

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)
Fermi - 2DOCKET NUMBER (2)
0 5 0 0 0 3 4 1 1 OF 0 2TITLE (4)
Loss of Division I Offsite Power Resulting in Reactor ScramEVENT DATE (5)
MONTH DAY YEAR
0 3 2 8 8 5 8 5
LER NUMBER (6)
YEAR SEQUENTIAL NUMBER REVISION NUMBER
0 0 1 0 0 0 4
REPORT DATE (7)
MONTH DAY YEAR
2 6 8 5
OTHER FACILITIES INVOLVED (8)
FACILITY NAMES
DOCKET NUMBER(S)
0 5 0 0 0 0 0 0 0 0 0 0OPERATING MODE (9)
5
POWER LEVEL (10)
0 0 0
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 8: (Check one or more of the following) (11)
20.402(b) 20.405(c) X 50.73(a)(2)(iv) 73.71(b)
20.405(a)(1)(i) 50.36(c)(1) 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 388A)
20.405(a)(1)(iii) 50.73(a)(2)(ii) 50.73(a)(2)(viii)(A)
20.405(a)(1)(iv) 50.73(a)(2)(iii) 50.73(a)(2)(viii)(B)
20.405(a)(1)(v) 50.73(a)(2)(ix) 50.73(a)(2)(x)LICENSEE CONTACT FOR THIS LER (12)
NAME
A. E. Wegele, Compliance Engineer
TELEPHONE NUMBER
AREA CODE
3 1 3 5 8 6 - 5 3 1 3COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)
CAUSE SYSTEM COMPONENT MANUFACTURER REPORTABLE TO NRCs
CAUSE SYSTEM COMPONENT MANUFACTURER REPORTABLE TO NRCsSUPPLEMENTAL REPORT EXPECTED (14)
YES (If yes, complete EXPECTED SUBMISSION DATE) X NO
EXPECTED SUBMISSION DATE (15)
MONTH DAY YEAR

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

At 2345 hours on 03/28/85 while initial fuel loading was in progress, breaker position D on Bus # 11 automatically opened interrupting the 13.8 KV feed to System Service Transformer # 64 which supplies power to Division I. Reactor Protection System Division I power was lost which resulted in a full scram because the neutron monitoring instrumentation RPS shorting links were removed. Emergency Diesel Generator # 12 started automatically to supply power to Division I. After offsite power was restored to Division I using tie breakers, EDG # 12 was unloaded and secured.

Subsequent trouble shooting did not reveal the cause of the problem. A similar event occurred on 03/31/85 after the transformer was reenergized. Investigations conducted following the second occurrence revealed that water had entered the switchgear cabinet housing breaker position A6 and caused a ground fault at the A6 breaker which is an alternate feed to transformer # 64. A heavy rainstorm with strong winds preceded each occurrence. It was concluded that the first event was caused by a ground fault at the same location.

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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 0 1	— 0 0	0 2	OF 0 2

TEXT (If more space is required, use additional NRC Form 365A's) (17)

While performing initial fuel loading at 2345 hours on 03/28/85, breaker D on Bus # 11 automatically opened interrupting 13.8 KV power to System Service Transformer # 64 (SS 64). SS 64 supplies power to Division I. A full scram signal was received because power to Division I of the Reactor Protection System (RPS) was lost and the RPS shorting links were removed per procedure during core alterations thus establishing non-coincident logic. Emergency Diesel Generator # 12 automatically started (EDG # 11 was unavailable because of maintenance), Division I Battery chargers tripped, Division I Standby Gas Treatment System initiated, Division I Control Center HVAC switched to recirculation mode, Division I Emergency Equipment Cooling Water System and Emergency Equipment Service Water System automatically initiated, Division I Control Air Compressor initiated and Reactor Water Cleanup System, Drywell Sumps and Primary Pneumatic Supply Systems automatically isolated (isolation valve groups 10, 11, 13, and 18).

After power was restored to the refueling bridge, the fuel bundle which was being transferred when the event occurred was inserted into the core and core alterations were halted. Division I offsite power was then restored by using tie breakers and EDG # 12 was unloaded and secured. Throughout the event Division II systems were unaffected and thus available to perform their intended function. All protection and safety systems functioned as designed throughout the event.

Extensive trouble shooting failed to reveal why breaker D opened and thus SS 64 was reenergized at 2210 hours on 03/30/85. At 0625 hours on 03/31/85 breaker D again automatically opened. While attempting to place caution tags on breaker A6 (an alternate feed to SS 64) water was observed inside the switchgear cabinet. There was also extensive evidence of arcing on the breaker components. Further observation revealed a defective seal on the duct (directly above the switchgear cabinet) which houses the power feeds from CTG # 11 transformer. Since there was a heavy rainstorm with strong winds prior to each event, it is believed that water entered the cabinet during these storms causing a ground fault at the A6 breaker which resulted in breaker D opening.

The A6 breaker was replaced and the duct leak was repaired with a temporary seal. During a future outage of Division I, the duct and switchgear will be thoroughly inspected and necessary repairs made to ensure a permanent seal. Other switchyard equipment will be inspected and repaired as necessary. A periodic maintenance schedule will be established to identify and correct equipment degradation.



2000 Second Avenue
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April 26, 1985
NP-85-392

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. 85-001

Please find enclosed LER No. 85-001-00, dated 04/26/85, for a reportable event which occurred on 03/28/85. 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: Regional Administrator
USNRC Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Mr. P.M. Byron

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