

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Fermi-2										DOCKET NUMBER (2) 0 5 0 0 0 3 4 1										PAGE (3) 1 OF 04					
TITLE (4) Division I Core Spray/RCIC Room Cooler Deenergized																									
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	2	4	8	5	8	5	0	4	3	0	0	0	8	2	6	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 0 0		20.402(b)		20.406(e)		60.73(a)(2)(iv)		73.71(b)															
				20.406(a)(1)(i)		60.38(a)(1)		60.73(a)(2)(v)		73.71(a)															
				20.406(a)(1)(ii)		60.38(a)(2)		60.73(a)(2)(vi)		OTHER (Specify in Abstract below and in Text, NRC Form 366A)															
				20.406(a)(1)(iii)		60.73(a)(2)(ii)		60.73(a)(2)(vii)(A)																	
				20.406(a)(1)(iv)		60.73(a)(2)(iii)		60.73(a)(2)(vii)(B)																	
				20.406(a)(1)(v)		60.73(a)(2)(iii)		60.73(a)(2)(ix)																	
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																
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR											
YES (If yes, complete EXPECTED SUBMISSION DATE)										X NO															

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

On July 24, 1985, at about 1830 hours, the control switch for room cooler T41-B021 was found in the off position by the Nuclear Shift Supervisor (NSS) during his walkthrough of the control room. T41-B021 is the room cooler for the Reactor Core Isolation Cooling (RCIC) and Division I Core Spray (CS) systems and supports the operability of these systems. When this was found, the plant was in Operational Condition 3 and reactor pressure was less than 150 psig. Also, in a separate event, valve E11-F603A was inadvertently left closed making Division I emergency core cooling systems (ECCS) inoperable (see LER 85-047). Under these plant conditions and because Division I CS was made inoperable by the status of the room cooler, technical specification 3.5.1.a.1 was violated and the plant was required to comply with section 3.0.3 of the technical specifications. The room cooler was returned to normal. No reason has been found for the room cooler being in the off condition. A procedure revision has been processed to require the verification of the operational status of room coolers used to cool ECCS equipment during shift turnovers.

8509030494 850826  
PDR ADOCK 05000341  
S PDRIE 20  
1/1

## 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	05000341	85	043	00	00	2	OF 04

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

On July 24, 1985, at about 1830 hours, the Cordinated Manual Control (CMC) switch for room cooler T41-B021 was found in the OFF/RESET position by the Nuclear Shift Supervisor (NSS) during his walkthrough of the control room. T41-B021 is the room cooler for the Reactor Core Isolation Cooling (RCIC) and Division I Core Spray (CS) systems. Upon further investigation, the Motor Control Center (MCC) feeding T41-B021 (MCC 72B-3A position 2D) was also found in the OFF position. When no reason could be determined for the room cooler being in the off condition, the MCC was re-energized, the room cooler was run to ensure its operability, and then the CMC switch was placed in AUTO, its normal postion.

On the day this was found, the plant was in a planned shutdown sequence and had changed from Operational Condition 2 to 3 at 1520 hours, and was in Operational Condition 4 at 0115 hours on July 25, 1985. When in Operational Conditions 2 and 3, technical specifications require the RCIC and CS systems to be operable. The room cooler is a system required to support the operability of the RCIC and CS systems. Therefore, with T41-B021 inoperable, RCIC and Division I Core Spray were also inoperable. However, reactor pressure had been reduced below 150 psig since about 0700 hours on July 24, 1985. With reactor pressure below 150 psig RCIC is not required to be operational, and therefore technical specification 3.7.4 for RCIC was not violated.

In a separate event which began on July 23, 1985, at 1319 hours, valve E11-F603A was inadvertently left closed making Division I emergency core cooling systems (ECCS) inoperable; except for Division I of the automatic depressurization system (ADS) which is not affected by the position of E11-F603A. With E11-F603A closed, the flow path for the return of Division I service water to the residual heat removal (RHR) reservoir, the ultimate heat sink, was blocked. This blocked flow for Division I of the: emergency diesel generator service water (EDGSW); emergency equipment service water (EESW) and; residual heat removal service water (RHRSW). (The inadvertant closure of E11-F603A is the subject of LER 85-047.)

Taken as a separate event, having the room cooler CMC switch in the OFF/RESET position made inoperable only the Core Spray system when it was required to be operable for the given plant operational condition, but did not violate technical specifications in and of itself. As noted above, because reactor pressure was below 150 psig at the time, RCIC was not required to be operable. However, coupled with the fact that Division I ECCS was inoperable, albeit unknown at the time, having Division I CS inoperable did violate technical specifications.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

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	0 5 0 0 0 3 4 1 8 5	—	0 4 3	—	0 0	0 3	OF 0 4

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

With the Division I CS system inoperable, technical specification 3.5.1.a.1. allows seven days to restore it to operable status, provided that at least one Low Pressure Coolant Injection (LPCI) pump in each LPCI subsystem is operable. With the Division I ECCS inoperable this condition was not met, and thus the plant was in violation of the limiting condition for operation action statement, technical specification 3.5.1.a.1. for the CS system. As such the provisions of technical specification section 3.0.3 are applicable, which require that within one hour action shall be initiated to place the plant in an operational condition in which the specification does not apply.

To comply with section 3.0.3, the plant had to be in cold shutdown within 24 hours of the time the CMC switch was found in the OFF/RESET position, because at the time, the plant operational condition was hot shutdown. This was achieved as the plant entered Operational Condition 4, cold shutdown, at 0115 hours on July 25, 1985, about seven hours later.

Subsequent investigation of Work Orders (PN-21's) on HVAC, RCIC, and electrical systems; Nuclear Shift Supervisor and Nuclear Supervising Operator Log books; and Abnormal Lineup Sheets did not reveal any reason for the cooler's status. The Plant Support Engineer for Reactor Building HVAC systems was contacted, but he also did not know of any activities involving the room cooler. The NSS who discovered the problem on July 24, 1985, stated that he noted the CMC switch for room cooler T41-B021 was in the correct, AUTO, position with normal indications at approximately 1530 hours the previous day July 23, 1985. Normal indications means that the MCC feeding the room cooler was energized, otherwise there would be no lights lit at the CMC switch to indicate the status of the room cooler; OFF/RESET, AUTO, or RUNNING. Assuming that the room cooler was placed in OFF/RESET shortly after the NSS noted the CMC switch was normal, then the maximum time the room cooler could have been off was about 27 hours.

This event has been discussed with all operating shifts, emphasizing the importance of maintaining an awareness of equipment status with respect to safe operation and technical specification requirements. In addition, a modification has been made to procedure 21.000.01 "Shift Operations and Control Room" to require the verification of the operational status of additional systems and equipment during shift turnovers. This includes the addition of room coolers used to cool ECCS equipment.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)  Fermi-2	DOCKET NUMBER (2)  0 5 0 0 0 3 4 1	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 5	0 4 3	0 0	0 4	OF	0 4

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

While the room cooler for Division I CS and RCIC systems was inoperable, the Division II ECCS systems except for HPCI were available if required, as was the Division I ADS. Also, the time required to reestablish T41-B021 to operable status would not have presented a significant problem to the operation of the Division I CS system. Status of room temperature is displayed in the control room and the action required to make the room cooler operable would not preclude the Division I CS system from performing its safety function.

**Detroit  
Edison**

2000 Second Avenue  
Detroit, Michigan 48226  
(313) 237-8000

August 26, 1985  
NP850050

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

Gentlemen:

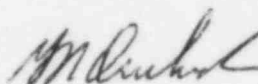
Reference: Fermi 2  
NRC Docket No. 50-341  
NRC Operating License No. NPF-43

Subject: Transmittal of Licensee  
Event Report 85-043

Please find enclosed LER No. 85-043-00, dated August 26, 1985, for a reportable event which occurred on July 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  
USNRC Region III  
799 Roosevelt Rd.  
Glen Ellyn, IL 60137

Director/Coordinator  
Monroe City-County Office of Civil Preparedness  
965 South Raisinville Road  
Monroe, MI 48161

IE22  
1/1