

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)										DOCKET NUMBER (2)										PAGE (3)																																							
Joseph M. Farley - Unit 2										0 5 0 0 0 3 6 4										1 OF 0 2																																							
TITLE (4)																																																											
Reactor Trip																																																											
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			1 5			8 5				8 5			0 1			0			0 0			0 8			1 4				8 5														0 5 0 0 0																
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)																																																											
OPERATING MODE (1)										20.402(b)										20.400(a)										<input checked="" type="checkbox"/> 20.734(c)(1)(iv)										73.714)																			
POWER LEVEL (10)										0 9 9										20.400(a)(1)(i)										20.30(a)(1)										20.734(c)(1)(v)										73.714)									
										20.400(a)(1)(ii)										20.30(a)(2)										20.734(c)(1)(vi)										OTHER (Specify in Abstract, below and in Text, NRC Form 204A)																			
										20.400(a)(1)(iii)										20.734(c)(1)(i)										20.734(c)(1)(vii)(A)																													
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LICENSEE CONTACT FOR THIS LER (12)																																																											
NAME															TELEPHONE NUMBER																																												
J. D. Woodard															AREA CODE 2 0 5 8 9 9 - 5 1 5 6																																												
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														
SUPPLEMENTAL REPORT EXPECTED (14)																																																											
YES (If yes, complete EXPECTED SUBMISSION DATE)															<input checked="" type="checkbox"/> NO																																												
															EXPECTED SUBMISSION DATE (15)																																												
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-spaced typewritten lines) (16)

At 1949 on 7-15-85, during steady state operation at 99 percent power and with severe thunderstorms in the area, a reactor trip occurred due to a high negative flux rate as detected by the power range nuclear detectors. Lightning apparently caused a voltage surge which tripped both the normal and redundant power supplies in rod control system power cabinets 2AC and 2BD. The control rods powered by these cabinets dropped into the core causing the high negative flux rate.

Shortly after the trip, both generator output breakers opened prematurely resulting in de-energizing all three reactor coolant pumps before the fast dead bus transfer feature could transfer their power supply from the auxiliary to the startup transformers. The resulting loss of forced coolant circulation constituted a "Notification of Unusual Event" condition. Natural circulation cooling was verified. Approximately 25 minutes after the reactor trip, reactor coolant pump 2B was started and the Notification of Unusual Event condition was terminated.

Testing verified the proper operation of the output breakers and the fast dead bus transfer. Following testing and the completion of required repairs the unit returned to power operation on 7-17-85. Health/safety of the public was not affected by this event.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 5/31/85

FACILITY NAME (1) J. M. Farley - Unit 2	DOCKET NUMBER (2) 05000364	LER NUMBER (3)			PAGE (3)	
		YEAR 85	SEQUENTIAL NUMBER 010	REVISION NUMBER 00	02	OF 02

TEXT (If more space is required, use additional NRC Form 255A's) (17)

At 1949 on 7-15-85, during steady state operation at 99 percent power and with severe thunderstorms in the area, a reactor trip occurred due to a high negative flux rate as detected by the power range nuclear detectors. Lightning apparently caused a voltage surge which tripped both the normal and redundant power supplies in rod control system power cabinets 2AC and 2BD. The control rods powered by these cabinets dropped into the core causing the high negative flux rate.

Approximately fifteen seconds after the trip, generator output breaker 1002 opened. Breaker 1102, the second generator output breaker, opened approximately three seconds later. By design, these breakers should not have opened until thirty seconds after the trip. When the generator output breakers opened, 4160 Volt buses 2A, 2B and 2C were de-energized which de-energized all three reactor coolant pumps, both circulating water pumps and condensate pump 2A. The automatic fast dead bus transfer feature normally prevents de-energization of these 4160 volt buses by transferring the power source from the unit auxiliary transformers to the startup transformers. However, the fast dead bus transfer occurred per design thirty seconds after the trip. By this time, the reactor coolant pump buses had been de-energized and the reactor coolant pump breakers had opened automatically due to undervoltage on the buses. The loss of forced coolant circulation resulting from the trip of the reactor coolant pumps constituted a "Notification of Unusual Event" condition. Natural circulation cooling was verified. Approximately 25 minutes after the reactor trip, reactor coolant pump 2B was started and the Notification of Unusual Event condition was terminated.

Testing was conducted to determine the cause of the premature opening of the generator output breakers, but the cause could not be determined. Reactor and turbine trip signals were introduced into the generator output breaker control circuitry and the breakers were found to operate properly. No electrical or mechanical problem could be found which would have caused the output breakers to open prematurely. The automatic fast dead bus transfer feature of 4160 volt buses 2A, 2B and 2C was also tested and found to operate properly. Following testing and the completion of required repairs the unit returned to power operation on 7-17-85. In a subsequent reactor trip which occurred on 7-17-85, the generator output breakers and the fast dead bus transfer operated as designed.

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R. P. McDonald
Senior Vice President
Flintridge Building



August 14, 1985

Docket No. 364

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

Dear Sir:

Joseph M. Farley Nuclear Plant, Unit 2, Licensee Event Report No. LER 85-010-00 is forwarded in accordance with 10CFR50.73 to provide 30 day written notification of the occurrence.

If you have any questions, please advise.

Yours very truly,

R. P. McDonald
R. P. McDonald

RPM/DSM:sam

Enclosure

xc: IE, Region II

IE 22