



Commonwealth Edison  
Dresden Nuclear Power Station  
R.R. #1  
Morris, Illinois 60450  
Telephone 815/942-2920

September 24, 1991

EDE LTR #91-577

U.S. Nuclear Regulatory Commission  
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Washington, D.C. 20555

Licensee Event Report #91-007-0, Docket #050249 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(i)(B).

E. D. Eenigenburg  
Station Manager  
Dresden Nuclear Power Station

EDE/ade

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III  
NRC Resident Inspector's Office  
File/NRC  
File/Numerical

(ZDVR/317)

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Facility Name (1) Dresden Nuclear Power Station, Unit 3 Docket Number (2) 0 15 10 10 10 12 14 19 Page (3) 1 of 0 3

Title (4) Type B and C Containment Local Leak Rate Testing Limit Exceeded Due to HPCI Turbine Exhaust Check Valve Leakage

Event Date (5)			LER Number (6)				Report Date (7)			Other Facilities Involved (8)	
Month	Day	Year	Year	Sequential Number	Revision Number	Month	Day	Year	Facility Names	Docket Number(s)	
0	9	1991	1991	0017	00	0	9	2009	N/A		
									N/A		

OPERATING MODE (9) N

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)

<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> Other (Specify in Abstract below and in Text)
<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	

POWER LEVEL (10) 0 0 0

LICENSEE CONTACT FOR THIS LER (12)

Name: Michael Andjelic, Technical Staff Engineer Ext. 2366

TELEPHONE NUMBER: AREA CODE 8 1 5 9 4 2 - 12 19 12 10

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
X	B   J	I   S   V	M   3   6   0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)

Yes (If yes, complete EXPECTED SUBMISSION DATE)  NO

Expected Submission Date (15) 0 2 0 1 9 2

ABSTRACT (Limit to 1400 spaces, i.e, approximately fifteen single-space typewritten lines) (16)

On September 10, 1991 with Unit 3 in a refueling outage and during the performance of Dresden Technical Staff Surveillance Procedure (DTS) 1600-1, Local Leak Rate Testing (LLRT) of Primary Containment Isolation Valves, the leakage between the 3-2301-74, High Pressure Coolant Injection (HPCI) Turbine Exhaust To Suppression Chamber Stop Check Valve, and the 3-2301-45, HPCI Turbine Exhaust Check Valve, was unable to be determined. Further diagnosis and previous LLRT history indicated that the 3-2301-45 was the leaking valve. This valve leakage exceeded the Technical Specification 3.7.A.2.b.(2)(a) limit of 488.452 scfh. The cause of the excessive leakage is unknown at this time. This valve will be repaired and tested prior to unit startup. A supplement to this report will then be submitted outlining the cause of failure, retest results, the final Type B and C leak rate test results and any additional corrective actions to prevent recurrence. The safety significance of this event was minimal because the in line valve is not believed to have significant leakage. Therefore, the "through" leakage, which represents actual containment leakage under design basis accident conditions, was minimal. A previous occurrence of this type is outlined in LER 89-009/050249.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						Page (3)		
		Year	///	Sequential Number	///	Revision Number				
Dresden Nuclear Power Station	0   5   0   0   0   2   4   9	9   1	-	0   0   7	-	0   0	0   3	OF	0   3	

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

This valve will be repaired, inspected, and retested per DTS 1600-1 prior to unit startup, under Work Request D03575. A supplement to this report will then be submitted to report the cause of failure, retest results, maintenance history, applicability of the QCNPS problem to Dresden and the final Type B and C leak rate test results.

This report is being submitted in accordance with 10CFR 50.73(a)(2)(i)(B), which requires the reporting of any operation or condition prohibited by the Technical Specifications.

D. SAFETY ANALYSIS OF EVENT:

The safety significance is considered minimal because in line HPCI Turbine Exhaust Stop Check Valve 3-2301-74 is not believed to have significant leakage. Therefore, the through leakage for this primary containment boundary is minimal, and as such primary containment integrity would have been unaffected under design basis accident conditions.

The supplement to this report will include the retest results, and verification of 3-2301-74 integrity.

E. CORRECTIVE ACTIONS:

Prior to unit startup, the cause of the excessive leakage from the 3-2301-45 valve will be determined and appropriate repairs will be completed by Mechanical Maintenance personnel (249-200-91-06201). The valve will be retested by the Technical Staff per DTS 1600-1. A supplement to this report outlining the cause of the event, maintenance history, retest results, and the final Type B and C local leak rate testing results (including total type B and C leakage and data for any volumes which exceed Station guidelines) will also be submitted (249-200-91-06202). The supplemental report will also provide further information concerning whether low speed operation of the HPCI Turbine creates the "chugging" phenomenon which has been identified at QCNPS and any further corrective actions.

F. PREVIOUS OCCURENCES:

LER/Docket Numbers    Title

89-009/05000249    Local Leak Rate Testing "As Found" Limit Exceeded Due To Excessive Leakage From Primary Containment Valves

The cause of this event was primarily leakage from the Inboard Feedwater [SJ] Check Valve 3-220-58A. Other contributing leakages were from the HPCI Turbine Exhaust Check Valve, 3-2301-45, and the Reactor Building to Pressure Suppression Chamber Vacuum Breaker Check Valve, 3-1601-31B. The cause of the failure for the HPCI Turbine Exhaust Check Valve was corroded disks and worn and cracked Buna-rubber seats; the valve was replaced.

G. COMPONENT FAILURE DATA:

<u>Manufacturer</u>	<u>Nomenclature</u>	<u>Model Number</u>	<u>Mfg. Part Number</u>
Marlin	Check Valve	R-150-ESGBF-X	N/A

An industry wide Nuclear Plant Reliability Data System (NPRDS) data base search revealed two reported failures for this type of check valve utilized in the same manner. The failures were generally excessive leakage between the seat and disk.