



Dresden Nuclear Power Station
6500 North Dresden Road
Morris, IL 60450

January 19, 2024

10 CFR 55.31

SVPLTR: #24-0001

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

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

Subject: Licensee Event Report 237/2023-001-00, HCPI Inoperable Due to Air Void Accumulation

Enclosed is Licensee Event Report 237/2023-001-00, HCPI Inoperable Due to Air Void Accumulation. This report describes an event being reported in accordance with 10 CFR 50.73(a)(2)(v)(A) for a condition that could have prevented the fulfillment of a safety function of a system needed to mitigate the consequences of an accident.

There are no regulatory commitments contained in this submittal.

Should you have any questions concerning this letter, please contact Mr. Daniel J. Murphy, Regulatory Assurance Manager, at (815) 416-2800.

Respectfully,

A handwritten signature in blue ink, appearing to read "Carolyne Joseph".

Carolyne Joseph
Site Vice President
Dresden Nuclear Power Station

Enclosure: Licensee Event Report 237/2023-001-00

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



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 less learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Library, and Information Collections Branch (T-6 A10M), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by email to Infocollections.Resource@nrc.gov, and the OMB review at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; email: oir_submission@omb.eop.gov. The NRC is not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

1. Facility Name Dresden Nuclear Power Station, Unit 2	<input checked="" type="checkbox"/> 050	2. Docket Number 00237	3. Page 1 OF 3
	<input type="checkbox"/> 052		

4. Title
HPCI Inoperable Due to Air Void Accumulation

5. Event Date			6. LER Number			7. Report Date			8. Other Facilities Involved		
Month	Day	Year	Year	Sequential Number	Revision No.	Month	Day	Year	Facility Name	<input type="checkbox"/> 050	Docket Number
11	20	2023	23	001	000	01	19	2024	N/A	<input type="checkbox"/> 052	N/A
									Facility Name	<input type="checkbox"/> 050	Docket Number
									N/A	<input type="checkbox"/> 052	N/A

9. Operating Mode: 1 10. Power Level: 100

11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)

<input type="checkbox"/> 10 CFR Part 20	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 10 CFR Part 50	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 73.1200(a)
<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 73.1200(b)
<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)	<input type="checkbox"/> 73.1200(c)
<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 73.1200(d)
<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 10 CFR Part 21	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 10 CFR Part 73	<input type="checkbox"/> 73.1200(e)
<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 21.2(c)	<input type="checkbox"/> 50.69(g)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.77(a)(1)	<input type="checkbox"/> 73.1200(f)
<input type="checkbox"/> 20.2203(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> 73.77(a)(2)(i)	<input type="checkbox"/> 73.1200(g)
<input type="checkbox"/> 20.2203(a)(2)(iv)		<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/> 73.77(a)(2)(ii)	<input type="checkbox"/> 73.1200(h)
<input type="checkbox"/> 20.2203(a)(2)(v)		<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)		

OTHER (Specify here, in abstract, or NRC 366A).

12. Licensee Contact for this LER

Licensee Contact Daniel J. Murphy, Regulatory Assurance Manager	Phone 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 IRIS	Cause	System	Component	Manufacturer	Reportable to IRIS

14. Supplemental Report Expected

<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date)	15. Expected Submission Date	Month 03	Day 19	Year 2024
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16. Abstract (Limit to 1326 spaces, i.e., approximately 13 single-spaced typewritten lines)

On 11/20/2023 at 0956 CST, a section of High-Pressure Coolant Injection (HPCI) discharge piping was found to have an air void during the monthly performance of a non-destructive ultrasonic testing examination for gas accumulation in the Emergency Core Cooling Systems. Technical Specification 3.5.1 Condition G was entered and HPCI was declared inoperable. Venting was performed to restore the system to operable, which was confirmed via non-destructive ultrasonic testing at 1034 CST on 11/20/2023. This event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(D) for a condition that could have prevented the fulfillment of a safety function of a system needed to mitigate the consequences of an accident.

The cause of the event has not yet been determined. Investigation into the cause of the event is ongoing, and a supplemental report will be submitted after completion of the investigation. Additional corrective actions are being evaluated as part of the investigation and will be provided in the supplemental report.



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

(See NUREG-1022, R.3 for instruction and guidance for completing this form
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1. FACILITY NAME Dresden Nuclear Power Station	<input checked="" type="checkbox"/> 050	2. DOCKET NUMBER 00237	3. LER NUMBER		
	<input type="checkbox"/> 052		YEAR	SEQUENTIAL NUMBER	REV NO.
			23	- 001	- 000

NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

General Electric – Boiling Water Reactor, 2957 megawatts thermal rated core power

Energy Industry Identification System (EIIIS) codes are identified in the text as [XX].

A. CONDITIONS PRIOR TO EVENT

Unit: 2 Event Date: November 20, 2023 Event Time: 0956 CST
Reactor Mode: 1 Mode Name: Power Operation Power Level: 100%

B. DESCRIPTION OF EVENT

On November 20, 2023, at 0956 CST, a portion of the single-train High Pressure Coolant Injection system (HPCI) [BJ] discharge piping was discovered to have an air void during the monthly performance of a non-destructive ultrasonic examination (NDE UT) for gas accumulation in Emergency Core Cooling System (ECCS) piping. Upon notification of this discovery, the station entered Technical Specification 3.5.1 Condition G and declared HPCI inoperable. An 8-hour notification was made in accordance with 10 CFR 50.72(b)(3)(v)(D) for a condition that, at the time of discovery, could have prevented the fulfillment of the safety function of a system needed to mitigate the consequences of an accident.

The NRC was notified via ENS Report 56866 at 1753 EST.

This event is being reported in accordance with 10 CFR 50.73(a)(2)(v)(D) for a condition that could have prevented the fulfillment of the safety function of a system needed to mitigate the consequences of an accident.

C. CAUSE OF EVENT

The cause of the event has not yet been determined. Investigation into the cause of the event is being performed under Issue Report (IR) 04718861. A supplemental report will be submitted after completion of this evaluation.

D. SAFETY ANALYSIS

The safety significance of the event is very low. TS 3.5.1 allows Unit 2 to remain at power for 14 days with HPCI inoperable, providing that the Isolation Condenser (IC) [BL] remains operable per the required actions for Condition G. Unit 2 maintained compliance with TS 3.5.1 given the IC was operable during the period in which HPCI was inoperable, and HPCI operability was restored in 38 minutes after the time of discovery.



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			23	- 001	- 000

NARRATIVE

E. CORRECTIVE ACTIONS

Venting was performed in accordance with station procedure to restore HPCI to operable. At 1034 CST on November 20, 2023, NDE UT confirmed the system piping was water solid and LCO 3.5.1 Condition G was exited.

Additional corrective actions are being reviewed as part of the investigation to determine the cause of the event. Any additional actions will be documented in a supplemental report.

F. PREVIOUS OCCURENCES

A review of DNPS LERs for the last three years did not identify any LERs associated with HPCI or other ECCS gas accumulation resulting in a loss of function. Additional occurrences of gas intrusion into ECCS piping will be reviewed as part of the investigation into the cause of this event and documented as applicable in the supplemental report.

G. COMPONENT FAILURE DATA

Not applicable