



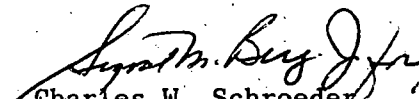
Commonwealth Edison
Dresden Nuclear Power Station
R.R. #1
Morris, Illinois 60450
Telephone 815/942-2920

November 2, 1992

CWS LTR #92-651

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

Licensee Event Report 92-32, Docket 050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(v).


Charles W. Schroeder 11/5/92
Station Manager
Dresden Nuclear Power Station

CWS/jmt

Enclosure

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

(ZDVR/778)

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2/3										Docket Number (2) 0 5 10 10 10 2 3 17			Page (3) 1 of 0 3		
Title (4) Inadequate 4 KV Degraded Voltage Setting Resulting in Control Room Air Filtration Unit Booster Fans Inoperable Due to Inaccurate Calculational Assumption															
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)					
1 0	1 6	9 2	9 2	0 3 2	0 0	1 0	2 7	9 2	Dresden Unit 2	0 5 10 10 10 2 3 7					
									Dresden Unit 3	0 5 10 10 10 2 4 9					
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 9 3			20.402(b)			20.405(c)			50.73(a)(2)(iv)			73.71(b)			
			20.405(a)(1)(i)			50.36(c)(1)			<input checked="" type="checkbox"/> 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 Sang J. Rhee, Technical Staff System Engineer								TELEPHONE NUMBER							
Ext. 2371								AREA CODE 8 1 5 9 4 2 - 2 9 2 0							
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)					
[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 October 6, 1992, at 1115 hours with Unit 2 at 93% rated core thermal power, and Unit 3 at 96% rated core thermal power, Dresden Station received a notification from the Nuclear Engineering Department (NED) concerning operability of the Control Room Air Filtration Unit booster fans at existing Second Level degraded voltage settings. As a result of the degraded voltage calculations, NED determined, that at the existing Second Level degraded voltage relay setting for Bus 24-1, the Air Filtration Unit 'A' and 'B' booster fans for the 'B' train Air Handling Unit for the Control Room Ventilation system would have less available voltage than the required minimum pick up voltage specified by the contactor manufacturer. Based on this calculation, both 'A' and 'B' booster fans were declared inoperable until such time that a design change is made to restore the available voltage to the 'A' and 'B' booster fans greater than the manufacturer's minimum voltage. Both Booster fans control power transformers were replaced and the system was declared operable at 1200 hours on October 17, 1992. The adequacy of the settings for Second Level Degraded voltage protection was previously reported by LER 92-004/050249.

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 3 7	9 2	- 0 3 2	- 0 0				0 3	OF	0 3

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

However, because the MCC that supplies the Control Room Standby Air Filtration Unit Booster Fans was a later year modification, the MCC is not a General Electric MCC and was therefore unique. Each booster fan control circuit has a relatively smaller control transformer (100 Volt-Ampere) for the size load. As a result of the smaller control transformer, a larger voltage drop occurs than was observed in similar size 1 GE MCC starter contactors. Since MCC 29-8 is the only non GE MCC, this condition is considered to be unique.

D. SAFETY ANALYSIS OF EVENT:

The safety function of the Control Room Emergency Filtration System is to maintain the habitability of the Control Room such that the plant can be safely shutdown under design basis conditions. The purpose of the 'A' and 'B' Air Filtration Unit booster fans for the 'B' train Control Room Ventilation system is to provide filtered air to the Control room in the event of a design basis accident. The system is required to be manually started within 40 minutes of a design basis event. Without sufficient voltage to pickup the contactors the booster fans may not start or run. Upon notification by NED that the Control Room HVAC Booster Fans A and B were susceptible to degraded voltage, the system was administratively declared inoperable.

Since the probability of having degraded voltage concurrent with a Loss of Coolant Accident (LOCA) that results in significant fuel damage is considered to be very small, the safety significance is considered minimal.

E. CORRECTIVE ACTIONS:

Immediate corrective action was to initiate Work Request 13060 to replace the existing 100 VA control power transformer with a 300 VA control power transformer. Both Booster fans control power transformers were replaced and the system was declared operable at 1200 hour on October 17, 1992. In order to verify proper operation of these fans, Operations will continue to perform DOS 5750-01, Control Room Standby HVAC Air Filtration Unit Surveillance, on a monthly basis.

F. PREVIOUS OCCURENCES:

LER/Docket Numbers	Title
92-004/050249	Improper Setpoint of Second Level Undervoltage Relays Due to Management Deficiency.
	The Nuclear Engineering Department notified Dresden Station that Unit 3 4 KV Buses 33-1 and 34-1 calculated voltages, after plant modifications, would be 3832 V and 3792 V, respectively. Based on these calculations and the fact that modifications had to be performed to achieve these voltages, Unit 3 was in an unanalyzed condition.

G. COMPONENT FAILURE DATA:

Manufacturer	Nomenclature	Model Number	Mfg. Part Number
N/A	N/A	N/A	N/A

There is no component failure identified with this event, therefore, this section is not applicable.