

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Joseph M. Farley - Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 3 6 4 1 OF 0 3				PAGE (3) 1 OF 0 3		
TITLE (4) Unit Shut Down Due To Losing One Train Of Charging																
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 7	8 6	8 6	0 0 9	0 0	0 8	1 8	8 6					0 5 0 0 0			
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11)														
1		20.402(b)				20.405(e)				50.73(a)(2)(iv)				73.71(b)		
POWER LEVEL (10)		0 9 9				20.405(a)(1)(i)				50.73(a)(2)(v)				73.71(c)		
		20.405(a)(1)(ii)				50.36(c)(2)				50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text NRC Form 366A)		
		20.405(a)(1)(iii)				XX 50.73(a)(2)(i)				50.73(a)(2)(vii)(A)						
		20.405(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(vii)(B)						
		20.405(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)						
LICENSEE CONTACT FOR THIS LER (12)																
NAME J. D. Woodard, General Manager - Nuclear Plant										TELEPHONE NUMBER 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 NPPDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPPDS						
X	C B M	O	W	1 2 0	Y											
SUPPLEMENTAL REPORT EXPECTED (14)																
YES (If yes, complete EXPECTED SUBMISSION DATE)										XX NO		EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR

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

At 0638 on 7-17-86, during normal operation at 99% reactor power, the 2B charging pump tripped. Since the 2C charging pump had been removed from service previously for maintenance, only one operable charging pump existed which was not sufficient to meet the Technical Specification requirements. It was subsequently determined that repairs could not be completed on either inoperable charging pump before the 72 hour Limiting Condition for Operation (LCO) period would expire. The decision was made to shut the unit down; this decision was made as soon as it could be determined that the repair time would exceed the LCO period. A controlled power reduction was begun at 2216 on 7-17-86 and cold shutdown (Mode 5) was reached at 1235 on 7-19-86.

The 2C charging pump was returned to service at 1124 on 7-21-86 following repairs. The unit resumed power operation on 7-22-86.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

Plant and System Identification:

Westinghouse - Pressurized Water Reactor
Energy Industry Identification System codes are identified in the text as [XX].

Summary of Event

At 0638 on 7-17-86, during normal operation at 99% reactor power, the 2B charging pump [CB] tripped. Since the 2C charging pump had been removed from service previously for maintenance, one train of charging was inoperable thereby not meeting Technical Specification requirements. It was subsequently determined that repairs could not be completed on either inoperable charging pump before the 72 hour Limiting Condition for Operation (LCO) period would expire. The decision was made to shut the unit down. A controlled power reduction was begun at 2216 on 7-17-86 and cold shutdown (MODE 5) was reached at 1235 on 7-19-86.

Description of Event

There are three charging pumps for each unit at FNP. One pump is permanently aligned to each of the two trains and the B pump can be aligned to either train. The charging pumps also serve as high-head safety injection pumps and Technical Specifications require that there be an operable pump in each train.

On 7-17-86, the unit was operating normally at 99% reactor power and maintenance was being performed on the 2C charging pump. The 2B charging pump was aligned to the B train and was running and supplying normal charging and reactor coolant pump seal injection water. At 0638, the 2B charging pump tripped. The 2A charging pump was started manually and the actions of FNP-2-AOP-16.0 (CVCS Malfunction) were performed. An investigation revealed that the breaker [EB] for the 2B charging pump had opened automatically due to a ground fault. Further, it was found that there was low resistance from the motor windings to ground and there was evidence of arcing in the motor. It was decided to return the motor to the vendor for repair. The failure of the 2B charging pump motor was unrelated to the maintenance that was being performed on the 2C charging pump.

One train of charging was inoperable thereby not meeting Technical Specification requirements. It was determined that repairs could not be completed on either inoperable charging pump before the 72 hour LCO period would expire. The decision was made to shut the unit down. A controlled power reduction was begun at 2216 on 7-17-86 and cold shutdown (Mode 5) was reached at 1235 on 7-19-86.

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Cause of Event

This event was caused by the electrical failure of the 2B charging pump motor while the 2C charging pump had already been removed from service for repair. The exact cause of the electrical failure of the motor has not yet been determined, but investigation is continuing. Thus, one train of charging was lost.

Reportability Analysis and Safety Assessment

This event is reportable because the unit was shut down as a result of not meeting a requirement of a Technical Specification LCO. However, the unit operated safely and reliably throughout this period. As soon as it could be determined that the repair time would exceed the LCO period, the unit was shut down. The 2A charging pump remained operable throughout the event and there was no danger to the health and safety of the public.

Corrective Action

The 2C charging pump was returned to service at 1124 on 7-21-86 following repairs. The unit resumed power operation on 7-22-86. The 2B charging pump motor was returned to be repaired and it will be returned to service following those repairs.

Additional Information

No previous events of this type have been reported at Farley Nuclear Plant.

Failed component data:

The charging pump motors are made by:

Westinghouse Electric Corporation
Medium Motor and Gearing Division
Buffalo, New York 14240

Motor frame number: 5810S

The charging pumps are made by:

Pacific Pumps
5715 Bickett Street
Huntington Park, California

The pump serial numbers are 47668, 47669

Mailing Address

Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291
Telephone 205 783-6090

R. P. McDonald
Senior Vice President
Flintridge Building



August 18, 1986

Docket No. 50-354

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 86-009-00

Joseph M. Farley Nuclear Plant, Unit 2, Licensee Event Report No. LER 86-009-00 is being submitted in accordance with 10CFR50.73.

If you have any questions, please advise.

Respectfully submitted,

R. P. McDonald

RPM/JAR:kpc-D-LER

Enclosure

cc: IE, Region II

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