 CST, the operating heating boiler shutdown. At 19:15, the Main Control Room (MCR) received alarms for low reactor building (RB) differential pressure (DP). As directed by procedure, Operators verified local gauge readings and equipment configuration. At 21:42, local gauge readings were averaged at -0.24 inches wc which required entry into Tech Spec 3.6.4.1.A due to RB DP being greater than Technical Specification required -0.25 inches wc by local average on the refuel floor. At 22:05, U3 RB ventilation was secured, and at 22:07 TS 3.6.4.1.A was exited when RB DP returned below -0.25 inches wc.

The cause of the event was determined to be a degraded area DP controller that restricted exhaust flow, preventing the system from maintaining RB DP greater than TS allowed value.

Corrective actions include calibration of the area DP controller, enhancements to operational response procedures, a review of the associated maintenance strategy, and review for potential component upgrades.

NRC FORM 366A  
(11-2015)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104

EXPIRES: 10/31/2016



## 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	- 001	- 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: 02/09/2016                      Event Time: 1900 CST  
Reactor Mode: 1            Mode Name: Power Operation                      Power Level: 100 percent

#### B. Description of Event:

On 2/9/16 at 19:00, the operating heating boiler [LV] shutdown. At 19:15, the Main Control Room (MCR) received alarms indicating that Reactor Building (RB) [NG] DP was below -0.3" wc. An Equipment Operator (EO) was dispatched to take local RB DP readings on the Refuel Floor. Local readings were averaged to be -0.35" wc. Operations verified that all Secondary Containment interlock doors, RB blowout panels and reactor building ventilation [VA] (RBV) exhaust hatches were in the proper configuration.

Following the loss of the heating boiler, Operations entered the associated response procedure. This procedure directed field operators to block open all doors of both the U2 and U3 RBV supply plenums to prevent freezing of the ventilation filters and heating coils within the plenums.

At 21:42, another step change in RB DP was noticed by Operations. Main Control Room RB DP indication degraded from -0.25" wc to -0.12" wc. An EO was dispatched to obtain local readings on the Refuel Floor. Local readings were averaged at -0.24" wc which required entry into Tech Spec 3.6.4.1.A due to RB DP being greater than Tech Spec required -0.25" wc by local average on the refuel floor.

At 22:05, U3 RBV was secured, and at 22:07 Tech Spec 3.6.4.1.A was exited when RB DP returned to below -0.25" wc.

An 8 hour non-emergency notification was made via Emergency Notification System #51721 in accordance with 10 CFR 50.72(b)(3)(v)(C) for the loss of Secondary Containment.



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

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**NARRATIVE**

**C. Cause of Event:**

The apparent cause of the event was determined to be the system operating with an out of tolerance (OOT) U3 Area DP controller that degraded total system margin.

**D. Safety Analysis:**

With the exception of the degraded area differential pressure controller, all equipment responded as designed. Operator action to secure Unit 3 RBV in accordance with proceduralized guidance prevented the further degradation of the reactor building differential pressure, maintaining the negative differential pressure and preventing loss of safety function. This event is of very low safety significance.

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

**E. Corrective Actions:**

The degraded area DP controller was calibrated and the Unit 3 RBV restored to operation. Gaps in the maintenance strategy will be identified and eliminated. System upgrades will be reviewed for implementation. The operational response procedure for the loss of plant heating steam will be reviewed for enhancements.

**F. Previous Occurrences:**

A previous event in 2009 was found during the investigation where a degraded area DP controller caused a loss of secondary containment differential pressure. This event was used in the development of corrective actions.

**G. Component Failure Data:**

Manufacturer	Model	S/N	Type
Johnson Controls	T-5312	RY10812	Pneumatic Controller