

LICENSEE EVENT REPORT (LER)

Facility Name (1) Dresden Nuclear Power Station, Unit 3
 Docket Number (2) 0 | 5 | 0 | 0 | 0 | 2 | 4 | 9
 Page (3) 1 | of | 0 | 3

TITLE (4) Violation of Secondary Containment Integrity Due to Personnel Interlock Door Circuitry 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	5	1	3	8	8	8	8	8	0 0 8	0 0
									Dresden Unit 2	0 5 0 0 0 2 3 7
									N/A	

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)									
	N	<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)					
POWER LEVEL (10)	0	<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)					
	0	<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)					
	0	<input checked="" type="checkbox"/> 20.405(a)(1)(iii)	<input 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: Anthony Anandappa, Technical Staff Engineer (X-529)
 TELEPHONE NUMBER: 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
X	N H	F U	X X X X	N					

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15):
 YES (If yes, complete EXPECTED SUBMISSION DATE) NO

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

At 0930 hours on May 13, 1988, with Unit 3 shutdown for a scheduled refueling outage and Unit 2 operating at 94% rated core thermal power, an alarm was received in the Control Room indicating that the Unit 3 Reactor Building to Turbine Building personnel interlock door circuitry was bypassed or inoperable. In responding to the alarm, the Reactor Operator was unable to get a reset; an Equipment Attendant was then immediately dispatched to the area. Upon arrival, the inner and outer Unit 3 Reactor Building to Turbine Building personnel interlock doors were found open with personnel freely passing through both open doors, thus violating Secondary Containment integrity. Secondary Containment integrity was required at the time by Technical Specification 3.7.C.1 since Unit 2 was operating at 94% rated core thermal power. Investigation by a Shift Foreman revealed a loose power supply fuse in the local interlock door circuitry panel. The interlock door circuitry was returned to an operable condition upon tightly inserting the fuse, thus preventing further simultaneous openings of both the inner and outer doors. The interlock door circuitry was inoperable for approximately ten minutes. The safety significance of the event was minimal as a result of the prompt action by the Operating Department personnel. In addition, the Reactor Building was maintained at a negative pressure with respect to the environment at all times during this event. A restraining assembly will be installed over the interlock door circuitry fuses to prevent future recurrence.

Handwritten signature/initials

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TEXT

PLANT AND SYSTEM IDENTIFICATION

General Electric Boiling Water Reactor - 2527 Mwt rated core thermal power. Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

Nuclear Tracking System (NTS) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX).

EVENT IDENTIFICATION

Violation of Secondary Containment [NG] integrity due to a failure of the Reactor Building [NG] to Turbine Building [NM] personnel interlock door circuitry.

A. CONDITIONS PRIOR TO EVENT:

Unit: 3(2) Event Date: May 13, 1988 Event Time: 0930 hours
 Reactor Mode: N Mode Name: Refuel (Run) Power Level: 0% (94%)
 Reactor Coolant System (RCS) Pressure: 0 psig (990.4 psig)

B. DESCRIPTION OF EVENT:

At 0930 hours on May 13, 1988 with Unit 3 shutdown for a scheduled refuel outage and Unit 2 operating at 94% rated core thermal power, an alarm was received in the Control Room indicating that the Unit 3 Reactor Building to Turbine Building personnel interlock door circuitry was inoperable or bypassed. In responding to the alarm, the Reactor Operator was unable to get a reset; an Equipment Attendant was immediately dispatched to the area. Upon arrival, the inner and outer Unit 3 Reactor Building to Turbine Building personnel interlock doors were found open with personnel freely passing through the open doors, thus violating Secondary Containment integrity. Secondary Containment integrity was required at the time by Technical Specification (T.S.) 3.7.C.1 since Unit 2 was operating at power.

Investigation by a Shift Foreman revealed a loose power supply fuse in the local interlock door circuitry panel. The interlock door circuitry was restored to an operable condition upon tightly inserting the fuse, thus preventing further simultaneous opening of both the inner and outer doors. The interlock door circuitry was inoperable for approximately ten minutes.

C. APPARENT CAUSE OF EVENT:

The Unit 3 Reactor Building to Turbine Building personnel interlock door circuitry is powered from 125V DC reactor building distribution panel main bus No. 3. The two supply power fuses, together with two fuses associated with the magnetic door locking devices, are located in an circuitry panel between the inner and outer doors. The fuses can be installed or removed without opening up this panel. The fuses are locked in place by inserting and twisting them a quarter turn, thus energizing the appropriate interlock circuit. The Shift Foreman who arrived at the scene observed that positive power supply fuse F1 was loose, which resulted in failure of the interlock circuit which prevents simultaneous opening of both the inner and outer doors. The control room alarm annunciated as designed, indicating failure of the interlock circuitry. It could not be determined specifically how the fuse became loosened, but it is clear that it occurred at the time of the Control Room alarm. 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.

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TEXT

D. SAFETY ANALYSIS OF EVENT:

Upon receipt of the Control Room alarm, Operating Department personnel were dispatched to the area to secure at least one door of the interlock and initiate corrective action as required. Prompt investigation resulted in repair of the interlock circuitry within ten minutes. Although Secondary Containment integrity was required by Technical Specification 3.7.C.1 since Unit 2 was operating at power, the Reactor Building was maintained at a negative pressure with respect to the environment at all times during this event, preventing any exfiltration from the Reactor Building to the environment. For these reasons, this event had minimal safety significance.

E. CORRECTIVE ACTIONS:

The immediate corrective action was to manually secure one of the doors and restore power to the interlock door circuitry by inserting and locking the fuse in place. The interlock door circuitry was then verified to show it would prevent simultaneous opening of both the inner and outer doors. To prevent a similar event from occurring in the future, the following additional actions were initiated.

1. Work requests D75451 for Unit 2 and D75452 for Unit 3 were initiated to install a locking restraint assembly for the fuses to ensure they are not removed or loosened (249-200-8-04901).
2. This event was covered at an awareness/expectation session with all contractor personnel on June 6, 1988 conducted by the Projects and Construction Superintendent and the Station Manager.
3. A May 13, 1988 memo issued by the Assistant Superintendent of Operations regarding this event and Secondary Containment integrity requirements will also be reviewed at a tailgate session (249-200-8804902).

F. PREVIOUS EVENTS:

<u>LER Number/Docket Number</u>	<u>Title</u>
87-28/050237	Failure of Secondary Containment Leak Rate Test Due to Excessive Air In-Leakage

This event involved failure of a Secondary Containment leak rate test due to excessive inleakage; a major source of the inleakage was determined to be degraded Main Steam [SB] line boot seals assemblies located at the steam line penetrations from the Reactor Building to the Turbine Building. Corrective action included repairs to the seals and implementing an inspection program.

G. COMPONENT FAILURE DATA:

This event did not involve a component failure.



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

June 6, 1988

EDE LTR #88-427

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

Licensee Event Report #88-008-0, 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
File/NRC
File/Numerical

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