

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Fermi-2										DOCKET NUMBER (2) 0 5 0 0 0 3 4 1										PAGE (3) 1 of 2	
TITLE (4) Reactor Scram Due to False Upscale Trip of IRM H																					
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 4	2 5	8 5	8 5	0 0 8	0 0	0 5	2 5	8 5						0 5 0 0 0							
OPERATING MODE (9) 5			THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11)																		
POWER LEVEL (10) 0 0 0			20.402(b)			20.406(c)			<input checked="" type="checkbox"/> 80.73(a)(2)(iv)			73.71(b)									
			20.406(a)(1)(i)			80.36(c)(1)			<input type="checkbox"/> 80.73(a)(2)(v)			73.71(c)									
			20.406(a)(1)(ii)			80.36(c)(2)			<input type="checkbox"/> 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)			<input type="checkbox"/> 80.73(a)(2)(vii)(A)												
			20.406(a)(1)(iv)			80.73(a)(2)(ii)			<input type="checkbox"/> 80.73(a)(2)(vii)(B)												
			20.406(a)(1)(v)			80.73(a)(2)(iii)			<input type="checkbox"/> 80.73(a)(2)(ix)												
LICENSEE CONTACT FOR THIS LER (12)												TELEPHONE NUMBER									
NAME A.E. Wegele, 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 NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC							
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 April 25, 1985, with the plant in mode 5 and control rod drive refurbishment underway beneath the reactor vessel, the reactor protection system was actuated twice when workers bumped an IRM cable, causing a false upscale trip on IRM H (RPS Channel B2). This unanticipated half-scam combined, with an anticipated half-scam in RPS A from maintenance on the Main Steam Line radiation monitors, produced a full scam signal. All systems responded as expected to the scam.

The IRM trip resulted from the response of the IRM detector to the change in capacitance caused by the slight deformation of the cable insulation when the cable was bumped. Because this occurs only where there is a lot of work under the vessel, IRM trips due to bumping the cables are not expected to occur during normal operation and have not occurred since the control rod drive refurbishment was completed.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/86

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Fermi-2	0 8 0 0 0 3 4 1	8 5	— 0 0 8	— 0 0	0 2	OF 0 2

TEXT (If more space is required, use additional NRC Form 200A's) (17)

On April 25, 1985 with the plant in operational condition 5 and control rod drive refurbishment underway beneath the reactor vessel, the Reactor Protection System (RPS) was actuated twice when workers bumped an IRM cable, causing a false upscale trip on IRM H (RPS Channel B2). In both occurrences, the unanticipated and inadvertent half-scam from the IRM combined with an anticipated half-scam from work on the Main Steam Line radiation monitors, produced a full scam.

The first scam occurred at 0234 hours. At that time, RPS Channel A2 was in the tripped condition, as expected by the operators, because of maintenance in progress on Main Steam Line C radiation monitor. The upscale trip on IRM H tripped RPS Channel B2, completing the RPS scam logic. No rod movement occurred because all rods except one were already fully inserted at the time of the scam. The one withdrawn rod, 18-55, was valved out at its hydraulic control unit for replacement of the rod drive.

The second scam occurred at 1603 hours. At that time, RPS Channel A2 was in its tripped condition, as expected by the operators, because of maintenance in progress on Main Steam Line A radiation monitor. As previously, the upscale trip on IRM H tripped RPS Channel B2, completing the RPS scam logic. In this case, one control rod moved. All other rods were fully inserted at the time of the scam. The rod that moved, number 26-27, had been withdrawn and its drive replaced earlier. At the time of the scam, the insert lines had been valved in on the HCU in preparation for inserting the drive and recoupling the control rod. Following the scam signal, the drive responded as expected, recoupling with the control rod and inserting it fully.

The IRM trips were the result of personnel working under the reactor vessel bumping the IRM cables. Bumping or pinching the cables slightly deforms the cable insulation, changing the capacitance of the cable. This change is interpreted by the IRM detector as an electronic spike. Bumping the cables occurs only when there is a significant level of work under the vessel, as in the changeout of control rod drives. Because this work can take place only when the plant is shutdown, IRM trips due to bumping the cables are not expected to occur during normal operation and have not occurred since the control rod drive refurbishment was completed. No further corrective action is considered necessary at this time.

**Detroit
Edison**

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May 25, 1985
NP-85-542

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

Gentlemen:

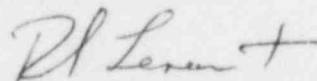
Reference: Fermi 2
NRC Operating License No. NPF-33

Subject: Transmittal of Licensee Event Report No. 85-008

Please find enclosed LER No. 85-008-00, dated May 25, 1985, for a reportable event which occurred on April 25, 1985. As indicated below, a copy of this LER is being sent to the Region III office.

If you have any questions, please contact us.

Sincerely,



R. S. Lenart
Superintendent
Nuclear Production

Enclosure: NRC Forms 366, 366A

cc: Mr. P.M. Byron

Regional Administrator
USNRC Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

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