

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Fermi-2										DOCKET NUMBER (2) 0 5 0 0 0 3 4 1										PAGE (3) 1 OF 0 2			
TITLE (4) Loss of Power to Main Steam Line and Fuel Pool Vent Radiation Monitors																							
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	8	2	4	8	5	8	5	0	5	3	0	0	0	9	2	0	8	5	0	5	0	0	0
OPERATING MODE (9) 3			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11):																				
POWER LEVEL (10) 0.00			20.402(b)				20.406(a)				<input checked="" type="checkbox"/> 80.73(a)(2)(iv)				73.71(b)								
			20.406(a)(1)(i)				80.36(a)(1)				80.73(a)(2)(v)				73.71(c)								
			20.406(a)(1)(ii)				80.36(a)(2)				80.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)								
			20.406(a)(1)(iii)				80.73(a)(2)(i)				80.73(a)(2)(vii)(A)												
			20.406(a)(1)(iv)				80.73(a)(2)(ii)				80.73(a)(2)(vii)(B)												
			20.406(a)(1)(v)				80.73(a)(2)(iii)				80.73(a)(2)(a)												
LICENSEE CONTACT FOR THIS LER (12)												TELEPHONE NUMBER											
NAME L.P. Bregni, Compliance Engineer												AREA CODE 3 1 3											
												5 8 6 - 5 3 1 3											
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																							
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS				
SUPPLEMENTAL REPORT EXPECTED (14)												EXPECTED SUBMISSION DATE (15)		MONTH		DAY		YEAR					
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 August 24, 1985, at 0548 hours, Engineered Safety Features were actuated when an instrument repairman inadvertently shorted a 120VAC power supply. The plant was at zero power in Operational Condition 3 at the time. The repairman was replacing the cover on an instrument drawer after completing a surveillance on the Main Steam Line Radiation Monitor, Division II, Channel B2/D. The repairman's screwdriver slipped when he was installing the bottom cover on the drawer. The screwdriver entered the drawer through the perforated cover, shorted the 120VAC instrument power filters, blowing fuse D11A-F9B and interrupting power to Main Steam Line radiation monitor D11-K603D and Fuel Pool Radiation Monitor D11-K609D. This led to a shutdown of Reactor Building HVAC, actuation of Standby Gas Treatment Division II (an ESF), shift of Control Center HVAC to recirculation mode (an ESF), a half-scrum, and half-trip of the MSIVs. The fuse was replaced and all systems returned to normal by 0638. All systems responded as designed.

The repairman chose the wrong size screwdriver. To prevent recurrence, the repairmen have been instructed about the proper size screwdriver to use; the event report has been made required reading for all I&C personnel.

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PDR ADOCK 05000341  
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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Fermi-2	0500034185	—	053	—	00	02	OF 02

TEXT (If more space is required, use additional NRC Form 366A's) (17)

On August 24, 1985, at 0548 hours, Engineered Safety Features were actuated when an instrument repairman inadvertently shorted a 120VAC power supply. The plant was at zero power in Operational Condition 3 at the time.

The repairman was replacing the cover on an instrument drawer after completing surveillance 44.010.28 (Reactor Protection System and Nuclear Steam Supply Shutoff System Main Steam Line Radiation, Division II, Channel B2/D Functional Test). The repairman's screwdriver slipped off the head of a pan head screw when he was installing the bottom cover on the drawer of MSL radiation monitor D11-K603D. The screwdriver entered the drawer through the perforated cover and shorted the 120VAC instrument power filters. This blew fuse D11A-F9B, interrupting power to the MSL radiation monitor and the Fuel Pool Radiation Monitor D11-K609D. Upon loss of instrument power, the monitor fail-safe logic provided a trip output which simulated high radiation (radiation conditions were normal throughout this event). The upscale trips resulted in a trip of RPS Division II logic (half-scam), shutdown of Reactor Building HVAC, auto start of Standby Gas Treatment system Division II (an ESF actuation), and shift of Control Center HVAC to recirculation mode (an ESF actuation). As a result of the logic lineup, one of the two trip relays for closure for each of the inboard and outboard Main Steam Line Isolation Valves was deenergized. This put each valve in a half-trip condition.

The fuse was replaced and the Fuel Pool Radiation Monitor trip was cleared at 0628. Reactor Building HVAC was restarted; the Control Center HVAC was returned to normal; and SBTG Division II was shutdown at 0630. The Main Steam Line Radiation Monitor trip and the half-scam were cleared at 0638. All systems responded as designed.

The cause of this event was the repairman's error in choosing the wrong size screwdriver. The correct size screwdriver would not have slipped off the screw head or passed through the perforated cover. To prevent recurrence, Instrument & Controls personnel who perform this surveillance have been instructed about the proper size screwdriver to use. An engineering design change in process will replace the existing Main Steam Line monitors. The new MSL monitor design will require revision of the existing test procedures. This revision will eliminate the need to remove the bottom cover of the monitor drawer to perform the functional test.

The Deviation/Event Report describing this occurrence has been made required reading for all I&C personnel. There have been no other failures of the type described above.

Detroit  
Edison

Robert S. Lenart  
Plant Manager

Fermi-2  
6400 North Dixie Highway  
Newport, Michigan 48166  
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September 20, 1985  
NP850095



Nuclear  
Operations

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

Gentlemen:

Reference: Fermi 2  
NRC Docket No. 50-341  
NRC Operating License No. NPF-43

Subject: Transmittal of Licensee  
Event Report 85-053

Please find enclosed LER No. 85-053-00, dated September 20, 1985, for a reportable event which occurred on August 24, 1985. As indicated below, a copy of this LER is being sent to the Administrator Region III.

If you have any questions, please contact us.

Sincerely,

R. S. Lenart  
Plant Manager

Enclosure: NRC Forms 366, 366A

cc: P.M. Byron  
M.D. Lynch

Regional Administrator  
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