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Dresden Nuclear Power Station
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August 6, 1991

EDE LTR #91-479

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Licensee Event Report #91-005-0, Docket #050249 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(iv).

E. D. Eenigenburg
Station Manager
Dresden Nuclear Power Station

EDE/ade

Enclosure

cc: A. Bert Davis, Regional Administrator, Region III
File/NRC
File/Numerical

(ZDVR/283)

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

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 4

Title (4) Primary Containment Isolation Valve Closure Due to Reactor Water Cleanup System Isolation

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)
07	11	91	91	005	00	08	02	91	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)					
	20.402(b)	20.405(c)	X	50.73(a)(2)(iv)	73.71(b)	
POWER LEVEL (10) 0 6 3	20.405(a)(1)(i)	50.36(c)(1)		50.73(a)(2)(v)	73.71(c)	
	20.405(a)(1)(ii)	50.36(c)(2)		50.73(a)(2)(vii)	Other (Specify in Abstract below and in Text)	
	20.405(a)(1)(iii)	50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		
	20.405(a)(1)(iv)	50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)		
	20.405(a)(1)(v)	50.73(a)(2)(iii)		50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)

Name: John Reid, Technical Staff System Engineer Ext. 2380 TELEPHONE NUMBER: AREA CODE 8 1 5 9 4 2 - 2 9 2 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

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15) X NO

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

On July 11, 1991 at 0948 hours with Unit 3 at 63% power, a Reactor Water Cleanup (RWC) System isolation occurred with Primary Containment Isolation Motor Operated valves (MOVs) 3-1201-1 and 3-1201-2 fully closing. Operational Analysis Department personnel were performing testing following modification to the RWC water sample panel, when the unplanned RWC isolation occurred. Investigation revealed that a momentary short circuit occurred when the power supply to the sample panel was turned on. This was evident by the fact that none of the sample panel instruments energized and the electrical feed went dead as soon as the power supply was turned on. It was discovered later that the main fuse which supplies 120 VAC to the sample panel had opened. The power supply to the RWC high temperature indicating switches is also protected by this same fuse. When the fuse opened, power to the RWC high temperature indicating switches was lost. The deenergization of these switches initiated a RWC system isolation signal. Corrective actions included successful replacement of the fuse and prompt return of the RWC system to normal operation. This event had no safety significance because the RWC system properly isolated on the high temperature signal and isolation of the RWC system for short periods has no affect on power operation or coolant chemistry limits. A previous unplanned RWC system isolation was reported by LER 91-14/050237.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

Review of the sample panel power supply circuit indicated that the new sample panel had an internal 15 amp breaker; however, fuse 707-7 which feeds this breaker was only 5 amps. This less than optimum electrical protection coordination resulted in the opening of the main fuse although the fault was in the sample panel. Although fuse 707-7 fed both the RWCU high temperature system trip logic and the sample panel by original plant design, (and was judged adequate to support the sample panel modification) and the primary purpose of the 15 amp internal sample panel breaker was to serve as an isolation point for the potential subsequent installation of additional modules, design deficiency within the sample panel modification was a contributing factor in this event.

D. SAFETY ANALYSIS OF EVENT:

The purpose of the RWCU system is to maintain reactor water chemistry within Technical Specification requirements. As this event was promptly resolved and the RWCU system was returned to service immediately, Technical Specification limits were not exceeded. The RWCU system automatically isolated, as designed, upon receipt of a high temperature signal in the RWCU system. There was no effect on public health or safety. Therefore, this event had no safety significance.

E. CORRECTIVE ACTIONS:

1. The immediate corrective actions concerning the short circuit were to complete the replacement of the fuse and reestablish RWCU system operation. This was done without further incident.
2. A design change to the sample panel power supply circuit has been completed, changing the breaker at the sample panel to a 5 amp breaker and fuse 707-7 to a 10 amp fuse.
3. The cognizant Nuclear Engineering Department (NED) System Design Engineer also reviewed this event with the Architect/Engineer involved and will include a review of this event in the NED Lessons Learned program to provide awareness of this concern (249-200-91-04501).

F. PREVIOUS OCCURENCES:

LER/Docket Numbers Title

91-1/050237 Partial Group I Isolation Due To Shorting Of 1B MSIV Position Indicating Light Socket

This event involved unplanned automatic closure of two Primary Containment Group I Isolation valves due to shorting of the 1B Main Steam Isolation Valve (MSIV) open position indicating lamp socket in the Control Room. The short occurred during bulb changing and was attributed to foreign material in the lamp socket. The operator had vacuumed the socket prior to installing the new bulb in accordance with procedural requirements; however, the foreign material may have been introduced by the vacuum nozzle. Routine vacuuming of the Control Room sockets continues to be performed and has been effective in reducing events of shorting on the Control Room panels.

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

LER/Docket Numbers Title

91-14/050237 Primary Containment Isolation Valve Closure Due To Reactor Water Cleanup System Isolation

This event involved unplanned automatic closure of two Primary Containment Group I Isolation valves due to shorting of position indication light socket at local control station. The short occurred while changing the bulb; corrective action included adding a precaution to the procedure used for surveillance of the local control stations.

G. COMPONENT FAILURE DATA:

<u>Manufacturer</u>	<u>Nomenclature</u>	<u>Model Number</u>	<u>Mfg. Part Number</u>
*****	*****	*****	*****

As there was no component failure this section does not apply.