



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

August 11, 1989

EDE LTR #89-624

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

Licensee Event Report #89-020-0, Docket #050237 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/jt

Enclosure

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

(0639k)

8908180159 890811
PDR ADOCK 05000237
S PDC

IE22
11

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2 Docket Number (2) 0 5 10 10 10 12 13 17 Page (3) 1 of 0 4

Title (4) Potential Violation of Secondary Containment Integrity Due to Interlock Door Strike Failure

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	1988	8	020	00	0	8	1988	Dresden Unit 3	051010121419

OPERATING MODE (9) N

POWER LEVEL (10) 0 9 6

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)	

LICENSEE CONTACT FOR THIS LER (12)

Name: A. N. Anandappa, Technical Staff System Engineer Ext. 2529

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

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	N	G I E L	X X X X	N					

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15) X NO

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

At 0830 hours on July 19, 1989, the Operations Shift Supervisor was notified that a secondary containment interlock door to the Unit 2/3 Diesel Generator (DG) room was not operating properly. Control Room personnel also received Control Room Panel 902-4 Annunciator E-21, "Reactor Building to Unit 2/3 DG Room Interlock Doors Inoperative or Bypassed." Immediate investigation by Operations Department personnel determined that the latch on the Unit 2/3 DG room door had failed, and that opening of the door from the Reactor Building into the interlock corridor would cause the Unit 2/3 DG room door to open slightly. An individual was posted in the area to maintain one of the interlock doors in the closed position until repairs were completed by Electrical Maintenance. The safety significance of this event was minimal as an overall reactor building to atmosphere differential pressure of >= 0.25 inches of water vacuum was maintained at all times. A previous event involving failure of a secondary containment interlock door was reported by LER 88-8/050249.

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	8 9	-	0 2 0	-	0 0	2	OF	0 4	

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

PLANT AND SYSTEM IDENTIFICATION:

General Electric - Boiling Water Reactor - 2527 Mwt rated core thermal power.

EVENT IDENTIFICATION:

Potential Violation of Secondary Containment Integrity Due to Interlock Door Strike Failure

A. CONDITIONS PRIOR TO EVENT:

Unit(s): 2(3) Event Date: July 19, 1989 Event Time: 0830 hours
 Reactor Mode(s): N(N) Mode Name(s): Run(Run) Power Level: 96%(99%)
 Reactor Coolant System (RCS) Pressure(s): 995(1006) psig

B. DESCRIPTION OF EVENT:

At 0830 hours on July 19, 1989, with Unit 2 operating at 96% rated core thermal power and Unit 3 operating at 99% rated core thermal power, an Operations Shift Supervisor was notified that a secondary containment interlock door to the Unit 2/3 Diesel Generator (DG) room was not operating properly. Control Room personnel also received Control Room Panel 902-4 E-21 Annunciator, "Reactor Building to Unit 2/3 DG Room Interlock Doors Inoperative or Bypassed." Immediate investigation by Operations Department personnel determined that the latch on the Unit 2/3 DG room door had failed, and that opening of the door from the reactor building into the Unit 2/3 DG interlock corridor would cause the Unit 2/3 DG room door to open slightly. An individual was posted in the area to maintain one of the interlock doors in the closed position until repairs were completed by Electrical Maintenance at 0600 hours on July 20, 1989.

C. APPARENT CAUSE OF EVENT:

Secondary containment integrity was required during this event by Technical Specification 3.7.C.1. Maintaining at least one door in each personnel interlock access in the closed position is included in the Technical Specification definition of secondary containment integrity. Therefore, this report is submitted in accordance with 10 CFR 50.73(a)(2)(i)(B), which requires the reporting of any condition prohibited by the Technical Specifications.

Investigation by Electrical Maintenance determined the Unit 2/3 DG room door strike, which is equipped with an interlocked keyswitch, had failed. Entry to the Unit 2/3 DG room from the Unit 2 Reactor Building via the access corridor is interlocked such that the reactor building side door must be fully closed and a DG room key must be used to open the Unit 2/3 DG room door. In this event, a strike mechanism which maintains the Unit 2/3 DG room door in the locked closed position had failed. This allowed the Unit 2/3 DG room door to swing open due to normal Reactor to Turbine Building differential pressure (dP). Both doors in the interlock pair being opened simultaneously resulted in the Control Room alarm. Individuals at the interlock access also notified the Operations Shift Supervisor; prompt response by Operations insured that secondary integrity was maintained pending repair of the strike mechanism by Electrical Maintenance.

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	8 9	-	0 2 0	-	0 0	3	OF	0 4	

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

A maintenance and system history review indicates that this is not an adverse trend. A previous similar occurrence involving a failure of the interlock circuitry for the Reactor to Turbine Building secondary containment interlock doors was reported by LER 85-2/050237. Corrective actions included installation of a time delay feature to provide improved interlock circuit operation.

D. SAFETY ANALYSIS OF EVENT:

Operations Department personnel responded immediately to ensure that secondary containment integrity was restored in accordance with Technical Specification 3.7.C.1. An overall reactor building to atmosphere dP of well in excess of 0.25 inches of water vacuum (dP value required during demonstration of secondary containment integrity in accordance with Technical Specification 4.7.C.1.c) was maintained throughout this event, which would have prevented exfiltration of contamination from the reactor building had this event occurred under design-basis accident conditions. Therefore, this event was of minimal safety significance.

E. CORRECTIVE ACTIONS:

Immediate corrective actions included posting an individual in the area to ensure that at least one door in the interlock access was maintained in the closed position in accordance with Technical Specification 3.7.C.1. Electrical Maintenance then replaced the failed strike mechanism and proper interlock operation was verified. The interlock doors are inspected by the Technical Staff prior to performance of secondary containment leak rate tests at each refuel outage prior to refueling and also included on a periodic Technical Staff inspection surveillance. Therefore, no further corrective action is appropriate.

F. PREVIOUS EVENTS:

Two previous events involving a secondary containment interlock door failures are listed below.

<u>LER/Docket Numbers</u>	<u>Title</u>
88-8/050249	Violation of Secondary Containment Integrity Due to Personnel Interlock Door Circuitry Failure A loose fuse was repaired and a restraining assembly was installed over the interlock door circuitry fuses to prevent recurrence.
85-2/050237	Unit 2 Reactor Building/Turbine Building Interlock Door Failure This event involved a problem with the Reactor Building/Turbine Building interlock door circuitry such that a door opened ajar. The Reactor Building/Turbine Building interlock doors were adjusted to give a slower closure stroke time and the interlock circuitry was modified to install time delay relays which require one door to be closed for approximately two seconds before another door can be opened.

LICENSE 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	8 9	-	0 2 0	-	0 0	4	OF	0 4	

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

G. COMPONENT FAILURE DATA:

<u>Manufacturer</u>	<u>Nomenclature</u>	<u>Model Number</u>	<u>Mfg. Part Number</u>
Tee Jay Service Products	Locking Door Strike Mechanism	310-1-SPDT-FS	N/A

As this component is not reportable to the NPRDS data base, an industry-wide NPRDS search for similar events was not performed.