



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

August 1, 1991

EDE LTR #91-474

U.S. Nuclear Regulatory Commission
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Licensee Event Report #91-016, Docket #050237 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/dwh

Enclosure

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

(ZDVR/279)

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2	Docket Number (2) 0 15 10 10 10 12 13 17	Page (3) 1 of 0 3
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Title (4) **Spurious Closure of 2A SDC Pump Isolation Valve Due to Control Relay Contact Problem**

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	7	10	9	1	6	0	8	0	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)				
POWER LEVEL (10) 0 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 20.405(a)(1)(iv)
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(i)
		<input checked="" type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(v)
			<input type="checkbox"/> 50.73(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 50.73(a)(2)(viii)
				<input type="checkbox"/> 50.73(a)(2)(ix)	<input checked="" type="checkbox"/> 50.73(a)(2)(x)
					<input type="checkbox"/> 73.71(b)
					<input type="checkbox"/> 73.71(c)
					<input type="checkbox"/> Other (Specify in Abstract below and in Text)

LICENSEE CONTACT FOR THIS LER (12)		TELEPHONE NUMBER	
Name	AREA CODE		
Diego Estrella, Technical Staff System Engineer	8 1 5	9 4 2	-12 19 10
Ext. 2354			

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)											
CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	
X	J E	R L Y	G O B O	Y							

SUPPLEMENTAL REPORT EXPECTED (14)				Expected Submission Date (15)	Month	Day	Year
<input type="checkbox"/> Yes (If yes, complete EXPECTED SUBMISSION DATE)				<input checked="" type="checkbox"/> NO			

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

On July 10, 1991 at 1400 hours, following a Unit 2 shutdown, the Nuclear Station Operator (NSO) was attempting to place the 2A Shutdown Cooling (SDC) Loop in operation; however, the 2A SDC pump suction isolation motor-operated (MO) 2-1001-2A valve automatically cycled closed after the NSO placed it in the full open position. The NSO made several attempts to open the valve but it continued to close automatically after reaching its full open position. The Electrical Maintenance Department performed a continuity test across MO2-1001-2A control logic relay contact 3/4, which required lifting of a connection wire off the contact's terminal. Upon verification that the contact was not short circuited, the connection wire was relanded and the isolation signal simultaneously cleared. The relay was replaced to allow for further bench testing and also as a preventative measure. Bench testing of the relay could not pin point the cause of the spurious signal. The safety significance for this event was minimal because the valve closed when given the spurious signal and a redundant isolation valve was operable. Review of system records indicates that this type of failure has not been a recurring problem.

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 3 7	9 1	- 0 1 6	- 0 0	0 3	OF	0 3	

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

D. SAFETY ANALYSIS OF EVENT:

At the time of this event the SDC System was being started for removal of decay heat from the reactor coolant in conjunction with an orderly reactor shutdown due to primary containment isolation valves for the leaking recirculation loop sample (refer to LER 91-015/050237). The MO2-1001-2A valve closed properly when challenged by the spurious isolation signal. Technical Specification 3.7.A.2 requires that primary containment integrity be maintained for conditions when the reactor water temperature is at or above the boiling point (212 degrees F) and fuel is in the vessel. During this attempt to initiate the SDC System, primary containment integrity was maintained and a redundant isolation valve was operable. For this reason, this event was of minimal safety significance.

E. CORRECTIVE ACTIONS:

As immediate corrective action WR 02417 was issued to request an EMD investigation of the event. The relay was replaced and the MO2-1001-2A valve was tested per Dresden Operating Surveillance (DOS) 1600-18, Cold Shutdown Valve Testing. The SDC System was then started and Cold Shutdown of the reactor was reached at 2000 hours, July 10, 1991. This event has been identified as an isolated case. However, if further similar occurrences take place additional actions will be evaluated. For these reasons, the corrective actions taken were appropriate and no further actions are deemed necessary.

F. PREVIOUS OCCURRENCES:

Review of maintenance and system history files for the past five years indicates no similar occurrences of this type on the SDC system. However, the following is a non-reportable station deviation report (DVR) involving a similar type of relay.

DVR Number	Title
12-2-91-015	Unit 2/3 Diesel Generator [EK] Cooling Water Alarm Circuit Relay Failures
	While preparing the Unit 2/3 Diesel Generator for the monthly surveillance, two control relays in the auxiliary control panel were found damaged. Contact damage had resulted in melting of the casing material. Safety significance was minimal because this condition would not have prevented automatic start of the Diesel Generator. The apparent root cause of this event is attributed to random failure of relay CR-120. Under WR 97888, the EMD replaced the relays and inspected the cabinet for any fire damage that may have occurred. A search of maintenance records indicated that these were original components and the event is believed to be an isolated case, attributed to random failure.

G. COMPONENT FAILURE DATA:

Manufacturer	Nomenclature	Model Number	Mfg. Part Number
General Electric Company (GE)	Relay	CR120A06022AA	N/A

An industry wide NPRDS data base search under GE Model Number CR120A revealed 42 records of valve related failures. The majority of these failures were attributed to end of life.