NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Fermi-2	0 5 0 0 0 3 4 1	1 OF 0 3

TITLE (4)
RWCU Isolation Valves

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	0 4	8 5	8 5	—	0 3 2	—	0 0	0 8	0 3	8 5		0 5 0 0 0
												0 5 0 0 0

OPERATING MODE (9)	2	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 0 2	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	XX 50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
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 NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

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 4, 1985, the inboard and outboard primary containment isolation valves for the Reactor Water Cleanup (RWCU) system were left in the open position with flow to the RWCU pumps and the breakers deenergized. This defeated the isolation function of these valves, and was a violation of technical specification 3/4.6.3. This condition existed for approximatly 1-1/2 hours, while the plant was in Operational Condition 2 (Startup) and reactor power between 2 and 3 percent. When the condition was found, a plant shutdown was commenced as required by technical specification, and within a half hour the valves were made operable. There were no significant operational occurences during, or as a result of this event. The root cause of this event was personnel error.

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

On July 4, 1985, at about 1500 hours, the Nuclear Shift Operator (NSO) received a request for permission to deenergize Reactor Water Cleanup (RWCU) valves G33F001 and G33F004. These are, respectively, the inboard and outboard primary containment isolation valves in the common supply line to the RWCU pumps from the reactor pressure vessel. The request was made by technicians assigned to install a chart recorder that was to monitor the contacts of temperature switches that provide isolation signals to these RWCU valves. The request was granted and the valve breakers were opened with the valves in the open position and flow to the RWCU pumps.

At 1515 hours the Nuclear Assistant Shift Supervisor (NASS) realized that having both the inboard and outboard primary containment isolation valves in the open position and deenergized was in violation of technical specification 3/4.6.3. This specification requires at least one operable isolation valve in an open penetration. The NASS then declared the valves inoperable. The Nuclear Shift Supervisor (NSS) was informed of the situation, and in accordance with technical specifications preparations for a reactor shutdown were commenced. At 1646 hours both RWCU valves were reenergized, and normal plant operations were resumed. During this event the plant was in Operational Condition 2 (Startup) and reactor power between 2 and 3 percent.

As reported in LER's 85-025, -027, -028, and -031, the RWCU system has recently experienced spurious isolations. In an attempt to determine the origin of these isolations, the Technical Group decided to monitor the contact position of the temperature switches that provide isolation signals to the RWCU valves. There are a number of individual temperature switches that can each provide an isolation which has aggravated finding the cause of the spurious isolations. By monitoring the output contacts of each temperature switch with a chart recorder, the switch providing the spurious output could be determined and corrective action taken.

Installation of the chart recorder required removing power from the isolation circuits. It had been determined, through previous investigation, that whenever power is restored to the temperature switches of the RWCU isolation circuitry a spurious isolation signal occurs. In anticipation of this occurring, the technician requested that power be removed from the valves to prevent the isolation and alleviate an ESF actuation, a reportable event.

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

The root cause of this event is personnel error in that the NASS did not immediately recognize that deenergizing these valves was a violation of technical specifications. Technical specification 3/4.6.3 was consulted by the NASS to determine the required actions under the condition of having the valves deenergized in the open position. The technical specification action statement was misinterpreted to mean that the plant had 12 hours to be in hot shutdown. Circumstances that contributed to this error were the large number of previous RWCU isolations. Control room personnel were aware of these previous events, and were sensitive of the need to preclude additional ESF actuations, and the attendant transients imposed on the system.

The safety consequence of this event is the loss of automatic isolation capability of the RWCU system if it had been required. The RWCU leak detection system was operable, and would have provided alarm indication in the control room of breaches in the system pressure boundary. The capability to manually isolate the system if required existed at the time of the event, including other valves operable from the control room. Although additional time is required to operate these valves manually, safety systems are capable of providing adequate core cooling to permit manual RWCU isolation. There were no significant operational occurences during, or as a result of this event.

This event will be discussed with the operators involved as well as at the Nuclear Shift Supervisors meeting. This LER will be placed in the required reading for all licensed operators.

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

August 2, 1985
NP850006

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 85-032

Please find enclosed LER No. 85-032-00, dated August 2, 1985, for a reportable event which occurred on July 4, 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,

J. D. Leman for R. S. Lenart.

R. S. Lenart
Plant Manager

Enclosure: NRC Forms 366, 366A

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

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